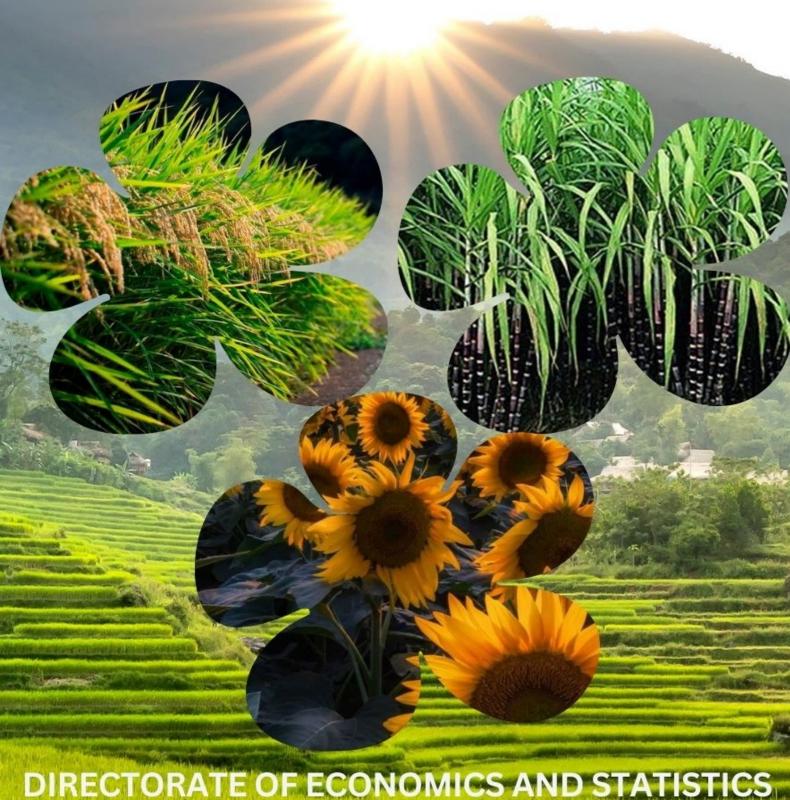


REPORT ON ESTIMATES OF AREA OF PRINCIPAL **CROPS UNDER TIMELY REPORTING SCHEME IN KARNATAKA 2022-23**



BENGALURU



REPORT ON ESTIMATES OF AREA OF PRINCIPAL CROPS UNDER TIMELY REPORTING SCHEME IN KARNATAKA

2022-23

DIRECTORATE OF ECONOMICS AND STATISTICS
BENGALURU

PREFACE

The centrally sponsored "Timely Reporting Scheme" is being

implemented in the State since 1969-70 which aims to arrive at quick and

reliable estimates of area under principal crops. District wise area under

selected principal crops has been estimated based on the data from

sample villages for all the three seasons during 2022-23 which constitute

20 percent of total villages. This report is based on the second set of

20% villages selected among the five sets of villages commencing from

2021-22 to 2025-26 covering 15 crops. While estimating area,

classification of crops as traditional and high yielding variety and also

status of irrigation are taken into account.

This report is prepared in the Agricultural Statistics Division of the

Directorate of Economics and Statistics. Suggestions for improvement of

this report are most welcome.

Place: Bengaluru

Date: 16-01-2024

Team Associated in the Preparation of Report

Sri. Basawaraj S.	Additional Director
Smt. J. Mangala	Joint Director
Smt. T.S. Girija	Deputy Director
Smt. E. Pushpa	Assistant Director
Smt. Amaravathi	Statistical Inspector
Kum. M. Hameeda	Enumerator
Sri. Hanumantaraya	Enumerator

CONTENTS

Sl. No.	Title	Page No.
1.1	Introduction	1
1.2	Objectives	1
1.3	Coverage	1
1.4	Time Schedule	2
1.5	Sampling Design	2
1.6	Organization of Field Work	3
1.7	Training	3
1.8	Sample Size and Receipt Position of Crop Abstracts	4
1.9	Supervision	4
1.10	Procedure for Estimating Area of Crops	5
2.	Results of the Scheme	6-27
3.	Summary of the Findings	28
	Appendix	
1	District wise and season wise receipt position of village Crop Abstracts during 2022-23.	29
2.1	District wise and season wise Estimated area under ratio method and Reconciled Area under Paddy crop for the year 2022-23.	30
2.2	District wise and season wise Estimated area under ratio method and Reconciled Area under Jowar crop for the year 2022-23.	31
2.3	District wise and season wise Estimated Area under ratio method and Reconciled Area under Ragi crop for the year 2022-23.	32
2.4	District wise and season wise Estimated Area under ratio method and Reconciled Area under Maize crop for the year 2022-23.	33
2.5	District wise Estimated Area under ratio method and Reconciled Area under Bajra, Wheat, Tur & Bengal gram crops for the year 2022-23.	34
2.6	District wise and season wise Estimated Area under ratio method and Reconciled Area under Groundnut crop for the year 2022-23.	35
2.7	District wise and season wise Estimated Area under ratio method and Reconciled Area under Sunflower crop for the year 2022-23.	36
2.8	District wise Estimated Area under ratio method and Reconciled area under Sesamum, Safflower & Linseed crops for the year 2022-23.	37
2.9	District wise Estimated area under ratio method and Reconciled Area under Cotton & Sugarcane crops for the year 2022-23.	38
3	Season wise & Crop wise percentage variation of estimates of area by ratio method over reconciled area for the year 2021-22 and 2022-23.	39

1. TIMELY REPORTING OF ESTIMATES OF AREA OF PRINCIPAL CROPS IN KARNATAKA 2022-23

1.1 Introduction

The "Timely Reporting Scheme" sponsored by Government of India is being implemented in the State since 1969-70, with an objective to arrive at quick, reliable and accurate estimates of area under selected principal crops soon after the end of each season. These estimates of area are worked out on the basis of the actual enumeration in 20% of total villages selected in the State every year. The area estimates under this scheme will help the Government in assessing agricultural prospects during the year and to take quick policy measures relating to agricultural output, imports, minimum support price and exports of the agricultural commodities etc.

1.2 Objective

The main objective of the scheme is to obtain reliable and statistically precise area estimates under selected principal crops soon after the end of each season. The area is estimated separately for irrigated and unirrigated category crops for both traditional and high yielding varieties.

1.3 Coverage

The time schedule of Timely Reporting Scheme of the State covering the period from 1st April 2022 to 31st March 2023 is divided into three seasons viz., kharif, rabi and summer (see Para 1.4). Totally 15 major crops are covered under the scheme but, the number of crops coverage varies from season to season. However, Paddy, Maize, Ragi and Sunflower crops are common for all the three seasons. Crop coverage in each season is as follows:

- a) Kharif: 1. Paddy 2. Jowar 3. Maize 4. Ragi 5. Bajra 6. Tur 7. Groundnut 8. Sesamum 9. Sunflower
- b) Rabi: 1. Paddy 2. Jowar 3. Maize 4. Ragi 5. Wheat 6. Cotton 7. Gram8. Sugarcane 9. Sunflower 10. Safflower 11. Linseed
- c) Summer: 1. Paddy 2. Maize 3. Ragi 4. Groundnut 5. Sunflower.

1.4 Time Schedule

The Time Schedule for Crop Area Enumeration was as follows:

Sl. No.	Agricultural Season	Sowing period	Crop Enumeration Period
1	Kharif Early	1 st April 2022 to 30 th June 2022	1 st July 2022 to 31 st July 2022
	Late	1 st July 2022 to 31 st August 2022	1 st September 2022 to 30 th September 2022
2	Rabi	1 st September 2022 to 31 st December 2022	1 st January 2023 to 31 st January 2023
3	Summer	1 st January 2023 to 31 st March 2023	1 st April 2023 to 30 th April 2023

1.5 Sampling design

- 1) Linear systematic sampling method suggested by the Directorate of Economics and Statistics, Government of India, New Delhi, is adopted, treating each taluk as a stratum. 20% of total villages in each taluk are selected every year. All the village accountant circles in each taluk and all the villages in each village accountant circle are arranged in random order for preparing a sample frame to select the sampling unit.
- 2) The selection of 20% sample villages in each taluk is done as per systematic sampling technique from the sampling frame stated above, with an interval of five sample units with a different random strata adopting non-overlapping sampling procedure.
- 3) Commencing the year 2021-22, 20% of villages are selected every year under the scheme, so that 100% villages are covered in five years i.e. by 2025-26. This report is based on the data collected from the second set of villages selected for the year 2022-23.

1.6 Organization of Field Work

- 1) The Directorate of Economics and Statistics was entrusted with the responsibility of implementation of the scheme and the field work was assigned to the Village Accountants of the Revenue Department (During 2022-23 field work was conducted by Private Resident under Crop Survey through Mobile App).
- 2) To improve the quality of field work and to point out different kinds of mistakes committed by the Village Accountants in recording the crop area, supervision is essential. In Karnataka state from 2018-19 GIS Mobile Application based Crop Survey was started and conducted only during kharif season. From 2019-20 onwards crop survey was conducted in all the three seasons. Since Kharif 2019, under crop survey Directorate of Economics and Statistics has been assigned the responsibility of 1% verification of the crop survey data capture through mobile app as 3rd party audit. For the 1% verification, Directorate of Economics and Statistics was taken up verification in all the TRS villages (20% of total villages). The supervision of field work was entrusted to Agriculture, Horticulture and Statistics department. The District Statistical Officers and their staff from the Economics & Statistics Department were also involved in the supervision work.
- 3) The District Statistical Officers were assigned with the overall responsibility of implementation of the scheme in their jurisdiction.

1.7 Training

The District Statistical Officers impart training to the field staff with regard to the procedure to be followed in the area enumeration and in recording the crop area in the prescribed crop abstracts from the RTC. Supervisory staffs of the Horticulture, Agriculture and Statistics Departments were also trained during kharif season well before the commencement of the area enumeration work.

1.8 Sample size and receipt position of Crop Abstracts

During the year under review, in all 5880 villages were selected under the scheme. The details of number of villages selected and the number of the crop abstracts received in each season and other such particulars are given in Table-1.

 $\label{eq:Table-1} Table-1$ Season wise receipt position of Crop Abstracts

Sl. No.	Particulars	Kharif	Rabi	Summer
1	2	3	4	5
1.	No. of Villages selected	5880	5880	5880
2.	No. of Villages from which crop abstracts received	5880	5880	5880
3.	Percentage response	100	100	100

1.9 Supervision

The details of supervision conducted by Statistics, Agriculture and Horticulture Departments are given in Table- 2.

Table-2 Number of villages Supervised

Sl. No.	Agency	2022-23 - No (Kharif + Rab	O	Percentage of supervision		
		Allotted	Supervised	2022-23	2021-22	
1	2	3	4	5	6	
1	Statistics	11362	11179	98.39	98.51	
2	Agriculture	1176	1172	99.66	97.25	
3	Horticulture	1601	1592	99.44	97.76	

1.10 Procedure for Estimating Area of Crops:

The formula adopted for estimating the area under selected crops and working out the sampling error of such estimates by the ratio method and compile the same with crop survey data.

A. Ratio Method:

- 1. Let k be the number of taluks in a district.
- 2. Yij be the area under a crop in the j^{th} village of the i^{th} taluk in the current year.
- 3. X_{ij} be the area under that crop in the j^{th} village of the i^{th} taluk during the previous year.
- 4. ni be the total number of villages selected in the ith taluk.
- 5. Ni be the total number of villages in the ith taluk.
- 6. Rc be the combined ratio estimates of the given crop in the district.
- 7. X is the area under that crop during previous ASCR report.
- 8. Y_{Rc} be the estimates of the area of the crop in the district.
 - a) Area Estimates by Ratio Method

$$\begin{array}{c} \textbf{A} \\ \textbf{Y}_{Rc} \end{array} = \left(\begin{array}{c} k \\ \sum \\ i=1 \end{array} \right) X \\ \frac{K}{\sum \\ i=1 \end{array} \right) X$$

Where X= the total area under the crop in the district during the previous year.

5

<u>CHAPTER – 2</u>

2. Results of the scheme

Area estimates have been worked out by using ratio method, comparing the same with reconciled area. Crop wise details of the estimates are presented in the ensuing paragraphs.

2.1 Paddy

It is an important cereal crop grown in 13.6 lakh hectares of area during 2022-23. The area covered under the crop was more in Raichur followed by Ballari, Yadagiri, Davanagere and Koppala districts. About 71.2% of the area under the crop was covered in Kharif season alone.

Season wise estimates of area as per Ratio Method along with reconciled area under paddy are given below in Table-3.

Table - 3
Season wise Estimated and Reconciled area under Paddy crop

Area in hectares

Season	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	Percentage of variation over Reconciled area
1	2	3	4
Kharif	1046583	964922	8.5
Rabi	92945	94139	-1.3
Summer	213128	296365	-28.1
Total	1352656	1355426	-0.2

Compared to reconciled area, the estimated area of Paddy under ratio method was lower. During kharif season, the percentage of variation over reconciled area was higher.

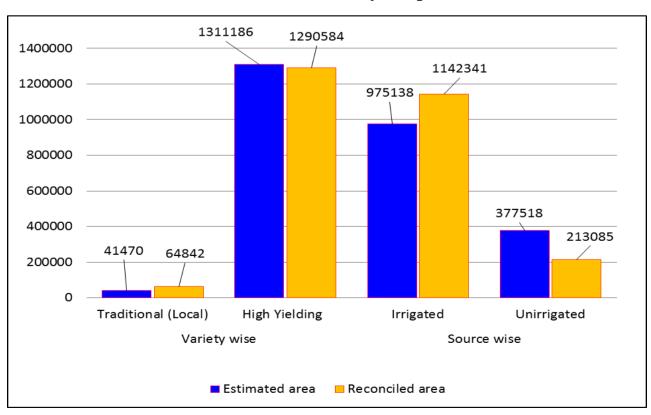
Estimated area under irrigated/unirrigated category as per ratio method and the reconciled area are given in Table-4.

Table-4
Season wise and Variety wise area Estimated by Ratio method under Paddy crop

Area in hectares

		Estimated area as per Ratio Method				Reconciled	Percentage of variation
Variety	Irrigated/ Unirrigated	Kharif	Rabi	Summer	Total	area (as per Crop survey)	over Reconciled area
1	2	3	4	5	6	7	8
	Irrigated	1506	198	4	1708	5121	-66.6
Traditional (Local)	Unirrigated	39642	120	0	39762	59721	-33.4
	Total	41148	318	4	41470	64842	-36.0
	Irrigated	667679	92627	213124	973430	1137220	-14.4
High Yielding	Unirrigated	337756	0	0	337756	153365	120.2
	Total	1005435	92627	213124	1311186	1290584	1.6
Total	Irrigated	669185	92825	213128	975138	1142341	-14.6
	Unirrigated	377398	120	0	377518	213085	77.2
	Total	1046583	92945	213128	1352656	1355426	-0.2

Variety wise and Source wise Estimated Area (Ratio Method) and Reconciled Area under Paddy Crop (in hectares)



As per the reconciled area, the irrigated area under paddy crop was 84.28% and unirrigated was 15.72% whereas, under ratio method it was 72.09% and 27.91% respectively. In case of traditional and high yielding varieties, the percentage of area under reconciled area was 5% and 95% as against the estimated area was 3% and 97% respectively. The percentage variation of estimated area under ratio method over reconciled area was -14.6 under irrigated category, 77.2 under unirrigated category and -0.2 to the total during 2022-23. District wise details are given in Appendix-2.1.

2.2 Jowar

Jowar is another important cereal crop with 5.6 lakh hectares of area in the State of which, 89% of area was cultivated during Rabi season alone. Belagavi stands first in the area coverage i.e., 19.3% followed by, Kalaburagi (10.4%), Raichur (9.5%) and Haveri (9.1%). Season wise information is given in Table–5.

 $\label{eq:Table-5} \textbf{Season wise Estimated and Reconciled area under Jowar crop}$

Area in hectares

Season	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	Percentage of variation over Reconciled area	
1	2	3	4	
Kharif	rif 65266 63684		2.5	
Rabi	450758	498878	-9.6	
Total 516024		562562	-8.3	

From the above table, the variation of area under ratio method compared to reconciled area was 2.5% and -9.6% during kharif and rabi seasons respectively.

Area by varieties and status of irrigation worked out by ratio method and the reconciled area are given in Table-6.

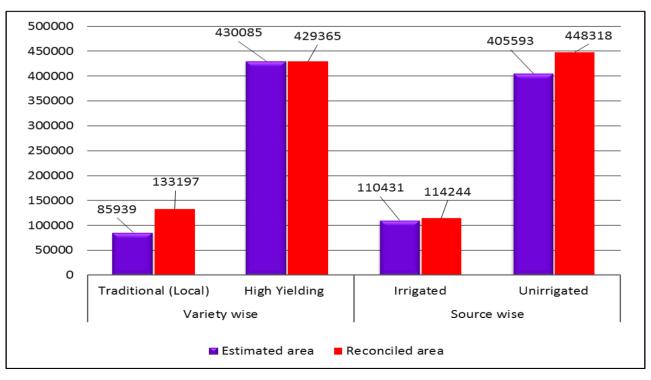
Table – 6
Season wise and Variety wise area Estimated by Ratio method and Reconciled area under Jowar crop

Area in hectares

	Irrigated/	Estimate	ed area as p Method	er Ratio	Reconciled area (as	Percentage of variation
Variety	Unirrigated	Kharif	Rabi	Total	per Crop survey)	over Reconciled area
1	2	3	4	5	6	7
T 11:1 1	Irrigated	165	4765	4930	6255	-21.2
Traditional (Local)	Unirrigated	9287	71722	81009	126942	-36.2
(Local)	Total	9452	76487	85939	133197	-35.5
	Irrigated	18864	86637	105501	107988	-2.3
High Yielding	Unirrigated	36950	287634	324584	321376	1.0
Ticiding	Total	55814	374271	430085	429365	0.2
Total	Irrigated	19029	91402	110431	114244	-3.3
	Unirrigated	46237	359356	405593	448318	-9.5
	Total	65266	450758	516024	562562	-8.3

Out of total estimated jowar area 17% was under traditional variety and the remaining 83% was under high yield variety, as against 24% and 76% of reconciled area respectively. District wise details are given in Appendix -2.2.

Variety wise and Source wise Estimated Area (Ratio Method) and Reconciled Area under Jowar Crop (in hectares)



2.3 Ragi

Ragi is the third most important cereal crop largely grown in southern districts with 8.3 lakh hectares of area during 2022-23. The major Ragi growing districts are Tumakuru (18.2%), Hassan (13.3%), Mysuru (12.5%), Mandya (8.3%) and Bengaluru Rural (7.5%) which account for 59.8% of the total Ragi area of the State. About 84.6% of the area was covered under kharif season itself. Season wise area estimated as per ratio method is given in Table-7.

Table-7 Season wise Estimated and Reconciled area under Ragi crop

Area in hectares

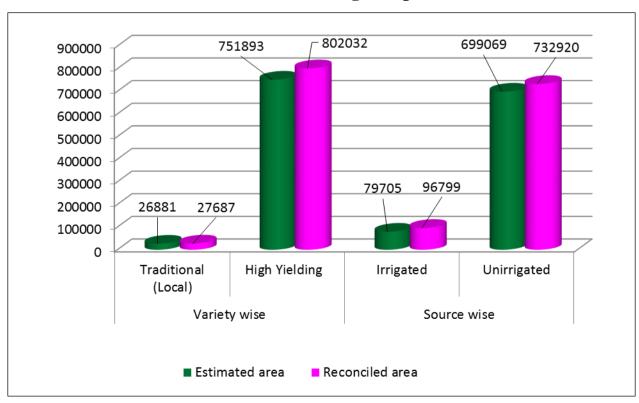
Season	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	Percentage of variation over Reconciled area
1	2	3	4
Kharif	665353	702338	-5.3
Rabi	107360	117987	-9.0
Summer	6061	9395	-35.5
Total	778774	829720	-6.1

The percentage variation of area estimated by ratio method over reconciled area was -6.1. Estimated area under Ratio method was lower in all the three seasons. Table-8 depicts estimated area by status of irrigation.

 $\begin{tabular}{ll} Table-8 \\ Season wise and Variety wise area Estimated by Ratio method under Ragi crop \\ Area in hectares \\ \end{tabular}$

		Estimat	ed area as	Method		Percentage	
Variety	Irrigated/ Unirrigated	Kharif	Rabi	Summer	Total	Reconciled area (as per Crop survey)	of variation over Reconciled area
1	2	3	4	5	6	7	8
	Irrigated	3	2375	0	2378	3745	-36.5
Traditional (Local)	Unirrigated	21998	2505	0	24503	23942	2.3
(2000)	Total	22001	4880	0	26881	27687	-2.9
	Irrigated	20878	50388	6061	77327	93054	-16.9
High Yielding	Unirrigated	622474	52092	0	674566	708978	-4.9
	Total	643352	102480	6061	751893	802032	-6.3
Total	Irrigated	20881	52763	6061	79705	96799	-17.7
	Unirrigated	644472	54597	0	699069	732920	-4.6
	Total	665353	107360	6061	778774	829720	-6.1

Variety wise and Source wise Estimated Area (Ratio Method) and Reconciled area under Ragi Crop (in hectares)



11

802032 hectares (96.7%) of reconciled area was covered by high yielding variety. Out of total estimated area, 96.5% area was covered by High Yielding variety and remaining under traditional variety. Estimated area was lower under both traditional and high yielding variety when compared to reconciled area. The area estimated under ratio method in case of irrigated area was lower when compared to reconciled area. District wise details are given in Appendix- 2.3

2.4 Maize

Total

1877330

Maize is yet another cereal crop grown in more than 19.5 lakh hectares in the State. Maize growing major districts are Haveri (17%), Vijayanagara (11%) and Belagavi (10%). 81% of the area was covered under kharif season alone. Season wise estimated area as per ratio method is given in Table -9

Table – 9
Season wise Estimated area and Reconciled area under Maize crop

Area in hectares

-3.7

Percentage of Reconciled area Estimated area as Season variation over per Ratio Method (as per Crop survey) Reconciled area 1 Kharif -3.2 1526727 1577716 Rabi 287136 299449 -4.1 Summer 63467 72770 -12.8

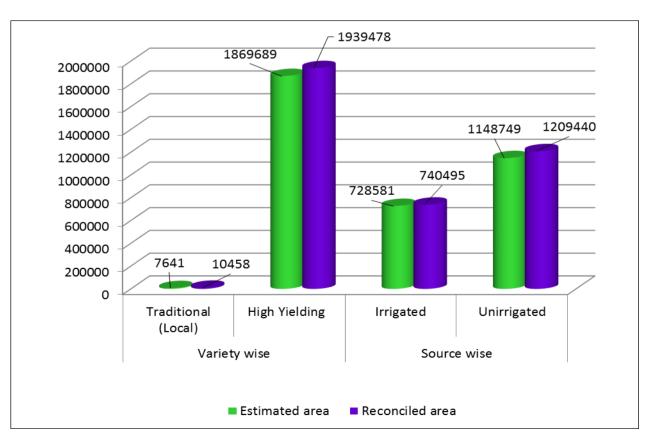
The Percentage variation of estimated area under ratio method over reconciled area was -3.2 in Kharif, -4.1 in Rabi and -12.8 in Summer season. The total estimated area was lower under ratio method when compared to the reconciled area.

1949935

Estimated area by season wise, variety wise and source wise as per ratio method and the reconciled area are given in Table -10.

		Estimate	ed area as	s per Ratio	Reconciled	Percentage of variation	
Variety	Irrigated/ Unirrigated	Kharif	Rabi	Summer	Total	area (as per Crop survey)	over Reconciled area
1	2	3	4	5	6	7	8
	Irrigated	1348	2064	1553	4965	5424	-8.5
Traditional (Local)	Unirrigated	2676	0	0	2676	5034	-46.8
	Total	4024	2064	1553	7641	10458	-26.9
	Irrigated	401245	260713	61658	723616	735071	-1.6
High Yielding	Unirrigated	1121458	24359	256	1146073	1204406	-4.8
	Total	1522703	285072	61914	1869689	1939478	-3.6
Total	Irrigated	402593	262777	63211	728581	740495	-1.6
	Unirrigated	1124134	24359	256	1148749	1209440	-5.0
	Total	1526727	287136	63467	1877330	1949935	-3.7

Variety wise and Source wise Estimated Area (Ratio Method) and Reconciled area under Maize Crop (in hectares)



13

It is observed from the above table that, under ratio method the total estimated irrigated area was 38.8% out of which, 99.3% of area sown with high yielding variety. As per reconciled area, 38% of area was irrigated of which, the area sown with high yielding variety was 99.3%. The percentage variation of estimated irrigated and unirrigated area by ratio method over reconciled area was -1.6 and -5.0 respectively. District wise details are given in Appendix-2.4

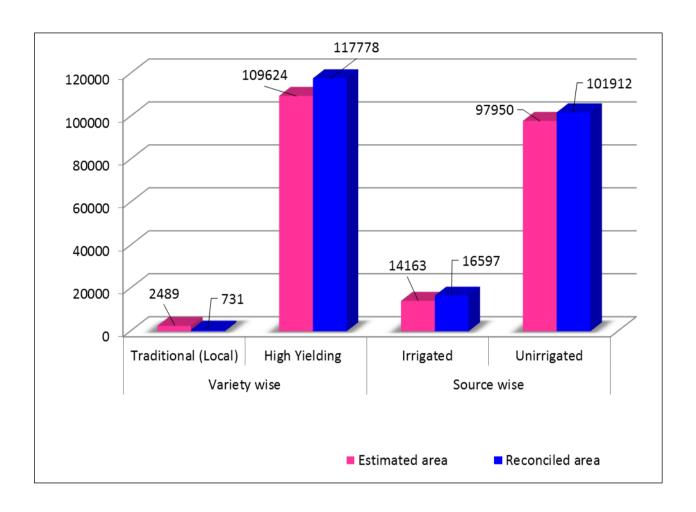
2.5 Bajra

Bajra crop was grown in 1.2 lakh hectares in the State during the year. It is largely grown in Koppala (33.3%), Raichur (18.5%), Vijayapura (16.3%) and Bagalakote (12.5%) districts in the State. These 4 districts contribute 80.6% of the total cropped area of the Bajra crop in the State. Total area estimated under the crop by ratio method was lower when compared to the reconciled area. 2% of area estimated had traditional variety and the remaining 98% of the area was sown with high yielding variety as per ratio estimates whereas, under reconciled area only 1% area was covered under traditional variety and remaining 99% area was covered under high yielding variety. Estimated area of Bajra crop by variety wise and source wise by ratio method and reconciled area are given in Table-11.

Table-11 Variety wise Estimated area and Reconciled area under Bajra crop

Area in hectares Reconciled Estimated area Percentage of Irrigated/ Variety as per Ratio area (as per variation over Unirrigated Crop survey) Method Reconciled area 1 3 5 **Irrigated** 0 2 -100.0 **Traditional** Unirrigated 729 2489 241.6 (Local) **Total** 2489 731 240.5 -14.7 **Irrigated** 14163 16595 High Yielding Unirrigated 95461 101183 -5.7 **Total** 109624 117778 -6.9 Irrigated -14.7 14163 16597 Total Unirrigated 97950 101912 -3.9 **Total** 112113 -5.4 118509

Variety wise and Source wise Estimated Area (Ratio Method) and Reconciled Area under Bajra Crop (in hectares)



It is observed from the above table that, under ratio method there was variation of -14.7% under irrigated area and -3.9% under unirrigated area when compared to reconciled area. District wise details are given in Appendix-2.5

2.6 Wheat

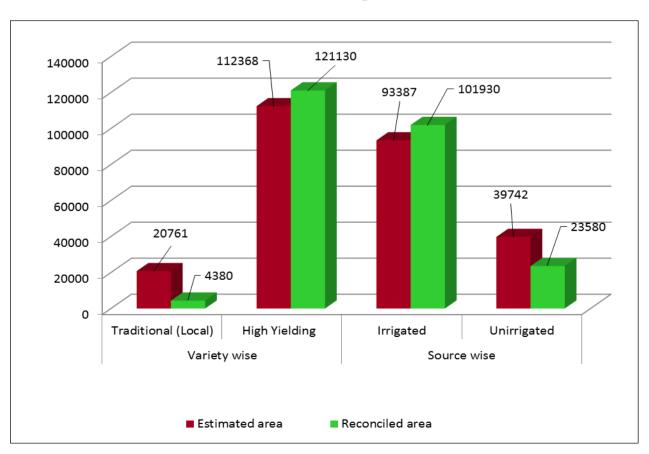
Wheat crop is grown only in Rabi season nearly in 1.3 lakh hectares. About 47950 hectares of area is covered by Belagavi district (38.2%) followed by, Vijayapura (23.9%) and Bagalakote (17.9%). The estimated area under ratio method for this crop was higher when compared to reconciled area. Details are given in Table-12.

Table-12 Variety wise Estimated area and Reconciled area under Wheat crop

Area in hectares

Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	Percentage of variation over Reconciled area
1	2	3	4	5
	Irrigated	2502	4380	-42.9
Traditional (Local)	Unirrigated	18259	0	0.0
(Local)	Total	20761	4380	374.0
	Irrigated	90885	97550	-6.8
High Yielding	Unirrigated	21483	23580	-8.9
Ticianig	Total	112368	121130	-7.2
	Irrigated	93387	101930	-8.4
Total	Unirrigated	39742	23580	68.5
	Total	133129	125510	6.1

Variety wise and Source wise Estimated Area (Ratio Method) and Reconciled Area under Wheat Crop (in hectares)



16

It can be seen from the above table that, under Ratio Method out of total estimated area, irrigated area was 93387 (70%) of which, the irrigated area under High Yielding Variety was 97% and Traditional (Local) was 3%. Under reconciled area, the area under irrigation was 101930 (81%) of which, area under High Yielding variety was 96% and Traditional (Local) was 4%. The estimated area by ratio method was higher to the extent of 6.1% when compared to the reconciled area. District wise details are given in Appendix- 2.5

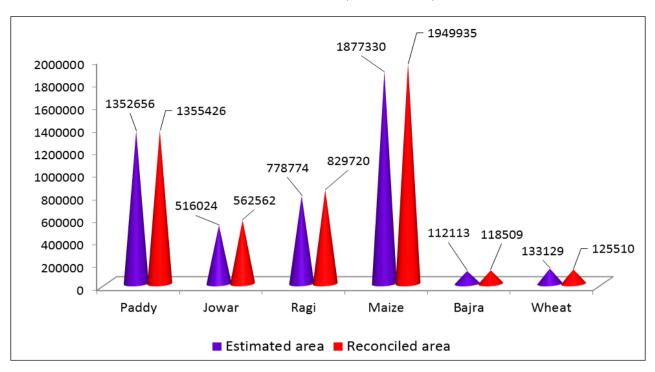
Estimated area for cereal crops under ratio method and reconciled area is given in Table-13 and also graphically presented below.

Table-13 Estimated area and Reconciled area under Cereals

Area in hectares

Crop Name	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	Percentage of variation over Reconciled area
1	2	3	4
Paddy	1352656	1355426	-0.2
Jowar	516024	562562	-8.3
Ragi	778774	829720	-6.1
Maize	1877330	1949935	-3.7
Bajra	112113	118509	-5.4
Wheat	133129	125510	6.1

Estimated Area (Ratio Method) and Reconciled Area (as per crop survey) under Cereals (in hectares)



2.7 Tur

Tur crop is one of the important long duration pulse crop grown only in kharif season. About 12.4 lakh hectares of area was under this crop during 2022-23 of which, 4.9 lakh hectares grown in Kalaburagi and 3.8 lakh hectares in Vijayapura districts which constitutes 69.2% of the total area of the crop in the state. It is observed that, the estimated area by ratio method was lower to the extent of 4.5% when compared to the reconciled area.

2.8 Bengal gram

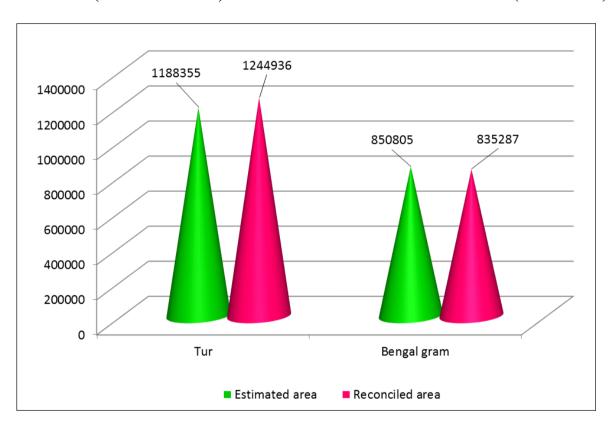
Bengal gram is also an important pulse crop of the State grown in nearly 8.4 lakh hectares in Rabi season. Gadag district is covered with 1.5 lakh hectares, 1.4 lakh hectares in Dharwad district and 1.1 lakh hectares of area in Belagavi district which works out to 48.3% of the total State area. The estimated area by ratio method was higher to the extent of 1.9% when compared to the reconciled area.

Details of Estimated area under Tur and Bengal gram crop is given in Table–14 and also graphically presented below. District wise details are given in Appendix-2.5.

Table-14 Estimated area and Reconciled area under Tur and Bengal gram crops

			Area in hectares	
Crop	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	Percentage of variation over Reconciled area	
1	2	3	4	
Tur	1188355	1244936	-4.5	
Bengal gram	850805	835287	1.9	

Estimated (Ratio Method) and Reconciled area under Pulses (in hectares)



2.8 Groundnut

Groundnut is an important oilseed crop grown in about 3.2 lakh hectares in the State. Though it is grown in Kharif and Summer seasons, about 92% of the area is cultivated during kharif season alone. Predominant groundnut growing districts are Chitradurga (1.2 lakh hectares) and Tumakuru (0.5 lakh hectares) which accounted for 52.4% of the total area of the State. Season wise estimates of area are given in Table-15.

Table-15 Season wise Estimated area and Reconciled area under Groundnut crop

Area in hectares

Season	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	Percentage of variation over Reconciled area
1	2	3	4
Kharif	275460	297717	-7.5
Summer	17980	26312	-31.7
Total	293440	324029	-9.4

The estimated area under ratio method was lower side to the extent of 9.4% when compared with Reconciliation area. Season wise, Variety wise and irrigated/unirrigated details are given in Table–16.

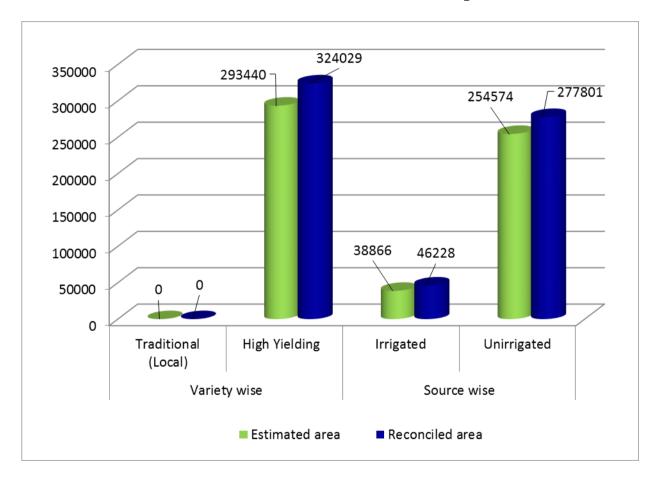
Table-16 Season wise and variety wise Estimated area by Ratio method and Reconciled area under Groundnut crop

Area in hectares

			timated a r Ratio M		Rec (as pe	Percentage of		
Variety	Irrigated/ Unirrigated	Kharif	Summer	Total	Kharif	Summer	Total	variation over Reconciled area
1	2	3	4	5	6	7	8	9
	Irrigated	0	0	0	0	0	0	0.0
Traditional (Local)	Unirrigated	0	0	0	0	0	0	0.0
	Total	0	0	0	0	0	0	0.0
	Irrigated	20889	17977	38866	19958	26271	46228	-15.9
High Yielding	Unirrigated	254571	3	254574	277759	41	277801	-8.4
	Total	275460	17980	293440	297717	26312	324029	-9.4
	Irrigated	20889	17977	38866	19958	26271	46228	-15.9
Total	Unirrigated	254571	3	254574	277759	41	277801	-8.4
	Total	275460	17980	293440	297717	26312	324029	-9.4

It is seen from the above table that, the estimated area under irrigated and unirrigated as per ratio method was on lower side to the extent of 15.9% and 8.4% respectively and the total area under high yielding variety was on lower side to the extent of 9.4% when compared with reconciled area. District wise details are given in Appendix -2.6

Variety wise and Source wise Estimated Area (Ratio Method) and Reconciled area under Groundnut Crop (in hectares)



2.10 Sunflower

Sunflower is another important oilseed crop grown in about 2.50 lakh hectares in the State. Tumakuru had the largest area (0.40 lakh hectares) followed by Raichur (0.33 lakh hectares), Bagalakote (0.32 lakh hectares), Gadag (0.27 lakh hectares) and Koppala (0.23 lakh hectares). Total area in these 5 districts contributes 62% of sunflower area of the State. Season wise estimated area under ratio method is given in

Table – 17

Table-17 Season wise Estimated area and Reconciled area under Sunflower crop $Area in \ hectares$

Season	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	Percentage of variation over Reconciled area
1	2	3	4
Kharif	176666	189572	-6.8
Rabi	55724	58127	-4.1
Summer	1625	2595	-37.4
Total	234015	250294	-6.5

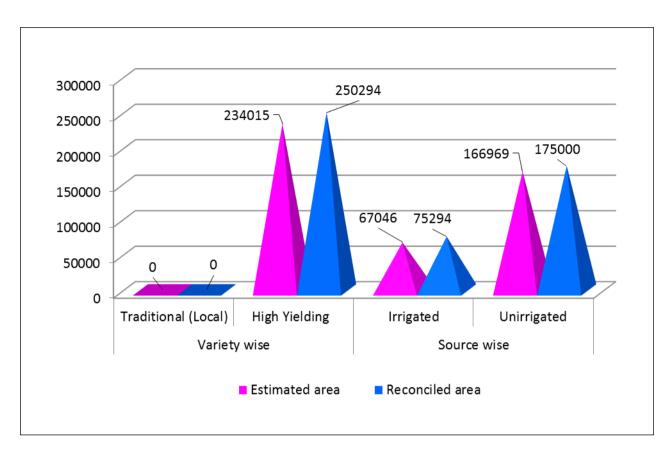
It is seen from the above table that, the area estimated under ratio method was lower side when compared with reconciled area. Comparative information showing the season wise and variety wise estimates of area by ratio method and reconciled area are given in Table -18.

Table-18 Season wise and variety wise area Estimated under Ratio method and Reconciled area under Sunflower crop

Area in hectares

		Estin		ea as per l	Ratio	Reconciled	Percentage of
Variety	Irrigated/ Unirrigated	Kharif	Rabi	Summer	Total	area (as per Crop survey)	variation over Reconciled area
1	2	3	4	5	6	7	8
	Irrigated	0	0	0	0	0	0.0
Traditional (Local)	Unirrigated	0	0	0	0	0	0.0
	Total	0	0	0	0	0	0.0
	Irrigated	30265	35156	1625	67046	75294	-11.0
High Yielding	Unirrigated	146401	20568	0	166969	175000	-4.6
	Total	176666	55724	1625	234015	250294	-6.5
	Irrigated	30265	35156	1625	67046	75294	-11.0
Total	Unirrigated	146401	20568	0	166969	175000	-4.6
	Total	176666	55724	1625	234015	250294	-6.5

Variety wise and Source wise Estimated Area (Ratio Method) and Reconciled area under Sunflower Crop (in hectares)



It is clear from the above table that, in the ratio method the estimated area under high yielding variety was lower to the extent of 6.5% when compared to the reconciled area. The entire area under the crop was high yielding variety. District wise details are given in Appendix –2.7.

2.11 Sesamum

Sesamum crop is grown in 0.20 lakh hectares mainly in rainfed areas during kharif season only. It is largely grown in Mandya 0.05 lakh hectares, Koppala 0.04 lakh hectares and Mysuru 0.03 lakh hectares. Percentage variation of estimated area under ratio method over reconciled area was higher to the extent of 2.7. The entire area under the crop was grown as high yielding variety. Estimated area under Sesamum is given in Table-19. District wise area details are given in Appendix-2.8.

2.12 Safflower

Safflower is an important oilseed crop grown about 0.62 lakh hectares of area in Rabi season during 2022-23. It is largely grown in Bidar district (0.26 lakh hectares) followed by Kalaburagi (0.16 lakh hectares) and Gadag (0.08 lakh hectares). Estimated area by ratio method was lower to the extent of 10.4% when compared to reconciled area. The entire area under the crop was grown as high yielding variety. Estimated area under Safflower is given in Table-19. District wise area details are given in Appendix - 2.8.

2.13 Linseed

Linseed is another oilseed crop grown in the State during Rabi season only. Out of 140 hectares of area about 65% of area was sown in Tumakuru, Vijayapura and Davanagere districts. Estimated area by ratio method was lower to the extent of 7.9% when compared with reconciled area. Estimated area under Linseed is given in Table-19. District wise area details are given in Appendix-2.8.

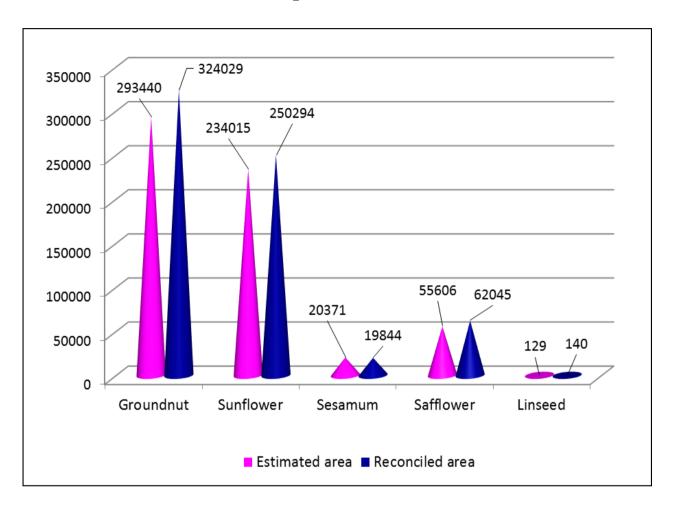
Estimated area for oilseed crops under ratio method and reconciled area is given in Table-19 and also graphically presented below.

Table – 19
Estimated area (Ratio Method) and Reconciled area (as per crop survey)
Under Oilseed Crops

Area in hectares

Crop Name	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	Percentage of variation over Reconciled area
1	2	3	4
Groundnut	293440	324029	-9.4
Sunflower	234015	250294	-6.5
Sesamum	20371	19844	2.7
Safflower	55606	62045	-10.4
Linseed	129	140	-7.9

Estimated area (Ratio Method) and Reconciled area under Oilseed Crops (in hectares)



2.14 Cotton

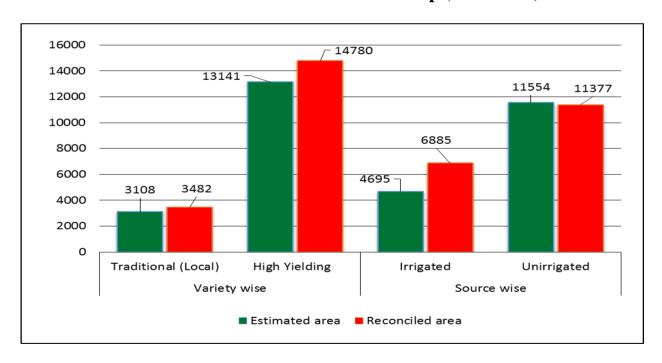
Cotton is an important cash crop largely grown in Raichur, Dharwad, Vijayapura, Gadag and Belagavi districts. 0.18 lakh hectares of area was covered under the crop during 2022-23. The variation of estimated area as per ratio method over reconciled area was -11.0%. Variety wise and irrigated/unirrigated details are given in Table-20. The district wise area details are given in Appendix-2.9.

Table - 20
Variety wise Estimated area and Reconciled area under Cotton crop

Area in hectares

Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	Percentage of variation over Reconciled area
1	2	3	4	5
True 11/1 1	Irrigated	46	201	-77.1
Traditional (Local)	Unirrigated	3062	3281	-6.7
(Local)	Total	3108	Ratio od (as per Crop survey) variation over Reconciled area 4 5 201 -77.1 2 3281 -6.7 8 3482 -10.7 9 6684 -30.4 2 8096 4.9 41 14780 -11.1 5 6885 -31.8 34 11377 1.6	
TT' 1	Irrigated	4649	6684	-30.4
High Yielding	Unirrigated	8492	8096	4.9
Ticiding	Total	13141	14780	-11.1
	Irrigated	4695	6885	-31.8
Total	Unirrigated	11554	11377	1.6
	Total	16249	18262	-11.0

Variety wise and Source wise Estimated area (Ratio Method) and Reconciled Area under Cotton Crop (in hectares)



2.15 Sugarcane

Sugarcane is an irrigated crop, which is grown in all the seasons. Out of 3 lakh hectares of area under the crop, 56% of cropped area is found in Belagavi district alone followed by, Bagalakote (22%) and Vijayapura (8%) districts. Estimated area by Ratio

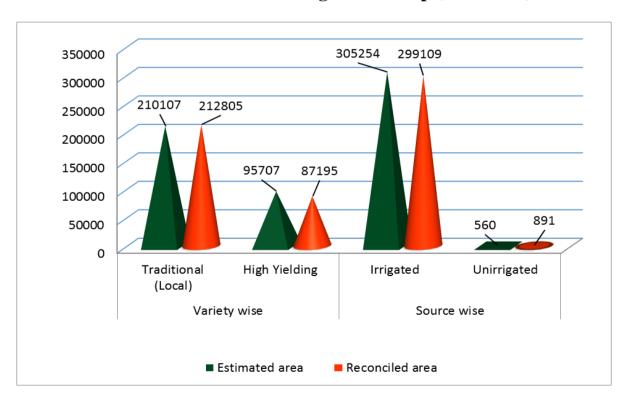
method was higher to the extent of 1.9% when compared to reconciled area. Estimated area of Sugarcane crop by variety wise and source wise by ratio method and reconciled area are given in Table-21. District wise details of estimates are given in Appendix-2.9.

Table-21 Variety wise Estimated area and Reconciled area under Sugarcane crop

Area in hectares

Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	Percentage of variation over Reconciled area
1	2	3	4	5
m 11.1	Irrigated	209547	212041	-1.2
Traditional (Local)	Unirrigated	560	764	-26.7
(Local)	Total	210107	212805	-1.3
TT: 1	Irrigated	95707	87068	9.9
High Yielding	Unirrigated	0	127	-100.0
Ticiding	Total	95707	87195	9.8
	Irrigated	305254	299109	2.1
Total	Unirrigated	560	891	-37.1
	Total	305814	300000	1.9

Variety wise and Source wise Estimated area (Ratio Method) and Reconciled Area under Sugarcane Crop (in hectares)



27

3. SUMMARY OF THE FINDINGS:

- 3.1 The area estimated under ratio method on the basis of the 20% of villages selected is almost nearer to the reconciled area figures, which helps to frame some important agriculture policies at national and state level.
- 3.2 The Timely Reporting Scheme was implemented in 5880 villages of the State during 2022-23, which belong to the second set of villages selected under the scheme for the years 2021-22 to 2025-26.
- 3.3 During the year the crop abstracts were received from all the villages in respect of Kharif. Rabi and Summer seasons.
- 3.4 During the year 2022-23, percentage of supervision by Statistics, Agriculture and Horticulture Departments personnel was 98.39, 99.66 and 99.44 respectively.
- 3.5 The estimated area under ratio method was high in respect of Wheat, Bengal gram, Sesamum, Sugarcane crops and it was low in case of Paddy, Jowar, Ragi, Maize, Bajra, Tur, Groundnut, Sunflower, Safflower, Linseed and Cotton crops when compared to the reconciled area.

APPENDIX - 1
District wise & Season wise receipt position of village Crop Abstracts during 2022-23

			Kharif		Rabi		Summer		
Sl. No.	Districts	No. of villages selected	No. of villages from which crop abstracts received	Percen tage	No. of villages from which crop abstracts received	Percen tage	No. of villages from which crop abstracts received	Percen tage	
1	Bagalakote	121	121	100	121	100	121	100	
2	Ballari	59	59	100	59	100	59	100	
3	Belagavi	239	239	100	239	100	239	100	
4	Bengaluru Rural	212	212	100	212	100	212	100	
5	Bengaluru Urban	116	116	100	116	100	116	100	
6	Bidar	128	128	100	128	100	128	100	
7	Chamarajanagara	93	93	100	93	100	93	100	
8	Chikkaballapura	303	303	100	303	100	303	100	
9	Chikkamagalur	225	225	100	225	100	225	100	
10	Chitradurga	208	208	100	208	100	208	100	
11	Dakshina Kannada	77	77	100	77	100	77	100	
12	Davanagere	167	167	100	167	100	167	100	
13	Dharwad	81	81	100	81	100	81	100	
14	Gadag	68	68	100	68	100	68	100	
15	Hassan	513	513	100	513	100	513	100	
16	Haveri	140	140	100	140	100	140	100	
17	Kalaburagi	186	186	100	186	100	186	100	
18	Kodagu	106	106	100	106	100	106	100	
19	Kolara	363	363	100	363	100	363	100	
20	Koppala	127	127	100	127	100	127	100	
21	Mandya	295	295	100	295	100	295	100	
22	Mysuru	261	261	100	261	100	261	100	
23	Raichur	158	158	100	158	100	158	100	
24	Ramanagara	162	162	100	162	100	162	100	
25	Shivamogga	311	311	100	311	100	311	100	
26	Tumakuru	542	542	100	542	100	542	100	
27	Udupi	54	54	100	54	100	54	100	
28	Uttara Kannada	260	260	100	260	100	260	100	
29	Vijayanagara	67	67	100	67	100	67	100	
30	Vijayapura	135	135	100	135	100	135	100	
31	Yadagiri	103	103	100	103	100	103	100	
	STATE TOTAL	5880	5880	100	5880	100	5880	100	

APPENDIX - 2.1
District wise and Season wise Estimated Area under Ratio method and Reconciled Area for the year 2022-23

Crop: Paddy Area: in hectares

Sl.	Dieteriete	Kha	rif	Rabi		Summer		Total	
No.	Districts	Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalakote	7	24	0	0	0	0	7	24
2	Ballari	90304	87740	2979	2524	17200	64116	110483	154380
3	Belagavi	37914	52941	46	51	43	103	38003	53095
4	Bengaluru Rural	90	138	0	4	2	53	92	194
5	Bengaluru Urban	122	161	0	0	0	0	122	161
6	Bidar	739	853	0	0	0	0	739	853
7	Chamarajanagara	7524	8145	572	626	942	1157	9038	9927
8	Chikkaballapura	1078	1465	582	507	454	987	2114	2959
9	Chikkamagalur	6563	8954	0	219	262	331	6825	9505
10	Chitradurga	527	474	108	125	70	135	705	734
11	Dakshina Kannada	3484	6186	841	1127	0	9	4325	7322
12	Davanagere	40582	62378	301	406	43585	54027	84468	116811
13	Dharwad	9271	8986	0	15	0	74	9271	9076
14	Gadag	2221	3016	1981	2136	0	2674	4202	7825
15	Hassan	38324	32307	889	733	53	230	39266	33270
16	Haveri	28102	28438	564	271	10667	10221	39333	38930
17	Kalaburagi	6476	8007	529	1207	2454	1695	9459	10909
18	Kodagu	11538	13440	0	1	0	7	11538	13448
19	Kolara	2737	2715	181	159	135	701	3053	3575
20	Koppala	59954	59670	3622	2136	48903	45048	112479	106854
21	Mandya	42972	60391	187	106	14434	16034	57593	76532
22	Mysuru	83547	85847	0	6	11433	12492	94980	98346
23	Raichur	140528	174181	66364	67867	11345	21500	218237	263548
24	Ramanagara	2814	3022	0	83	50	24	2864	3128
25	Shivamogga	88015	72054	62	94	9683	10132	97760	82280
26	Tumakuru	2978	3409	0	106	9	222	2987	3737
27	Udupi	28778	35781	6095	5407	0	24	34873	41212
28	Uttara Kannada	204983	38830	343	606	69	421	205395	39856
29	Vijayanagara	11626	13827	5088	6569	0	8074	16714	28470
30	Vijayapura	36	75	0	33	3385	0	3421	108
31	Yadagiri	92749	91467	1611	1015	37950	45875	132310	138357
	STATE TOTAL	1046583	964922	92945	94139	213128	296365	1352656	1355426

APPENDIX - 2.2

District wise and Season wise Estimated Area under Ratio method and Reconciled area for the year 2022-23

Crop: Jowar Area: in hectares

Sl.	D'at data	Kha	arif	Ra	bi	Total		
No.	Districts	Ratio	RCA	Ratio	RCA	Ratio	RCA	
1	Bagalakote	1386	788	41164	39320	42550	40108	
2	Ballari	4988	4678	17366	17170	22354	21848	
3	Belagavi	6671	6256	102827	102390	109498	108646	
4	Bengaluru Rural	2306	1874	86	188	2392	2062	
5	Bengaluru Urban	718	727	0	30	718	757	
6	Bidar	257	164	31614	35310	31871	35474	
7	Chamarajanagara	10981	13235	220	223	11201	13458	
8	Chikkaballapura	3117	886	618	543	3735	1429	
9	Chikkamagalur	954	1392	4347	2699	5301	4091	
10	Chitradurga	1621	1933	3226	3682	4847	5615	
11	Dakshina Kannada	0	0	0	0	0	0	
12	Davanagere	220	273	2721	3226	2941	3499	
13	Dharwad	107	110	29344	28372	29451	28482	
14	Gadag	94	131	22454	26034	22548	26165	
15	Hassan	4897	3738	841	1256	5738	4994	
16	Haveri	55	81	14248	50894	14303	50975	
17	Kalaburagi	64	147	56409	58086	56473	58233	
18	Kodagu	0	176	0	0	0	176	
19	Kolara	491	795	71	224	562	1019	
20	Koppala	1017	1043	13487	15414	14504	16457	
21	Mandya	0	0	0	24	0	24	
22	Mysuru	3057	3099	278	366	3335	3465	
23	Raichur	6646	7525	46669	46036	53315	53561	
24	Ramanagara	1879	1535	237	366	2116	1901	
25	Shivamogga	0	1	0	3	0	4	
26	Tumakuru	8190	7599	579	773	8769	8372	
27	Udupi	0	0	0	7	0	7	
28	Uttara Kannada	0	50	0	15	0	65	
29	Vijayanagara	5508	5374	5641	6666	11149	12040	
30	Vijayapura	0	22	48049	49529	48049	49551	
31	Yadagiri	42	54	8262	10032	8304	10086	
	STATE TOTAL	65266	63684	450758	498878	516024	562562	

APPENDIX - 2.3

District wise and Season wise Estimated Area under Ratio method and Reconciled area for the year 2022-23

Crop: Ragi Area: in hectares

Sl.	Districts	Kha	arif	R	abi	Sum	mer	Tot	tal
No.	Districts	Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalakote	4	12	0	0	0	0	4	12
2	Ballari	640	849	1149	1349	0	222	1789	2420
3	Belagavi	645	660	28	90	0	12	673	762
4	Bengaluru Rural	61138	61437	460	534	0	54	61598	62025
5	Bengaluru Urban	13660	15125	430	436	0	0	14090	15561
6	Bidar	0	5	0	0	0	0	0	5
7	Chamarajanagara	4146	4025	38	43	28	69	4212	4137
8	Chikkaballapura	32649	31860	1838	1648	865	830	35352	34338
9	Chikkamagalur	52401	54494	1273	1401	14	62	53688	55957
10	Chitradurga	27609	37350	5817	6021	464	1447	33890	44818
11	Dakshina Kannada	0	0	0	0	0	0	0	0
12	Davanagere	9548	12027	9321	11154	173	549	19042	23729
13	Dharwad	11	17	0	4	0	0	11	21
14	Gadag	0	18	14	21	0	0	14	39
15	Hassan	94503	99098	10546	11148	12	172	105061	110418
16	Haveri	19	46	92	71	0	37	111	155
17	Kalaburagi	0	41	32	55	0	1	32	96
18	Kodagu	0	1	0	0	0	0	0	1
19	Kolara	41443	43467	402	588	715	705	42560	44759
20	Koppala	0	13	23	29	0	0	23	42
21	Mandya	51419	58444	6818	7819	3081	2996	61318	69259
22	Mysuru	52501	60999	40555	42046	35	439	93091	103484
23	Raichur	28	31	0	40	0	0	28	71
24	Ramanagara	59979	58996	1277	1606	136	81	61392	60684
25	Shivamogga	29	85	0	3	10	17	39	105
26	Tumakuru	149610	149124	1218	1460	206	237	151034	150821
27	Udupi	0	0	0	1	0	0	0	1
28	Uttara Kannada	0	6	0	2	0	0	0	8
29	Vijayanagara	13341	14053	26008	30337	322	1467	39671	45857
30	Vijayapura	30	50	21	79	0	0	51	129
31	Yadagiri	0	6	0	2	0	0	0	8
	STATE TOTAL	665353	702338	107360	117987	6061	9395	778774	829720

APPENDIX - 2.4
District wise and Season wise Estimated Area under Ratio method and Reconciled area for the year 2022-23

Crop: Maize Area: in hectares

Sl.	J. Maize	Kharif		Rabi		Summer Total			tal
No.	Districts	Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalakote	54090	59639	14009	15037	4672	5227	72771	79903
2	Ballari	27040	23120	4743	5981	1993	614	33776	29715
3	Belagavi	103452	112159	64543	66038	22123	10540	190118	188737
4	Bengaluru Rural	4492	4888	103	175	0	130	4595	5193
5	Bengaluru Urban	560	716	0	31	0	1	560	749
6	Bidar	726	813	110	156	148	138	984	1107
7	Chamarajanagara	32601	29901	9340	8410	3180	8081	45121	46392
8	Chikkaballapura	47077	48152	2922	4226	1945	3578	51944	55956
9	Chikkamagalur	5284	6380	1172	724	44	74	6500	7178
10	Chitradurga	102870	117158	23977	22164	4839	6256	131686	145578
11	Dakshina Kannada	0	0	0	0	0	0	0	0
12	Davanagere	106119	123767	8268	6779	1487	1862	115874	132408
13	Dharwad	46764	48724	10013	10484	249	893	57026	60101
14	Gadag	117495	112054	11405	12506	117	307	129017	124867
15	Hassan	107594	106932	8707	9436	674	1198	116975	117567
16	Haveri	234586	241207	75174	74311	9923	11035	319683	326554
17	Kalaburagi	1935	1387	285	489	6	76	2226	1952
18	Kodagu	1843	1892	0	0	0	0	1843	1892
19	Kolara	1076	954	729	846	162	910	1967	2710
20	Koppala	113126	121429	16685	18963	357	867	130168	141260
21	Mandya	2272	3622	1154	1188	1526	2649	4952	7459
22	Mysuru	46745	43681	4747	6231	237	1046	51729	50959
23	Raichur	679	673	1387	1762	0	32	2066	2467
24	Ramanagara	2724	2554	1615	1480	21	46	4360	4079
25	Shivamogga	44468	44734	753	963	8345	9882	53566	55579
26	Tumakuru	29932	28103	1844	2147	151	242	31927	30491
27	Udupi	0	0	0	28	0	0	0	28
28	Uttara Kannada	5867	7617	2350	2152	10	783	8227	10552
29	Vijayanagara	198842	199095	8913	15374	32	667	207787	215136
30	Vijayapura	86416	86285	12159	11138	1214	5581	99789	103004
31	Yadagiri	52	80	29	230	12	51	93	361
	STATE TOTAL	1526727	1577716	287136	299449	63467	72770	1877330	1949935

APPENDIX - 2.5

District wise and Crop wise Estimated Area under Ratio method and Reconciled area for the year 2022-23

Area: in hectares

	T	I			1	Area: in hectares			
Sl.	Districts	Baj	ra	Wh	eat	Tı	ur	Benga	lgram
No.	Districts	Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalakote	13827	14761	21782	22427	32770	37495	53878	57144
2	Ballari	1905	1888	0	12	5065	3751	6267	5344
3	Belagavi	5534	6392	45363	47950	13499	11516	119081	107651
4	Bengaluru Rural	0	11	0	0	602	418	54	73
5	Bengaluru Urban	0	11	0	0	161	240	0	0
6	Bidar	0	5	8115	9466	116072	113718	84114	84622
7	Chamarajanagara	345	294	0	14	136	190	2068	1163
8	Chikkaballapura	89	99	0	0	1806	1357	78	169
9	Chikkamagalur	0	12	0	1	275	55	5654	5794
10	Chitradurga	631	904	60	55	6947	6815	31713	30688
11	Dakshina Kannada	0	0	0	0	0	0	0	0
12	Davanagere	103	179	54	125	269	512	7232	6197
13	Dharwad	0	15	10493	3274	44	70	139883	141619
14	Gadag	2408	434	13715	4631	347	196	170369	153989
15	Hassan	0	8	0	0	107	227	880	1106
16	Haveri	0	9	107	217	66	107	4202	3934
17	Kalaburagi	431	266	4662	6022	411237	486238	39320	40267
18	Kodagu	0	0	0	0	0	0	0	0
19	Kolara	8	33	0	0	644	459	7	11
20	Koppala	36941	39496	842	1017	51017	34963	77694	81798
21	Mandya	0	1	0	0	197	182	0	0
22	Mysuru	0	8	0	0	2092	1836	254	546
23	Raichur	2450	21883	68	146	93064	108337	32775	35634
24	Ramanagara	16176	4	0	0	354	500	0	0
25	Shivamogga	0	1	0	0	0	19	0	0
26	Tumakuru	50	102	9408	0	7699	6609	342	329
27	Udupi	42	0	0	0	0	0	0	0
28	Uttara Kannada	0	0	0	0	0	1	0	6
29	Vijayanagara	6820	7098	21	40	5239	5804	8122	56540
30	Vijayapura	20217	19314	18307	29992	385603	375180	65845	19791
31	Yadagiri	4136	5281	132	121	53043	48142	973	872
	STATE TOTAL	112113	118509	133129	125510	1188355	1244936	850805	835287

APPENDIX - 2.6
District wise and Season wise Estimated Area under Ratio method and Reconciled area for the year 2022-23

Crop: Groundnut Area: in hectares

Sl.	Districts	Kha	rif	Sumn	ner	Total		
No.	Districts	Ratio	RCA	Ratio	RCA	Ratio	RCA	
1	Bagalakote	796	665	3188	2716	3984	3381	
2	Ballari	3556	3036	180	537	3736	3573	
3	Belagavi	17491	17096	555	1964	18046	19060	
4	Bengaluru Rural	113	108	0	0	113	108	
5	Bengaluru Urban	2	10	0	0	2	10	
6	Bidar	0	8	342	93	342	101	
7	Chamarajanagara	1684	2051	110	47	1794	2098	
8	Chikkaballapura	14924	15347	1012	1006	15936	16353	
9	Chikkamagalur	1670	2485	3	14	1673	2498	
10	Chitradurga	90092	117215	2827	4541	92919	121756	
11	Dakshina Kannada	0	0	0	0	0	0	
12	Davanagere	2615	3193	365	375	2980	3568	
13	Dharwad	21929	18759	145	59	22074	18818	
14	Gadag	18166	17706	1208	4911	19374	22617	
15	Hassan	160	219	0	38	160	257	
16	Haveri	10086	8428	2516	2277	12602	10705	
17	Kalaburagi	191	303	175	121	366	425	
18	Kodagu	0	0	0	0	0	0	
19	Kolara	4510	3705	20	8	4530	3712	
20	Koppala	3364	4169	1435	1306	4799	5475	
21	Mandya	234	255	0	29	234	285	
22	Mysuru	718	846	0	0	718	846	
23	Raichur	1510	618	86	89	1596	707	
24	Ramanagara	1101	599	0	0	1101	599	
25	Shivamogga	25	73	2	8	27	81	
26	Tumakuru	45470	47078	678	937	46148	48015	
27	Udupi	0	0	0	2	0	2	
28	Uttara Kannada	9	23	0	1	9	24	
29	Vijayanagara	30115	29640	792	2570	30907	32210	
30	Vijayapura	3639	3549	1849	2381	5488	5930	
31	Yadagiri	1290	533	492	283	1782	816	
	STATE TOTAL	275460	297717	17980	26312	293440	324029	

APPENDIX - 2.7
District wise and Season wise Estimated Area under Ratio method and Reconciled area for the year 2022-23

Crop: Sunflower Area: in hectares

Sl.	p: Sunflower	Kha	rif	Ra	bi	Summer		Area: in hectares Total	
No.	Districts	Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalakote	25175	29541	1583	1812	416	537	27174	31890
2	Ballari	1405	1538	242	226	0	10	1647	1774
3	Belagavi	4108	4158	11793	12703	187	150	16088	17011
4	Bengaluru Rural	0	2	0	0	0	0	0	2
5	Bengaluru Urban	0	13	0	1	0	0	0	14
6	Bidar	0	6	65	207	26	33	91	245
7	Chamarajanagara	20775	18607	690	411	149	392	21614	19410
8	Chikkaballapura	23	138	709	788	411	576	1143	1502
9	Chikkamagalur	3221	1883	0	0	0	0	3221	1883
10	Chitradurga	8469	9186	279	447	0	8	8748	9641
11	Dakshina Kannada	0	0	0	0	0	0	0	0
12	Davanagere	1597	1463	787	1132	0	34	2384	2628
13	Dharwad	0	12	5831	5754	0	0	5831	5766
14	Gadag	14441	11054	16169	15866	15	290	30625	27210
15	Hassan	221	2331	0	3	0	0	221	2334
16	Haveri	0	17	10643	11101	371	181	11014	11299
17	Kalaburagi	4787	5267	144	223	0	15	4931	5505
18	Kodagu	0	0	0	0	0	0	0	0
19	Kolara	0	6	0	0	0	2	0	8
20	Koppala	22697	20695	2397	2293	35	30	25129	23017
21	Mandya	8	4	0	1	0	3	8	8
22	Mysuru	1392	2408	0	0	0	0	1392	2408
23	Raichur	26583	32820	89	180	0	2	26672	33002
24	Ramanagara	0	11	0	0	0	0	0	11
25	Shivamogga	0	412	197	160	4	28	201	599
26	Tumakuru	309	40132	0	29	0	4	309	40165
27	Udupi	0	0	0	0	0	0	0	0
28	Uttara Kannada	0	0	0	0	0	0	0	0
29	Vijayanagara	5875	6084	3145	3515	6	16	9026	9615
30	Vijayapura	33779	0	929	1147	0	263	34708	1410
31	Yadagiri	1801	1785	32	128	5	23	1838	1936
	STATE TOTAL	176666	189572	55724	58127	1625	2595	234015	250294

APPENDIX - 2.8 Districtwise and Cropwise Estimated area under Ratio method and Reconciled area for the year 2022-23

Area: in hectares

	Area: in hec							
Sl.	Districts -	Sesar	num	Safflo	wer	Linseed		
No.	Districts	Ratio	RCA	Ratio	RCA	Ratio	RCA	
1	Bagalakote	912	563	291	595	0	5	
2	Ballari	70	57	45	37	0	0	
3	Belagavi	31	107	1243	1166	0	0	
4	Bengaluru Rural	0	4	0	0	0	4	
5	Bengaluru Urban	0	3	0	0	0	0	
6	Bidar	325	112	22983	25755	0	2	
7	Chamarajanagara	1274	1126	0	5	0	0	
8	Chikkaballapura	0	3	0	1	0	9	
9	Chikkamagalur	702	899	0	2	0	0	
10	Chitradurga	0	49	296	420	43	11	
11	Dakshina Kannada	0	0	0	0	0	0	
12	Davanagere	9	43	17	65	0	14	
13	Dharwad	0	2	4148	4202	0	0	
14	Gadag	21	38	6028	7624	0	2	
15	Hassan	680	1948	0	0	0	0	
16	Haveri	11	14	648	495	0	3	
17	Kalaburagi	236	399	15495	16458	0	4	
18	Kodagu	0	0	0	0	0	0	
19	Kolara	0	4	0	0	0	0	
20	Koppala	6399	4179	846	652	0	1	
21	Mandya	4820	5440	0	0	0	0	
22	Mysuru	3203	2752	0	0	0	0	
23	Raichur	914	853	61	116	0	0	
24	Ramanagara	320	800	0	0	0	0	
25	Shivamogga	0	3	0	0	0	0	
26	Tumakuru	317	234	0	2	86	59	
27	Udupi	0	0	0	0	0	0	
28	Uttara Kannada	0	0	0	0	0	0	
29	Vijayanagara	66	120	0	43	0	0	
30	Vijayapura	61	83	3310	4205	0	18	
31	Yadagiri	0	10	195	202	0	8	
	STATE TOTAL	20371	19844	55606	62045	129	140	

APPENDIX - 2.9
Districtwise and Cropwise estimated area under Ratio method and Reconciled area for the year 2022-23

Area: in hectares

SI. Cotton Sugarca					
Sl. No.	Districts				
		Ratio 108	RCA 146	Ratio 63853	RCA
1	Bagalakote				64787
2	Ballari	850	842	337	167
3	Belagavi	1625	1610	178121	167973
4	Bengaluru Rural	0	0	0	11
5	Bengaluru Urban	0	0	0	0
6	Bidar	0	0	8866	8406
7	Chamarajanagara	0	29	3313	3891
8	Chikkaballapura	53	271	0	15
9	Chikkamagalur	0	67	0	1
10	Chitradurga	0	63	0	2
11	Dakshina Kannada	0	0	0	0
12	Davanagere	84	818	0	334
13	Dharwad	2672	2511	2864	7065
14	Gadag	2970	1708	4900	1902
15	Hassan	0	16	135	287
16	Haveri	0	1322	2804	2731
17	Kalaburagi	1608	306	4658	5094
18	Kodagu	0	0	0	0
19	Kolara	24	208	0	4
20	Koppala	191	211	561	604
21	Mandya	0	0	3529	4113
22	Mysuru	0	1179	3214	2558
23	Raichur	3220	3730	102	238
24	Ramanagara	0	0	1576	24
25	Shivamogga	0	0	0	24
26	Tumakuru	0	42	0	2
27	Udupi	0	0	0	0
28	Uttara Kannada	0	0	0	1630
29	Vijayanagara	114	306	3800	4029
30	Vijayapura Vijayapura	2076	2240	22910	23787
31	Yadagiri	654	637	271	321
	STATE TOTAL	16249	18262	305814	300000
		10277	10202	202014	20000

APPENDIX - 3
Season wise and Crop wise percentage variation of Estimates of Area by ratio method over Reconciled Area for the year 2021-22 & 2022-23

Sl.	Стор		ation of Estimated
110.		2021-22	2022-23
I	Kharif	,	
1	Paddy	-0.8	8.5
2	Jowar	-1.2	2.5
3	Ragi	0.9	-5.3
4	Maize	1.3	-3.2
5	Bajra	1.1	-5.4
6	Tur	0.5	-4.5
7	Groundnut	-1.5	-7.5
8	Sunflower	-2.8	-6.8
9	Sesamum	-13.7	2.7
II	Rabi		
1	Paddy	0.3	-1.3
2	Jowar	-0.6	-9.6
3	Ragi	-14.1	-9.0
4	Maize	-5.7	-4.1
5	Wheat	-2.1	6.1
6	Bengal gram	-0.7	1.9
7	Sunflower	4.7	-4.1
8	Safflower	-1.4	-10.4
9	Linseed	-26.3	-7.9
10	Cotton	5.7	-11.0
11	Sugarcane	-2.0	1.9
III	Summer		
1	Paddy	-5.5	-28.1
2	Ragi	-3.0	-35.5
3	Maize	-6.8	-12.8
4	Groundnut (Rabi & Summer)	-4.5	-31.7
5	Sunflower	-7.6	-37.4