



GOVERNMENT OF KERALA

**ANNUAL REVIEW OF CROP STATISTICS
SYSTEM IN KERALA THROUGH THE
SCHEME FOR IMPROVEMENT OF CROP
STATISTICS 2023-24**

**DEPARTMENT OF ECONOMICS & STATISTICS
KERALA**

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Preface

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The Department of Economics & Statistics is the designated agency for compiling Agricultural Statistics in the State. At the national level, Ministry of Agriculture and Farmers' Welfare, Government of India, implements the central sector scheme, Improvement of Agricultural Statistics (IAS) in which, "Establishment of an Agency for Reporting Agricultural Statistics (EARAS)" is a component implemented in the non-land record States like Kerala. Through EARAS scheme, data on land use, crop acreage, productivity, yield rates, irrigation details, and related aspects are systematically collected, which are important indicators for planning and development in the Agriculture sector for the Central & State Governments.

The National Statistics Office (NSO), under the Ministry of Statistics & Programme Implementation, Government of India, plays a pivotal role in this process. It provides training to state government field staff and offers technical guidance in developing efficient survey techniques to ensure timely and reliable estimates of crop area and yield.

To address non-sampling errors, the National Statistics Office (Field Operations Division) and the State Government jointly conduct sample checks using two non-overlapping samples. This methodology forms the foundation of the "Improvement of Crop Statistics (ICS)" scheme, launched in 1975-76. The primary objective of the ICS scheme is to identify and rectify deficiencies in the crop statistics system through technical supervision of fieldwork and implementation of suggested improvements.

*Each year, Directorate of Economics and Statistics (DES) compiles and publishes findings of the ICS scheme in the report titled **"Annual Review of Crop Statistics System in Kerala through the Scheme for Improvement of Crop Statistics 2023-24."** EARAS Division at the Directorate of Economics and Statistics, Government of Kerala, has prepared this report.*

I would like to appreciate the efforts put in by the staff of EARAS Division under the supervision of Smt. Haleema Beegum K, Joint Director and the timely guidance rendered by Dr. K G Geetha, Additional Director. I hope this report would pave the way for qualitative change in the conduct of EARAS scheme in a big way.


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EXECUTIVE SUMMARY

In order to enhance the accuracy and dependability of area and yield data, Improvement of Crop Statistics (ICS) was implemented in the fiscal year 1975-76. NSO and Department of Economics & Statistics are collaborating to conduct sample check study and produce reports in order to identify flaws in area enumeration and crop estimation surveys under EARAS scheme and provide recommendations for improvement in Crop Statistics.

Area Enumeration

1. Timeliness of completion of Girdawari in Autumn, Winter and Summer season for Central samples is 98.75%, 96.25%, and 98.75%, and for the State Samples it is 100% for all the three seasons. For Summer Dry season, it is 76.25% for the Central Sample and 96.25% for the State Sample.
2. EARAS statements were submitted in time after completing Girdawari in 88.75% cases during Autumn season, 85% cases during Winter season, 80% cases during Summer season and 38.75% cases during Summer dry for the Central Sample and 98.75%, 98.75%, 100%, and 38.75% for the State Sample, respectively.
3. Date of submission of EARAS statement was not reported in 2.5% cases during Autumn, 5% cases during Winter and 2.5% cases during Summer for Central samples. For State Sample, it was 1.25% for Winter season.
4. Crop area observed by the ICS supervisors and that reported by primary workers did not match in some cases. No error occurred in Autumn and Summer season for Central samples. Non reporting of crops actually grown in 0.40% of Central Samples in Winter, reporting incorrect area of crops in 4.20% of State Samples in Autumn, 2.21% of State Samples in Winter and 1.28% of state samples in Summer.

5. For the year 2023-24, 100%, 99.60% and 100% experiments of Central Samples and 95.80%, 97.79% and 98.72% of State Sample were found to be free from procedural errors during Autumn, Winter and Summer respectively.
6. It is seen that in some cases EARAS statements were submitted by due date without completing Girdawari. 1.25% of Central and State samples in Autumn season and 3.75% of state samples in Summer dry were submitted EARAS statements by due date without completing Girdawari. Trivandrum and Kollam districts submitted EARAS statements by due date without completing Girdawari.
7. It is seen that in some cases EARAS Statements were not submitted, though Girdawari was completed. ie; 1.25% cases in Autumn and Winter seasons, 5% cases in Summer season and 43.75% cases in Summer dry for Central samples and 43.75% cases in Summer dry for State samples.

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 2023-24.
2. Standard equipments supplied by the department are used in crop cutting experiments for Central and State Samples.

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 through 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 equipment's 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.

Four clusters are chosen and located inside each designated Investigator zone as part of the sample check area enumeration operation. The supervisory officer from NSO or DES uses all available methods to determine variances in crop reporting and recording in the relevant survey data for each season, as well as variations in land use reporting.

The Investigator's examination of crop cutting experiments during the harvest stage involves ensuring that the conduct adheres to the procedures outlined in GCES. This inspection encompasses evaluating the selection of fields and random coordinates, marking experimental plots of specified shape and size, harvesting, weighing the produce, and other relevant aspects. Additionally, the inspection involves verifying the supply and use of equipment for conducting the experiments, assessing the training received by the primary workers, evaluating the crop condition, and confirming the appropriate use of inputs.

The data collected through the sample check are analyzed 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 covering 20% of the selected villages was done in each year. The first cycle of the survey was completed within a period of five years from 1975-76 to 1979-80 and the second cycle completed in 1984-85. 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 2023-24

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 2023-24

The response in sample check on area enumeration ie; the number of Investigator zones for which filled in schedules were received during 2023-24 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 2023-24

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	4	100	100	100
		S	4	100	100	100
3	Pathanamthitta	C	3	100	100	100
		S	3	100	100	100
4	Alappuzha	C	4	100	100	100
		S	4	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 SAMPLE CHECK ON ENUMERATION OF AREA DURING 2023-24
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	4	100
		S	4	100
3	Pathanamthitta	C	3	100
		S	3	100
4	Alappuzha	C	4	100
		S	4	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 2023-24 is given in Table-2&2(a). Timeliness of completion of Girdawari in Autumn, Winter and Summer season for Central samples is 98.75%, 96.25%, and 98.75%, and for the State Samples it is 100% for all three seasons. For the Summer Dry season, it is 76.25% for the Central Sample and 96.25% for the State Sample.

For Central Samples, Girdawari was completed after the due date for 14.29% in Kottayam, 25% in Kollam and 25% in Alappuzha during Autumn, Winter and Summer respectively.

During Winter, the date of completion of Girdawari was not recorded in 12.50% of samples in Idukki and 11.11% in Palakkad for Central samples.

During summer Dry, the date of completion of Girdawari was not recorded in 42.86% of samples in Kottayam, 12.50% of samples in Idukki and 16.67% of samples in Kozhikkode for Central samples.

Girdawari was partially completed in 33.33% of samples in Pathanamthitta, 57.14% of samples in Malappuram, 83.33% of samples in Kozhikkode and 80% of samples in Wayanad for Central samples and for State samples it was 60% in Wayanad during Summer Dry.

CHART-1
COMPLETION OF GIRDAWARI 2023-24 AUTUMN

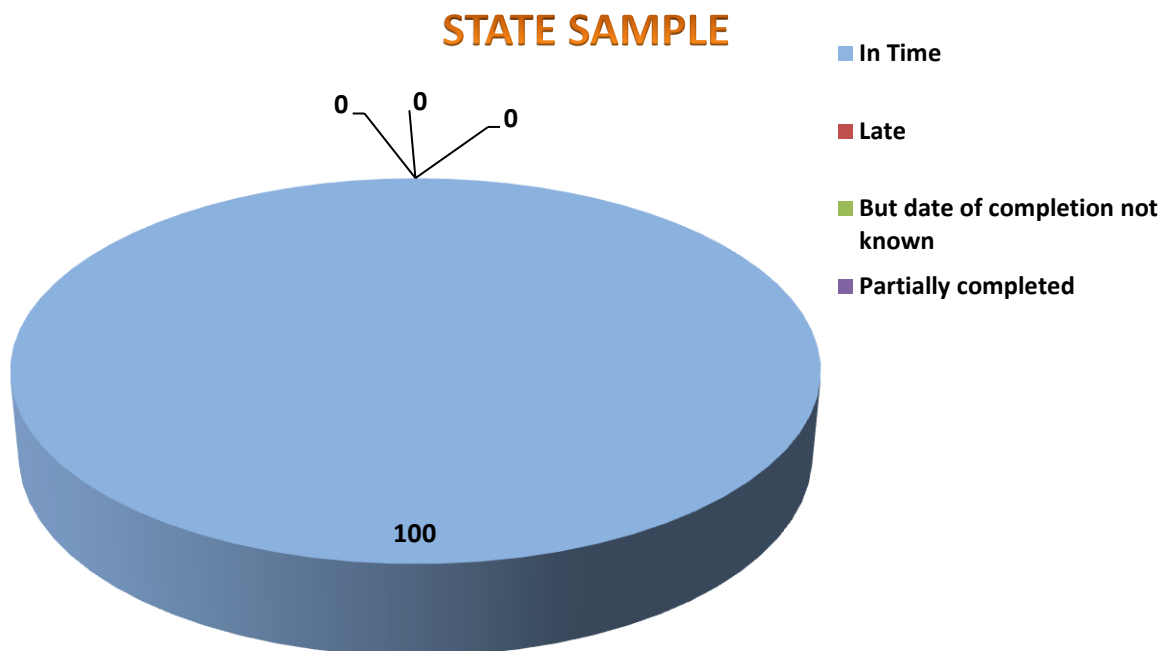
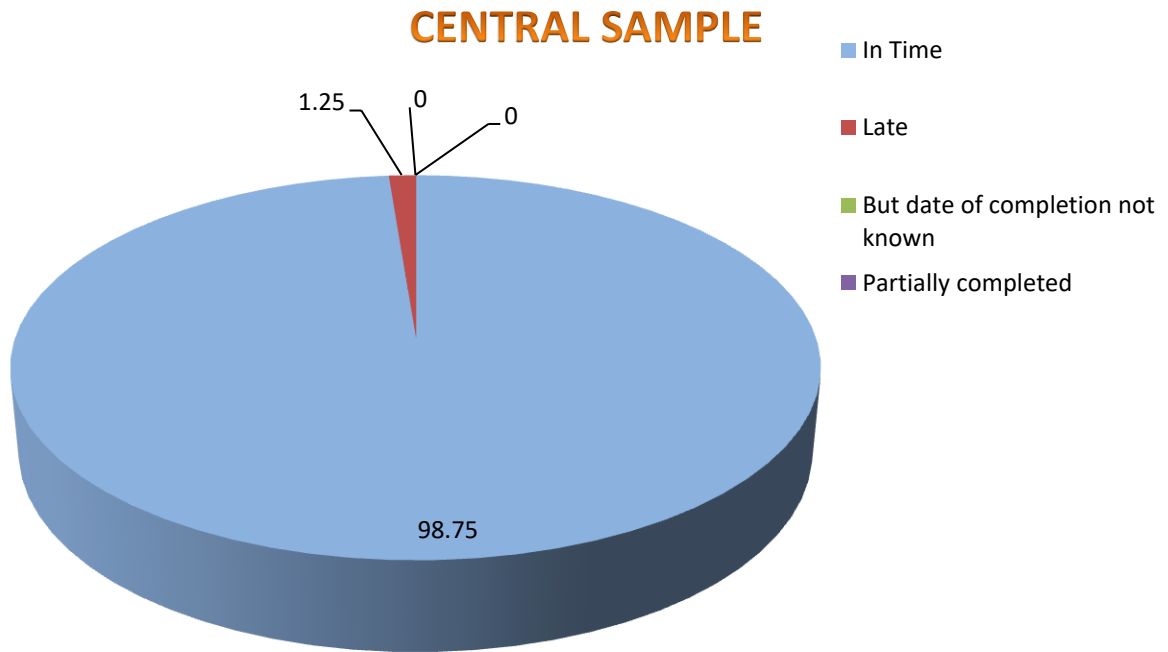


CHART-2
COMPLETION OF GIRDAWARI 2023-24 WINTER

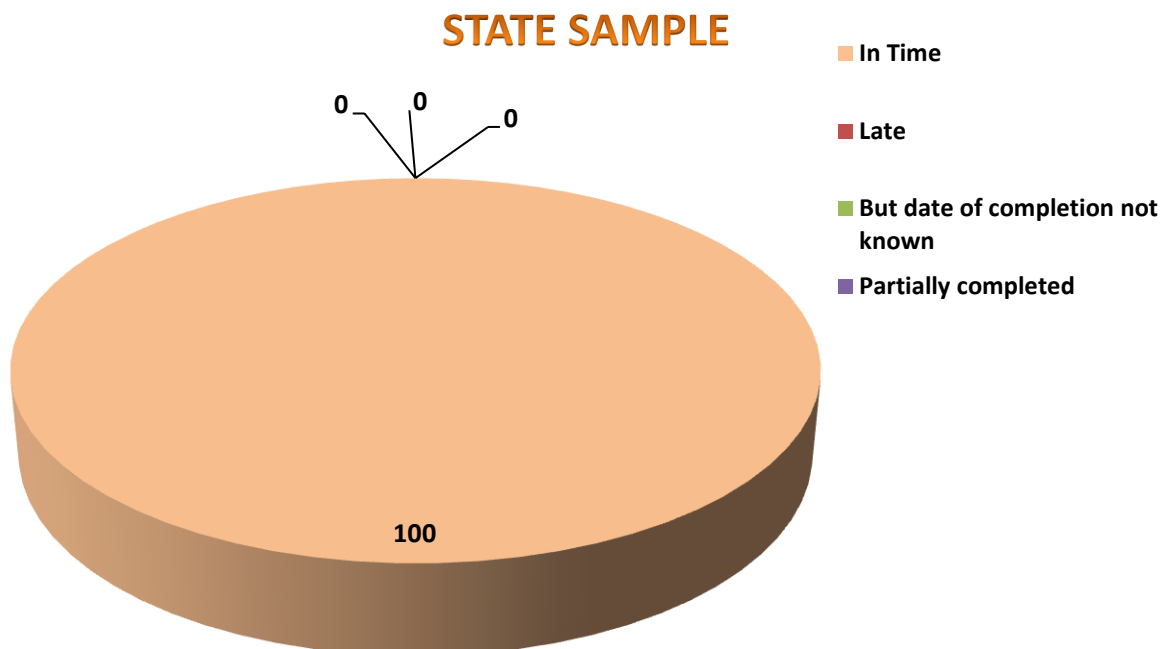
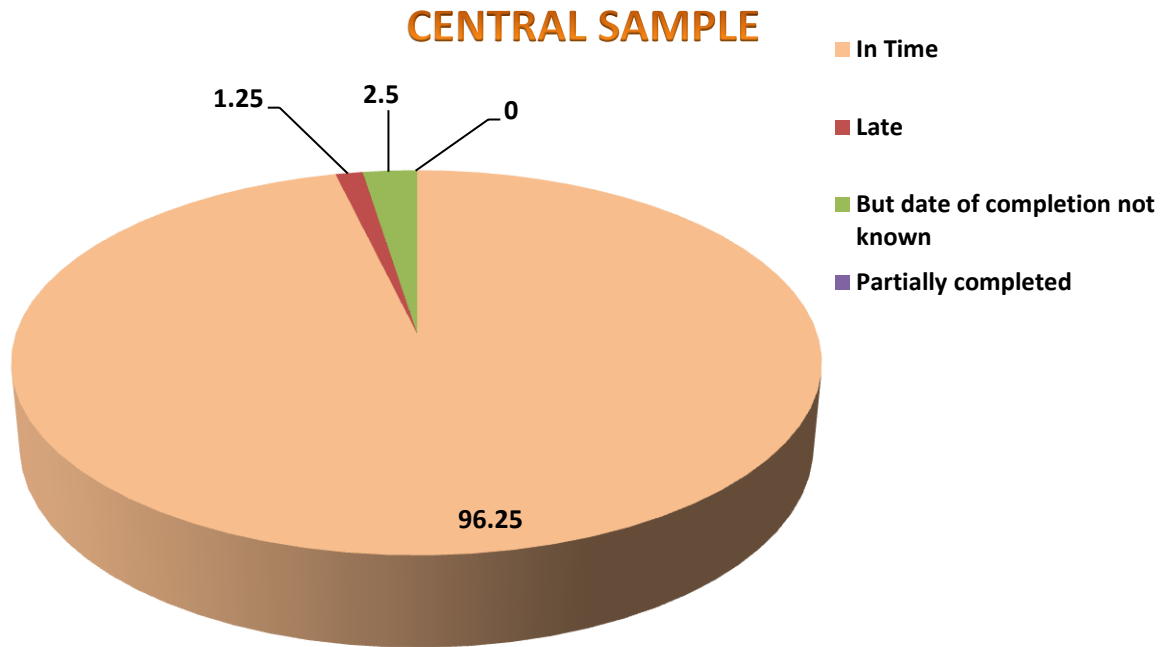


CHART-3
COMPLETION OF GIRDAWARI 2023-24 SUMMER

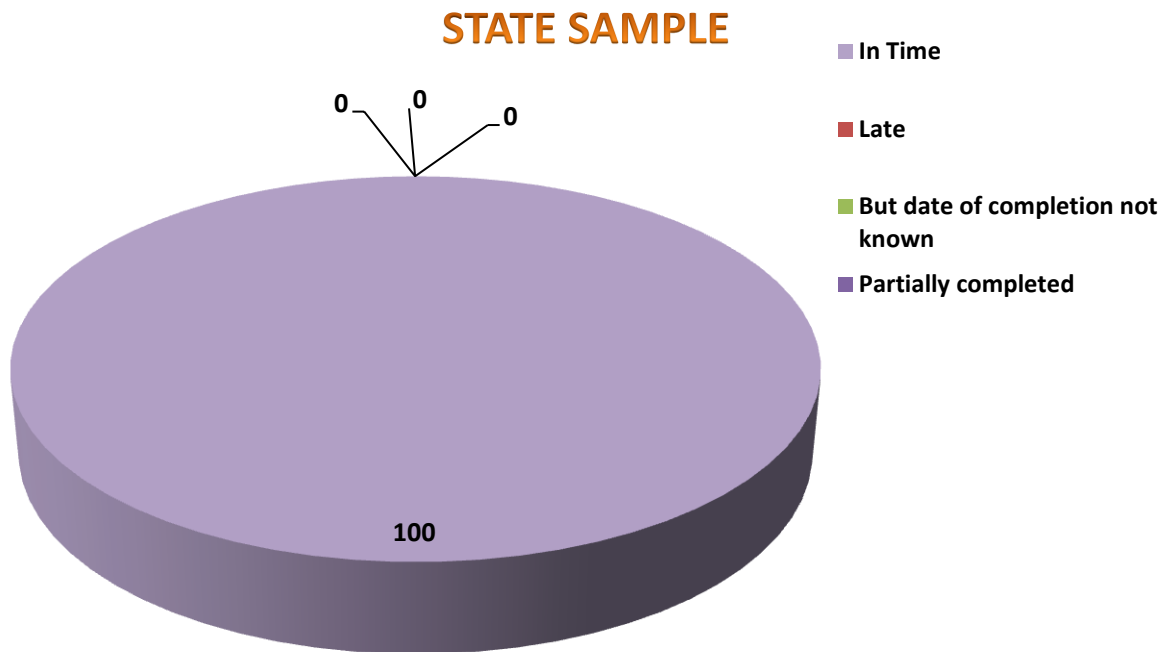
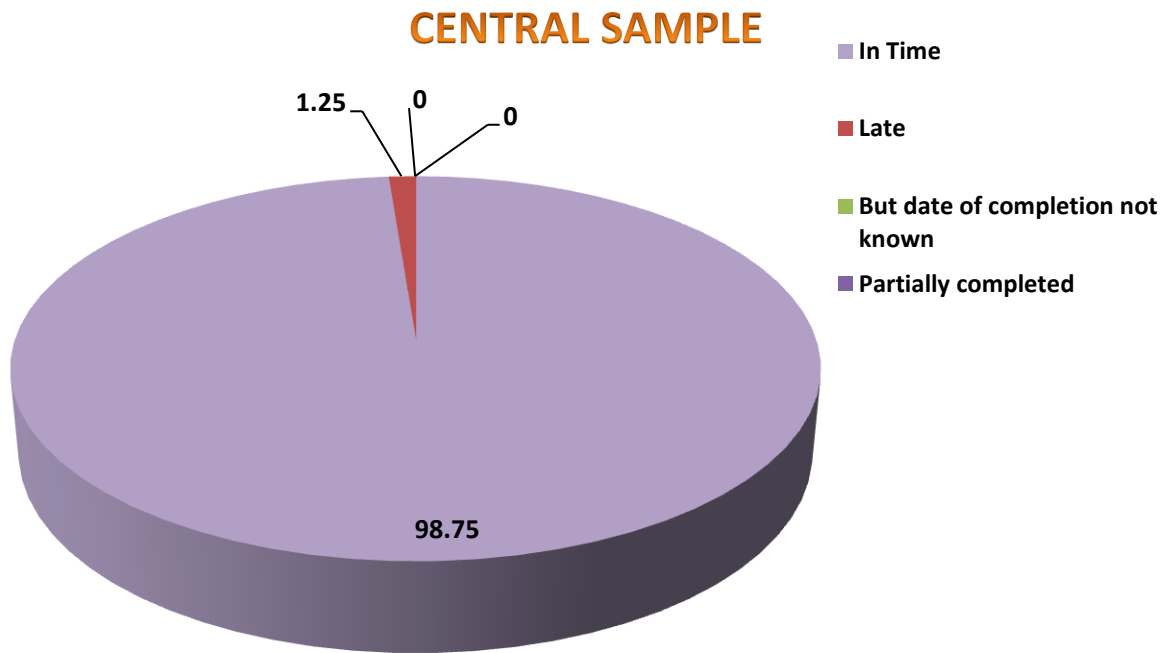


CHART-4
COMPLETION OF GIRDAWARI 2023-24 SUMMER DRY

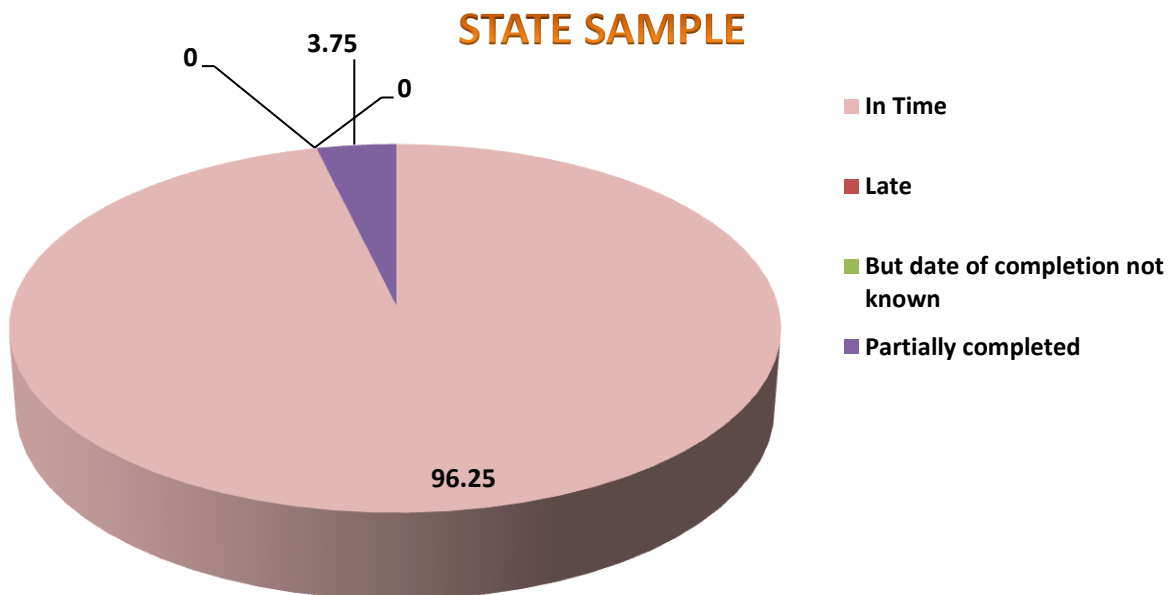
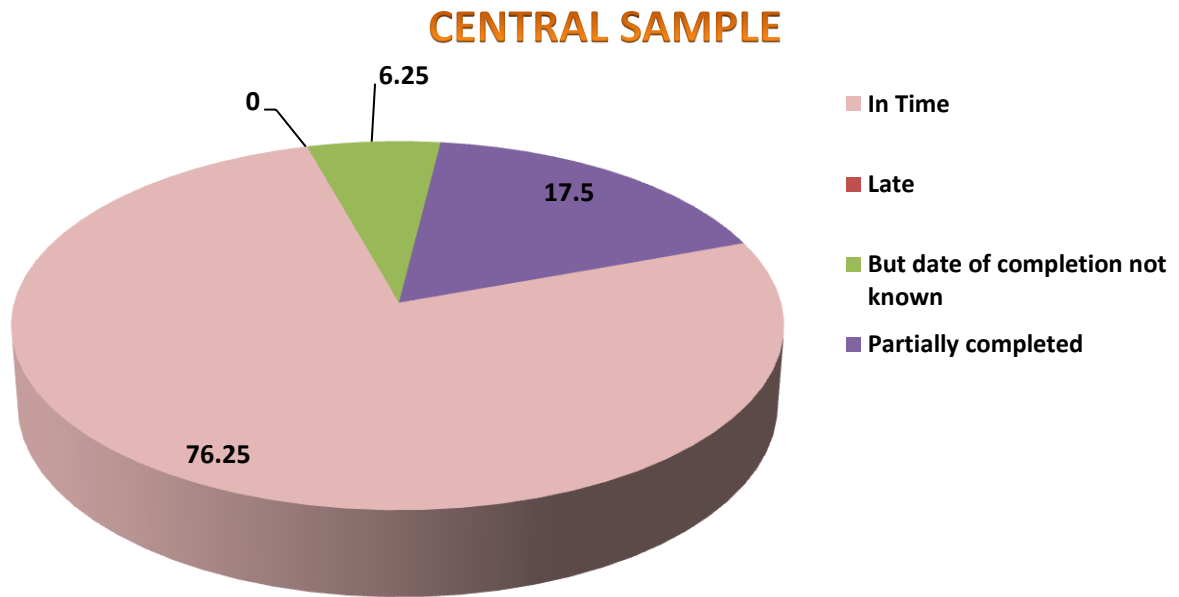


Table-2
TIMELINESS IN COMPLETION OF GIRDAWARI DURING 2023-24

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	Partially completed	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Thiruvananthapuram	C	100.00				100.00					100.00			
		S	100.00				100.00					100.00			
2	Kollam	C	100.00				75.00	25.00				100.00			
		S	100.00				100.00					100.00			
3	Pathanamthitta	C	100.00				100.00					100.00			
		S	100.00				100.00					100.00			
4	Alappuzha	C	100.00				100.00					75.00	25.00		
		S	100.00				100.00					100.00			
5	Kottayam	C	85.71	14.29			100.00					100.00			
		S	100.00				100.00					100.00			
6	Idukki	C	100.00				87.50		12.50			100.00			
		S	100.00				100.00					100.00			
7	Ernakulam	C	100.00				100.00					100.00			
		S	100.00				100.00					100.00			
8	Thrissur	C	100.00				100.00					100.00			
		S	100.00				100.00					100.00			
9	Palakkad	C	100.00				88.89		11.11			100.00			
		S	100.00				100.00					100.00			
10	Malappuram	C	100.00				100.00					100.00			
		S	100.00				100.00					100.00			
11	Kozhikode	C	100.00				100.00					100.00			
		S	100.00				100.00					100.00			
12	Wayanad	C	100.00				100.00					100.00			
		S	100.00				100.00					100.00			
13	Kannur	C	100.00				100.00					100.00			
		S	100.00				100.00					100.00			
14	Kasaragod	C	100.00				100.00					100.00			
		S	100.00				100.00					100.00			
For District covered		C	98.75	1.25			96.25	1.25	2.50			98.75	1.25		
		S	100.00				100.00					100.00			

Table-2 (a)

TIMELINESS IN COMPLETION OF GIRDAWARI DURING 2023-24

SUMMER DRY

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	100.00			
		S	100.00			
2	Kollam	C	100.00			
		S	100.00			
3	Pathanamthitta	C	66.67			33.33
		S	100.00			
4	Alappuzha	C	100.00			
		S	100.00			
5	Kottayam	C	57.14		42.86	
		S	100.00			
6	Idukki	C	87.50		12.50	
		S	100.00			
7	Ernakulam	C	100.00			
		S	100.00			
8	Thrissur	C	100.00			
		S	100.00			
9	Palakkad	C	100.00			
		S	100.00			
10	Malappuram	C	42.86			57.14
		S	100.00			
11	Kozhikode	C			16.67	83.33
		S	100.00			
12	Wayanad	C	20.00			80.00
		S	40.00			60.00
13	Kannur	C	100.00			
		S	100.00			
14	Kasaragod	C	100.00			
		S	100.00			
For District covered		C	76.25		6.25	17.50
		S	96.25			3.75

3) Submission of EARAS Statement

The details of season wise submission of EARAS statement during 2023-24 are indicated in Table-3&3(a). Timely submission of EARAS statements still needs considerable improvement in almost all districts. Ernakulam, Malappuram and Kasargod districts submitted timely in all the three seasons. The EARAS statements were submitted before due date after completion of Girdawari in 88.75% cases during Autumn, 85% cases during Winter, 80% cases during Summer and 38.75% cases during Summer dry for Central Sample and 98.75%, 98.75%, 100% and 93.75% respectively for state sample.

The EARAS statements of 20% of Central samples during Autumn and 60% of State samples during summer dry season from Trivandrum and 25% of State samples from Kollam districts were submitted on due date without completion of Girdawari.

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

In Kerala during 2023-24 no such cases are there where EARAS statements were submitted after due date without completing Girdawari.

3b) Details of EARAS statements submitted after due dates after completing Girdawari

SEASONS	CENTRAL
Autumn	Thrissur 60% Kozhikkode 16.67% Wayanad 20%
Winter	Thiruvananthapuram 40% Kollam 25% Thrissur 80%
Summer	Thiruvananthapuram 60% Alappuzha 25% Idukki 12.5% Thrissur 60% Wayanad 40%

No State samples and Summer Dry samples are there in which EARAS statements submitted after due date without completing Girdawari.

3c) Details regarding EARAS statements submitted but information about date of submission not recorded

SEASONS	CENTRAL	STATE
Autumn	Pathanamthitta-33.33% Palakkad - 11.11%	
Winter	Thiruvananthapuram -20% Kottayam-14.29% Idukki - 12.50% Palakkad - 11.11%	Thiruvananthapuram -20%
Summer	Kannur-14.29% Idukki - 12.50%	

No Central or State samples for Summer Dry where EARAS statement submitted and information about date of submission not recorded.

Table-3
TIMELINESS IN SUBMISSION OF EARAS STATEMENT DURING 2023-24

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	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	20.00		80.00						
			S			100.00						
		Winter	C			40.00	40.00	20.00				
			S			80.00		20.00				
		Summer	C			40.00	60.00					
			S			100.00						
2	Kollam	Autumn	C			100.00						
			S	25.00		75.00						
		Winter	C			75.00	25.00					
			S			100.00						
		Summer	C			100.00						
			S			100.00						
3	Pathanamthitta	Autumn	C			66.67		33.33				
			S			100.00						
		Winter	C			100.00						
			S			100.00						
		Summer	C			100.00						
			S			100.00						
4	Alappuzha	Autumn	C			75.00			25.00			
			S			100.00						
		Winter	C			75.00			25.00			
			S			100.00						
		Summer	C			50.00	25.00		25.00			
			S			100.00						
5	Kottayam	Autumn	C			100.00						
			S			100.00						
		Winter	C			85.71		14.29				
			S			100.00						
		Summer	C			100.00						
			S			100.00						

Table 3 contd...

Table-3
TIMELINESS IN SUBMISSION OF EARAS STATEMENT DURING 2023-24

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			100.00							
			S			100.00							
		Winter	C			87.50		12.50					
			S			100.00							
		Summer	C			75.00	12.50	12.50					
			S			100.00							
7	Ernakulam	Autumn	C			100.00							
			S			100.00							
		Winter	C			100.00							
			S			100.00							
		Summer	C			100.00							
			S			100.00							
8	Thrissur	Autumn	C			40.00	60.00						
			S			100.00							
		Winter	C			20.00	80.00						
			S			100.00							
		Summer	C				60.00		40.00				
			S			100.00							
9	Palakkad	Autumn	C			88.89		11.11					
			S			100.00							
		Winter	C			88.89		11.11					
			S			100.00							
		Summer	C			100.00							
			S			100.00							
10	Malappuram	Autumn	C			100.00							
			S			100.00							
		Winter	C			100.00							
			S			100.00							
		Summer	C			100.00							
			S			100.00							

Table 3 contd...

Table-3
TIMELINESS IN SUBMISSION OF EARAS STATEMENT DURING 2023-24

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			100.00							
		Winter	C			100.00							
			S			100.00							
		Summer	C			83.33					16.67		
			S			100.00							
12	Wayanad	Autumn	C			80.00	20.00						
			S			100.00							
		Winter	C			100.00							
			S			100.00							
		Summer	C			60.00	40.00						
			S			100.00							
13	Kannur	Autumn	C			100.00							
			S			100.00							
		Winter	C			100.00							
			S			100.00							
		Summer	C			85.71				14.29			
			S			100.00							
14	Kasaragod	Autumn	C			100.00							
			S			100.00							
		Winter	C			100.00							
			S			100.00							
		Summer	C			100.00							
			S			100.00							
For District covered		Autumn	C	1.25		88.75	6.25	2.50	1.25				
			S	1.25		98.75							
		Winter	C			85.00	8.75	5.00	1.25				
			S			98.75		1.25					
		Summer	C			80.00	12.50	2.50	5.00				
			S			100.00							

Table-3 (a)											
TIMELINESS IN SUBMISSION OF EARAS STATEMENT DURING 2023-24-Summer Dry											
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			80.00				20.00		
		S	60.00		40.00						
2	Kollam	C			75.00				25.00		
		S			100.00						
3	Pathanamthitta	C			33.33				33.33	33.33	
		S			100.00						
4	Alappuzha	C			50.00				50.00		
		S			100.00						
5	Kottayam	C							100.00		
		S			100.00						
6	Idukki	C			25.00				75.00		
		S			100.00						
7	Ernakulam	C			100.00						
		S			100.00						
8	Thrissur	C			100.00						
		S			100.00						
9	Palakkad	C							100.00		
		S			100.00						
10	Malappuram	C							42.86	57.14	
		S			100.00						
11	Kozhikode	C							16.67	83.33	
		S							16.67	83.33	
12	Wayanad	C			60.00					40.00	
		S							20.00	80.00	
13	Kannur	C			71.43				28.57		
		S			100.00						
14	Kasaragod	C			80.00				20.00		
		S			100.00						
For District covered		C			38.75				43.75	17.50	
		S	3.75		93.75					2.50	

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)

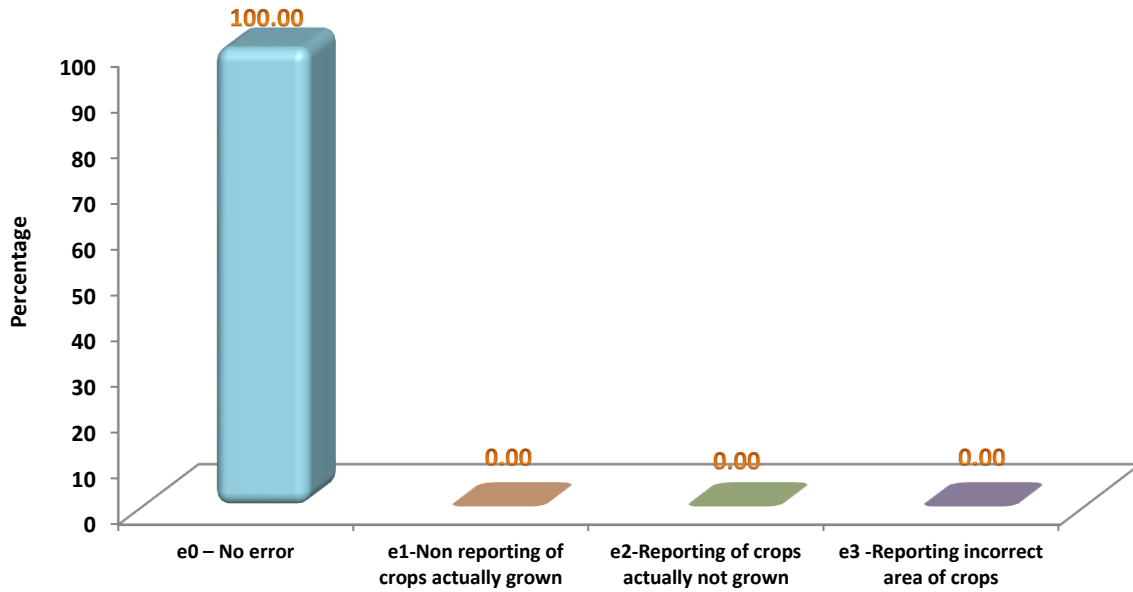
The percentage of survey numbers in which different types of discrepancies in recording paddy area by the Investigator during Autumn, Winter and Summer for the year 2023-24 are given in Table-4. The error, which non-reporting of the actual grown area of the crop (E1) is 0.40% (Trivandrum -50%) in Winter for Central Sample. Reporting of crops actually not grown (E2) was not reported in Kerala during 2023-24. Reporting of incorrect area of crops (E3) is 4.20% (Palakkad - 6%, Kannur - 7.69%, Kasaragod - 5.56%) in Autumn and 2.21% (Thrissur 7.50%, Kozhikkode - 7.69%) in Winter and 1.28% (Thrissur - 25%, Kozhikkode - 10%) in Summer for State Sample.

Reporting of incorrect area of crops (E3) is 4.20% (Palakkad-6%, Kannur - 7.69%, Kasaragod - 5.56%) in Autumn and 2.21% (Thrissur -7.50%, Kozhikkode-7.69%) in Winter and 1.28%(Kozhikkode - 10%, Thrissur-25%) during Summer for State Sample.

CHART-5

ERRORS IN RECORDING CROP AND CROP AREAS 2023-24 AUTUMN

CENTRAL SAMPLE



STATE SAMPLE

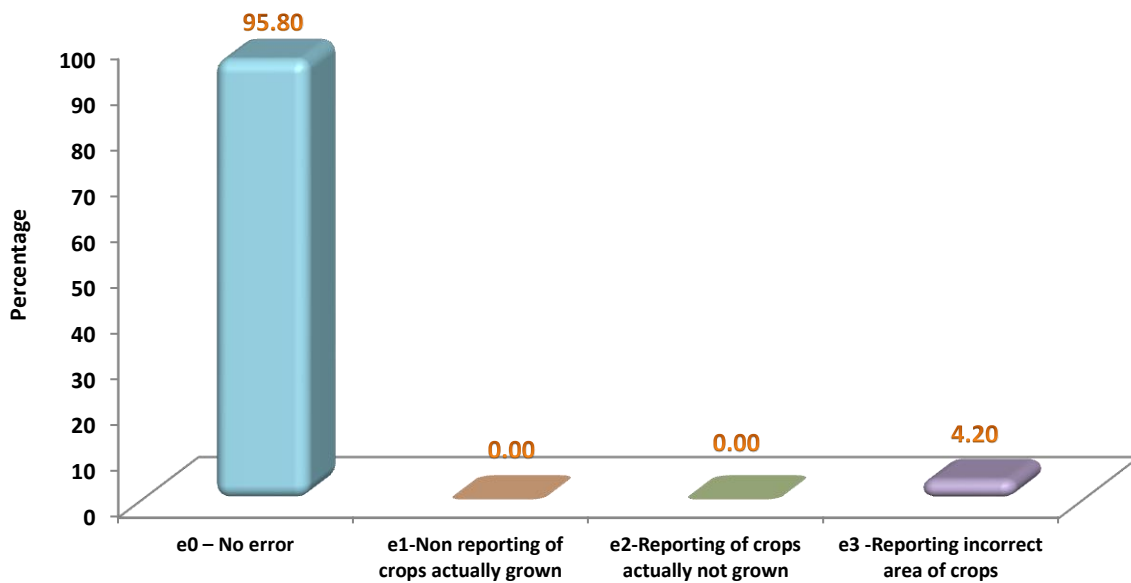


CHART-6
ERRORS IN RECORDING CROPS AND CROP AREAS 2023-24 WINTER

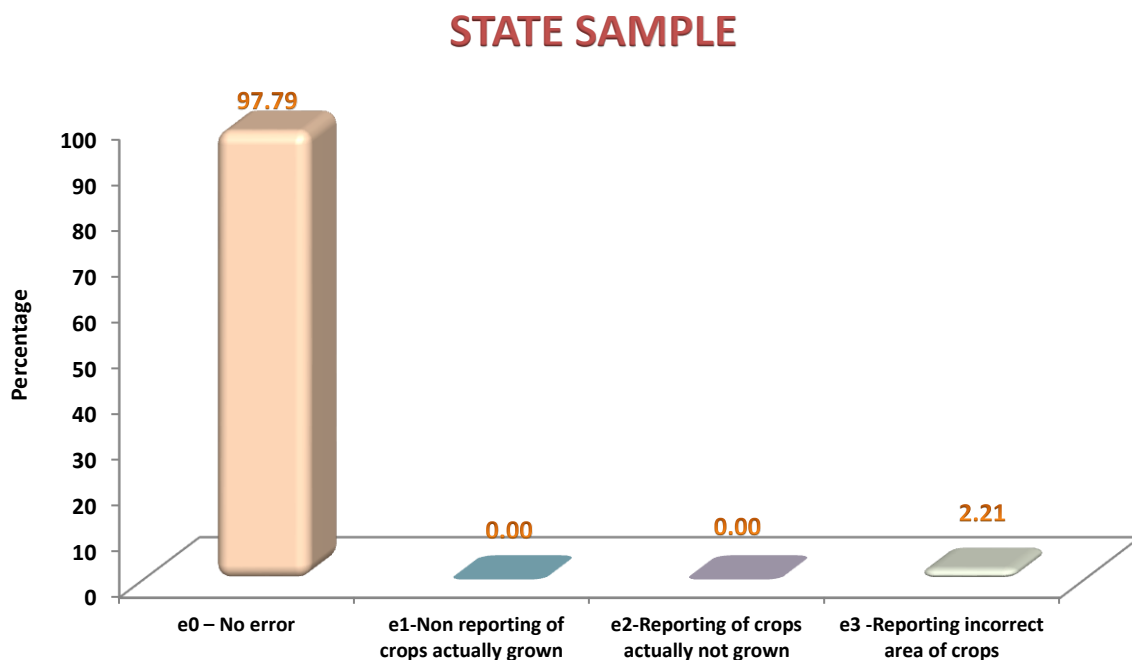
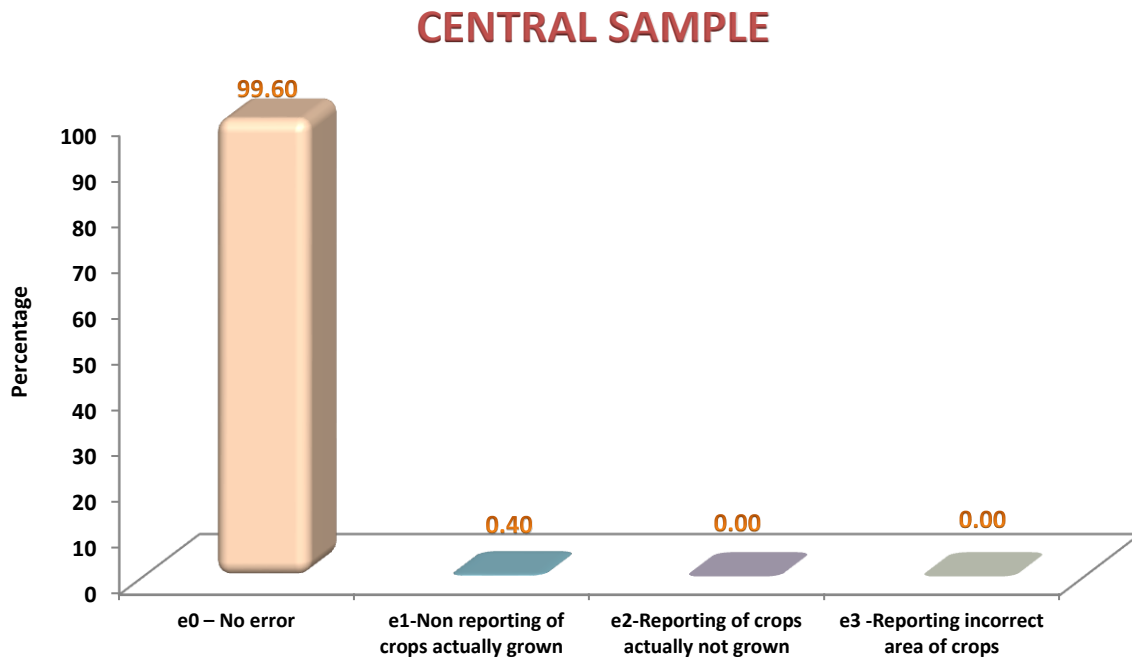
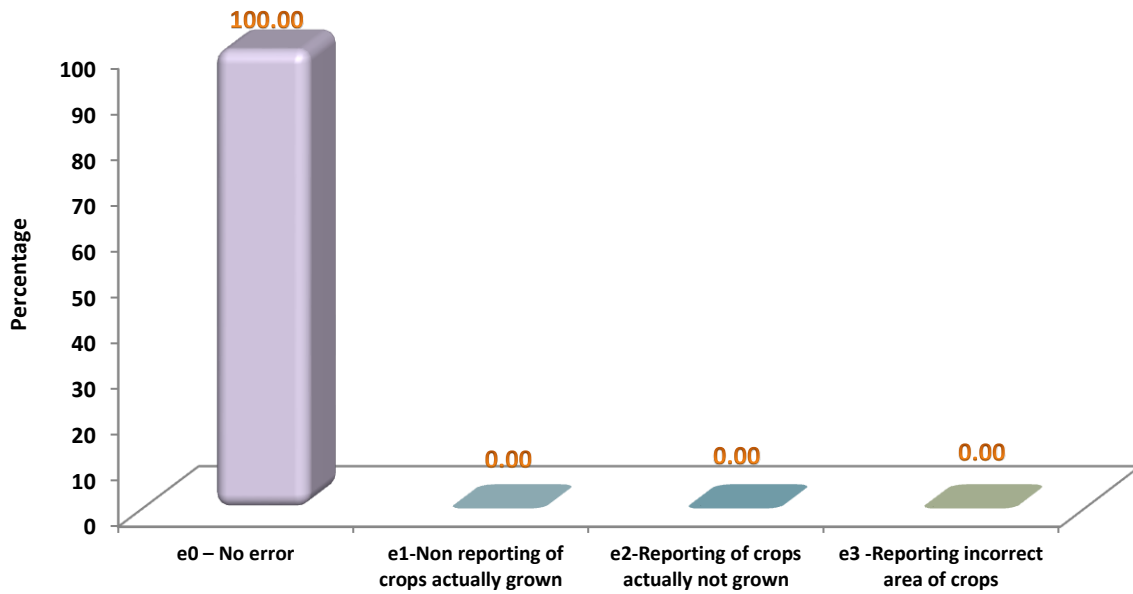


CHART-7

ERRORS IN RECORDING CROPS AND CROP AREAS 2023-24 SUMMER

CENTRAL SAMPLE



STATE SAMPLE

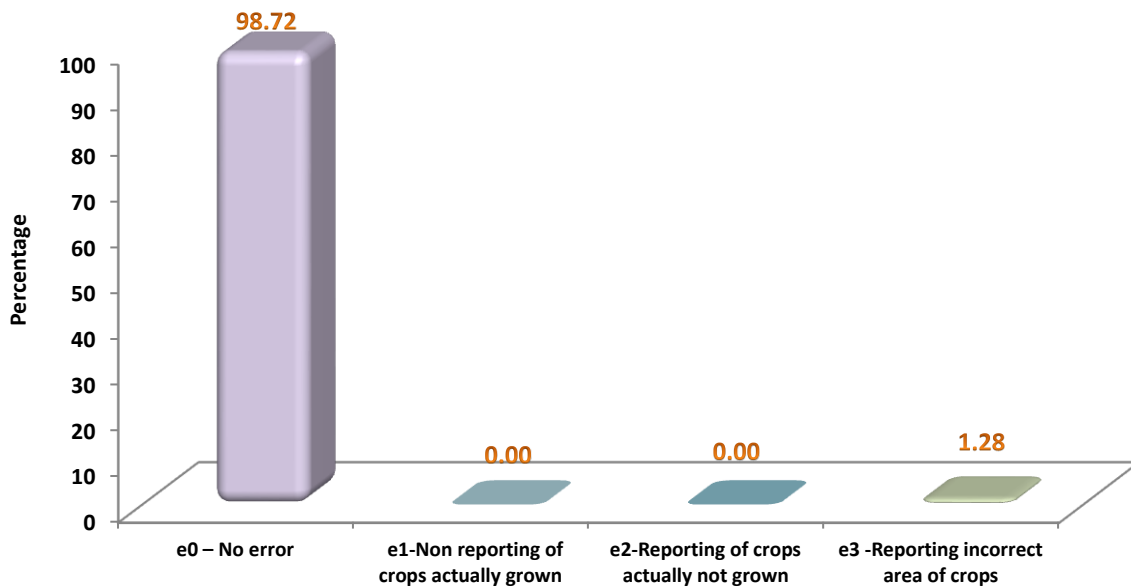


Table-4
PERCENTAGE OF SURVEY NUMBERS IN WHICH ERRORS IN RECORDING CROP AREAS WERE OBSERVED: 2023-24

Sl. No.	District	Agency	Percentage of survey numbers with different types of errors in enumeration of area during												
			AUTUMN				WINTER				SUMMER				
			e0	e1	e2	e3	e0	e1	e2	e3	e0	e1	e2	e3	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Thiruvananthapuram	C	100.00				50.00	50.00			100.00				
		S	100.00				100.00								
2	Kollam	C	100.00				100.00				100.00				
		S					100.00								
3	Pathanamthitta	C					100.00				100.00				
		S					100.00				100.00				
4	Alappuzha	C					100.00				100.00				
		S	100.00				100.00				100.00				
5	Kottayam	C	100.00								100.00				
		S	100.00				100.00				100.00				
6	Idukki	C	100.00				100.00				100.00				
		S	100.00				100.00								
7	Ernakulam	C					100.00				100.00				
		S	100.00				100.00								
8	Thrissur	C	100.00				100.00								
		S	100.00				92.50			7.50	75.00			25.00	
9	Palakkad	C	100.00				100.00				100.00				
		S	94.00			6.00	100.00				100.00				
10	Malappuram	C	100.00				100.00				100.00				
		S	100.00				100.00				100.00				
11	Kozhikode	C					100.00				100.00				
		S	100.00				92.31			7.69	90.00			10.00	
12	Wayanad	C					100.00				100.00				
		S					100.00				100.00				
13	Kannur	C	100.00				100.00								
		S	92.31			7.69	100.00								
14	Kasaragod	C	100.00				100.00				100.00				
		S	94.44			5.56	100.00				100.00				
For District covered		C	100.00				99.60	0.40			100.00				
		S	95.80			4.20	97.79			2.21	98.72			1.28	
C-Central Sample S-State Sample															
e0 - No error e1-Non reporting of crops actually grown e2-Reporting of crops actually not grown															
e3 -Reporting incorrect area of crops															

Table-4 (a)

PERCENTAGE OF SURVEY NUMBERS IN WHICH ERRORS IN RECORDING CROP AREAS WERE OBSERVED: 2023-24

Sl. No.	District	Agency	Percentage of survey numbers with different types of errors in enumeration of area during			
			SUMMER DRY			
			e0	e1	e2	e3
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				
		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				
		S				
C-Central Sample S-State Sample						
e0_ No error e1-Non reporting of crops actually grown e2-Reporting of crops actually not grown						
e3 -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, except for Central sample in Winter season & the discrepancy is 0.40%.

Table-5(a)
DISCREPANCIES IN RECORDING IRRIGATION PARTICULARS OF PADDY
DURING 2023-24 - 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		100.00		100.00									
		S		100.00		100.00									
2	Kollam	C			100.00	100.00									
		S													
3	Pathanamthitta	C													
		S													
4	Alappuzha	C													
		S		100.00		100.00									
5	Kottayam	C		100.00		100.00									
		S		100.00		100.00									
6	Idukki	C		100.00		100.00									
		S		100.00		100.00									
7	Ernakulam	C													
		S			100.00	100.00									
8	Thrissur	C		100.00		100.00									
		S			100.00	100.00									
9	Palakkad	C		21.05	78.95	100.00									
		S		84.00	16.00	100.00									
10	Malappuram	C		100.00		100.00									
		S			100.00	100.00									
11	Kozhikode	C													
		S			100.00	100.00									
12	Wayanad	C													
		S													
13	Kannur	C			100.00	100.00									
		S			100.00	100.00									
14	Kasaragod	C		100.00		100.00									
		S		11.11	88.89	100.00									
For District covered		C		41.67	58.33	100.00									
		S		51.75	48.25	100.00									

C-Central Sample S-State Sample

I-Irrigated UI- Un Irrigated NR-Non reporting

Table-5(b)
DISCREPANCIES IN RECORDING IRRIGATION PARTICULARS OF PADDY DURING
2023-24 - WINTER

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		50.00		50.00	50.00				50.00			50.00	50.00
		S		100.00		100.00									
2	Kollam	C		100.00		100.00									
		S			100.00	100.00									
3	Pathanamthitta	C		100.00		100.00									
		S		100.00		100.00									
4	Alappuzha	C		100.00		100.00									
		S		100.00		100.00									
5	Kottayam	C													
		S		100.00		100.00									
6	Idukki	C		100.00		100.00									
		S		100.00		100.00									
7	Ernakulam	C		85.71	14.29	100.00									
		S		100.00		100.00									
8	Thrissur	C		100.00		100.00									
		S		100.00		100.00									
9	Palakkad	C		100.00		100.00									
		S		100.00		100.00									
10	Malappuram	C		98.08	1.92	100.00									
		S		10.71	89.29	100.00									
11	Kozhikode	C			100.00	100.00									
		S			100.00	100.00									
12	Wayanad	C		100.00		100.00									
		S		100.00		100.00									
13	Kannur	C		100.00		100.00									
		S		100.00		100.00									
14	Kasaragod	C		100.00		100.00									
		S		100.00		100.00									
For District covered		C		97.59	2.01	99.60	0.40				0.40			0.40	0.40
		S		75.22	24.78	100.00									
												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 2023-24 - 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		100.00		100.00									
		S													
2	Kollam	C		100.00		100.00									
		S													
3	Pathanamthitta	C		100.00		100.00									
		S		100.00		100.00									
4	Alappuzha	C		100.00		100.00									
		S		100.00		100.00									
5	Kottayam	C		100.00		100.00									
		S		100.00		100.00									
6	Idukki	C		100.00		100.00									
		S													
7	Ernakulam	C		100.00		100.00									
		S													
8	Thrissur	C													
		S		100.00		100.00									
9	Palakkad	C		100.00		100.00									
		S		94.44	5.56	100.00									
10	Malappuram	C		100.00		100.00									
		S		100.00		100.00									
11	Kozhikode	C		100.00		100.00									
		S		100.00		100.00									
12	Wayanad	C		57.14	42.86	100.00									
		S		100.00		100.00									
13	Kannur	C													
		S													
14	Kasaragod	C		100.00		100.00									
		S		100.00		100.00									
For District covered		C		97.09	2.91	100.00									
		S		99.36	0.64	100.00									
												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 2023-24 - SUMMER DRY

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												
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												
		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												
		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, except for the Winter season for Central sample & the discrepancy is 0.40%.

Table-6(a)

DISCREPANCIES IN RECORDING SEED VARIETY PARTICULARS OF PADDY DURING 2023-24 - AUTUMN

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		100.00		100.00									
		S		100.00		100.00									
2	Kollam	C		100.00		100.00									
		S													
3	Pathanamthitta	C													
		S													
4	Alappuzha	C													
		S		100.00		100.00									
5	Kottayam	C		100.00		100.00									
		S		100.00		100.00									
6	Idukki	C		100.00		100.00									
		S		100.00		100.00									
7	Ernakulam	C													
		S			100.00	100.00									
8	Thrissur	C		100.00		100.00									
		S		100.00		100.00									
9	Palakkad	C		100.00		100.00									
		S		100.00		100.00									
10	Malappuram	C		100.00		100.00									
		S		100.00		100.00									
11	Kozhikode	C													
		S		100.00		100.00									
12	Wayanad	C													
		S													
13	Kannur	C		100.00		100.00									
		S		100.00		100.00									
14	Kasaragod	C		100.00		100.00									
		S		88.89	11.11	100.00									
For District covered		C		100.00		100.00									
		S		97.90	2.10	100.00									

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 2023-24 – 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		50.00		50.00	50.00			50.00			50.00	50.00
		S		100.00		100.00								
2	Kollam	C		100.00		100.00								
		S			100.00	100.00								
3	Pathanamthitta	C		100.00		100.00								
		S		100.00		100.00								
4	Alappuzha	C		100.00		100.00								
		S		100.00		100.00								
5	Kottayam	C												
		S		100.00		100.00								
6	Idukki	C		100.00		100.00								
		S		100.00		100.00								
7	Ernakulam	C		100.00		100.00								
		S		100.00		100.00								
8	Thrissur	C		100.00		100.00								
		S		100.00		100.00								
9	Palakkad	C		98.65	1.35	100.00								
		S		97.96	2.04	100.00								
10	Malappuram	C		88.46	11.54	100.00								
		S		85.71	14.29	100.00								
11	Kozhikode	C		66.67	33.33	100.00								
		S		23.08	76.92	100.00								
12	Wayanad	C		64.29	35.71	100.00								
		S		100.00		100.00								
13	Kannur	C		41.18	58.82	100.00								
		S			100.00	100.00								
14	Kasaragod	C		15.79	84.21	100.00								
		S		57.14	42.86	100.00								
For District covered		C		81.93	17.67	99.60	0.40			0.40			0.40	0.40
		S		84.51	15.49	100.00								
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 2023-24 - SUMMER

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		100.00		100.00									
		S													
2	Kollam	C		100.00		100.00									
		S													
3	Pathanamthitta	C		100.00		100.00									
		S		100.00		100.00									
4	Alappuzha	C		100.00		100.00									
		S		100.00		100.00									
5	Kottayam	C		100.00		100.00									
		S		100.00		100.00									
6	Idukki	C		100.00		100.00									
		S													
7	Ernakulam	C		100.00		100.00									
		S													
8	Thrissur	C													
		S		100.00		100.00									
9	Palakkad	C		100.00		100.00									
		S		94.44	5.56	100.00									
10	Malappuram	C		100.00		100.00									
		S		100.00		100.00									
11	Kozhikode	C		100.00		100.00									
		S		100.00		100.00									
12	Wayanad	C		100.00		100.00									
		S		100.00		100.00									
13	Kannur	C													
		S													
14	Kasaragod	C		33.33	66.67	100.00									
		S		100.00		100.00									
For District covered		C		96.12	3.88	100.00									
		S		99.36	0.64	100.00									
												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 2023-24 - 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													
		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													
		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 2023-24. For State Sample the response was 100% during autumn, winter and summer and for Central samples, it was 98%, 99%, 100% respectively. Annual response was 99% for central samples & 100% for State samples. Annual response on paddy Crop cutting for Central Sample was 99% and for State Sample it was 100%.

Table-7
RESPONSE IN SAMPLE CHECK ON CROP CUTTING EXPERIMENTS FOR PADDY
DURING 2023-24

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
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>
1	Thiruvananthapuram	C	8	100.00	8	87.50	8	100.00	24	95.83
		S	8	100.00	8	100.00	8	100.00	24	100.00
2	Kollam	C	6	100.00	6	100.00	6	100.00	18	100.00
		S	6	100.00	6	100.00	6	100.00	18	100.00
3	Pathanamthitta	C	6	100.00	6	100.00	6	100.00	18	100.00
		S	6	100.00	6	100.00	6	100.00	18	100.00
4	Alappuzha	C	8	100.00	8	100.00	8	100.00	24	100.00
		S	8	100.00	8	100.00	8	100.00	24	100.00
5	Kottayam	C	8	100.00	8	100.00	8	100.00	24	100.00
		S	8	100.00	8	100.00	8	100.00	24	100.00
6	Idukki	C	4	100.00	4	100.00	4	100.00	12	100.00
		S	4	100.00	4	100.00	4	100.00	12	100.00
7	Ernakulam	C	10	100.00	10	100.00	10	100.00	30	100.00
		S	10	100.00	10	100.00	10	100.00	30	100.00
8	Thrissur	C	8	100.00	8	100.00	8	100.00	24	100.00
		S	8	100.00	8	100.00	8	100.00	24	100.00
9	Palakkad	C	10	100.00	10	100.00	10	100.00	30	100.00
		S	10	100.00	10	100.00	10	100.00	30	100.00
10	Malappuram	C	10	100.00	10	100.00	10	100.00	30	100.00
		S	10	100.00	10	100.00	10	100.00	30	100.00
11	Kozhikode	C	8	75.00	8	100.00	8	100.00	24	91.67
		S	8	100.00	8	100.00	8	100.00	24	100.00
12	Wayanad	C								
		S								
13	Kannur	C	8	100.00	8	100.00			16	100.00
		S	8	100.00	8	100.00			16	100.00
14	Kasaragod	C	6	100.00	6	100.00	14	100.00	26	100.00
		S	6	100.00	6	100.00	14	100.00	26	100.00
For District covered		C	100	98.00	100	99.00	100	100.00	300	99.00
		S	100	100.00	100	100.00	100	100.00	300	100.00

Distribution of number of experiments

2.1 Distribution of number of experiments conducted according to important inputs

Table 8(i), 8(ii) and 8(iii) 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 2023-24

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	87.50	100.00	75.00
		S		8	100.00	100.00	100.00
		C	T	8	87.50	100.00	75.00
		S		8	100.00	100.00	100.00
2	Kollam	C	H	6	33.33	100.00	66.67
		S		6		100.00	83.33
		C	T	6	33.33	100.00	66.67
		S		6		100.00	83.33
3	Pathanamthitta	C	H	6	66.67	100.00	100.00
		S		6	100.00	100.00	100.00
		C	T	6	66.67	100.00	100.00
		S		6	100.00	100.00	100.00
4	Alappuzha	C	H	8	50.00	100.00	50.00
		S		8	75.00	87.50	75.00
		C	T	8	50.00	100.00	50.00
		S		8	75.00	87.50	75.00
5	Kottayam	C	H	8	100.00	100.00	100.00
		S		8	100.00	100.00	100.00
		C	T	8	100.00	100.00	100.00
		S		8	100.00	100.00	100.00

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

Table-8(i)

DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2023-24
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
6	Idukki	C	H	4	100.00	100.00	100.00
		S		4	100.00	100.00	100.00
		C	T	4	100.00	100.00	100.00
		S		4	100.00	100.00	100.00
7	Ernakulam	C	H	10	60.00	90.00	70.00
		S		10	80.00	80.00	70.00
		C	T	10	60.00	90.00	70.00
		S		10	80.00	80.00	70.00
8	Thrissur	C	H	8	25.00	100.00	87.50
		S		8		100.00	100.00
		C	T	8	25.00	100.00	87.50
		S		8		100.00	100.00
9	Palakkad	C	H	10	80.00	100.00	90.00
		S		10	60.00	100.00	80.00
		C	T	10	80.00	100.00	90.00
		S		10	60.00	100.00	80.00
10	Malappuram	C	H	10	70.00	100.00	100.00
		S		10	60.00	100.00	100.00
		C	T	10	70.00	100.00	100.00
		S		10	60.00	100.00	100.00
11	Kozhikkode	C	H	6	16.67	66.67	33.33
		S		8		50.00	12.50
		C	T	8	12.50	50.00	25.00
		S		8		50.00	12.50
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	8		100.00	100.00
		S		8		87.50	50.00
		C	T	8		100.00	100.00
		S		8		87.50	50.00
14	Kasaragod	C	H	6	100.00	100.00	100.00
		S		6		83.33	50.00
		C	T	6	100.00	100.00	100.00
		S		6		83.33	50.00
For District covered		C	H	98	60.20	96.94	82.65
		S		100	52.00	91.00	78.00
		C	T	100	59.00	95.00	81.00
		S		100	52.00	91.00	78.00

*No Paddy in Wayanad district.

Table-8(ii)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO
IMPORTANT INPUTS DURING 2023-24

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	7	85.71	100.00	85.71
		S		8	100.00	100.00	100.00
		C	T	8	75.00	87.50	75.00
		S		8	100.00	100.00	100.00
2	Kollam	C	H	6	50.00	83.33	100.00
		S		6	100.00	83.33	33.33
		C	T	6	50.00	83.33	100.00
		S		6	100.00	83.33	33.33
3	Pathanamthitta	C	H	6	100.00	100.00	100.00
		S		6	100.00	100.00	100.00
		C	T	6	100.00	100.00	100.00
		S		6	100.00	100.00	100.00
4	Alappuzha	C	H	8	50.00	62.50	62.50
		S		8	100.00	100.00	100.00
		C	T	8	50.00	62.50	62.50
		S		8	100.00	100.00	100.00
5	Kottayam	C	H	8	100.00	100.00	100.00
		S		8	100.00	100.00	87.50
		C	T	8	100.00	100.00	100.00
		S		8	100.00	100.00	87.50
6	Idukki	C	H	4	100.00	75.00	100.00
		S		4	100.00	100.00	100.00
		C	T	4	100.00	75.00	100.00
		S		4	100.00	100.00	100.00
7	Ernakulam	C	H	10	100.00	100.00	100.00
		S		10	100.00	100.00	100.00
		C	T	10	100.00	100.00	100.00
		S		10	100.00	100.00	100.00
8	Thrissur	C	H	8	87.50	100.00	75.00
		S		8	75.00	75.00	62.50
		C	T	8	87.50	100.00	75.00
		S		8	75.00	75.00	62.50

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

Table-8(ii)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2023-24

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	80.00	100.00	90.00
		S		10	70.00	100.00	90.00
		C	T	10	80.00	100.00	90.00
		S		10	70.00	100.00	90.00
10	Malappuram	C	H	10	70.00	90.00	90.00
		S		10	50.00	70.00	90.00
		C	T	10	70.00	90.00	90.00
		S		10	50.00	70.00	90.00
11	Kozhikkode	C	H	8			12.50
		S		8		37.50	62.50
		C	T	8			12.50
		S		8		37.50	62.50
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	8	100.00	62.50	62.50
		S		8	62.50	37.50	62.50
		C	T	8	100.00	62.50	62.50
		S		8	62.50	37.50	62.50
14	Kasaragod	C	H	6	100.00	50.00	100.00
		S		6	66.67	33.33	33.33
		C	T	6	100.00	50.00	100.00
		S		6	66.67	33.33	33.33
For District covered		C	H	99	77.78	79.80	81.82
		S		100	77.00	80.00	80.00
		C	T	100	77.00	79.00	81.00
		S		100	77.00	80.00	80.00

Table-8(iii)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO
IMPORTANT INPUTS DURING 2023-24

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	100.00	100.00	100.00
		S		8	100.00	100.00	100.00
		C	T	8	100.00	100.00	100.00
		S		8	100.00	100.00	100.00
2	Kollam	C	H	6	100.00	100.00	100.00
		S		6	100.00	100.00	66.67
		C	T	6	100.00	100.00	100.00
		S		6	100.00	100.00	66.67
3	Pathanamthitta	C	H	6	100.00	100.00	100.00
		S		6	100.00	100.00	100.00
		C	T	6	100.00	100.00	100.00
		S		6	100.00	100.00	100.00
4	Alappuzha	C	H	8	75.00	100.00	100.00
		S		8	100.00	100.00	100.00
		C	T	8	75.00	100.00	100.00
		S		8	100.00	100.00	100.00
5	Kottayam	C	H	8	100.00	100.00	100.00
		S		8	100.00	100.00	100.00
		C	T	8	100.00	100.00	100.00
		S		8	100.00	100.00	100.00
6	Idukki	C	H	4	100.00	100.00	75.00
		S		4	100.00	75.00	75.00
		C	T	4	100.00	100.00	75.00
		S		4	100.00	75.00	75.00
7	Ernakulam	C	H	10	100.00	100.00	100.00
		S		10	100.00	100.00	80.00
		C	T	10	100.00	100.00	100.00
		S		10	100.00	100.00	80.00
8	Thrissur	C	H	8	100.00	100.00	100.00
		S		8	100.00	100.00	100.00
		C	T	8	100.00	100.00	100.00
		S		8	100.00	100.00	100.00

Table 8(iii) contd....

Table-8(iii)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2023-24

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	100.00	100.00	100.00
		S		10	100.00	100.00	100.00
		C	T	10	100.00	100.00	100.00
		S		10	100.00	100.00	100.00
10	Malappuram	C	H	10	100.00	100.00	100.00
		S		10	100.00	100.00	100.00
		C	T	10	100.00	100.00	100.00
		S		10	100.00	100.00	100.00
11	Kozhikode	C	H	8	100.00	87.50	87.50
		S		8	100.00	100.00	75.00
		C	T	8	100.00	87.50	87.50
		S		8	100.00	100.00	75.00
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H				
		S					
		C	T				
		S					
14	Kasaragod	C	H	14	100.00	92.86	85.71
		S		14	100.00	85.71	100.00
		C	T	14	100.00	92.86	85.71
		S		14	100.00	85.71	100.00
For District covered		C	H	100	98.00	98.00	96.00
		S		100	100.00	97.00	93.00
		C	T	100	98.00	98.00	96.00
		S		100	100.00	97.00	93.00

2) Other Crop Cutting Experiments

Table-8(iv)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2023-24

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			
		S		4	100.00		25.00
		C	T	4			
		S		4	100.00		25.00
2	Kollam	C	H	4		50.00	
		S		4	25.00		25.00
		C	T	4		50.00	
		S		4	25.00		25.00
3	Pathanamthitta	C	H				
		S					
		C	T				
		S					
4	Alappuzha	C	H				
		S					
		C	T				
		S					
5	Kottayam	C	H	4	25.00		100.00
		S		4		75.00	75.00
		C	T	4	25.00		100.00
		S		4		75.00	75.00
6	Idukki	C	H				
		S					
		C	T				
		S					
7	Ernakulam	C	H	4	25.00		50.00
		S		4	50.00		50.00
		C	T	4	25.00		50.00
		S		4	50.00		50.00
8	Thrissur	C	H	4	75.00		
		S		4			
		C	T	4	75.00		
		S		4			
To be contd...							

Table-8(iv)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2023-24

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	75.00	25.00	25.00
		S		4	75.00	75.00	
		C	T	4	75.00	25.00	25.00
		S		4	75.00	75.00	
10	Malappuram	C	H	4	75.00		50.00
		S		4	100.00		25.00
		C	T	4	75.00		50.00
		S		4	100.00		25.00
11	Kozhikode	C	H	4	75.00		25.00
		S		4	75.00		25.00
		C	T	4	75.00		25.00
		S		4	75.00		25.00
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	4	50.00	25.00	
		S		4			
		C	T	4	50.00	25.00	
		S		4			
14	Kasaragod	C	H	4	75.00	25.00	
		S		4	50.00		50.00
		C	T	4	75.00	25.00	
		S		4	50.00		50.00
For District covered		C	H	40	47.50	12.50	25.00
		S		40	47.50	15.00	27.50
		C	T	40	47.50	12.50	25.00
		S		40	47.50	15.00	27.50

Table-8(v)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2023-24

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	75.00	50.00	
		C	T	4			
		S		4	75.00	50.00	
2	Kollam	C	H	4			
		S		4			
		C	T	4			
		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		25.00	
		C	T	4			
		S		4		25.00	
6	Idukki	C	H				
		S					
		C	T				
		S					
7	Ernakulam	C	H	4	50.00		
		S		4	50.00	50.00	
		C	T	4	50.00		
		S		4	50.00	50.00	
8	Thrissur	C	H	4	50.00	25.00	
		S		4	100.00		
		C	T	4	50.00	25.00	
		S		4	100.00		

To be contd....

Table-8(v)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2023-24

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	100.00	25.00	25.00
		S		4	50.00	50.00	
		C	T	4	100.00	25.00	25.00
		S		4	50.00	50.00	
10	Malappuram	C	H	4	75.00	25.00	
		S		4			
		C	T	4	75.00	25.00	
		S		4			
11	Kozhikode	C	H	4			
		S		4			
		C	T	4			
		S		4			
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	4			
		S		4			
		C	T	4			
		S		4			
14	Kasaragod	C	H	4	75.00	25.00	
		S		4	50.00	25.00	
		C	T	4	75.00	25.00	
		S		4	50.00	25.00	
For District covered		C	H	40	35.00	10.00	2.50
		S		40	32.50	20.00	
		C	T	40	35.00	10.00	2.50
		S		40	32.50	20.00	

Table-8(vi)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO
IMPORTANT INPUTS DURING 2023-24

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	3	100.00		66.67
		S		4	100.00		25.00
		C	T	4	75.00		50.00
		S		4	100.00		25.00
2	Kollam	C	H	4	50.00		75.00
		S		4	100.00		50.00
		C	T	4	50.00		75.00
		S		4	100.00		50.00
3	Pathanamthitta	C	H				
		S					
		C	T				
		S					
4	Alappuzha	C	H	4	100.00		
		S		4	100.00		75.00
		C	T	4	100.00		
		S		4	100.00		75.00
5	Kottayam	C	H	4	50.00		75.00
		S		4	50.00		100.00
		C	T	4	50.00		75.00
		S		4	50.00		100.00
6	Idukki	C	H				
		S					
		C	T				
		S					
7	Ernakulam	C	H	4	100.00		75.00
		S		4	100.00	25.00	50.00
		C	T	4	100.00		75.00
		S		4	100.00	25.00	50.00
8	Thrissur	C	H	6	100.00		66.67
		S		6	66.67		66.67
		C	T	6	100.00		66.67
		S		6	66.67		66.67

Table-8(vi) contd...

Table-8(vi)

DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2023-24

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	83.33	33.33	100.00
		S		6	100.00		66.67
		C	T	6	83.33	33.33	100.00
		S		6	100.00		66.67
10	Malappuram	C	H	6	83.33	33.33	66.67
		S		6	33.33		83.33
		C	T	6	83.33	33.33	66.67
		S		6	33.33		83.33
11	Kozhikode	C	H	4	100.00		50.00
		S		4	100.00	25.00	100.00
		C	T	4	100.00		50.00
		S		4	100.00	25.00	100.00
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	4	100.00		75.00
		S		4	100.00	25.00	50.00
		C	T	4	100.00		75.00
		S		4	100.00	25.00	50.00
14	Kasaragod	C	H	4	100.00		100.00
		S		4	100.00		100.00
		C	T	4	100.00		100.00
		S		4	100.00		100.00
For District covered		C	H	49	87.76	8.16	69.39
		S		50	84.00	6.00	70.00
		C	T	50	86.00	8.00	68.00
		S		50	84.00	6.00	70.00

Table-8(vii)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2023-24

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	25.00		
		C	T	4			
		S		4	25.00		
2	Kollam	C	H	4			
		S		4			
		C	T	4			
		S		4			
3	Pathanamthitta	C	H				
		S					
		C	T				
		S					
4	Alappuzha	C	H	4	25.00		50.00
		S		4			
		C	T	4	25.00		50.00
		S		4			
5	Kottayam	C	H	4			25.00
		S		4			
		C	T	4			25.00
		S		4			
6	Idukki	C	H				
		S					
		C	T				
		S					
7	Ernakulam	C	H	4	25.00		
		S		4			
		C	T	4	25.00		
		S		4			
8	Thrissur	C	H	6	66.67		
		S		6	66.67		
		C	T	6	66.67		
		S		6	66.67		

Table-8(vii) contd....

Table-8(vii)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO IMPORTANT INPUTS DURING 2023-24

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	16.67		
		S		6	50.00		
		C	T	6	16.67		
		S		6	50.00		
10	Malappuram	C	H	6	50.00		16.67
		S		6			
		C	T	6	50.00		16.67
		S		6			
11	Kozhikode	C	H	4			25.00
		S		4			
		C	T	4			25.00
		S		4			
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	4	25.00		
		S		4			
		C	T	4	25.00		
		S		4			
14	Kasaragod	C	H	4	100.00		50.00
		S		4	50.00		
		C	T	4	100.00		50.00
		S		4	50.00		
For District covered		C	H	50	30.00		14.00
		S		50	20.00		
		C	T	50	30.00		14.00
		S		50	20.00		

Table-8(viii)
DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING TO
IMPORTANT INPUTS DURING 2023-24

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			
		S		4			
		C	T	4			
		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	25.00		
		S		4			
		C	T	4	25.00		
		S		4			
8	Thrissur	C	H	4	100.00		
		S		4	100.00	25.00	
		C	T	4	100.00		
		S		4	100.00	25.00	

Table 8(viii) contd...

Table-8(viii)

**DISTRIBUTION OF NUMBER OF EXPERIMENTS CONDUCTED ACCORDING
TO IMPORTANT INPUTS DURING 2023-24**

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	25.00	75.00	
		S		4	50.00	50.00	25.00
		C	T	4	25.00	75.00	
		S		4	50.00	50.00	25.00
10	Malappuram	C	H	4	100.00		
		S		4	50.00		
		C	T	4	100.00		
		S		4	50.00		
11	Kozhikode	C	H	4			25.00
		S		4			
		C	T	4			25.00
		S		4			
12	Wayanad	C	H				
		S					
		C	T				
		S					
13	Kannur	C	H	4			
		S		4	25.00		
		C	T	4			
		S		4	25.00		
14	Kasaragod	C	H	4	100.00	50.00	50.00
		S		4	100.00		
		C	T	4	100.00	50.00	50.00
		S		4	100.00		
For District covered		C	H	40	35.00	12.50	7.50
		S		40	32.50	7.50	2.50
		C	T	40	35.00	12.50	7.50
		S		40	32.50	7.50	2.50

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: 2023-24

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	8	8				
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						
13	Kannur	8	8				
14	Kasaragod	6	6				
Total for all crops		100	100				
* There is no autumn paddy in Wayanad district.							

Table 9(ii)

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

STATE: KERALA

YEAR: 2023-24

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	8	8				
6	Idukki	4	4				
7	Ernakulam	10	10				
8	Thrissur	8	8				
9	Palakkad	10	10				
10	Malappuram	10	10				
11	Kozhikode	8	6		2		
12	Wayanad						
13	Kannur	8	8				
14	Kasaragod	6	6				
Total for all crops		100	98		2		
*There is no autumn paddy in Wayanad district.							

Table 9 (iii)

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

STATE:KERALA

YEAR: 2023-24

SEASON: WINTER

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	8	8				
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						
13	Kannur	8	8				
14	Kasaragod	6	6				
Total		100	100				

Table 9 (iv)

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

STATE:KERALA

YEAR: 2023-24

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	7		1		
2	Kollam	6	6				
3	Pathanamthitta	6	6				
4	Alappuzha	8	8				
5	Kottayam	8	8				
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						
13	Kannur	8	8				
14	Kasaragod	6	6				
Total		100	99		1		

Table 9(v)

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

STATE:KERALA

YEAR: 2023-24

SEASON : **SUMMER**

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	8	8				
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						
13	Kannur						
14	Kasaragod	14	14				
State Total		100	100				

Table 9 (vi)

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

STATE: KERALA

YEAR: 2023-24

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	8	8				
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						
13	Kannur						
14	Kasaragod	14	14				
State Total		100	100				

Table 9(vii)

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

STATE:KERALA

YEAR: 2023-24

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: 2023-24

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	3		1		
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	49		1		

Table 9 (ix)

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

STATE:KERALA

YEAR: 2023-24

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						
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: 2023-24

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: 2023-24

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: 2023-24

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: 2023-24

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				

Table 9(xiv)

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

STATE:KERALA

YEAR: 2023-24

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	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 (xv)

CROPWISE NUMBER OF EXPERIMENTS PLANNED FOR CHECK AT HARVEST AND THE RESPONSE ACHIEVED

STATE : KERALA

YEAR : 2023-24

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 : 2023-24

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				

2. 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

3. 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: 2023-24 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	4915.18			8	4915.18							8	4915.18			8	4915.18
2	Kollam	6			6	3246.58	6	3246.58									6	3246.58	6	3246.58
3	Pathanamthitta	6	6	3125.75			6	3125.75							6	3125.75			6	3125.75
4	Alappuzha	8	6	4620.24	1	598.75	7	4045.74			1	1827.36	1	1827.36	6	4620.24	2	1213.06	8	3768.44
5	Kottayam	8	8	4249.43			8	4249.43							8	4249.43			8	4249.43
6	Idukki	4	4	2376.75			4	2376.75							4	2376.75			4	2376.75
7	Ernakulam	10	8	2614.00			8	2614.00			2	0.04	2	0.04	8	2614.00	2	0.04	10	2091.20
8	Thrissur	8			8	3560.43	8	3560.43									8	3560.43	8	3560.43
9	Palakkad	10	6	3092.36	4	2810.61	10	2979.66							6	3092.36	4	2810.61	10	2979.66
10	Malappuram	10	6	3899.35	4	3438.62	10	3715.06							6	3899.35	4	3438.62	10	3715.06
11	Kozhikode	8			4	1215.70	4	1215.70			4	1038.77	4	1038.77			8	1127.23	8	1127.23
12	Wayanad																			
13	Kannur	8			7	4059.40	7	4059.40			1	866.14	1	866.14			8	3660.24	8	3660.24
14	Kasaragod	6			5	3950.32	5	3950.32			1	3709.15	1	3709.15			6	3910.13	6	3910.13
	State Total	100	52	3695.42	39	3245.87	91	3502.76			9	1173.09	9	1173.09	52	3695.42	48	2857.22	100	3293.09

Table 10 (ii)

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

STATE: KERALA			YEAR: 2023-24						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.	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	2929.85	1	829.80	8	2667.35							7	2929.85	1	829.80	8	2667.35						
2	Kollam	6	2	3812.59	4	2956.11	6	3241.60							2	3812.59	4	2956.11	6	3241.60						
3	Pathanamthitta	6	4	2490.97	2	1011.82	6	1997.92							4	2490.97	2	1011.82	6	1997.92						
4	Alappuzha	8	4	3754.84	4	1307.35	8	2531.09							4	3754.84	4	1307.35	8	2531.09						
5	Kottayam	8	8	2276.99			8	2276.99							8	2276.99			8	2276.99						
6	Idukki	4	4	2867.48			4	2867.48							4	2867.48			4	2867.48						
7	Ernakulam	10	6	2731.02	3	2019.29	9	2493.77			1	0.04	1	0.04	6	2731.02	4	1514.48	10	2244.40						
8	Thrissur	8	2	3878.33	6	2481.55	8	2830.75							2	3878.33	6	2481.55	8	2830.75						
9	Palakkad	10	8	3165.44	2	3534.30	10	3239.21							8	3165.44	2	3534.30	10	3239.21						
10	Malappuram	10	7	3878.87	3	3176.32	10	3668.11							7	3878.87	3	3176.32	10	3668.11						
11	Kozhikode	6	1	3731.90	3	1398.40	4	1981.78			2	2177.86	2	2177.86	1	3731.90	5	1710.18	6	2047.14						
12	Wayanad																									
13	Kannur	8			8	3090.37	8	3090.37										8	3090.37	8	3090.37					
14	Kasaragod	6	6	4026.52			6	4026.52							6	4026.52			6	4026.52						
State Total		98	59	3174.79	36	2399.17	95	2880.87			3	1451.92	3	1451.92	59	3174.79	39	2326.31	98	2837.13						

Table 10 (iii)

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

STATE: KERALA			YEAR: 2023-24						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		
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	3101.93			8	3101.93							8	3101.93			8	3101.93		
2	Kollam	6	5	2399.78			5	2399.78	1	1913.52				1	1913.52	6	2318.74			6	2318.74	
3	Pathanamthitta	6	6	3986.41			6	3986.41							6	3986.41			6	3986.41		
4	Alappuzha	8	8	4250.06			8	4250.06							8	4250.06			8	4250.06		
5	Kottayam	8	8	4635.90			8	4635.90							8	4635.90			8	4635.90		
6	Idukki	4	4	3513.22			4	3513.22							4	3513.22			4	3513.22		
7	Eranakulam	10	10	4185.56			10	4185.56							10	4185.56			10	4185.56		
8	Thrissur	8	6	4588.00			6	4588.00			2	632.40	2	632.40	6	4588.00	2	632.40	8	3599.10		
9	Palakkad	10	7	5216.53	3	3415.06	10	4676.09							7	5216.53	3	3415.06	10	4676.09		
10	Malappuram	10	4	4723.49	3	4067.47	7	4442.34	1	286.67	2	2180.22	3	1549.03	5	3836.12	5	3312.57	10	3574.35		
11	Kozhikode	8			3	2745.64	3	2745.64			5	1940.63	5	1940.63			8	2242.51	8	2242.51		
12	Wayanad																					
13	Kannur	8	3	2806.33			3	2806.33	2	2224.60	3	1365.63	5	1709.22	5	2573.64	3	1365.63	8	2120.63		
14	Kasaragod	6	2	2798.50			2	2798.50	2	2216.36	2	392.60	4	1304.48	4	2507.43	2	392.60	6	1802.49		
State Total		100	71	4009.61	9	3409.39	80	3942.09	6	1847.02	14	1443.61	20	1564.63	77	3841.10	23	2212.83	100	3466.60		

Table 10 (iv)

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

STATE: KERALA

YEAR: 2023-24

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	7	6	2549.18	1	0.04	7	2185.02							6	2549.18	1	0.04	7	2185.02	
2	Kollam	6	3	4163.47	2	4003.38	5	4099.44			1	2663.92	1	2663.92	3	4163.47	3	3556.90	6	3860.18	
3	Pathanamthitta	6	6	3217.76			6	3217.76							6	3217.76			6	3217.76	
4	Alappuzha	8	4	3411.49	1	5726.88	5	3874.57			3	710.04	3	710.04	4	3411.49	4	1964.25	8	2687.87	
5	Kottayam	8	8	4020.05			8	4020.05							8	4020.05			8	4020.05	
6	Idukki	4	3	3912.51			3	3912.51	1	4035.46				1	4035.46	4	3943.25			4	3943.25
7	Ernakulam	10	10	3329.89			10	3329.89							10	3329.89			10	3329.89	
8	Thrissur	8	7	4112.73	1	1495.44	8	3785.57							7	4112.73	1	1495.44	8	3785.57	
9	Palakkad	10	8	4135.38	2	3745.39	10	4057.38							8	4135.38	2	3745.39	10	4057.38	
10	Malappuram	10	7	4580.82	2	4049.24	9	4462.70			1	2055.74	1	2055.74	7	4580.82	3	3384.74	10	4222.00	
11	Kozhikode	8									8	1426.34	8	1426.34			8	1426.34	8	1426.34	
12	Wayanad																				
13	Kannur	8	5	3616.75			5	3616.75	3	2337.80			3	2337.80	8	3137.14			8	3137.14	
14	Kasaragod	6	3	3758.41			3	3758.41	3	2350.45			3	2350.45	6	3054.43			6	3054.43	
State Total		99	70	3731.88	9	3424.27	79	3696.84	7	2585.75	13	1404.65	20	1818.03	77	3627.69	22	2230.86	99	3317.28	

Table 10(v)

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

STATE: KERALA

YEAR: 2023-24

SEASON: SUMMER

CROP: PADDY

STATE 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	8	8	4951.92			8	4951.92							8	4951.92			8	4951.92	
2	Kollam	6	6	4680.35			6	4680.35							6	4680.35			6	4680.35	
3	Pathanamthitta	6	6	3726.46			6	3726.46							6	3726.46			6	3726.46	
4	Alappuzha	8	8	4524.08			8	4524.08							8	4524.08			8	4524.08	
5	Kottayam	8	8	3969.27			8	3969.27							8	3969.27			8	3969.27	
6	Idukki	4	3	2884.70			3	2884.70	1	3243.48				1.00	3243.48	4	2974.40			4	2974.40
7	Ernakulam	10	10	1345.02			10	1345.02							10	1345.02			10	1345.02	
8	Thrissur	8	8	4304.64			8	4304.64							8	4304.64			8	4304.64	
9	Palakkad	10	10	1360.98			10	1360.98							10	1360.98			10	1360.98	
10	Malappuram	10	10	5265.70			10	5265.70							10	5265.70			10	5265.70	
11	Kozhikode	8	8	2461.56			8	2461.56							8	2461.56			8	2461.56	
12	Wayanad																				
13	Kannur																				
14	Kasaragod	14	12	4067.90			12	4067.90	2	3489.84				2.00	3489.84	14	3985.32			14	3985.32
	State Total	100	97	3601.22			97	3601.22	3	3407.72				3.00	3407.72	100	3595.42			100	3595.42

Table 10 (vi)

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

STATE: KERALA

YEAR: 2023-24

SEASON: SUMMER

CROP: PADDY

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	8	8	3835.67			8	3835.67							8	3835.67			8	3835.67	
2	Kollam	6	6	877.29			6	877.29							6	877.29			6	877.29	
3	Pathanamthitta	6	6	3331.41			6	3331.41							6	3331.41			6	3331.41	
4	Alappuzha	8	6	4194.60	2	2828	8	3852.88							6	4194.60	2	2828	8	3852.88	
5	Kottayam	8	8	4823.86			8	4823.86							8	4823.86			8	4823.86	
6	Idukki	4	4	4539.97			4	4539.97							4	4539.97			4	4539.97	
7	Ernakulam	10	10	2552.45			10	2552.45							10	2552.45			10	2552.45	
8	Thrissur	8	8	5624.82			8	5624.82							8	5624.82			8	5624.82	
9	Palakkad	10	10	3083.79			10	3083.79							10	3083.79			10	3083.79	
10	Malappuram	10	10	5047.13			10	5047.13							10	5047.13			10	5047.13	
11	Kozhikode	8	7	4134.70			7	4134.70	1	1154.44				1	1154.44	8	3762.17			8	3762.17
12	Wayanad																				
13	Kannur																				
14	Kasaragod	14	13	4359.82			13	4359.82	1	3439.04				1	3439.04	14	4294.05			14	4294.05
	State Total	100	96	3909.47	2	2828	98	3887.39	2	2296.74				2	2296.74	98	3876.55	2	2828	100	3855.58

Table 10 (vii)

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

STATE: KERALA YEAR: 2023-24 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							4	11500.00				4	11500.00	4	11500.00			4	11500.00
2	Kollam	4							4	10350.00				4	10350.00	4	10350.00			4	10350.00
3	Pathanamthitta																				
4	Alappuzha	4							4	15478.33				4	15478.33	4	15478.33			4	15478.33
5	Kottayam	4							2	24116.67	2	13633	4	18875.00	2	24116.67	2	13633	4	18875.00	
6	Idukki																				
7	Ernakulam	4	1	38666.67			1	38666.67	3	16511.11				3	16511.11	4	22050.00			4	22050.00
8	Thrissur	6							4	18858.33	2	9120	6	15612.22	4	18858.33	2	9120	6	15612.22	
9	Palakkad	6							6	13405.56				6	13405.56	6	13405.56			6	13405.56
10	Malappuram	6							2	14140.00	4	13617	6	13791.11	2	14140.00	4	13617	6	13791.11	
11	Kozhikode	4	1	38533.33			1	38533.33	3	15166.67				3	15166.67	4	21008.33			4	21008.33
12	Wayanad																				
13	Kannur	4	1	39333.33			1	39333.33	3	21433.33				3	21433.33	4	25908.33			4	25908.33
14	Kasaragod	4							4	18408.33				4	18408.33	4	18408.33			4	18408.33
	State Total	50	3	38844.44			3	38844.44	39	15760.51	8	12497	47	15204.96	42	17409.37	8	12497	50	16623.33	

Table 10 (viii)

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

STATE: KERALA

YEAR: 2023-24

SEASON: ANNUAL

CROP: BANANA

CENTRAL SAMPLE

Sl. No	District	No. of expts. Checked at harvest	HY Varieties						Other Varieties						Both HY & Others						Yield Rate Kg/Ha
			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	3							3	9567.56				3	9567.56	3	9567.56			3	9567.56
2	Kollam	4							2	12933.33	2	14100.00	4	13516.67	2	12933.33	2	14100.00	4	13516.67	
3	Pathanamthitta																				
4	Alappuzha	4							4	18650.00				4	18650.00	4	18650.00			4	18650.00
5	Kottayam	4							2	12583.33	2	15066.67	4	13825.00	2	12583.33	2	15066.67	4	13825.00	
6	Idukki																				
7	Ernakulam	4							4	15725.00				4	15725.00	4	15725.00			4	15725.00
8	Thrissur	6							6	15202.22				6	15202.22	6	15202.22			6	15202.22
9	Palakkad	6	1	13233.33	1	15433.33	2	14333.33	4	14683.33				4	14683.33	5	14393.33	1	15433.33	6	14566.67
10	Malappuram	6	2	10383.33			2	10383.33	3	17466.67	1	17266.67	4	17416.67	5	14633.33	1	17266.67	6	15072.22	
11	Kozhikode	4							4	17108.33				4	17108.33	4	17108.33			4	17108.33
12	Wayanad																				
13	Kannur	4							4	18775.00				4	18775.00	4	18775.00			4	18775.00
14	Kasaragod	4							4	20775.00				4	20775.00	4	20775.00			4	20775.00
	State Total	49	3	11333.33	1	15433.33	4	12358.33	40	16155.40	5	15120.00	45	16040.36	43	15818.98	6	15172.22	49	15739.78	

Table 10 (ix)

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

STATE: KERALA

YEAR: 2023-24

SEASON: ANNUAL

CROP:TAPIOCA

STATE SAMPLE

Sl. No.	District	No.ofexpts. Check ed 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	13437.50			4	13437.50	4	13437.50			4	13437.50
2	Kollam	4							1	40000.00	3	38166.67	4	38625.00	1	40000.00	3	38166.67	4	38625.00
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	4			3	43000.00	3	43000.00			1	31125.00	1	31125.00			4	40031.25	4	40031.25
6	Idukki																			
7	Ernakulam	4							2	63875.00	2	45750.25	4	54812.63	2	63875.00	2	45750.25	4	54812.63
8	Thrissur	4									4	40562.50	4	40562.50			4	40562.50	4	40562.50
9	Palakkad	4	3	58125.00			3	58125.00			1	21375.00	1	21375.00	3	58125.00	1	21375.00	4	48937.50
10	Malappuram	4							4	34468.75			4	34468.75	4	34468.75			4	34468.75
11	Kozhikode	4							3	24416.67	1	17875.00	4	22781.25	3	24416.67	1	17875.00	4	22781.25
12	Wayanad																			
13	Kannur	4									4	52812.50	4	52812.50			4	52812.50	4	52812.50
14	Kasaragod	4							2	13500.00	2	33750.00	4	23625.00	2	13500.00	2	33750.00	4	23625.00
	State Total	40	3	58125.00	3	43000.00	6	50562.50	16	28726.56	18	39854.19	34	34617.66	19	33368.42	21	40303.60	40	37009.39

Table 10 (x)

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

STATE: KERALA YEAR: 2023-24 SEASON: ANNUAL CROP:TAPIOCA CENTRAL SAMPLE

Sl.No	District	No.ofexpts.Check ed 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	23281.25	4	23281.25			4	23281.25	4	23281.25
2	Kollam	4			2	33000.00	2	33000.00			2	35625.00	2	35625.00			4	34312.50	4	34312.50
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	4							1	54750.00	3	63354.17	4	61203.13	1	54750.00	3	63354.17	4	61203.13
6	Idukki																			
7	Ernakulam	4							1	4250.00	3	25208.33	4	19968.75	1	4250.00	3	25208.33	4	19968.75
8	Thrissur	4							3	24708.33	1	15000.00	4	22281.25	3	24708.33	1	15000.00	4	22281.25
9	Palakkad	4	1	18750.00			1	18750.00	2	43625.00	1	56375.00	3	47875.00	3	35333.33	1	56375.00	4	40593.75
10	Malappuram	4							3	43916.67	1	10000.00	4	35437.50	3	43916.67	1	10000.00	4	35437.50
11	Kozhikode	4							3	26333.33	1	37250.00	4	29062.50	3	26333.33	1	37250.00	4	29062.50
12	Wayanad																			
13	Kannur	4	1	55125.00			1	55125.00	1	26125.00	2	48000.00	3	40708.33	2	40625.00	2	48000.00	4	44312.50
14	Kasaragod	4	1	57750.00			1	57750.00	2	19250.00	1	8750.00	3	15750.00	3	32083.33	1	8750.00	4	26250.00
	State Total	40	3	43875.00	2	33000.00	5	39525.00	16	30984.38	19	34391.45	35	32833.93	19	33019.74	21	34258.93	40	33670.31

Table 10 (xi)

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

STATE: KERALA

YEAR: 2023-24

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							1	6583.00	3	5054.53	4	5436.65	1	6583	3	5054.533	4	5436.65
2	Kollam	4									4	8620.50	4	8620.5			4	8620.5	4	8620.5
3	Pathanamthitta																			
4	Alappuzha	4									4	10119.90	4	10119.9			4	10119.9	4	10119.9
5	Kottayam	4									4	984.40	4	984.4			4	984.4	4	984.4
6	Idukki																			
7	Ernakulam	4									4	8548.10	4	8548.1			4	8548.1	4	8548.1
8	Thrissur	6							4	7961.90	2	6035.80	6	7319.867	4	7961.9	2	6035.8	6	7319.867
9	Palakkad	6							3	4676.80	3	6177.80	6	5427.3	3	4676.8	3	6177.8	6	5427.3
10	Malappuram	6									6	2567.47	6	2567.467			6	2567.467	6	2567.467
11	Kozhikode	4									4	12609.75	4	12609.75			4	12609.75	4	12609.75
12	Wayanad																			
13	Kannur	4									4	8095.50	4	8095.5			4	8095.5	4	8095.5
14	Kasaragod	4							2	6895.20	2	12015.60	4	9455.4	2	6895.2	2	12015.6	4	9455.4
	State Total	50							10	6625.14	40	7027.93	50	6947.37	10	6625.14	40	7027.93	50	6947.37

Table 10 (xii)

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

STATE: KERALA

YEAR: 2023-24

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	7298.05	4	7298.05			4	7298.05	4	7298.05
2	Kollam	4									4	8064.00	4	8064			4	8064	4	8064
3	Pathanamthitta																			
4	Alappuzha	4							1	11992.20	3	8484.60	4	9361.5	1	11992.2	3	8484.6	4	9361.5
5	Kottayam	4									4	6869.40	4	6869.4			4	6869.4	4	6869.4
6	Idukki																			
7	Eranakulam	4							1	9572.20	3	6270.00	4	7095.55	1	9572.2	3	6270	4	7095.55
8	Thrissur	6							4	10639.90	2	10588.40	6	10622.73	4	10639.9	2	10588.4	6	10622.73
9	Palakkad	6							1	9385.20	5	9432.60	6	9424.7	1	9385.2	5	9432.6	6	9424.7
10	Malappuram	6							3	13193.07	3	10857.60	6	12025.33	3	13193.07	3	10857.6	6	12025.33
11	Kozhikode	4									4	10287.75	4	10287.75			4	10287.75	4	10287.75
12	Wayanad																			
13	Kannur	4							1	8400.00	3	8806.00	4	8704.5	1	8400	3	8806	4	8704.5
14	Kasaragod	4							4	7548.00			4	7548	4	7548			4	7548
	State Total	50							15	10112.03	35	8619.18	50	9067.032	15	10112.03	35	8619.177	50	9067.032

Table 10 (xiii)

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

STATE: KERALA

YEAR: 2023-24

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	2	745.73			2	745.73	1	88.72	1	967.90	2	528.31	3	526.73	1	967.90	4	637.02
2	Kollam	4									4	354.71	4	354.71			4	354.71	4	354.71
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	4			1	552.14	1	552.14			3	666.78	3	666.78			4	638.12	4	638.12
6	Idukki																			
7	Ernakulam	4	1	1374.13	1	948.11	2	1161.12	1	920.24	1	749.39	2	834.82	2	1147.19	2	848.75	4	997.97
8	Thrissur	4							4	315.12			4	315.12	4	315.12			4	315.12
9	Palakkad	4	1	775.06	1	360.76	2	567.91	1	558.01	1	382.03	2	470.02	2	666.53	2	371.40	4	518.96
10	Malappuram	4									4	854.06	4	854.06			4	854.06	4	854.06
11	Kozhikode	4									4	452.24	4	452.24			4	452.24	4	452.24
12	Wayanad																			
13	Kannur	4									4	359.66	4	359.66			4	359.66	4	359.66
14	Kasaragod	4	1	755.26			1	755.26	1	468.55	2	991.00	3	816.85	2	611.91	2	991.00	4	801.45
	State Total	40	5	879.18	3	620.34	8	782.11	8	412.00	24	590.18	32	545.64	13	591.68	27	593.53	40	592.93

Table 10 (xiv)

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

STATE: KERALA

YEAR: 2023-24

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	195.60	4	195.60			4	195.60	4	195.60
2	Kollam	4									4	591.37	4	591.37			4	591.37	4	591.37
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	4									4	258.47	4	258.47			4	258.47	4	258.47
6	Idukki																			
7	Ernakulam	4							2	1046.00	2	328.13	4	687.06	2	1046.00	2	328.13	4	687.06
8	Thrissur	4	1	117.32			1	117.32	1	661.40	2	67.09	3	265.20	2	389.36	2	67.09	4	228.23
9	Palakkad	4	1	1030.23			1	1030.23	3	625.47			3	625.47	4	726.66			4	726.66
10	Malappuram	4	1	1879.35			1	1879.35	2	258.11	1	189.91	3	235.38	3	798.52	1	189.91	4	646.37
11	Kozhikode	4									4	859.56	4	859.56			4	859.56	4	859.56
12	Wayanad																			
13	Kannur	4									4	511.63	4	511.63			4	511.63	4	511.63
14	Kasaragod	4	1	2024.53			1	2024.53	2	761.12	1	761.86	3	761.37	3	1182.26	1	761.86	4	1077.16
	State Total	40	4	1262.86			4	1262.86	10	666.83	26	438.80	36	502.14	14	837.12	26	438.80	40	578.21

Table 10 (xv)

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

STATE: KERALA

YEAR: 2023-24

SEASON: PERENNIAL

CROP: ARECANUT

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	441.62	4	441.6212			4	441.6212	4	441.6212
2	Kollam	4									4	1468.11	4	1468.114			4	1468.114	4	1468.114
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	4									4	725.09	4	725.0884			4	725.0884	4	725.0884
6	Idukki																			
7	Eranakulam	4									4	829.36	4	829.3604			4	829.3604	4	829.3604
8	Thrissur	4	1	434.29			1	434.2884	3	1113.33			3	1113.33	4	943.5699			4	943.5699
9	Palakkad	4	1	1552.98	1	1444.68	2	1498.83	1	831.79	1	864.05	2	847.9162	2	1192.382	2	1154.364	4	1173.373
10	Malappuram	4							2	1451.79	2	1903.88	4	1677.836	2	1451.794	2	1903.878	4	1677.836
11	Kozhikode	4									4	960.90	4	960.8958			4	960.8958	4	960.8958
12	Wayanad																			
13	Kannur	4							1	1764.47	3	1710.51	4	1724.002	1	1764.471	3	1710.512	4	1724.002
14	Kasaragod	4							4	1267.28			4	1267.284	4	1267.284			4	1267.284
	State Total	40	2	993.63	1	1444.68	3	1143.98	11	1264.45	26	1057.83	37	1119.26	13	1222.79	27	1072.16	40	1121.11

Table 10 (xvi)

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

STATE: KERALA

YEAR: 2023-24

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	536.22	4	536.2217			4	536.2217	4	536.2217
2	Kollam	4									4	1358.77	4	1358.775			4	1358.775	4	1358.775
3	Pathanamthitta																			
4	Alappuzha																			
5	Kottayam	4									4	1016.26	4	1016.261			4	1016.261	4	1016.261
6	Idukki																			
7	Eranakulam	4							1	466.98	3	1336.84	4	1119.372	1	466.9774	3	1336.837	4	1119.372
8	Thrissur	4							4	968.75			4	968.7542	4	968.7542			4	968.7542
9	Palakkad	4	1	153.61	2	632.25	3	472.7075			1	1230.40	1	1230.4	1	153.6137	3	831.6363	4	662.1306
10	Malappuram	4							4	1485.58			4	1485.584	4	1485.584			4	1485.584
11	Kozhikode	4									4	758.05	4	758.0459			4	758.0459	4	758.0459
12	Wayanad																			
13	Kannur	4									4	1795.83	4	1795.835			4	1795.835	4	1795.835
14	Kasaragod	4	2	3387.17			2	3387.171	2	2543.02			2	2543.02	4	2965.095			4	2965.095
State Total		40	3	2309.32	2	632.25	5	1638.49	11	1397.31	24	1129.23	35	1213.48	14	1592.74	26	1091	40	1266.61

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: 2023-24 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	4915.18			8	7	8	8	4915.18	48.13	26.35	45.51		
2	Kollam	6	3246.58			5	5	4	5	3670.99	44.36	25.1	17	1	1124.54
3	Pathanamthitta	6	3125.75	1	2795.05	6	6	6	6	3125.75	56.06	24.91	33.31		
4	Alappuzha	8	3768.44	6	4620.24	6	6	6	6	4620.24	72.83	41.5	25.6	2	1213.06
5	Kottayam	8	4249.43	7	3967.52	8	8	8	8	4249.43	76.5	41.25	42.38		
6	Idukki	4	2376.75	2	2762.14	4	4	4	4	2376.75	27.25	22	28.75		
7	Ernakulam	10	2091.20	3	3027.11	7	6	6	7	2734.35	46.86	28.99	43.92	3	590.53
8	Thrissur	8	3560.43	4	3203.52	8	7	8	8	3560.43	30.63	18.2	39.94		
9	Palakkad	10	2979.66	3	3094.24	8	6	6	8	2997.62	71.88	38.67	45.83	2	2907.85
10	Malappuram	10	3715.06	7	3625.61	10	10	7	10	3715.06	95.7	33.2	31		
11	Kozhikode	8	1127.23			1	1	1	1	4049.28	48.32	19.8	37.2	7	709.80
12	Wayanad														
13	Kannur	8	3660.24	1	866.14	4	1	3	4	3633.97	22.4	28	62.27	4	3686.51
14	Kasaragod	6	3910.13			3	2	2	3	3943.20	25	17.5	36	3	3877.06
	State Total	100	3293.09	34	3565.79	78	69	69	78	3677.24	51.224615	28.113077	37.593077	22	1931.08

Table 11 (i)

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

STATE: KERALA

YEAR: 2023-24

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			8	4915.18			8	4915.18			8	4915.18
2	Kollam			5	3670.99	1	1124.54	5	3670.99	1	1124.54	5	3670.99
3	Pathanamthitta			5	3191.89	1	2795.05	5	3191.89			6	3125.75
4	Alappuzha	1	1827.36	1	1827.36	7	4045.74			1	598.75	7	4221.26
5	Kottayam			1	6222.78	7	3967.52	1	6222.78			8	4249.43
6	Idukki			2	1991.35	2	2762.14	2	1991.35			4	2376.75
7	Ernakulam	1	1771.53	5	2366.13	5	1816.28	4	2514.78	2	0.04	8	2614.00
8	Thrissur			4	3917.33	4	3203.52	4	3917.33			8	3560.43
9	Palakkad	1	2655.40	6	2892.27	4	3110.75	5	2939.64	1	3160.30	9	2959.59
10	Malappuram			3	3923.77	7	3625.61	3	3923.77			10	3715.06
11	Kozhikode	7	709.80	8	1127.23			1	4049.28			8	1127.23
12	Wayanad												
13	Kannur	4	3686.51	7	4059.40	1	866.14	3	4556.58			8	3660.24
14	Kasaragod	3	3877.06	6	3910.13			3	3943.20			6	3910.13
	State Total	17	2211.77	61	3330.95	39	3233.86	44	3763.36	5	976.73	95	3415.00

Table 11 (ii)

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

STATE:KERALA

YEAR: 2023-24

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	2667.35	1	4617.38	6	6	6	6	3139.10	64.33	33	55.33	2	2504.15
2	Kollam	6	3241.60	1	3661.28	4	4	3	4	3315.70	41	12.75	42.33	2	6186.82
3	Pathanamthitta	6	1997.92	2	2979.83	6	6	6	6	1997.92	57.5	26.67	35.5		
4	Alappuzha	8	2531.09	3	3120.77	4	4	4	4	3754.84	92.75	60.75	36.75	4	5229.40
5	Kottayam	8	2276.99	7	1977.57	8	8	5	8	2276.99	64.63	41.63	23.6		
6	Idukki	4	2867.48	2	2747.10	4	4	4	4	2867.48	65	61.75	31.75		
7	Ernakulam	10	2244.40	2	3048.76	7	7	6	7	2641.37	44	19.14	25.5	3	3954.44
8	Thrissur	8	2830.75	2	3484.69	7	6	7	7	3034.56	38.72	25.33	42.29	1	1404.04
9	Palakkad	10	3239.21	6	3646.50	9	7	9	9	3348.55	86.78	44.43	55.89	1	2255.22
10	Malappuram	10	3668.11	1	4187.94	10	10	8	10	3668.11	59.44	28.16	31.33		
11	Kozhikode	6	2047.14	1	3731.90	2	2	1	2	2993.18	43.5	29.5	79	4	6296.45
12	Wayanad														
13	Kannur	8	3090.37			8	6	6	8	3090.37	45.53	28.91	48.97		
14	Kasaragod	6	4026.52			6	6	6	6	4026.52	42.17	42.17	42.17		
State Total		98	2837.13	28	3064.41	81	76	71	81	3088.99	58.0453	34.158	40.739	17	4647.52

Table 11 (ii)

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

STATE:KERALA

YEAR: 2023-24

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			5	2843.45	3	2373.84	5	2843.45	2	1252.08	6	3139.10
2	Kollam	2	6186.82	5	3157.67	1	3661.28	3	3200.51			6	3241.60
3	Pathanamthitta			4	1506.96	2	2979.83	4	1506.96			6	1997.92
4	Alappuzha	4	5229.40	5	2177.29	3	3120.77	1	5657.04			8	2531.09
5	Kottayam			1	4372.96	7	1977.57	1	4372.96			8	2276.99
6	Idukki			2	2987.86	2	2747.10	2	2987.86			4	2867.48
7	Ernakulam	1	3954.37	6	2724.40	4	1524.40	5	2478.41	2	0.04	8	2805.49
8	Thrissur			5	2854.51	3	2791.14	5	2854.51	1	1404.04	7	3034.56
9	Palakkad			3	2752.64	7	3447.75	3	2752.64	1	2255.22	9	3348.55
10	Malappuram			9	3610.35	1	4187.94	9	3610.35			10	3668.11
11	Kozhikode	4	6296.45	5	1710.18	1	3731.90	1	2254.46			6	2047.14
12	Wayanad												
13	Kannur			8	3090.37			8	3090.37			8	3090.37
14	Kasaragod			6	4026.52			6	4026.52			6	4026.52
State Total		11	5675.58	64	2907.37	34	2704.91	53	3101.97	6	1027.25	92	2955.16

Table 11 (iii)

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

STATE: KERALA

YEAR: 2023-24

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	3101.93	1	4124.76	8	8	7	8	3101.93	44.59	24.15	36.56		
2	Kollam	6	2318.74	1	1268.18	2	2	1	2	1917.27	44.7	19.75	35.5	4	10077.87
3	Pathanamthitta	6	3986.41	6	3986.41	6	6	6	6	3986.41	108.3	38.3	70.8		
4	Alappuzha	8	4250.06	8	4250.06	8	8	6	8	4250.06	70.63	37.25	30		
5	Kottayam	8	4635.90	7	4613.57	7	7	7	7	4613.57	73.86	39.29	63.14	1	4792.25
6	Idukki	4	3513.22	3	3766.43	4	4	4	4	3513.22	52.5	24.25	63		
7	Ernakulam	10	4185.56	6	4668.47	10	9	8	10	4185.56	35.71	23.27	29.16		
8	Thrissur	8	3599.10	4	4840.65	5	5	5	5	4667.86	35.4	19.6	44.8	3	5453.52
9	Palakkad	10	4676.09	4	4645.00	9	9	9	9	4989.67	86.78	42.67	58.89	1	1853.86
10	Malappuram	10	3574.35	4	3856.87	9	5	5	9	3939.64	78.62	32.2	55.8	1	286.67
11	Kozhikode	8	2242.51	3	2467.24	4	4	3	5	2507.09	45.6	18.88	40.53	3	5404.67
12	Wayanad														
13	Kannur	8	2120.63	2	2384.41	5	3	3	5	2573.64	29	29.33	26	3	4096.90
14	Kasaragod	6	1802.49	2	2216.36	1	1	2	2	2216.36	16	16	26	4	6382.20
State Total		100	3466.60	51	4017.46	78	71	66	80	3853.90	721.69	364.94	580.18	20	5881.92

Table 11 (iii)

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

STATE: KERALA

YEAR: 2023-24

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			7	2955.81	1	4124.76	7	2955.81			8	3101.93
2	Kollam	4	10077.87	5	2528.85	1	1268.18	1	2566.37			6	2318.74
3	Pathanamthitta					6	3986.41					6	3986.41
4	Alappuzha					8	4250.06					8	4250.06
5	Kottayam	1	4792.25	1	4792.25	7	4613.57					8	4635.90
6	Idukki			1	2753.61	3	3766.43	1	2753.61			4	3513.22
7	Ernakulam			4	3461.18	6	4668.47	4	3461.18			10	4185.56
8	Thrissur	3	5453.52	4	2357.55	4	4840.65	1	3976.68			8	3599.10
9	Palakkad	1	1853.86	6	4696.81	4	4645.00	5	5265.40			10	4676.09
10	Malappuram	1	286.67	6	3386.00	4	3856.87	5	4005.86			10	3574.35
11	Kozhikode	2	3318.53	4	2113.06	4	2371.97	2	2566.85	1	2086.14	7	2264.85
12	Wayanad												
13	Kannur	3	4096.90	6	2032.71	2	2384.41	3	2699.79			8	2120.63
14	Kasaragod	2	5597.00	2	2798.50	4	1304.48			2	392.60	4	2507.43
State Total		17	5513.33	46	3019.52	54	3847.44	29	3566.26	3	957.12	97	3544.21

Table 11 (iv)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS
STATE: KERALA YEAR: 2023-24 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	7	2185.02	1	0.04	5	6	5	6	2481.06	51.4	20.83	45	1	408.76
2	Kollam	6	3860.18	2	4003.38	6	6	4	6	3860.18	52.33	21.5	29.5		
3	Pathanamthitta	6	3217.76	3	3019.99	6	6	6	6	3217.76	57	19.33	36.5		
4	Alappuzha	8	2687.87	3	2662.97	5	5	4	5	2885.17	55.2	27.6	41.5	3	7077.12
5	Kottayam	8	4020.05	5	4158.13	8	8	4	8	4020.05	33.39	24.83	48.6		
6	Idukki	4	3943.25	2	4017.20	4	4	3	4	3943.25	71.25	71.75	58.67		
7	Ernakulam	10	3329.89	4	2301.67	10	10	9	10	3329.89	58	21.9	29		
8	Thrissur	8	3785.57	5	5400.70	6	6	6	6	4749.82	76.5	35.83	46.17	2	1785.60
9	Palakkad	10	4057.38	6	3953.89	9	9	7	9	4113.82	84.67	41.22	43.43	1	3549.46
10	Malappuram	10	4222.00			9	8	9	9	4462.70	60.74	32.32	80.58	1	2055.74
11	Kozhikode	8	1426.34			1	1		1	846.34	4.2	4		7	10564.35
12	Wayanad														
13	Kannur	8	3137.14	1	3010.93	5	4	5	5	3758.39	38.4	31.25	47.2	3	6305.15
14	Kasaragod	6	3054.43	2	1934.00	6	6	4	6	3054.43	32.33	32.33	42.75		
State Total		99	3317.28	34	3549.80	80	79	66	81	3662.53	55.988	30.129	46.555	18	6871.25

Table 11 (iv)

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

STATE: KERALA

YEAR: 2023-24

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	1	408.76	6	2549.18	1	0.04	5	2977.27			7	2185.02
2	Kollam			4	3788.58	2	4003.38	4	3788.58			6	3860.18
3	Pathanamthitta			3	3415.53	3	3019.99	3	3415.53			6	3217.76
4	Alappuzha	2	1350.24	4	1946.79	4	3428.95	2	3218.46	1	5726.88	7	2253.73
5	Kottayam			3	3789.92	5	4158.13	3	3789.92			8	4020.05
6	Idukki			2	3869.29	2	4017.20	2	3869.29			4	3943.25
7	Ernakulam			6	4015.37	4	2301.67	6	4015.37			10	3329.89
8	Thrissur	2	1785.60	3	1093.68	5	5400.70	1	1495.44			8	3785.57
9	Palakkad	1	3549.46	4	4212.62	6	3953.89	3	4433.68			10	4057.38
10	Malappuram	1	2055.74	10	4222.00			9	4462.70			10	4222.00
11	Kozhikode	5	9042.43	6	1648.13	2	760.96	1	846.34	2	760.96	6	1648.13
12	Wayanad												
13	Kannur	2	4325.71	6	3351.13	2	2495.18	4	3945.26	1	1979.44	7	3302.53
14	Kasaragod			4	3614.65	2	1934.00	4	3614.65			6	3054.43
State Total		14	4724.94	61	3253.92	38	3418.98	47	3744.07	4	2307.06	95	3359.82

Table 11(v)

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

STATE: KERALA

YEAR: 2023-24

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. of Expts.		Yield Rate		N P K			Exclusive Total		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	8	4951.92	4	4917.14	8	8	8	8	4951.92	47.21	20.89	30.84		
2	Kollam	6	4680.35	2	5390.24	4	4	4	4	6389.94	23.18	13.51	18.94	2	1261.18
3	Pathanamthitta	6	3726.46	6	3726.46	6	6	6	6	3726.46	72.41	31.17	43.00		
4	Alappuzha	8	4524.09	8	4524.09	8	8	8	8	4524.09	72.13	42.5	32.25		
5	Kottayam	8	3969.27	7	3917.70	8	8	8	8	3969.27	74.13	39.25	44.50		
6	Idukki	4	2974.40	2	3134.76	3	3		3	3444.01	78.00	36		1	1565.57
7	Ernakulam	10	1345.02	5	1766.38	8	8	8	8	1681.19	44.81	27.62	21.45	2	0.37
8	Thrissur	8	4304.64	5	3594.75	8	7	8	8	4304.64	41.38	18	50.00		
9	Palakkad	10	1360.98	8	1351.36	10	10	10	10	1360.98	86.78	51.14	48.90		
10	Malappuram	10	5265.70	4	4467.95	10	10	8	10	5265.70	29.82	15.8	39.96		
11	Kozhikode	8	2461.56	3	1376.64	6	6	4	6	3175.95	66.82	31.4	47.85	2	318.40
12	Wayanad														
13	Kannur														
14	Kasaragod	14	3985.32	2	4046.73	14	13	4	14	3985.32	24.19	20.82	33.25		
State Total		100	3595.42	56	3400.10	93	91	76	93	3815.23	52.73	29.07	38.15	7	675.07

Table 11(v)

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

STATE: KERALA

YEAR: 2023-24

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			4	4986.70	4	4917.14	4	4986.70			8	4951.92
2	Kollam			2	7389.63	4	3325.71	2	7389.63	2	1261.18	4	6389.94
3	Pathanamthitta					6	3726.46					6	3726.46
4	Alappuzha					8	4524.09					8	4524.09
5	Kottayam			1	4330.29	7	3917.70	1	4330.29			8	3969.27
6	Idukki	1	1565.57	2	2814.04	2	3134.76	1	4062.50			4	2974.40
7	Ernakulam			3	1539.20	7	1261.81	3	1539.20	2	0.37	8	1681.19
8	Thrissur			3	5487.79	5	3594.75	3	5487.79			8	4304.64
9	Palakkad			2	1399.44	8	1351.36	2	1399.44			10	1360.98
10	Malappuram			6	5797.53	4	4467.95	6	5797.53			10	5265.70
11	Kozhikode	2	318.40	5	3112.52	3	1376.64	3	4975.26			8	2461.56
12	Wayanad												
13	Kannur												
14	Kasaragod			12	3975.09	2	4046.73	12	3975.09			14	3985.32
State Total		3	734.12	40	4165.33	60	3215.48	37	4443.53	4	630.78	96	3718.95

Table 11(vi)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS
STATE: KERALA YEAR: 2023-24 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	3835.67	2	4331.52	8	8.00	8	8.00	3835.67	74.63	27.75	38.63		
2	Kollam	6	877.29	4	644.28	6	6.00	5	6.00	877.29	35.93	16.2	26.28		
3	Pathanamthitta	6	3331.42	4	3126.20	6	6.00	6	6.00	3331.42	60.33	19.67	39.67		
4	Alappuzha	8	3852.88	8	3852.88	8	8.00	8	8.00	3852.88	80.06	36.13	49.25		
5	Kottayam	8	4823.86	7	4773.73	8	8.00	8	8.00	4823.86	115.23	72.3	115.98		
6	Idukki	4	4539.97	2	4346.99	3	3.00	1	3.00	4057.67	43.00	34	30.00		
7	Ernakulam	10	2552.45	6	2710.25	9	9.00	7	10.00	2552.45	30.89	26.33	35.71		
8	Thrissur	8	5624.82	3	3400.92	8	8.00	8	8.00	5624.82	51.00	26.13	48.63		
9	Palakkad	10	3083.80	10	3083.80	10	8.00	8	10.00	3083.80	64.40	35.25	40.00		
10	Malappuram	10	5047.13	4	5105.28	10	9.00	8	10.00	5047.13	63.30	30.62	54.13		
11	Kozhikode	8	3762.17	4	3980.03	6	5.00	7	7.00	4134.70	54.78	32.12	54.17	1	1154.44
12	Wayanad														
13	Kannur														
14	Kasaragod	14	4294.06	2	3581.68	12	12.00	8	12.00	4430.04	26.38	26.04	20.31	2	3478.12
State Total		100	3855.58	56	3526.52	94	90.00	82	96.00	3869.38	58.23	32.037	48.34	3	2703.56

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

STATE: KERALA

YEAR: 2023-24

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	6	3670.39	2	4331.52	6	3670.39			8	3835.67		
2	Kollam	2	1343.31	4	644.28	2	1343.31			6	877.29		
3	Pathanamthitta	2	3741.84	4	3126.20	2	3741.84			6	3331.42		
4	Alappuzha			8	3852.88					8	3852.88		
5	Kottayam	1	5174.75	7	4773.73	1	5174.75			8	4823.86		
6	Idukki	1	3479.04	3	4893.61	1	3479.04	1	5986.85	3	4057.67	1	5986.85
7	Ernakulam	4	2315.74	6	2710.25	4	2315.74			10	2552.45		
8	Thrissur	5	6959.17	3	3400.92	5	6959.17			8	5624.82		
9	Palakkad			10	3083.80					10	3083.80		
10	Malappuram	6	5008.37	4	5105.28	6	5008.37			10	5047.13		
11	Kozhikode	4	3544.32	4	3980.03	3	4340.94			8	3762.17	1	1154.44
12	Wayanad												
13	Kannur												
14	Kasaragod	12	4412.78	2	3581.68	10	4599.72			14	4294.06	2	3478.12
State Total		43	4234.56	57	3569.68	40	4349.39	1	5986.85	99	3834.05	4	3524.38

Table 11 (vii)

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

STATE: KERALA

YEAR: 2023-24

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	11500.00			1	1	1	1	14733.33	144.30	98.94	59.30	3	10422.22
2	Kollam	4	10350.00			2	2	1	2	11133.33	166.00	79	114.00	2	9566.67
3	Pathanamthitta														
4	Alappuzha	4	15478.33	1	22086.67	3	2	3	3	18693.33	43.33	33.5	16.00	1	5833.33
5	Kottayam	4	18875.00			4	4	4	4	18875.00	139.50	94.75	114.50		
6	Idukki														
7	Ernakulam	4	22050.00	1	13000.00	2		2	2	25833.33	184.00		240.00	2	18266.67
8	Thrissur	6	15612.22	1	9066.67	4	3	4	4	15433.33	24.00	21	33.25	2	15970.00
9	Palakkad	6	13405.56			4	4	2	4	14775.00	206.00	131	159.00	2	10666.67
10	Malappuram	6	13791.11			5	3	1	5	14789.33	58.80	54	39.00	1	8800.00
11	Kozhikode	4	21008.33			3	2	4	4	21008.33	242.33	120	287.25		
12	Wayanad														
13	Kannur	4	25908.33			2	1	2	2	26966.67	141.50	3	184.50	2	24850.00
14	Kasaragod	4	18408.33	1	13833.33	4	4	1	4	18408.33	105.25	105.3	462.00		
State Total		50	16623.33	4	14496.67	34	26	25	35	17903.62	122.86	81.4	145.17	15	13636.00

Table 11 (vii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS
STATE: KERALA YEAR: 2023-24 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	10422.22	4	11500.00			1	14733.33			4	11500.00
2	Kollam	2	9566.67	4	10350.00			2	11133.33			4	10350.00
3	Pathanamthitta												
4	Alappuzha	1	5833.33	3	13275.56	1	22086.67	2	7380.00			4	15478.33
5	Kottayam			4	18875.00			4	18875.00			4	18875.00
6	Idukki												
7	Ernakulam	2	18266.67	3	25066.67	1	13000.00	1	38666.67			4	22050.00
8	Thrissur	2	15970.00	5	16921.33	1	9066.67	3	17555.56			6	15612.22
9	Palakkad	2	10666.67	6	13405.56			4	14775.00			6	13405.56
10	Malappuram	1	8800.00	6	13791.11			5	14789.33			6	13791.11
11	Kozhikode			4	21008.33			4	21008.33			4	21008.33
12	Wayanad												
13	Kannur	2	24850.00	4	25908.33			2	26966.67			4	25908.33
14	Kasaragod			3	19933.33	1	13833.33	3	19933.33			4	18408.33
State Total		15	13636.00	46	16808.26	4	14496.67	31	17722.80			50	16623.33

Table 11 (viii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS
STATE: KERALA YEAR: 2023-24 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. of Expts.				Rate of Application					
		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	3	9567.56			2	2	1	2	13183.33	25	14	18.00	1	2336.00
2	Kollam	4	13516.67			3	2	2	3	14844.44	204	84	192.00	1	9533.33
3	Pathanamthitta														
4	Alappuzha	4	18650.00											4	18650.00
5	Kottayam	4	13825.00	1	9400.00	3	3	3	3	13177.78	201	116.33	355.00	1	15766.67
6	Idukki														
7	Eranakulam	4	15725.00			3	2	2	3	12966.67	80	61.5	76.00	1	24000.00
8	Thrissur	6	15202.22			4	4	3	4	13603.33	136	95.5	143.00	2	18400.00
9	Palakkad	6	14566.67			6	6	6	6	14566.67	458	278.5	367.67		
10	Malappuram	6	15072.22			4	3	3	4	13141.67	168	60.87	193.00	2	18933.33
11	Kozhikode	4	17108.33	1	20600.00	2	2	1	2	16250.00	30	30	37.00	2	17966.67
12	Wayanad														
13	Kannur	4	18775.00			2	2	3	3	19411.11	623	395.5	526.33	1	16866.67
14	Kasaragod	4	20775.00	1	24800.00	4	4	4	4	20775.00	123	78.5	147.25		
State Total		49	15739.78	3	18266.67	33	30	28	34	15221.96	220	135.62	251.36	15	16913.51

Table 11 (viii)

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

STATE: KERALA

YEAR: 2023-24

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			2	13183.33	1	2336.00	2	13183.33	1	2336.00	2	13183.33
2	Kollam	1	9533.33	4	13516.67			3	14844.44			4	13516.67
3	Pathanamthitta												
4	Alappuzha	4	18650.00	4	18650.00							4	18650.00
5	Kottayam	1	15766.67	3	15300.00	1	9400.00	2	15066.67			4	13825.00
6	Idukki												
7	Ernakulam	1	24000.00	4	15725.00			3	12966.67			4	15725.00
8	Thrissur	2	18400.00	6	15202.22			4	13603.33			6	15202.22
9	Palakkad			6	14566.67			6	14566.67			6	14566.67
10	Malappuram	2	18933.33	6	15072.22			4	13141.67			6	15072.22
11	Kozhikode	2	17966.67	3	15944.44	1	20600.00	1	11900.00			4	17108.33
12	Wayanad												
13	Kannur	1	16866.67	4	18775.00			3	19411.11			4	18775.00
14	Kasaragod			3	19433.33	1	24800.00	3	19433.33			4	20775.00
State Total		14	17954.76	45	15869.19	4	14284.00	31	14927.31	1	2336.00	48	16019.03

Table 11 (ix)

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

STATE: KERALA

YEAR: 2023-24

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.	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	13437.50	1	29750.00	1	1.00		1.00	29750.00	8.47	8.47		3	8000.00
2	Kollam	4	38625.00			1	1.00		1.00	36750.00	40.00	40		3	39250.00
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	4	40031.25			3	3.00	3	3.00	43000.00	256.67	256.67	278.00	1	31125.00
6	Idukki														
7	Ernakulam	4	54812.63			1		1	2.00	45750.25	6.90		112.80	2	63875.00
8	Thrissur	4	40562.50											4	40562.50
9	Palakkad	4	48937.50											4	48937.50
10	Malappuram	4	34468.75			1	1.00	1	1.00	63750.00	99.00	30	90.00	3	24708.33
11	Kozhikode	4	22781.25			1	1.00	1	1.00	21500.00	10.80	10.8	10.80	3	23208.33
12	Wayanad														
13	Kannur	4	52812.50											4	52812.50
14	Kasaragod	4	23625.00			2	2.00	2	2.00	33750.00	25.00	25	25.00	2	13500.00
State Total		40	37009.39	1	29750.00	10	9.00	8	11.00	39977.32	98.52	101.03	137.20	29	35883.62

Table 11(ix)
CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS
STATE: KERALA YEAR: 2023-24 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	8000.00	3	8000.00	1	29750.00					4	13437.50
2	Kollam	3	39250.00	4	38625.00			1	36750.00			4	38625.00
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam	1	31125.00	4	40031.25			3	43000.00			4	40031.25
6	Idukki												
7	Ernakulam	2	63875.00	4	54812.63			2	45750.25			4	54812.63
8	Thrissur	3	41250.00	3	41250.00	1	38500.00			1.00	38500.00	3	41250.00
9	Palakkad	3	58125.00	3	58125.00	1	21375.00			1	21375.00	3	58125.00
10	Malappuram	3	24708.33	4	34468.75			1	63750.00			4	34468.75
11	Kozhikode	3	23208.33	4	22781.25			1	21500.00			4	22781.25
12	Wayanad												
13	Kannur	4	52812.50	4	52812.50							4	52812.50
14	Kasaragod			2	33750.00	2	13500.00	2	33750.00	2.00	13500.00	2	33750.00
State Total		25	38150.00	35	38964.30	5	23325.00	10	41000.05	4	21718.75	36	38708.35

Table 11 (x)

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

STATE: KERALA

YEAR: 2023-24

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.	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	23281.25											4	23281.25
2	Kollam	4	34312.50											4	34312.50
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	4	61203.13	1	54750.00	4	3	4	4.00	61203.13	108.00	30.33	210.50		
6	Idukki														
7	Ernakulam	4	19968.75	1	38875.00	2	1	2	2.00	31437.50	54.00	85	163.00	2	8500.00
8	Thrissur	4	22281.25											4	22281.25
9	Palakkad	4	40593.75			1	1		1.00	56375.00	207.00	101		3	35333.33
10	Malappuram	4	35437.50			1	1	1	2.00	17000.00	10.00	10	223.80	2	53875.00
11	Kozhikode	4	29062.50			1	1	1	1.00	37250.00	30.00	30	37.00	3	26333.33
12	Wayanad														
13	Kannur	4	44312.50											4	44312.50
14	Kasaragod	4	26250.00											4	26250.00
State Total		40	33670.31	2	46812.50	9	7	8	10.00	43531.25	87.44	45.285714	178.60	30	30383.33

Table 11 (x)

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

STATE: KERALA

YEAR: 2023-24

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	36937.50	2	36937.50	2	9625.00			2	9625.00	2	36937.50
2	Kollam	4	34312.50	4	34312.50							4	34312.50
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam			3	63354.17	1	54750.00	3	63354.17			4	61203.13
6	Idukki												
7	Ernakulam	1	4250.00	2	14125.00	2	25812.50	1	24000.00	1	12750.00	3	22375.00
8	Thrissur	4	22281.25	4	22281.25							4	22281.25
9	Palakkad	3	35333.33	4	40593.75			1	56375.00			4	40593.75
10	Malappuram	2	53875.00	4	35437.50			2	17000.00			4	35437.50
11	Kozhikode	2	32625.00	3	34166.67	1	13750.00	1	37250.00	1	13750.00	3	34166.67
12	Wayanad												
13	Kannur	4	44312.50	4	44312.50							4	44312.50
14	Kasaragod	2	19250.00	2	19250.00	2	33250.00			2	33250.00	2	19250.00
State Total		24	33302.08	32	35654.30	8	25734.38	8	42710.94	6	18708.33	34	36310.66

Table 11 (xi)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS
STATE: KERALA YEAR: 2023-24 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	5436.65											4	5436.65
2	Kollam	4	8620.50											4	8620.50
3	Pathanamthitta														
4	Alappuzha	4	10119.90											4	10119.90
5	Kottayam	4	984.40											4	984.40
6	Idukki														
7	Eranakulam	4	8548.10											4	8548.10
8	Thrissur	6	7319.87											6	7319.87
9	Palakkad	6	5427.30											6	5427.30
10	Malappuram	6	2567.47											6	2567.47
11	Kozhikode	4	12609.75											4	12609.75
12	Wayanad														
13	Kannur	4	8095.50											4	8095.50
14	Kasaragod	4	9455.40											4	9455.40
State Total		50	6947.37											50	6947.37

Table 11 (xi)

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

STATE: KERALA

YEAR: 2023-24

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	5436.65			4	5436.65		
2	Kollam					4	8620.50			4	8620.50		
3	Pathanamthitta												
4	Alappuzha	1	8010.60	1	8010.60	3	10823.00			3	5103.40	1	8010.60
5	Kottayam	2	1091.40	2	1091.40	2	877.40			2	877.40	2	1091.40
6	Idukki												
7	Eranakulam					4	8548.10			4	8548.10		
8	Thrissur	5	8124.64	5	8124.64	1	3296.00			1	3296.00	5	8124.64
9	Palakkad	4	6090.90	4	6090.90	2	4100.10			2	4100.10	4	6090.90
10	Malappuram	4	3248.00	4	3248.00	2	1206.40			2	1206.40	4	3248.00
11	Kozhikode	4	12609.75	4	12609.75							4	12609.75
12	Wayanad												
13	Kannur					4	8095.50			4	8095.50		
14	Kasaragod	4	9455.40	4	9455.40							4	9455.40
State Total		24	7351.37	24	7351.37	26	6574.45			26	5914.50	24	7351.37

Table 11 (xii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS
STATE: KERALA YEAR: 2023-24 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	7298.05											4	7298.05
2	Kollam	4	8064.00											4	8064.00
3	Pathanamthitta														
4	Alappuzha	4	9361.50			2	2	2	2	6280.50	31.00	15.5	61.50	2	12442.50
5	Kottayam	4	6869.40	1	10999.60	1	1	1	1	10999.60	24.00	24	48.00	3	5492.67
6	Idukki														
7	Eranakulam	4	7095.55											4	7095.55
8	Thrissur	6	10622.73											6	10622.73
9	Palakkad	6	9424.70											6	9424.70
10	Malappuram	6	12025.33			1			1	11182.40	15.00			5	12193.92
11	Kozhikode	4	10287.75					1	1	15050.00			45.00	3	8700.33
12	Wayanad														
13	Kannur	4	8704.50											4	8704.50
14	Kasaragod	4	7548.00			2	2	2	2	10383.60	30.00	29.5	29.50	2	4712.40
State Total		50	9067.03	1	10999.60	6	5	6	7	10080.03	26.83	22.8	45.83	43	8902.13

Table 11 (xii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS
STATE: KERALA YEAR: 2023-24 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					4	7298.05			4	7298.05		
2	Kollam	4	8064.00	4	8064.00							4	8064.00
3	Pathanamthitta												
4	Alappuzha	1	11992.20	3	8184.40	1	12892.80	2	6280.50	1		3	8184.40
5	Kottayam					4	6869.40			3	5492.67	1	10999.60
6	Idukki												
7	Ernakulam	1	9572.20	1	9572.20	3	6270.00			3	6270.00	1	9572.20
8	Thrissur	5	11832.64	5	11832.64	1	4573.20			1	4573.20	5	11832.64
9	Palakkad	3	8058.00	3	8058.00	3	10791.40			3	10791.40	3	8058.00
10	Malappuram	1	10161.60	2	10672.00	4	12702.00	1	11182.40	4	12702.00	2	10672.00
11	Kozhikode			1	15050.00	3	8700.33	1	15050.00	3	8700.33	1	15050.00
12	Wayanad												
13	Kannur	2	8253.00	2	8253.00	2	9156.00			2	9156.00	2	8253.00
14	Kasargod	1	5916.00	3	8894.40	1	3508.80	2	10383.60	1	3508.80	3	8894.40
State Total		18	9430.07	24	9554.24	26	8617.30	6	9926.77	25	8006.30	25	9612.06

Table 11 (xiii)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS
 STATE: KERALA YEAR: 2023-24 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
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>	<i>16</i>
1	Thiruvananthapuram	4	637.02											4	637.02
2	Kollam	4	354.72											4	354.72
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	4	638.12											4	638.12
6	Idukki														
7	Ernakulam	4	997.97											4	997.97
8	Thrissur	4	315.12											4	315.12
9	Palakkad	4	518.97											4	518.97
10	Malappuram	4	854.07											4	854.07
11	Kozhikode	4	452.24											4	452.24
12	Wayanad														
13	Kannur	4	359.66											4	359.66
14	Kasaragod	4	801.45											4	801.45
State Total		40	592.93											40	592.93

Table 11 (xiii)

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

STATE: KERALA

YEAR: 2023-24

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	2	622.54	2	622.54	2	651.50			2	651.50	2	622.54
2	Kollam					4	354.72			4	354.72		
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam	2	865.61	2	865.61	2	410.63			2	410.63	2	865.61
6	Idukki												
7	Ernakulam	2	1147.19	2	1147.19	2	848.75			2	848.75	2	1147.19
8	Thrissur	3	371.03	3	371.03	1	147.39			1	147.39	3	371.03
9	Palakkad	3	564.61	3	564.61	1	382.03			1	382.03	3	564.61
10	Malappuram	1	432.62	1	432.62	3	994.55			3	994.55	1	432.62
11	Kozhikode	3	419.67	3	419.67	1	549.95			1	549.95	3	419.67
12	Wayanad												
13	Kannur					4	359.66			4	359.66		
14	Kasaragod	2	637.94	2	637.94	2	964.97			2	964.97	2	637.94
State Total		18	613.62	18	613.62	22	576.01			22	576.01	18	613.62

Table 11 (xiv)

CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS
STATE: KERALA YEAR: 2023-24 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	195.60											4	195.60
2	Kollam	4	591.37											4	591.37
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	4	258.47											4	258.47
6	Idukki														
7	Ernakulam	4	687.07											4	687.07
8	Thrissur	4	228.23											4	228.23
9	Palakkad	4	726.66			1	1.00	1	1.00	1030.23	8.00	8	8.00	3	625.47
10	Malappuram	4	646.37											4	646.37
11	Kozhikode	4	859.56											4	859.56
12	Wayanad														
13	Kannur	4	511.63											4	511.63
14	Kasaragod	4	1077.16											4	1077.16
State Total		40	578.21			1	1.00	1	1.00	1030.23	8.00	8	8.00	39	566.62

Table 11 (xiv)

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

STATE: KERALA

YEAR: 2023-24

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					4	195.60			4	195.60		
2	Kollam	2	598.34	2	598.34	2	584.41			2	584.41	2	598.34
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam	2	197.61	2	197.61	2	319.34			2	319.34	2	197.61
6	Idukki												
7	Eranakulam	2	1046.00	2	1046.00	2	328.13			2	328.13	2	1046.00
8	Thrissur	2	389.36	2	389.36	2	67.09			2	67.09	2	389.36
9	Palakkad	2	549.21	3	709.55	1	777.99	1	1030.23	1	777.99	3	709.55
10	Malappuram	1	1879.35	1	1879.35	3	235.38			3	235.38	1	1879.35
11	Kozhikode	2	488.72	2	488.72	2	1230.41			2	1230.41	2	488.72
12	Wayanad												
13	Kannur	1	49.86	1	49.86	3	665.56			3	665.56	1	49.86
14	Kasaragod	3	1182.26	3	1182.26	1	761.86			1	761.86	3	1182.26
State Total		17	706.73	18	724.71	22	458.35	1	1030.23	22	458.35	18	724.71

Table 11 (xv)

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

STATE: KERALA

YEAR: 2023-24

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	441.62											4	441.62
2	Kollam	4	1468.11											4	1468.11
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	4	725.09											4	725.09
6	Idukki														
7	Eranakulam	4	829.36											4	829.36
8	Thrissur	4	943.57											4	943.57
9	Palakkad	4	1173.37			1			1.00	1552.98	97.00			3	1046.84
10	Malappuram	4	1677.84											4	1677.84
11	Kozhikode	4	960.90											4	960.90
12	Wayanad														
13	Kannur	4	1724.00											4	1724.00
14	Kasaragod	4	1267.28											4	1267.28
State Total		40	1121.11			1			1.00	1552.98	97.00			39	1110.04

Table 11 (xv)

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

STATE: KERALA

YEAR: 2023-24

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	441.62			4	441.62		
2	Kollam	2	1848.53	2	1848.53	2	1087.70			2	1087.70	2	1848.53
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam					4	725.09			4	725.09		
6	Idukki												
7	Eranakulam					4	829.36			4	829.36		
8	Thrissur	4	943.57	4	943.57							4	943.57
9	Palakkad	1	831.79	2	1192.38	2	1154.36	1	1552.98	2	1154.36	2	1192.38
10	Malappuram	3	1274.69	3	1274.69	1	2887.28			1	2887.28	3	1274.69
11	Kozhikode	3	1061.44	3	1061.44	1	659.26			1	659.26	3	1061.44
12	Wayanad												
13	Kannur	1	1764.47	1	1764.47	3	1710.51			3	1710.51	1	1764.47
14	Kasaragod	2	1620.69	2	1620.69	2	913.88			2	913.88	2	1620.69
State Total		16	1269.83	17	1286.49	23	998.88	1	1552.98	23	998.88	17	1286.49

Table 11 (xvi)

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

STATE: KERALA

YEAR: 2023-24

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	536.22											4	536.22
2	Kollam	4	1358.78											4	1358.78
3	Pathanamthitta														
4	Alappuzha														
5	Kottayam	4	1016.26											4	1016.26
6	Idukki														
7	Eranakulam	4	1119.37											4	1119.37
8	Thrissur	4	968.75											4	968.75
9	Palakkad	4	662.13											4	662.13
10	Malappuram	4	1485.58											4	1485.58
11	Kozhikode	4	758.05			1	1.00	1	1.00	1041.72	44.00	44	44.00	3	663.49
12	Wayanad														
13	Kannur	4	1795.84											4	1795.84
14	Kasaragod	4	2965.10			2	2.00	2	2.00	4754.30	156.00	155	155.00	2	1175.90
State Total		40	1266.61			3	3.00	3	3.00	3516.77	118.67	118	118.00	37	1084.16

Table 11 (xvi)													
CROPWISE RATE OF APPLICATION OF FERTILIZERS AND DIFFERENTIAL YIELD RATES ACCORDING TO INPUTS													
STATE: KERALA		YEAR: 2023-24		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					4	536.22			4	536.22		
2	Kollam	1	1712.99	1	1712.99	3	1240.70			3	1240.70	1	1712.99
3	Pathanamthitta												
4	Alappuzha												
5	Kottayam					4	1016.26			4	1016.26		
6	Idukki												
7	Eranakulam					4	1119.37			4	1119.37		
8	Thrissur	1	1027.52	1	1027.52	3	949.17			3	949.17	1	1027.52
9	Palakkad	2	1199.29	2	1199.29	2	124.97			2	124.97	2	1199.29
10	Malappuram	2	1920.19	2	1920.19	2	1050.98			2	1050.98	2	1920.19
11	Kozhikode			1	1041.72	3	663.49	1	1041.72	3	663.49	1	1041.72
12	Wayanad												
13	Kannur					4	1795.84			4	1795.84		
14	Kasaragod	2	1175.90	4	2965.10			2	4754.30			4	2965.10
State Total		8	1416.41	11	1989.23	29	992.51	3	3516.77	29	992.51	11	1989.23

4. 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 2023-24 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: 2023-24

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 (Autumn)	S	Tape	100					100								100	
		Balance	98					98	2					2		100	
		Weight															
		Pegs	89		1			90									90
	C	Tape	89	5				94	3	1				4		98	
		Balance	88	8				96	2					2		98	
		Weight	2					2								2	
		Pegs	36	9	6	1		52	14	32				46		98	

Table 12 (i)

State wise Position of Supply and Use of Equipments

State: Kerala

Year: 2023-24

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	99					99								99	
		Balance	99	1				100								100	
		Weight															
		Pegs	99					99								99	
	C	Tape	91	2				93	4	2				6		99	
		Balance	97	2				99								99	
		Weight															
		Pegs	37	16	8	1		62	13	24				37		99	
Paddy (Summer)	S	Tape	100					100								100	
		Balance	100					100								100	
		Weight															
		Pegs	100					100								100	
	C	Tape	91	7				98	2					2		100	
		Balance	77	15				92	7	1				8		100	
		Weight															
		Pegs	34	17	5			56	19	24			1	44		100	

Table 12 (ii)

State wise Position of Supply and Use of Equipments

State: Kerala

Year: 2023-24

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		
Tapioca	S	Tape	39					39	1					1		40	
		Balance	39					39	1					1		40	
		Weight															
		Pegs	37				3	40									40
	C	Tape	36	1	1			38	2					2		40	
		Balance	35	3				38	2					2		40	
		Weight															
		Pegs	20	2			1	23	4	9		4	17			40	
Banana	S	Tape															
		Balance	47					47	3					3		50	
		Weight	3					3	1					1		4	
		Pegs															
	C	Tape															
		Balance	40	7				47	2					2		49	
		Weight															
Pegs																	

Table 12 (iii)
State wise Position of Supply and Use of Equipments

State: Kerala

Year: 2023-24

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	
Coconut	S	Tape														
		Balance														
		Weight														
		Pegs														
	C	Tape														
		Balance														
		Weight														
		Pegs														
Pepper	S	Tape														
		Balance	40					40							40	
		Weight														
		Pegs														
	C	Tape														
		Balance	38	1				39	1				1		40	
		Weight														
		Pegs														
Arecanut	S	Tape														
		Balance	40					40							40	
		Weight														
		Pegs														
	C	Tape														
		Balance	32	2				34	6				6		40	
		Weight														
		Pegs														

5. Comparison of ICS and GCES yield Estimates

The district yield rates of rice under ICS and GCES during the year 2023-24 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 2019-20 to 2023-24 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 2023-24 is given in Chart-20.

Table 13 (i)
Comparison of Yield Rates (Kg/Ha) of Rice Under GCES and ICS

State: Kerala

Year: 2023-24

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	2579	3229.27	1752.45	2307	2037.97	1435.56	2354	3253	2520
2	Kollam	2403	2133.01	2129.73	2064	1523.41	2536.14	3024	3075	576
3	Pathanamthitta	1354	2053.62	1312.63	2503	2619.07	2114.07	3124	2448	2189
4	Alappuzha	3047	2475.87	1662.93	3185	2792.29	1765.93	3450	2972	2531
5	Kottayam	2655	2791.87	1495.98	3189	3045.79	2641.17	2957	2608	3169
6	Idukki	1514	1561.52	1883.93	2526	2308.19	2590.71	2262	1954	2983
7	Ernakulam	1240	1373.92	1474.57	2544	2749.91	2187.74	2581	884	1677
8	Thrissur	2032	2339.20	1859.80	3151	2364.61	2487.12	3091	2828	3696
9	Palakkad	2584	1957.64	2128.16	3029	3072.19	2665.70	3099	894	2026
10	Malappuram	2077	2440.79	2409.95	3038	2348.35	2773.85	3721	3460	3316
11	Kozhikode	993	740.59	1344.97	1102	1473.33	937.10	2524	1617	2472
12	Wayanad				2774			2742		
13	Kannur	2440	2404.78	2030.37	2204	1393.26	2061.10	980		
14	Kasargod	2413	2568.95	2645.42	1945	1184.23	2006.76	2695	2618	2821
State Total		2598	2163.56	1863.99	2948	2277.55	2179.45	3238	2362	2533

Table 13 (ii)

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

State: Kerala

Year: 2023-24

Sl. No.	District	Tapioca(Kg/Ha)			Banana(Kg/Ha)		
		GCES	ICS		GCES	ICS	
			State Sample	Central Sample		State Sample	Central Sample
1	Thiruvananthapuram	33292	13438	23281	7848	11500	9568
2	Kollam	39300	38625	34313	7601	10350	13517
3	Pathanamthitta	50490			7674		
4	Alappuzha	35600			8390	15478	18650
5	Kottayam	52307	40031	61203	9696	18875	13825
6	Idukki	52999			11836		
7	Eranakulam	48387	54813	19969	9696	22050	15725
8	Thrissur	45175	40563	22281	10561	15612	15202
9	Palakkad	39669	48938	40594	11565	13406	14567
10	Malappuram	40948	34469	35438	10081	13791	15072
11	Kozhikode	34692	22781	29063	10895	21008	17108
12	Wayanad	45193			9926		
13	Kannur	43329	52813	44313	10061	25908	18775
14	Kasaragod	34432	23625	26250	10911	18408	20775
State Total		42345	37009	33670	10044	16623	15740

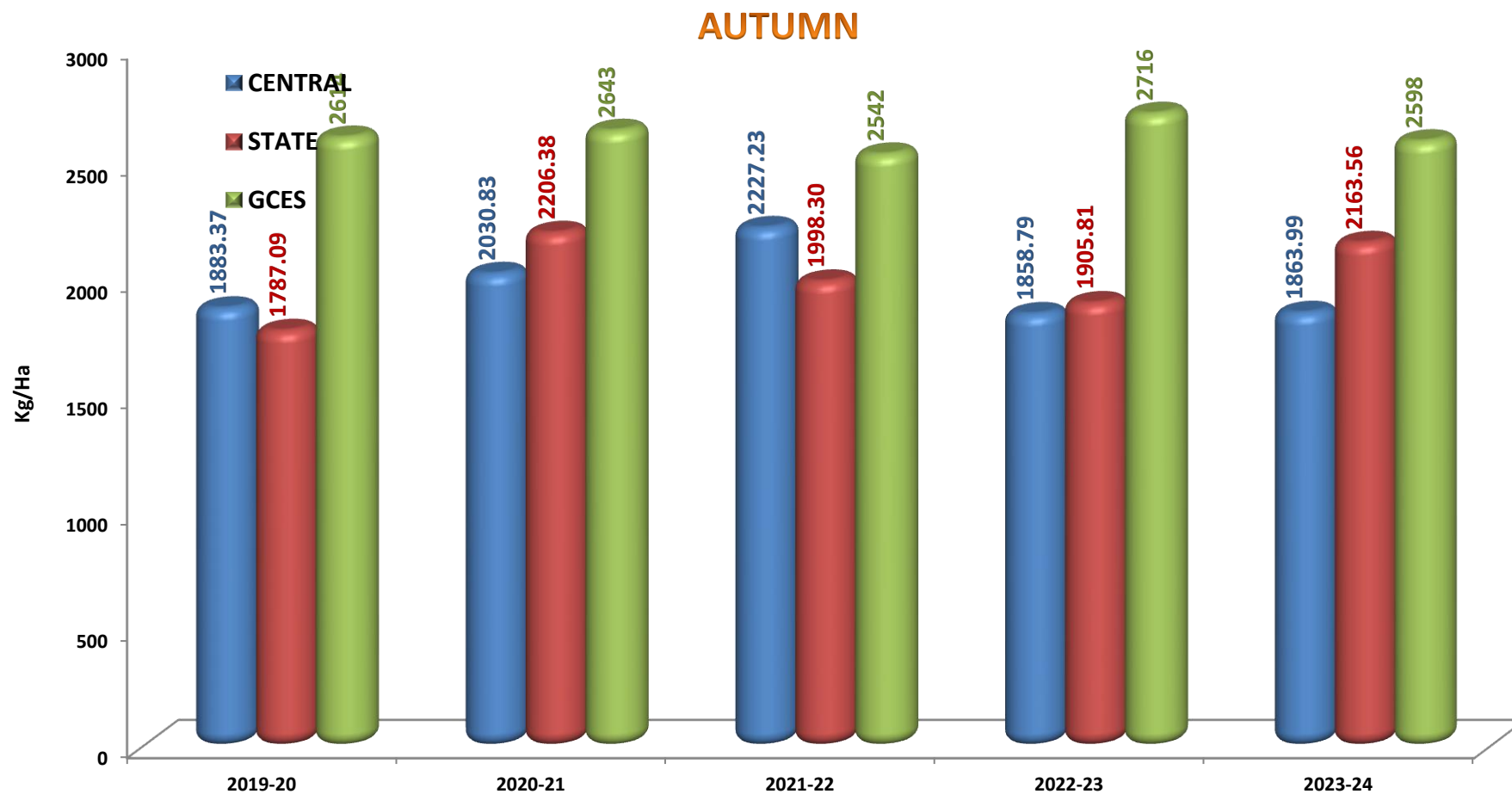
Table 13 (iii)
Comparison of Yield Rates of Important Crops Under GCES and ICS

State: Kerala

Year: 2023-24

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	6530	5437	7298	272	637	196	363	442	536
2	Kollam	6089	8621	8064	314	355	591	719	1468	1359
3	Pathanamthitta	4179			281			683		
4	Alappuzha	6335	10120	9362	239			272		
5	Kottayam	4965	984	6869	282	638	258	835	725	1016
6	Idukki	3874			498			1579		
7	Eranakulam	4911	8548	7096	242	998	687	695	829	1119
8	Thrissur	6362	7320	10623	254	315	228	611	944	969
9	Palakkad	7757	5427	9425	400	519	727	606	1173	662
10	Malappuram	9208	2567	12025	284	854	646	922	1678	1486
11	Kozhikode	8838	12610	10288	281	452	860	854	961	758
12	Wayanad	6597			391			273		
13	Kannur	6477	8096	8705	455	360	512	777	1724	1796
14	Kasaragod	8313	9455	7548	470	801	1077	2316	1267	2965
State Total		7211	6947	9067	424	593	578	1082	1121	1267

CHART-8
TREND OF YIELD RATES OF RICE UNDER ICS & GCES 2019-20 TO 2023-24



**CHART-9
TREND OF YIELD RATES OF RICE UNDER ICS & GCES 2019-20 TO 2023-24**

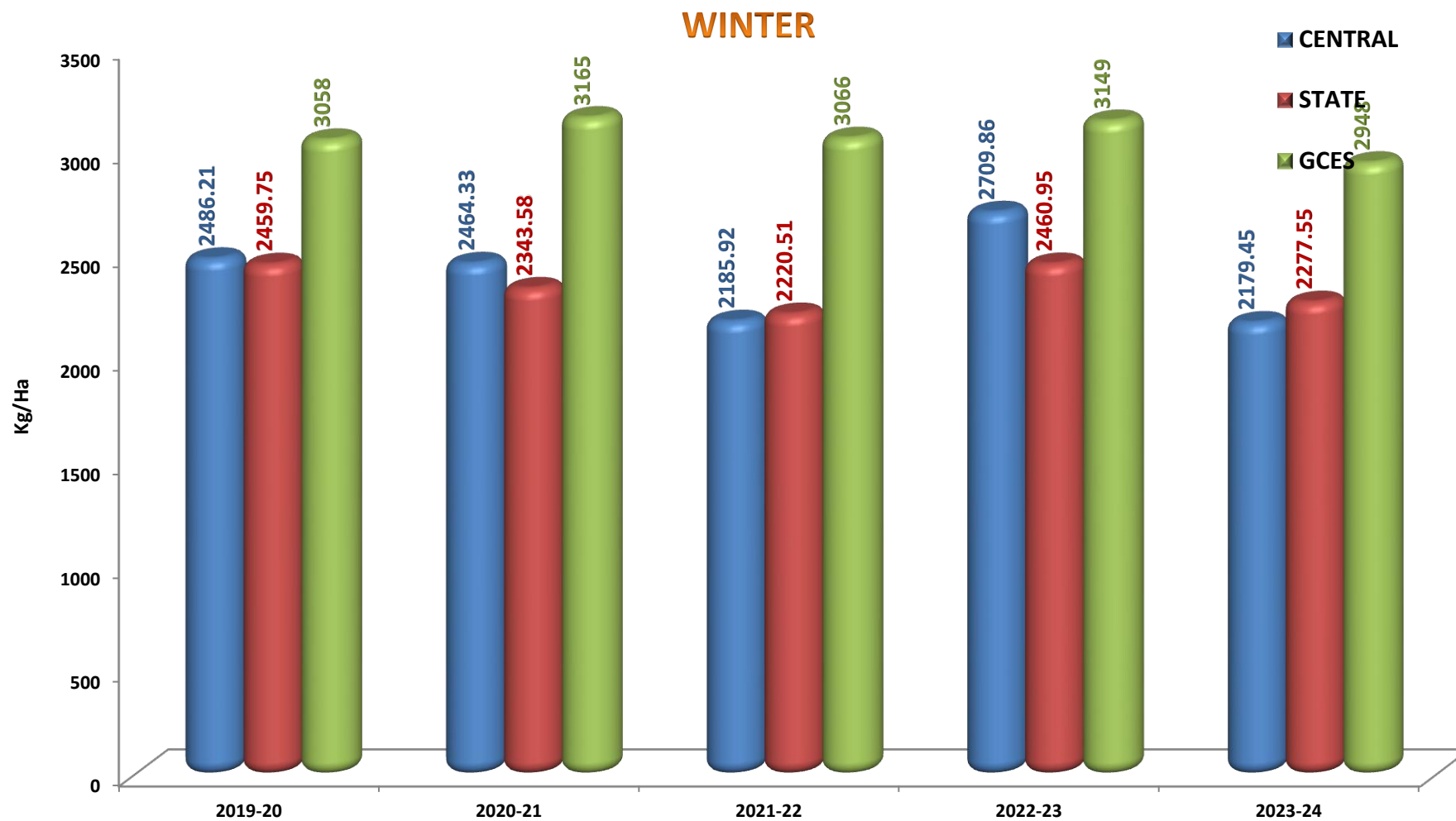


CHART-10
TREND OF YIELD RATES OF RICE UNDER ICS & GCES 2019-20 TO 2023-24

SUMMER

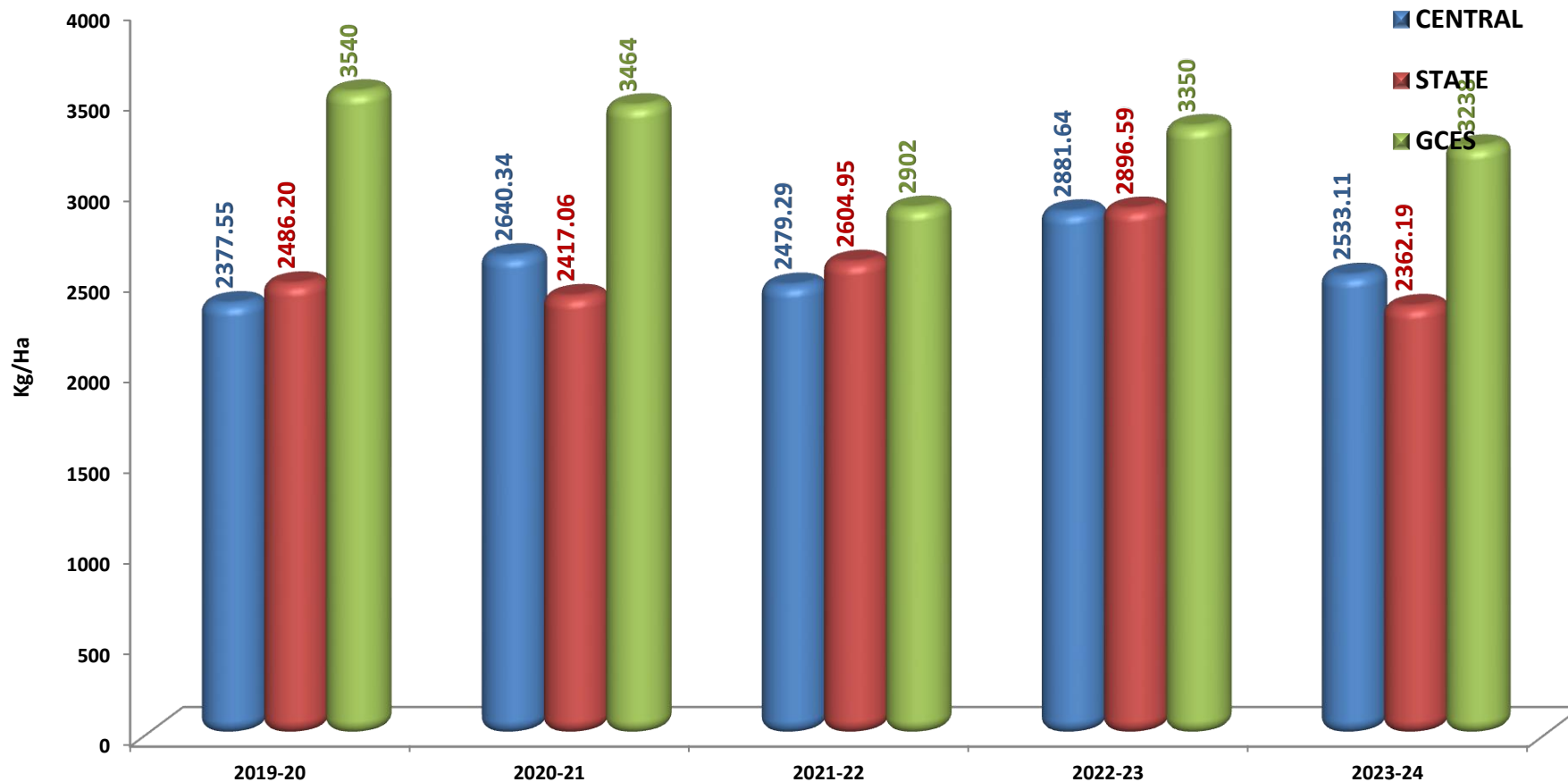


CHART-11
DISTRICTWISE YIELD RATES OF RICE— ICS & GCES 2023-24

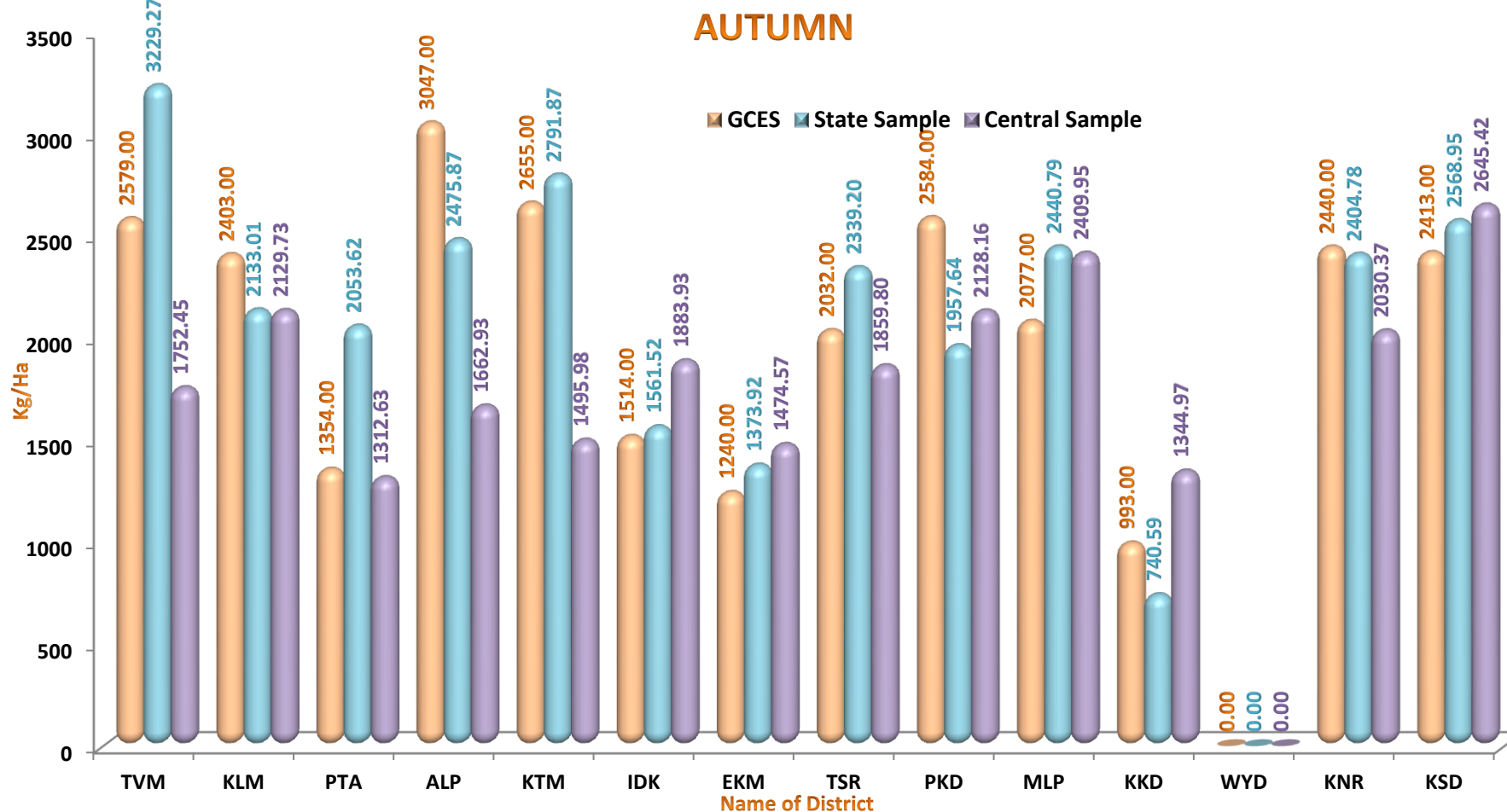


CHART-12
DISRTICTWISE YIELD RATES OF RICE– ICS & GCES 2023-24

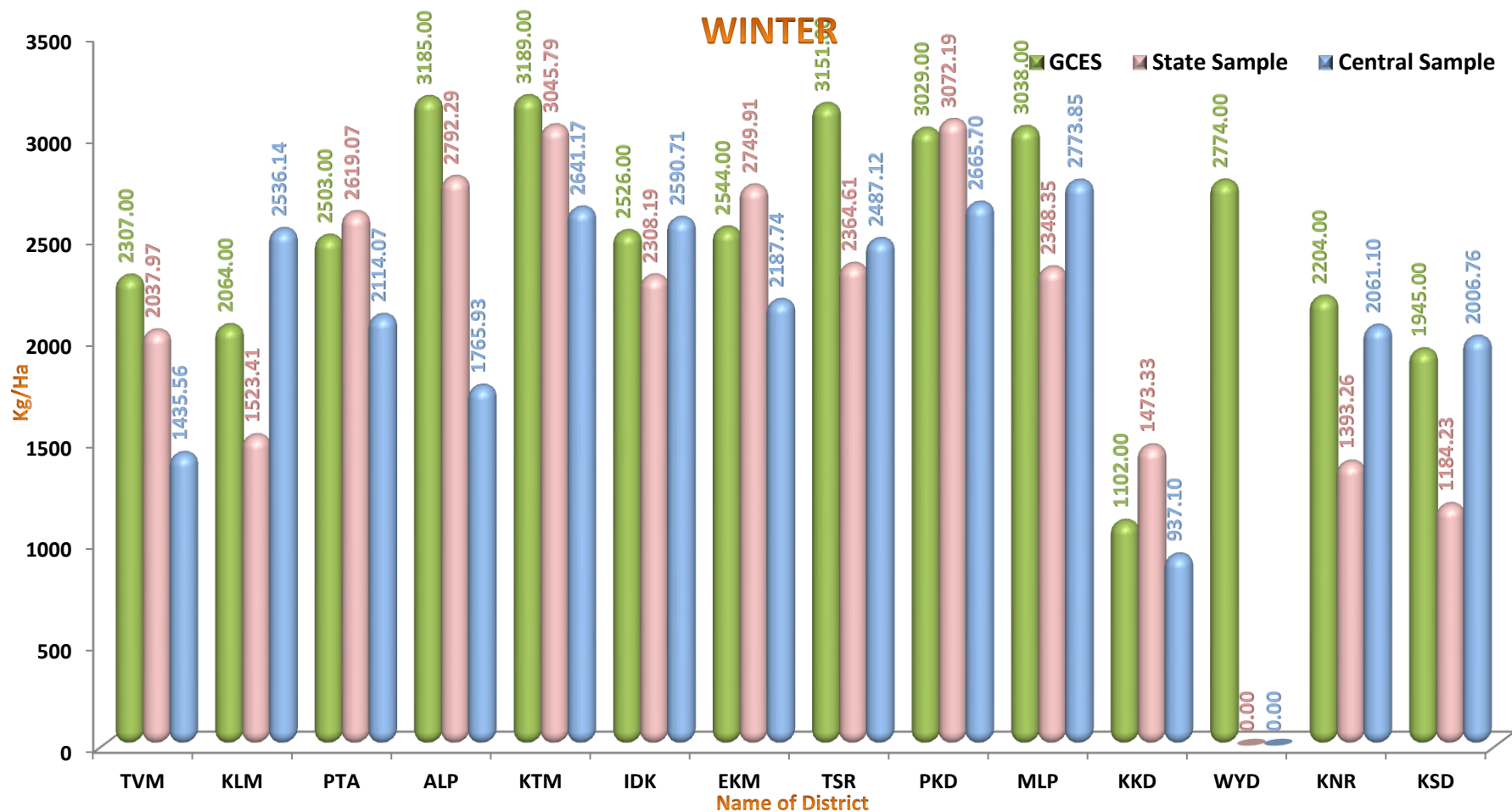


CHART-13
DISRTICTWISE YIELD RATES OF RICE– ICS & GCES 2023-24

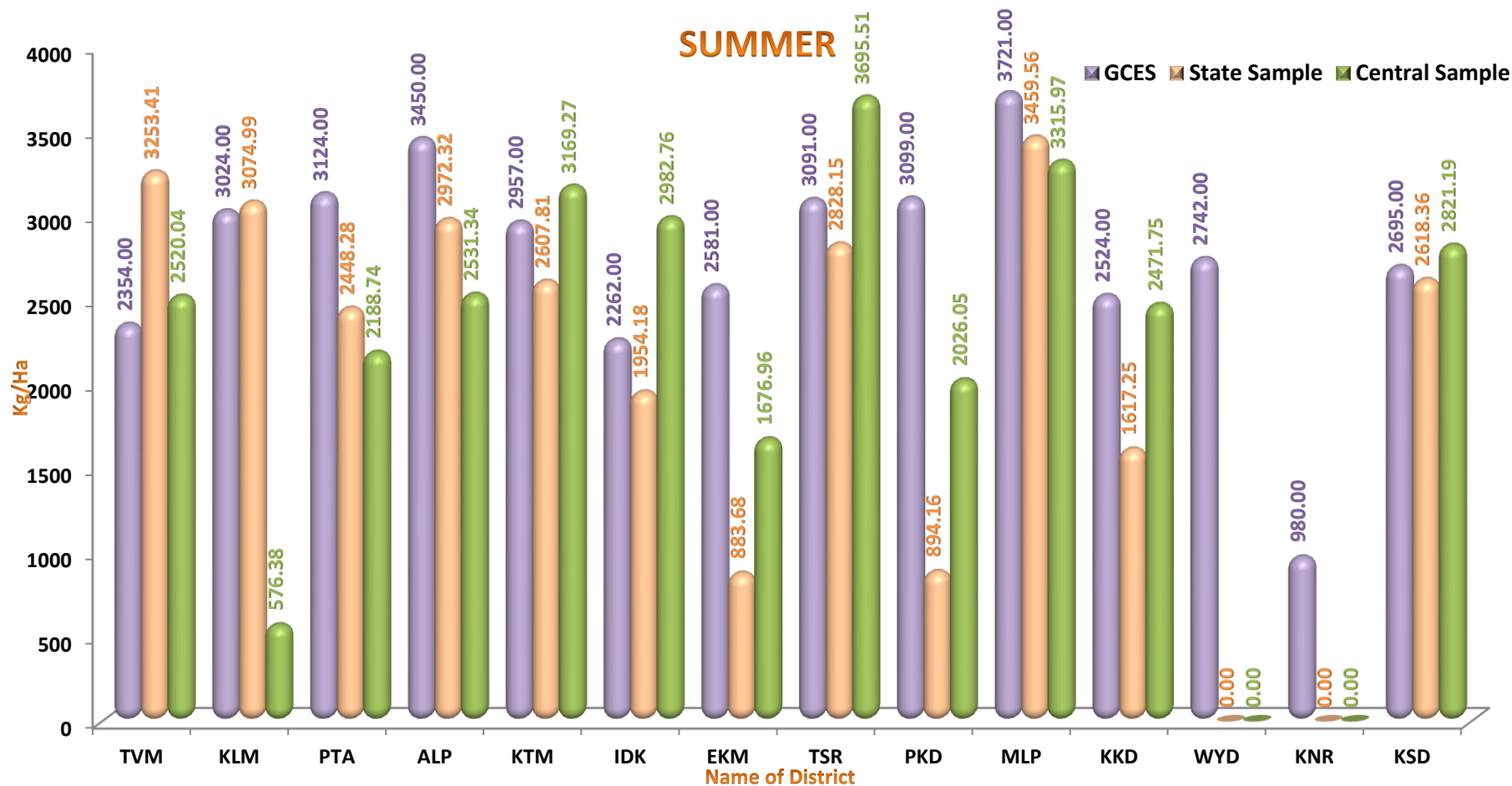


CHART-14
SEASONWISE YIELD RATE OF RICE UNDER GCES & ICS 2023-24

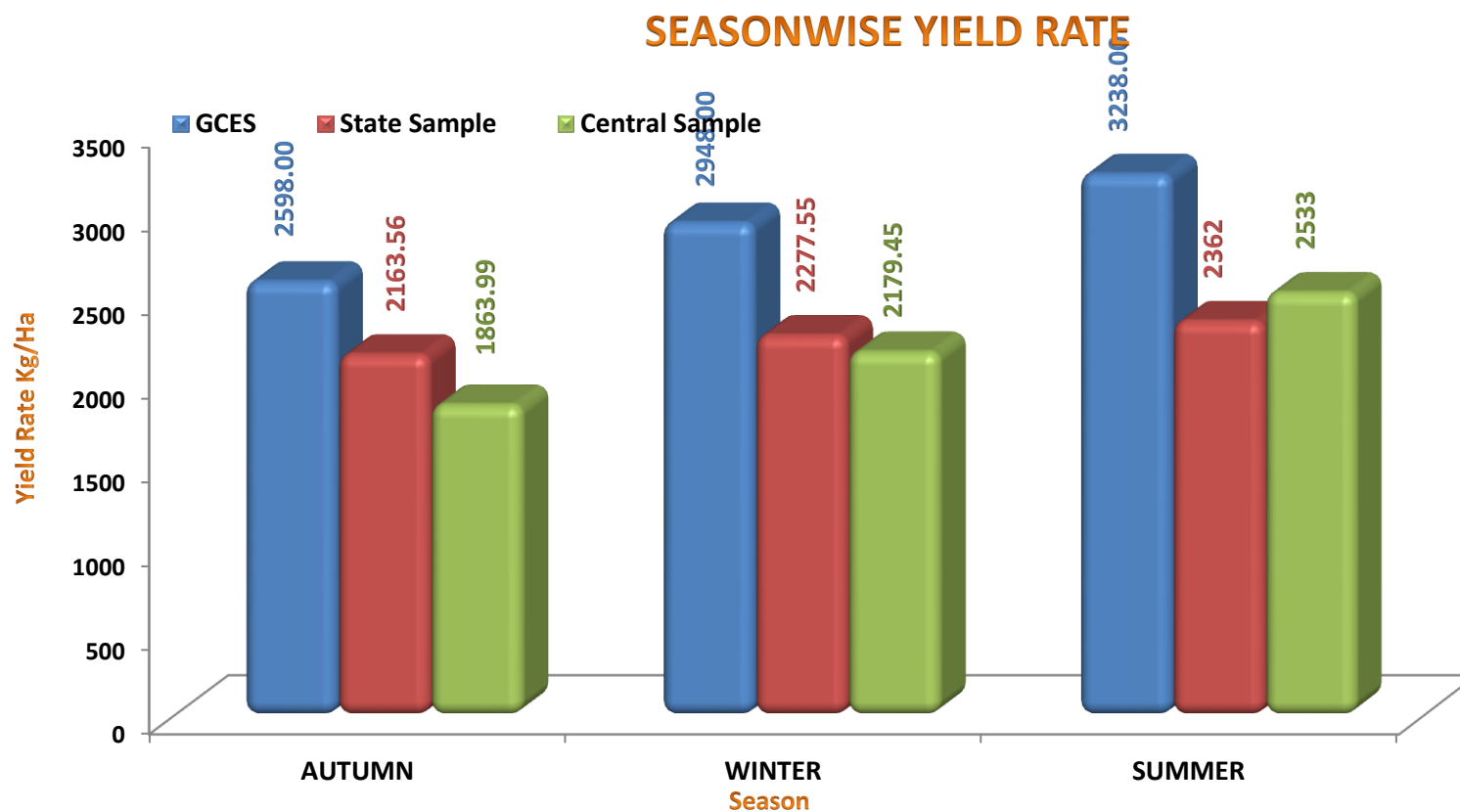


CHART-15
DISTRICTWISE YIELD RATE OF TAPIOCA UNDER GCES & ICS 2023-24

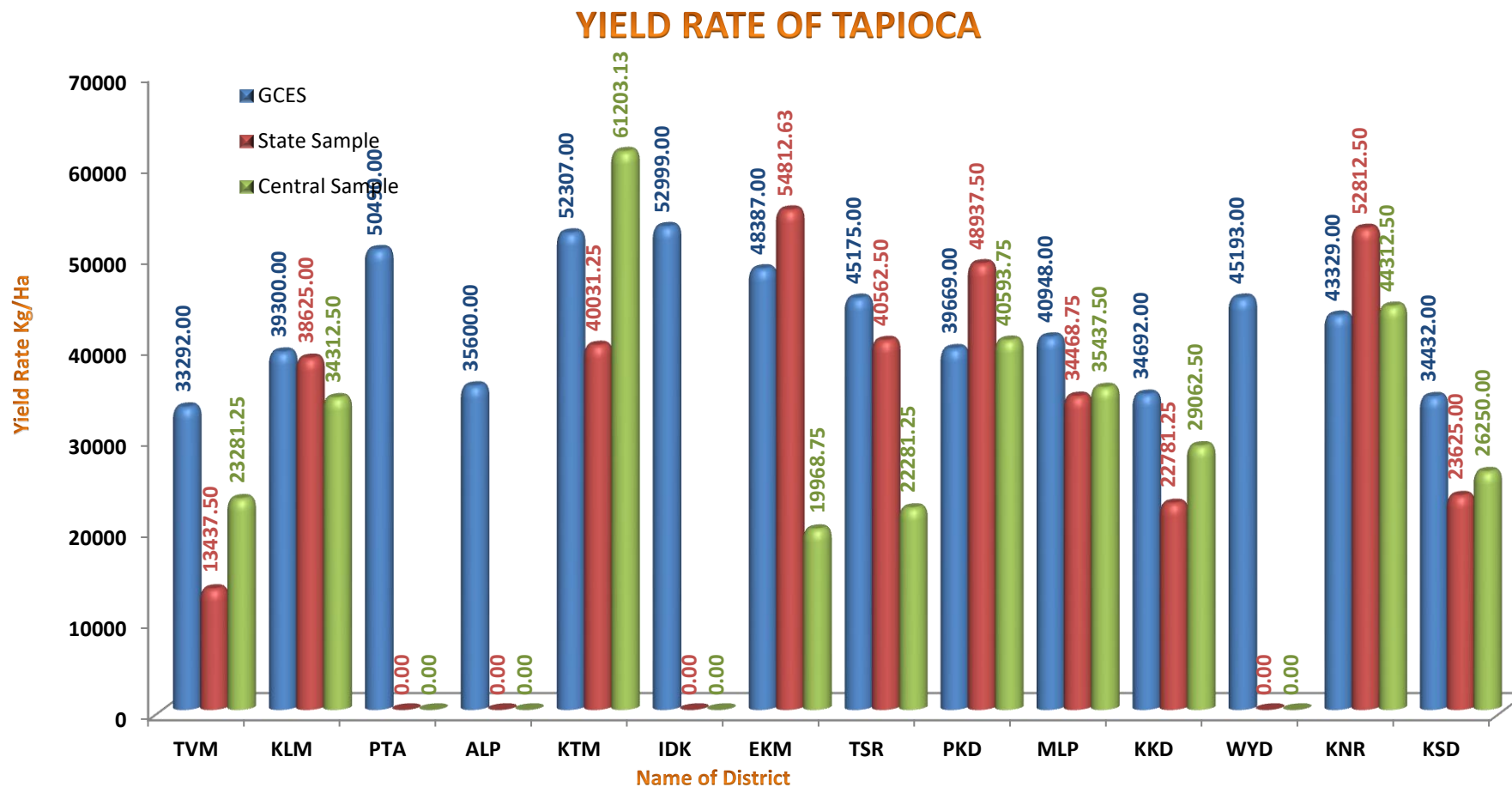


CHART-16
DISTRICTWISE YIELD RATE OF BANANA UNDER GCES & ICS 2023-24

YIELD RATE OF BANANA

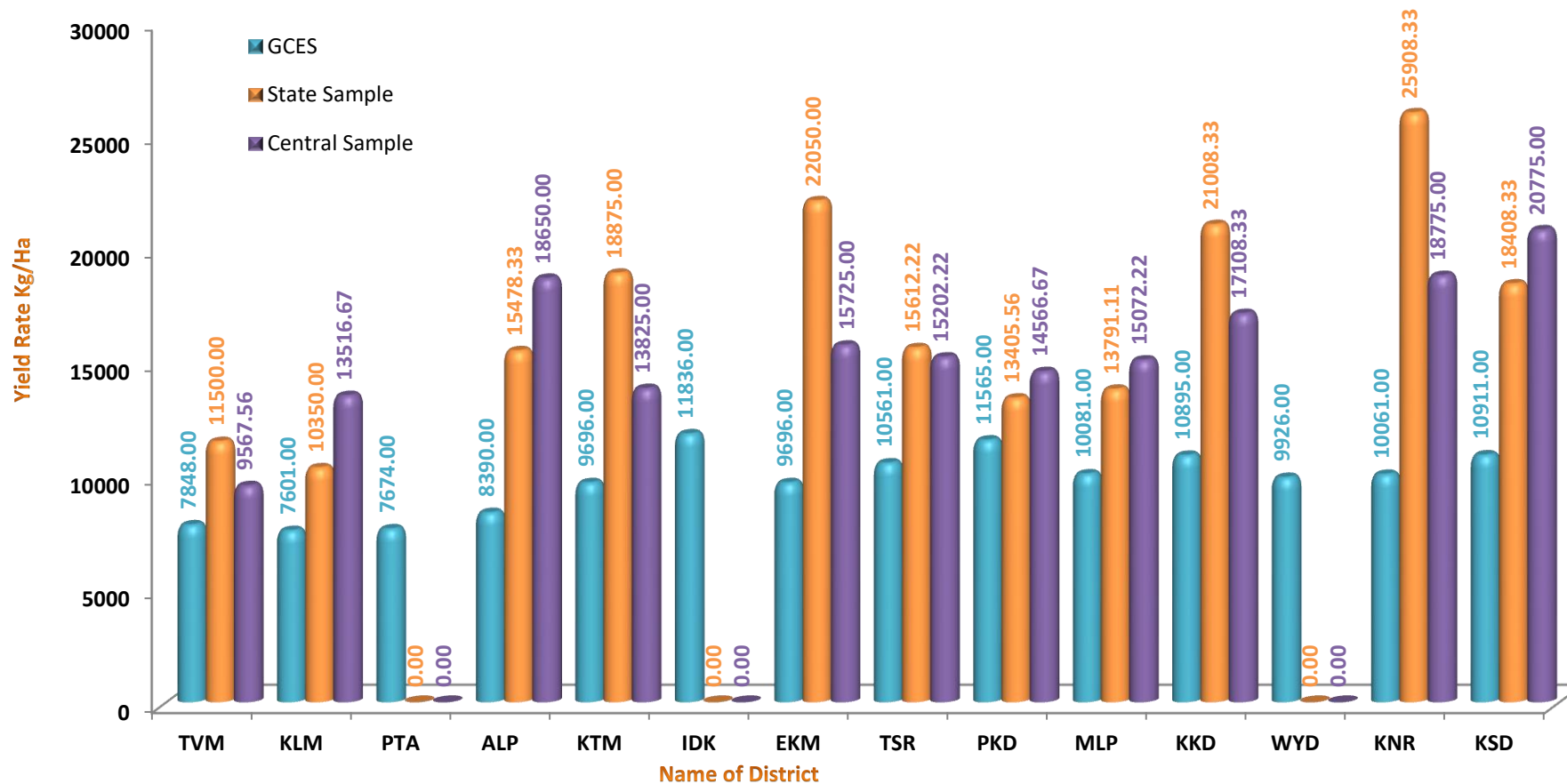


CHART-17
DISTRICTWISE YIELD RATE OF COCONUT UNDER GCES & ICS 2023-24

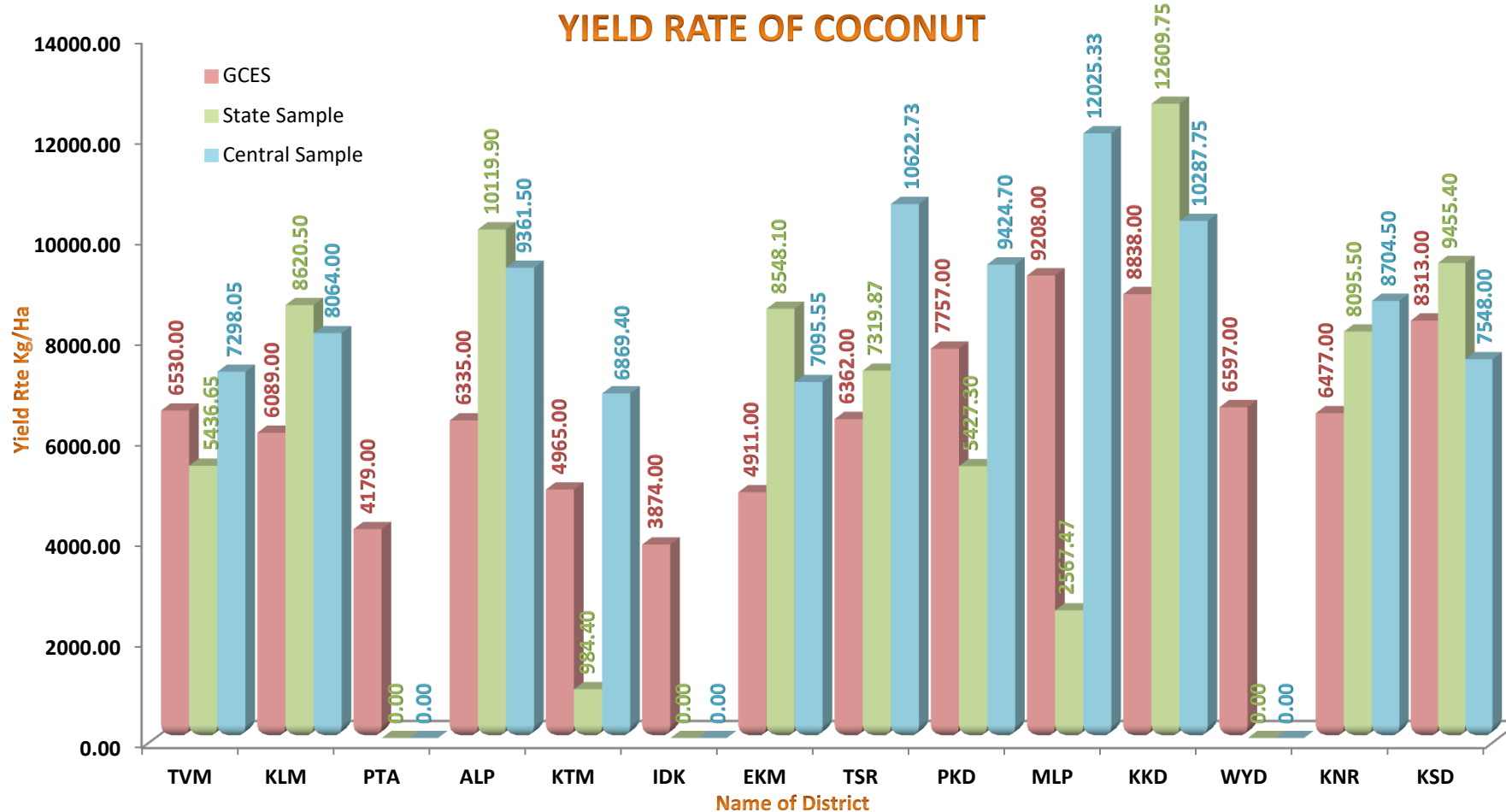


CHART-18
DISTRICTWISE YIELD RATE OF PEPPER UNDER GCES & ICS 2023-24

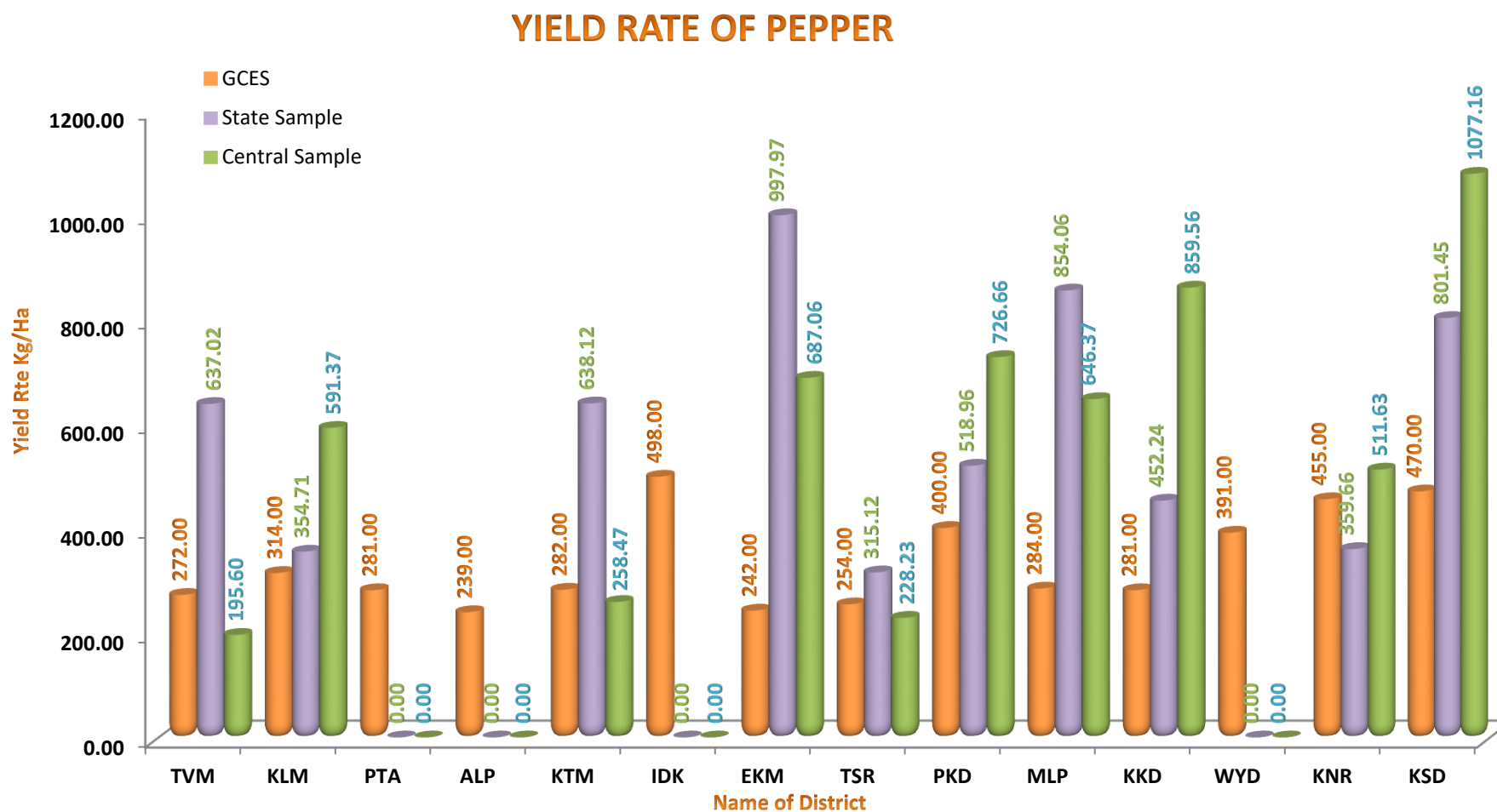


CHART-19
DISTRICTWISE YIELD RATE OF ARECANUT UNDER GCES & ICS 2023-24

YIELD RATE OF ARECANUT

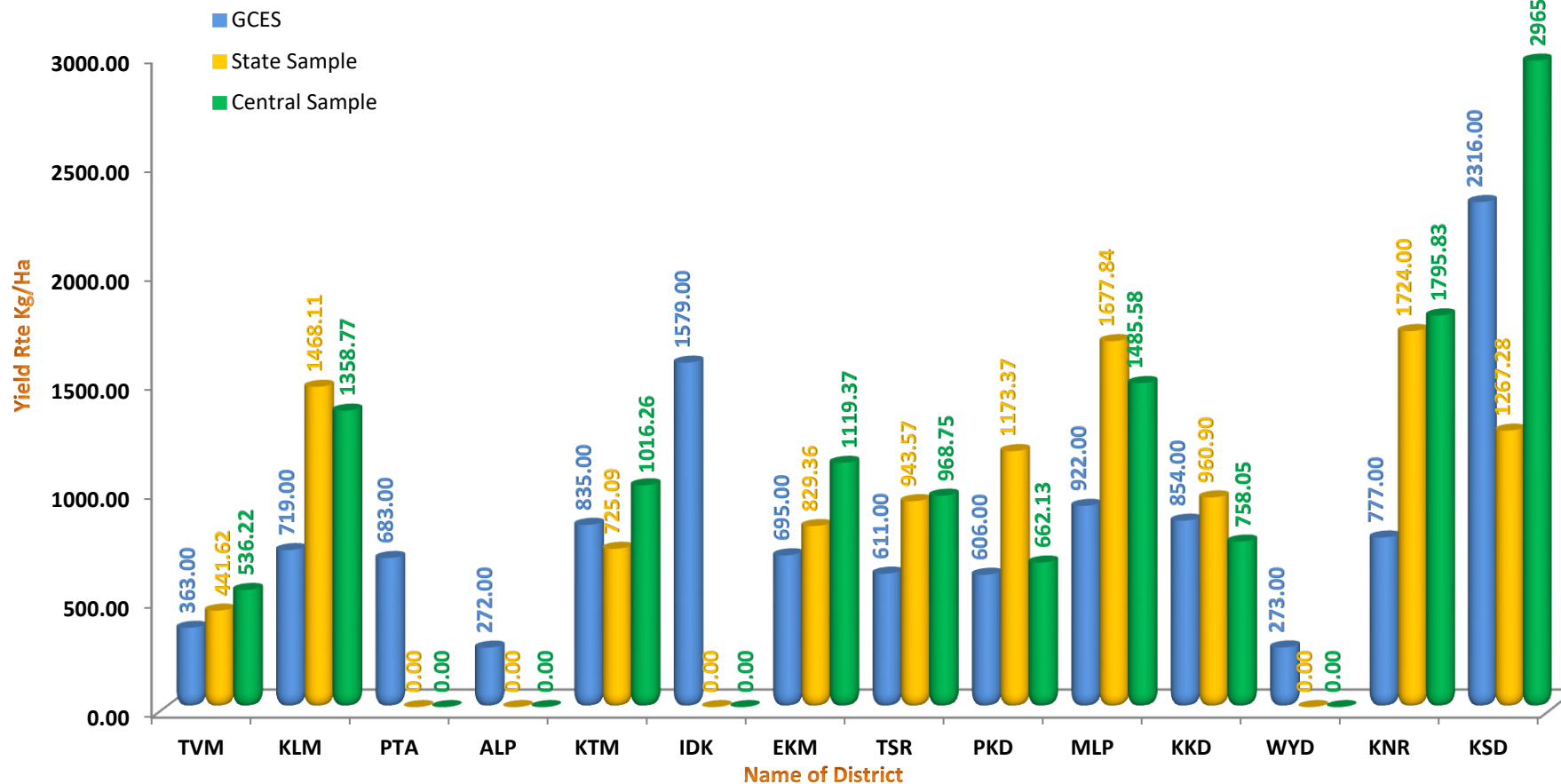


CHART-20
CROPWISE YIELD RATE OF IMPORTANT CROPS UNDER GCES & ICS 2023-24

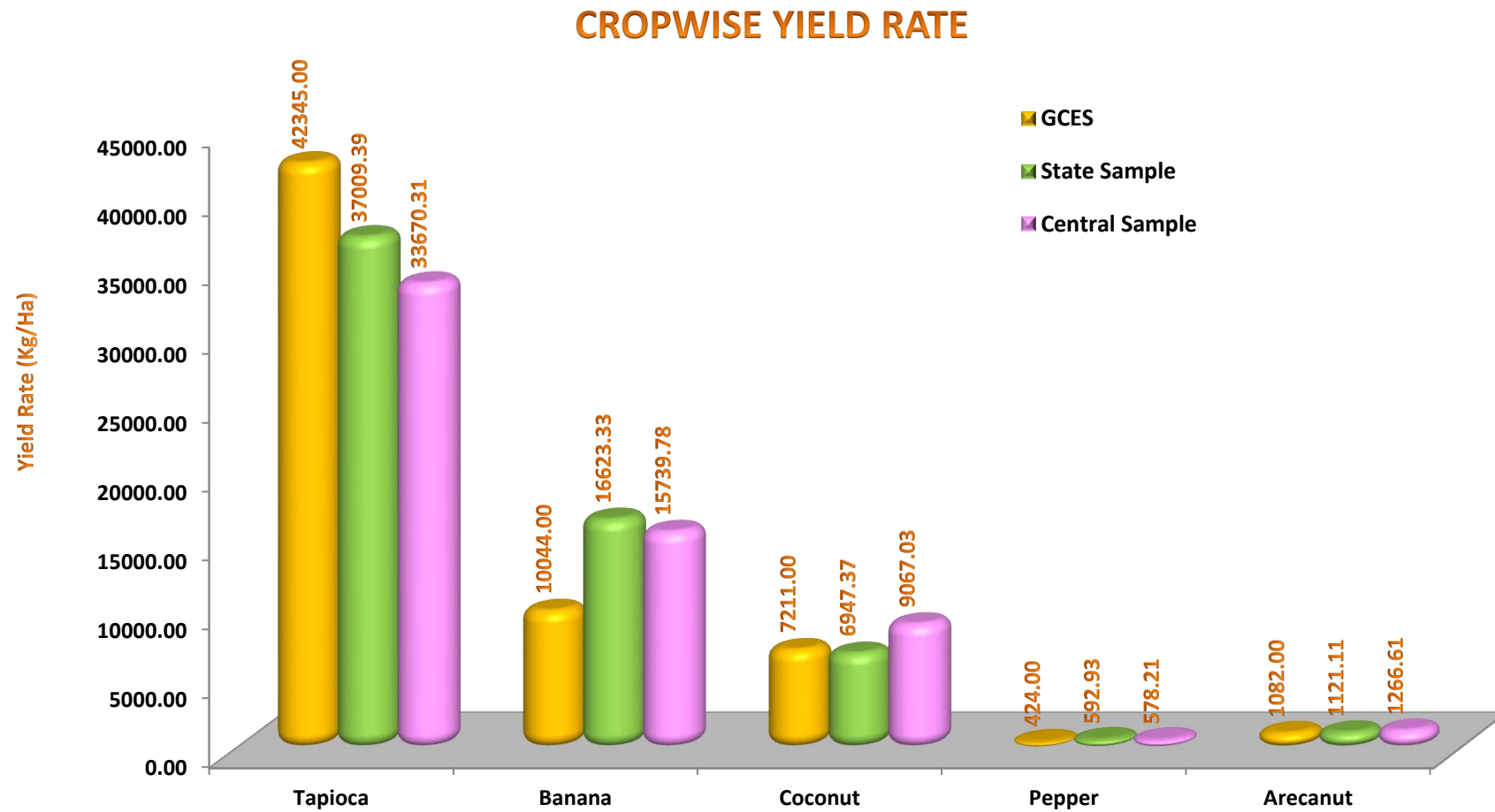


Table 14
TREND OF YIELD RATES (Kg/Ha) OF RICE UNDER GCES & ICS 2019-20 to 2023-24

YEAR	AUTUMN			WINTER			SUMMER		
	CENTRAL	STATE	GCES	CENTRAL	STATE	GCES	CENTRAL	STATE	GCES
2019-20	1883.37	1787.09	2614	2486.21	2459.75	3058	2377.55	2486.20	3540
2020-21	2030.83	2206.38	2643	2464.33	2343.58	3165	2640.34	2417.06	3464
2021-22	2227.23	1998.30	2542	2185.92	2220.51	3066	2479.29	2604.95	2902
2022-23	1858.79	1905.81	2716	2709.86	2460.95	3149	2881.64	2896.59	3350
2023-24	1863.99	2163.56	2598	2179.45	2277.55	2948	2533.11	2362.19	3238

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