



*Report on Estimates of Area of Principal
Crops under Timely Reporting Scheme in
Karnataka*

2021-22



Directorate of Economics & Statistics, Bengaluru.

DES No. 08/2022-23



Government of Karnataka

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

2021-22

DIRECTORATE OF ECONOMICS AND STATISTICS
BENGALURU

P R E F A C E

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 2021-22 which constitute 20 percent of total villages. This report is based on the first 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: 22-02-2023


(N. MADHURAM)
Director

Team Associated in the Preparation of Report

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

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	3
1.9	Supervision	4
1.10	Procedure for Estimating Area of Crops	5
2.	Results of the Scheme	6-28
3.	Summary of the Findings	29
	Appendix	
1	Districtwise and seasonwise receipt position of village crop abstracts during 2021-22.	30
2.1	Districtwise and seasonwise estimated area under ratio method and reconciled area under Paddy crop for the year 2021-22.	31
2.2	Districtwise and seasonwise estimated area under ratio method and reconciled area under Jowar crop for the year 2021-22.	32
2.3	Districtwise and seasonwise estimated area under ratio method and reconciled area under Ragi crop for the year 2021-22.	33
2.4	Districtwise and seasonwise estimated area under ratio method and reconciled area under Maize crop for the year 2021-22.	34
2.5	Districtwise and cropwise estimated area under ratio method and reconciled area for the year 2021-22.	35
2.6	Districtwise and seasonwise estimated area under ratio method and reconciled area under Groundnut crop for the year 2021-22.	36
2.7	Districtwise and seasonwise estimated area under ratio method and reconciled area under Sunflower crop for the year 2021-22.	37
2.8	Districtwise and cropwise estimated area under ratio method and reconciled area for the year 2021-22.	38
2.9	Districtwise and cropwise estimated area under ratio method and reconciled area for the year 2021-22.	39
3	Cropwise percentage variation of estimates of area by ratio method over reconciled area for the year 2020-21 and 2021-22.	40

1. TIMELY REPORTING OF ESTIMATES OF AREA OF PRINCIPAL CROPS IN KARNATAKA 2021-22

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 2021 to 31st March 2022 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 crop 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. Gram
8. 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 - Late	1 st April 2021 to 30 th June 2021 1 st July 2021 to 31 st August 2021	1 st July 2021 to 9 th July 2021 1 st September 2021 to 9 th September 2021
2	Rabi	1 st September 2021 to 31 st December 2021	1 st January 2022 to 9 th January 2022
3	Summer	1 st January 2022 to 31 st March 2022	1 st April 2022 to 9 th April 2022

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 first set of villages selected for the year 2021-22.

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.
- 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 5933 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.

Table – 1
Seasonwise receipt position of crop abstracts

Sl. No.	Particulars	Kharif	Rabi	Summer
1	2	3	4	5
1.	No. of Villages selected	5933	5933	5933
2.	No. of Villages from which crop abstracts received	5933	5933	5933
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	No. of villages (Kharif + Rabi + Summer)			
		2021-22		Percentage of supervision	
		Allotted	Supervised	2021-22	2020-21
1	2	3	4	5	6
1	Statistics	10829	10668	98.51	97.47
2	Agriculture	1384	1346	97.25	98.22
3	Horticulture	1519	1485	97.76	97.58

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. Y_{ij} 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. n_i be the total number of villages selected in the i^{th} taluk.
5. N_i be the total number of villages in the i^{th} taluk.
6. \hat{R}_c 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. \hat{Y}_{Rc} be the estimates of the area of the crop in the district.

a) Area Estimates by Ratio Method

$$\hat{Y}_{Rc} = \frac{\sum_{i=1}^k N_i \bar{Y}_i}{\sum_{i=1}^K N_i \bar{X}_i} X$$

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

CHAPTER – 2

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 14.9 hectares of area during 2021-22. The area covered under the crop was more in Raichur followed by Bellari, Yadagir, Davanagere and Koppal districts. About 69.2% 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
Seasonwise Estimated and Reconciled area under Paddy crop

Area in hectares			
Season	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	% variation over Reconciled area
1	2	3	4
Kharif	1019536	1028125	-0.8
Rabi	21545	21476	0.3
Summer	412664	436586	-5.5
Total	1453745	1486187	-2.2

Compared to reconciled area, the estimated area of Paddy under ratio method was lower. During Kharif and Summer seasons, the percentage of variation over reconciled area was low.

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

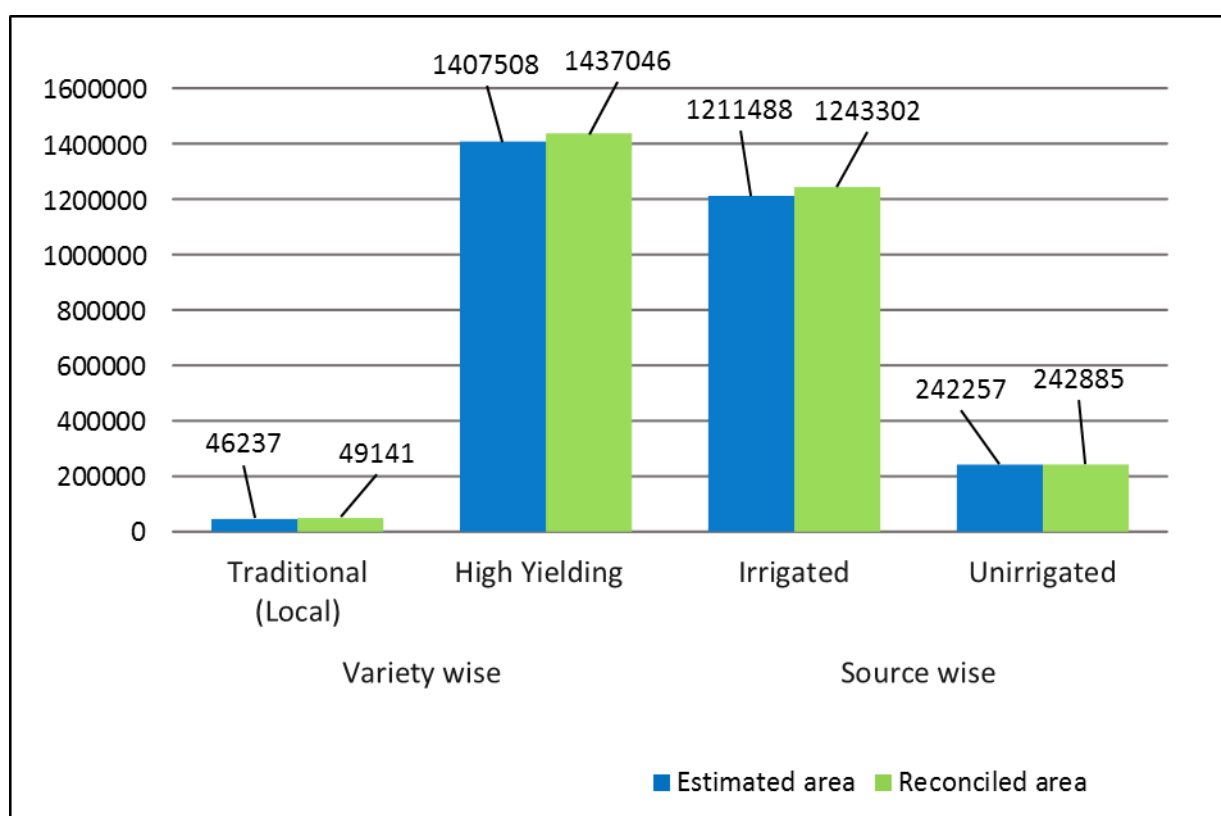
Table-4

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

Area in hectares

Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method				Reconciled area (as per Crop survey)	% variation over Reconciled area
		Kharif	Rabi	Summer	Total		
1	2	3	4	5	6	7	8
Traditional (Local)	Irrigated	6407	85	302	6794	6047	12.4
	Unirrigated	39443	0	0	39443	43094	-8.5
	Total	45850	85	302	46237	49141	-5.9
High Yielding	Irrigated	771281	21394	412019	1204694	1237255	-2.6
	Unirrigated	202405	66	343	202814	199791	1.5
	Total	973686	21460	412362	1407508	1437046	-2.1
Total	Irrigated	777688	21479	412321	1211488	1243302	-2.6
	Unirrigated	241848	66	343	242257	242885	-0.3
	Total	1019536	21545	412664	1453745	1486187	-2.2

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 83.66% and unirrigated was 16.34%, whereas under ratio method it was 83.34% and 16.66% respectively. In case of traditional and high yielding varieties, the percentage of area under reconciled area and estimated area was 3% and 97% each respectively. The percentage variation of estimated area under ratio method over reconciled area was -2.6% under irrigated category, -0.3% under unirrigated category and -2.2% to the total during 2021-22. District wise details are given in Appendix-2.1.

2.2 Jowar

Jowar is another important cereal crop with 6.2 lakh hectares of area in the State of which, 88% of area was cultivated during Rabi season alone. Belagavi stands first in the area coverage i.e., 21% followed by, Haveri (11%), Bagalkote (9%) and Kalaburgi (8%). Season wise information is given in Table-5.

Table – 5

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)	% variation over Reconciled area
1	2	3	4
Kharif	75993	76952	-1.2
Rabi	540916	544290	-0.6
Total	616909	621242	-0.7

From the above table, the variation of area under ratio method compared to reconciled area was -1.2% and -0.6% 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

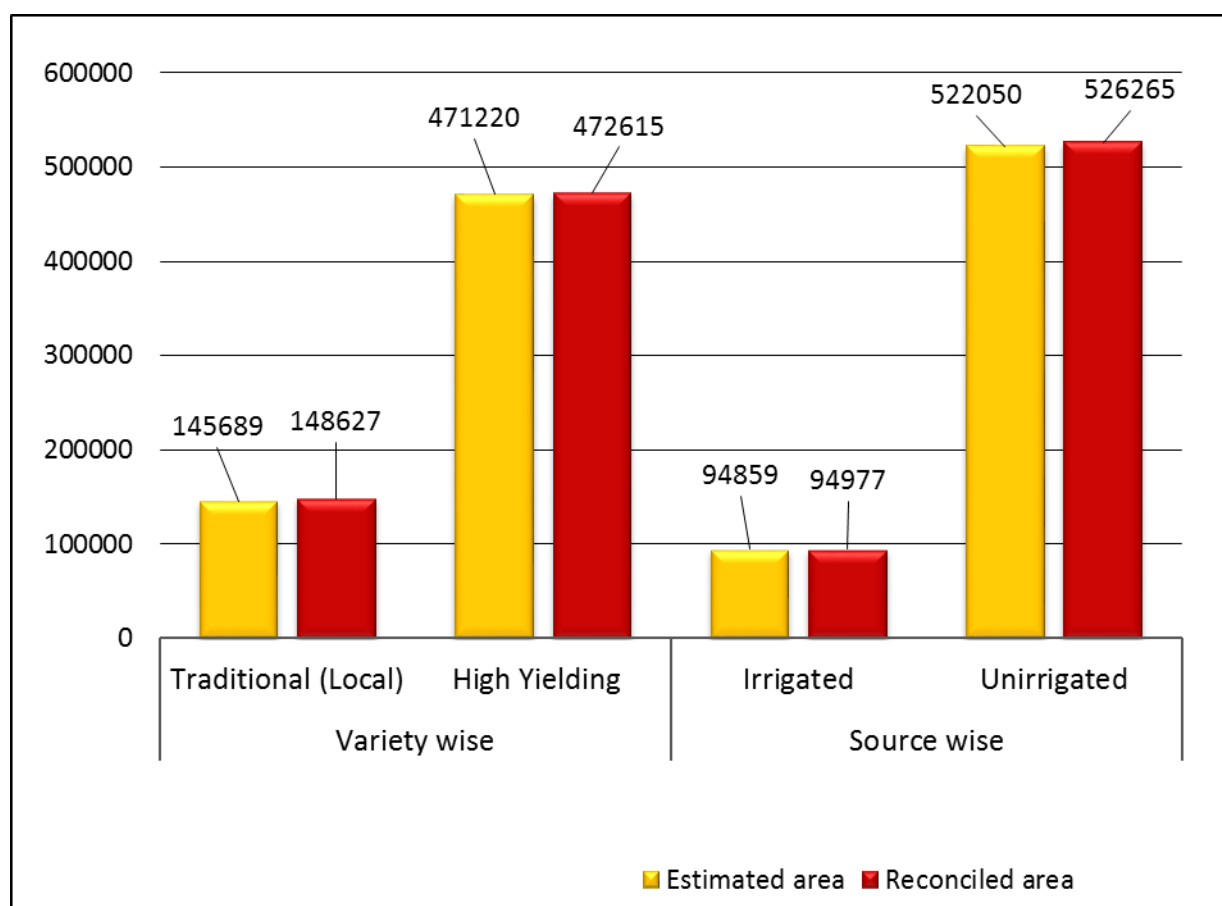
Season and Variety wise area estimated by Ratio method and Reconciled area under Jowar crop

Area in hectares

Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method			Reconciled area (as per Crop survey)	% variation over Reconciled area
		Kharif	Rabi	Total		
1	2	3	4	5	6	7
Traditional (Local)	Irrigated	1720	4523	6243	6747	-7.5
	Unirrigated	12758	126688	139446	141880	-1.7
	Total	14478	131211	145689	148627	-2.0
High Yielding	Irrigated	16146	72470	88616	88230	0.4
	Unirrigated	45369	337235	382604	384385	-0.5
	Total	61515	409705	471220	472615	-0.3
Total	Irrigated	17866	76993	94859	94977	-0.1
	Unirrigated	58127	463923	522050	526265	-0.8
	Total	75993	540916	616909	621242	-0.7

Out of total estimated area and reconciled Jowar area, in both the cases 24% of area was under traditional variety and the remaining 76% area was under hybrid variety. 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 8.6 lakh hectares of area during 2021-22. The major Ragi growing districts are Tumkur (19%), Hassan (12%), Mysuru (11%), Ramanagara (9%) and Bengaluru Rural (8%) which account for 59% of the total Ragi area of the State. About 88.7% of the area was covered under kharif season itself. Season wise area estimated as per ratio method is given in Table-7.

Table – 7**Seasonwise Estimated and Reconciled area under Ragi crop**

Area in hectares

Season	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	% variation over Reconciled area
1	2	3	4
Kharif	773361	766199	0.9
Rabi	72016	83855	-14.1
Summer	13040	13450	-3.0
Total	858417	863504	-0.6

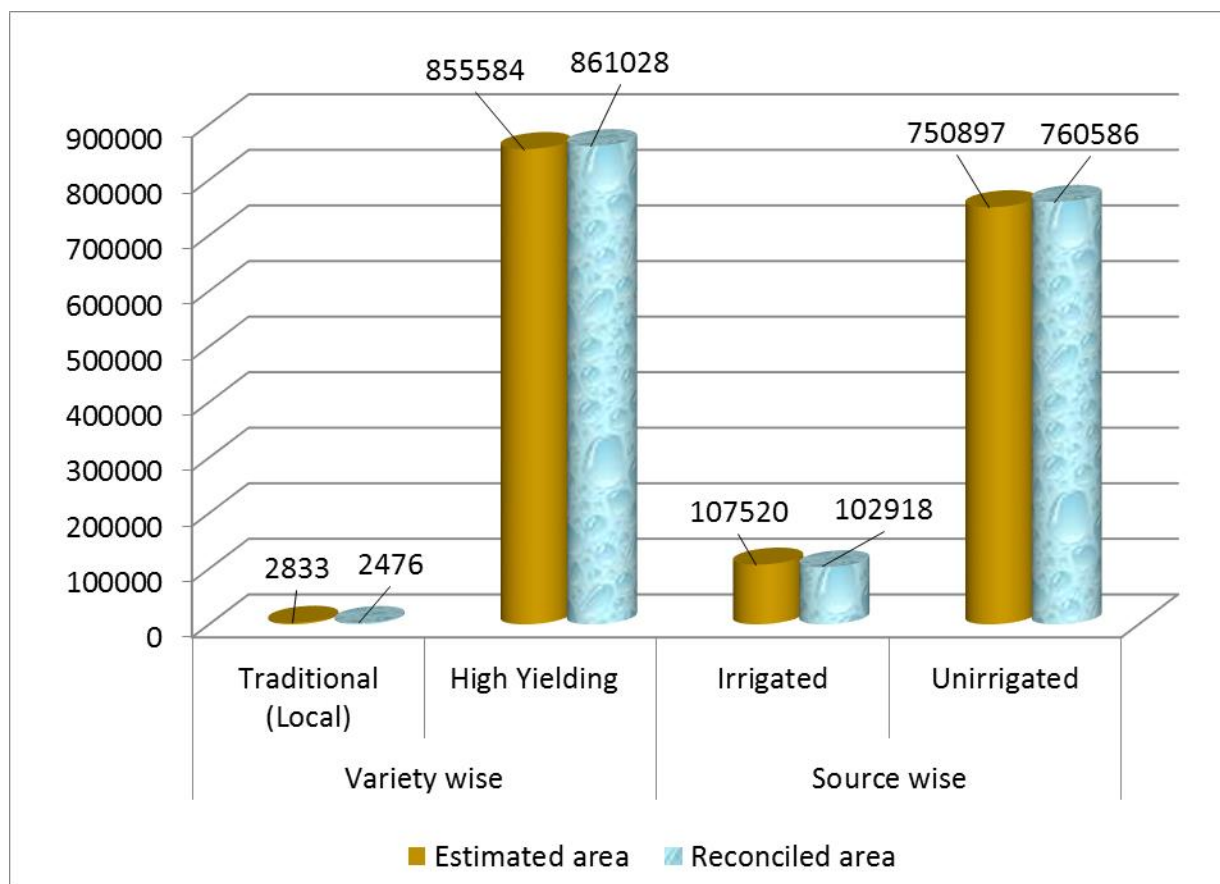
The percentage variation of area estimated by ratio method over reconciled area was -0.6. Estimated area under Ratio method was lower in Rabi & Summer seasons. Table-8 depicts estimated area by status of irrigation.

Table – 8**Season and Variety wise area Estimated by Ratio method under Ragi crop**

Area in hectares

Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method				Reconciled area (as per Crop survey)	% variation over Reconciled area
		Kharif	Rabi	Summer	Total		
1	2	3	4	5	6	7	8
Traditional (Local)	Irrigated	319	315	0	634	779	-18.6
	Unirrigated	1821	378	0	2199	1697	29.6
	Total	2140	693	0	2833	2476	14.4
High Yielding	Irrigated	49902	43944	13040	106886	102139	4.6
	Unirrigated	721319	27379	0	748698	758889	-1.34
	Total	771221	71323	13040	855584	861028	-0.6
Total	Irrigated	50221	44259	13040	107520	102918	4.5
	Unirrigated	723140	27757	0	750897	760586	-1.3
	Total	773361	72016	13040	858417	863504	-0.6

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



861028 hectares of reconciled area was covered by high yielding varieties of which, 88% was unirrigated. Out of total estimated area 99.7% was covered by High Yield variety and remaining under local variety. Estimated area was lower under high yielding variety when compared to reconciled area. The percentage of variation under Irrigated and Unirrigated area was 4.5 and -1.3 respectively. District wise details are given in Appendix- 2.3

2.4 Maize

Maize is yet another cereal crop grown in more than 17 lakh hectares in the State. Maize growing Major districts are Haveri (15%), Bellari (12 %) and Belagavi (12 %). 88% 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 and Reconciled area under Maize crop**

Area in hectares

Season	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	% variation over Reconciled area
1	2	3	4
Kharif	1561638	1541531	1.3
Rabi	147396	156247	-5.7
Summer	50338	53988	-6.8
Total	1759372	1751766	0.4

The Variation of estimated area under ratio method over reconciled area was 1.3% in Kharif, -5.7% in Rabi and -6.8% in Summer season. The total estimated area was high under ratio method when compared to the reconciled area.

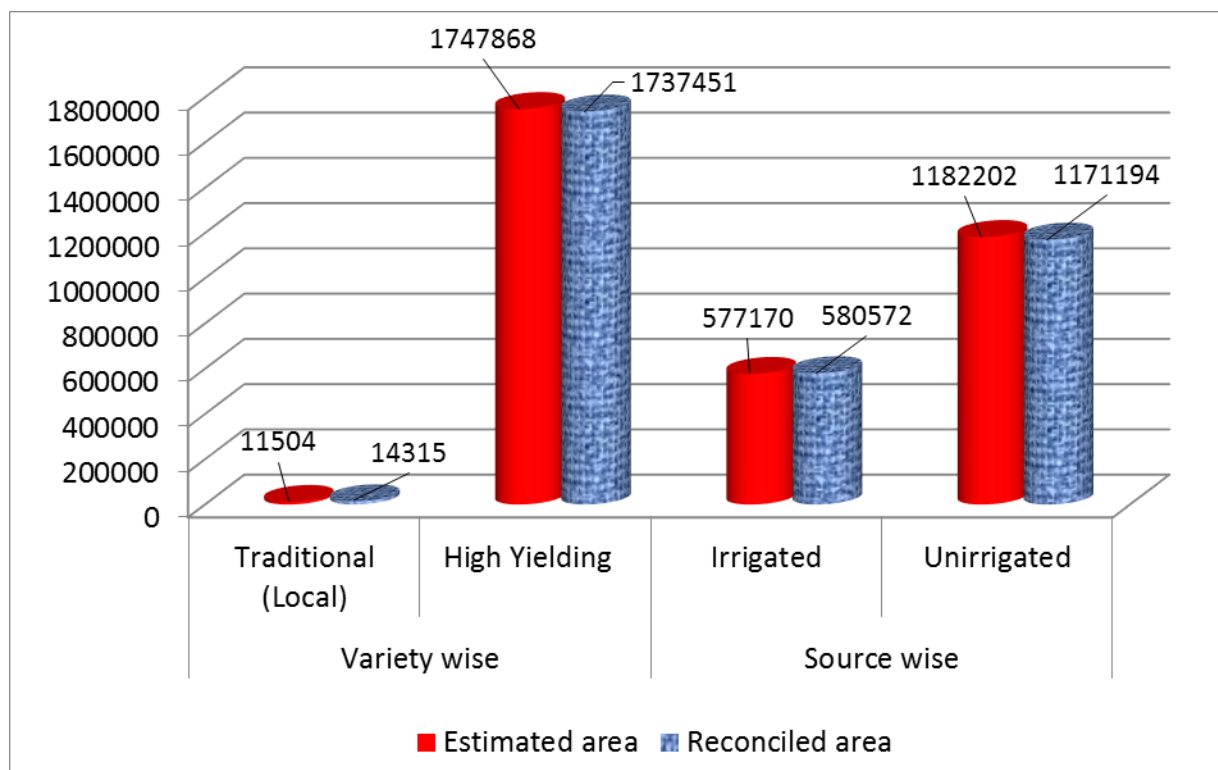
Estimated area by variety and irrigated/unirrigated as per ratio method and the reconciled area are given in Table – 10.

Table – 10**Season and Variety wise Estimated area by Ratio method under Maize crop**

Area in hectares

Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method				Reconciled area (as per Crop survey)	% variation over Reconciled area
		Kharif	Rabi	Summer	Total		
1	2	3	4	5	6	7	8
Traditional (Local)	Irrigated	6811	1151	252	8214	10660	-22.9
	Unirrigated	3095	195	0	3290	3655	-10.0
	Total	9906	1346	252	11504	14315	-19.6
High Yielding	Irrigated	391735	127176	50045	568956	569912	-0.2
	Unirrigated	1159997	18874	41	1178912	1167539	1.0
	Total	1551732	146050	50086	1747868	1737451	0.6
Total	Irrigated	398546	128327	50297	577170	580572	-0.6
	Unirrigated	1163092	19069	41	1182202	1171194	0.9
	Total	1561638	147396	50338	1759372	1751766	0.4

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



It is observed from the above table that, under ratio method, the total estimated irrigated area was 32.8%, out of which 98.6% of area sown with hybrid variety. As per reconciled area, 33.1% of area was irrigated, of which the area sown with hybrid variety was 98.2%. The variation of estimated irrigated and unirrigated area by ratio method over reconciled area was -0.6% and 0.9% respectively. District wise details are given in Appendix-2.4

2.5 Bajra

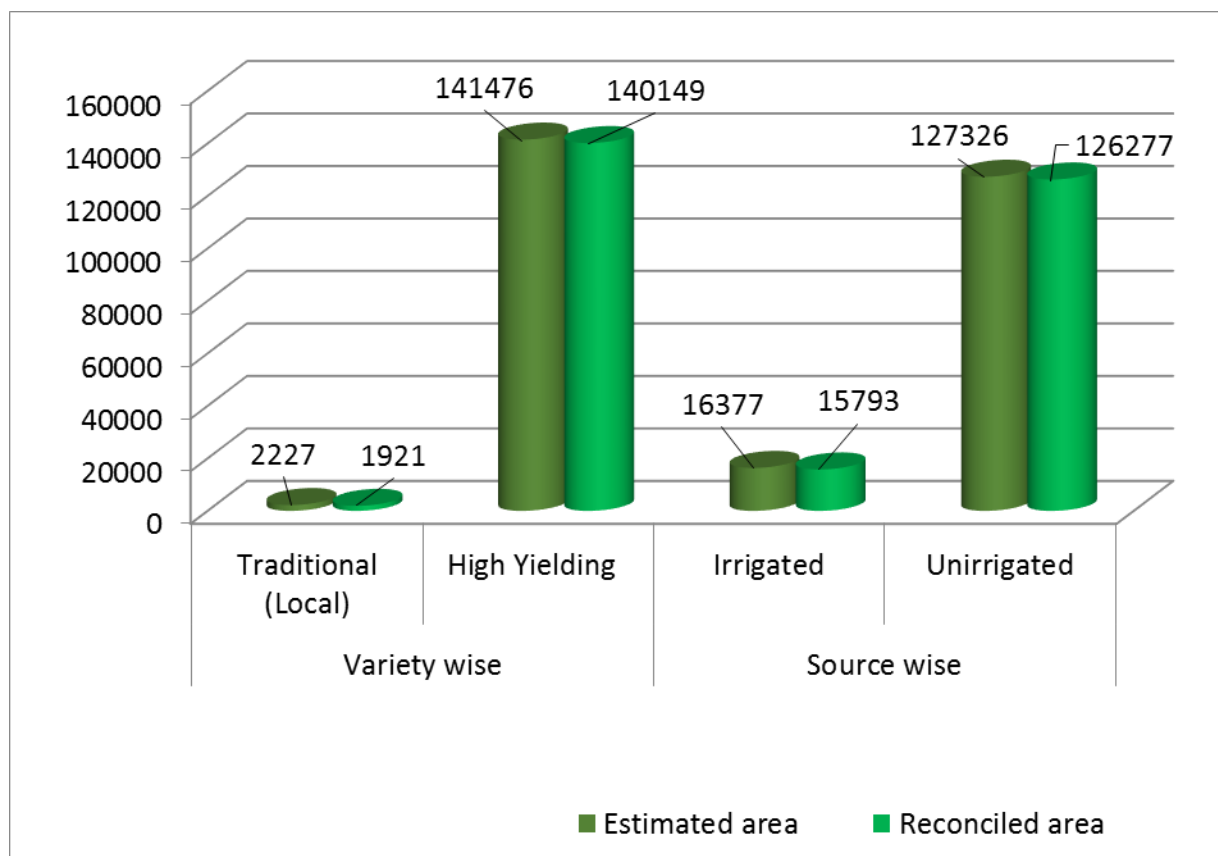
Bajra crop was grown in 1.4 lakh hectares in the State during the year. It is largely grown in Koppal (35%), Raichur (17%), Bagalkote (16%), Vijayapura (12%) and Bellari (7%) districts in the State. These 5 districts alone contribute 88% of the total cropped area of the Bajra crop in the State. Total area estimated under the crop by ratio method was higher compared to the reconciled area. Only 1.5% of area estimated had traditional variety and the remaining 98.5% of the area was sown with high yielding variety as per ratio estimates whereas, under reconciled area 1.4% area was covered under traditional variety and 98.6% area was covered under hybrid variety.

Estimated area of Bajra crop variety wise and irrigated/unirrigated category by ratio method and reconciled area are given in Table-11.

Table – 11
Variety wise Estimated and Reconciled area under Bajra crop
 Area in hectares

Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	% variation over Reconciled area
1	2	3	4	5
Traditional (Local)	Irrigated	19	53	-64.2
	Unirrigated	2208	1868	18.2
	Total	2227	1921	15.9
High Yielding	Irrigated	16358	15740	3.9
	Unirrigated	125118	124409	0.6
	Total	141476	140149	0.9
Total	Irrigated	16377	15793	3.7
	Unirrigated	127326	126277	0.8
	Total	143703	142070	1.1

**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 3.7% under irrigated area and 0.8% under unirrigated area whereas, the variation under hybrid and traditional variety is 0.9% and 15.9% respectively when compared to reconciled area. district wise details are given in Appendix-2.5

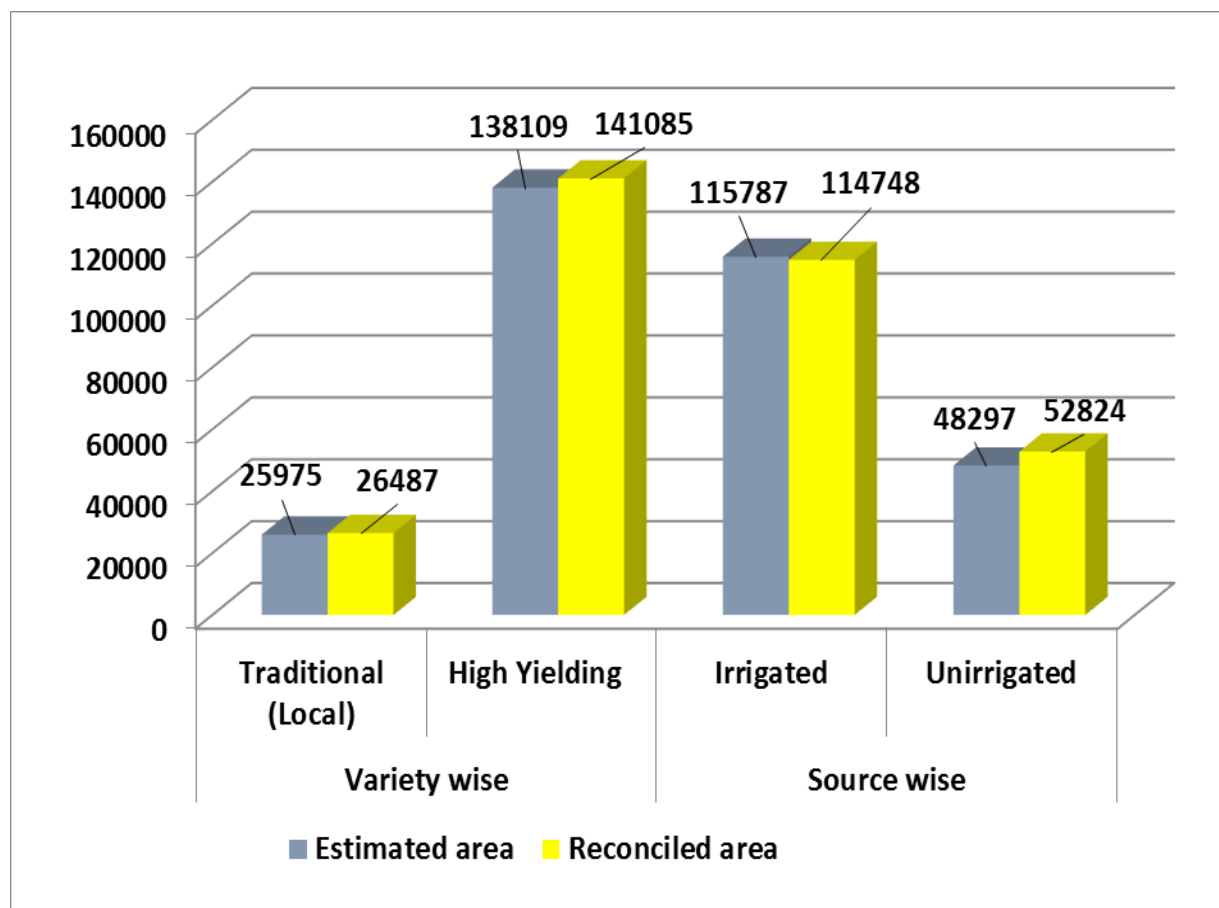
2.6 Wheat

Wheat crop is grown only in Rabi season nearly in 1.7 lakh hectares. About 52918 hectares of area is covered by Belagavi district (32%) followed by Bagalkote district 31793 hectares (19%). As per Ratio Method the total estimated area was low when compared to reconciled area. Details are given in Table – 12.

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

Area in hectares				
Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	% variation over Reconciled area
1	2	3	4	5
Traditional (Local)	Irrigated	2026	1824	11.1
	Unirrigated	23949	24663	-2.9
	Total	25975	26487	-1.9
High Yielding	Irrigated	113761	112924	0.7
	Unirrigated	24348	28161	-13.5
	Total	138109	141085	-2.1
Total	Irrigated	115787	114748	0.9
	Unirrigated	48297	52824	-8.6
	Total	164084	167572	-2.1

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



It can be seen from the above table that, under Ratio Method out of total estimated area irrigated area was 115787 (71%) of which, the irrigated area under High Yield Variety was 98% and Traditional (Local) was 2%. Under reconciled area, the area under irrigation was 114748 (68%) of which, area under High Yield Variety was 98% and Traditional (Local) was 2%. 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.

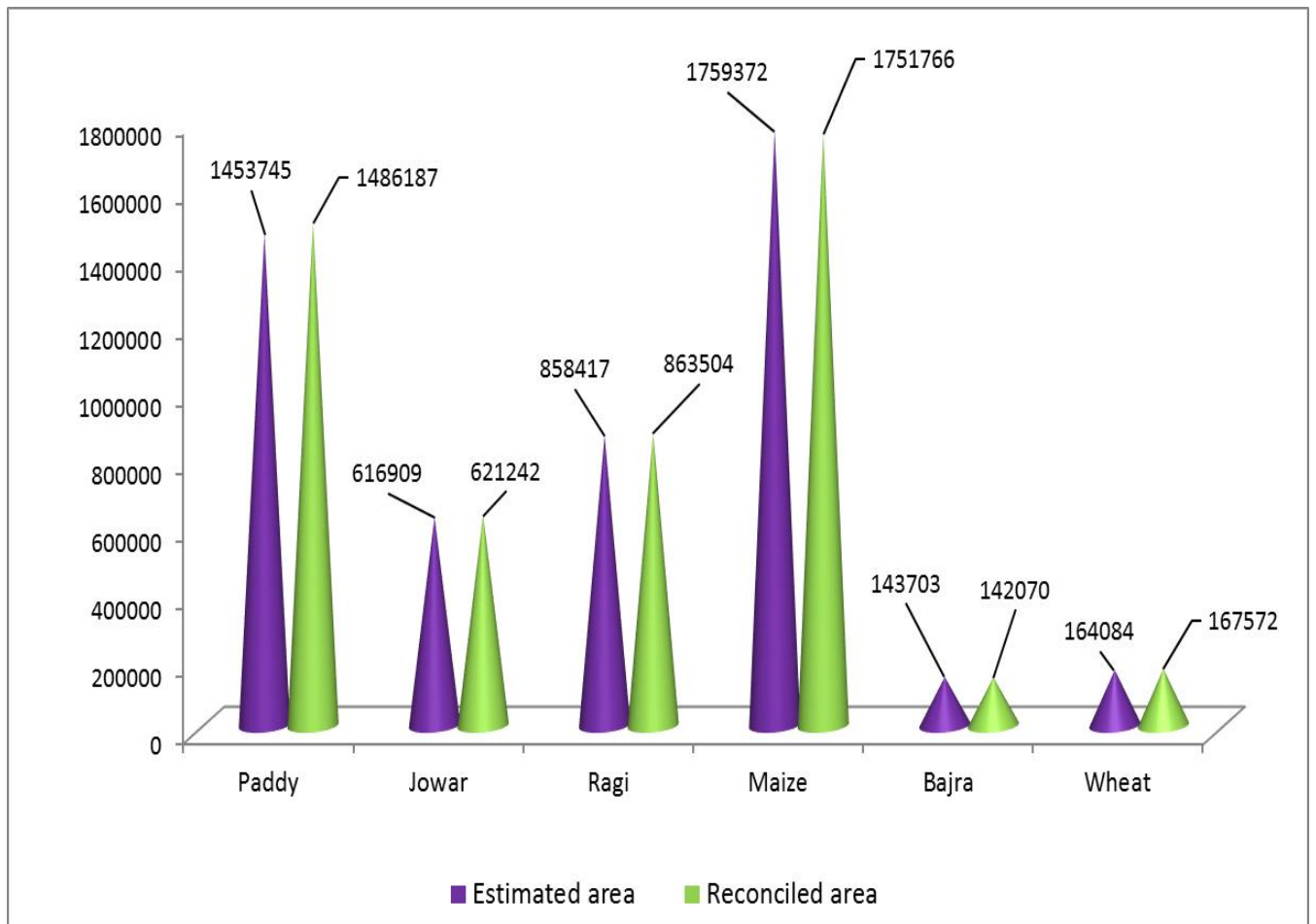
Table – 13

Estimated and Reconciled area under Cereals

Area in hectares

Crop Name	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	% variation over Reconciled area
1	2	3	4
Paddy	1453745	1486187	-2.2
Jowar	616909	621242	-0.7
Ragi	858417	863504	-0.6
Maize	1759372	1751766	0.4
Bajra	143703	142070	1.1
Wheat	164084	167572	-2.1

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 17.5 lakh hectares of area was under this crop during 2021-22 of which, 6.3 lakh hectares grown in Kalaburgi and 5.4 lakh hectares in Vijayapura districts which constitutes 67% of the total area of the crop in the state. It is observed that, the estimated area by ratio method was higher to the extent of 0.5% when compared to the reconciled area.

2.8 Bengal gram

Bengalgram is also an important pulse crop of the State grown in nearly 7.2 lakh hectares in Rabi season. Gadag district is covered with 1.2 lakh hectares of area which works out to 17% of the total State area. The estimated area by ratio method was lower to the extent of 0.7% when compared to the reconciled area.

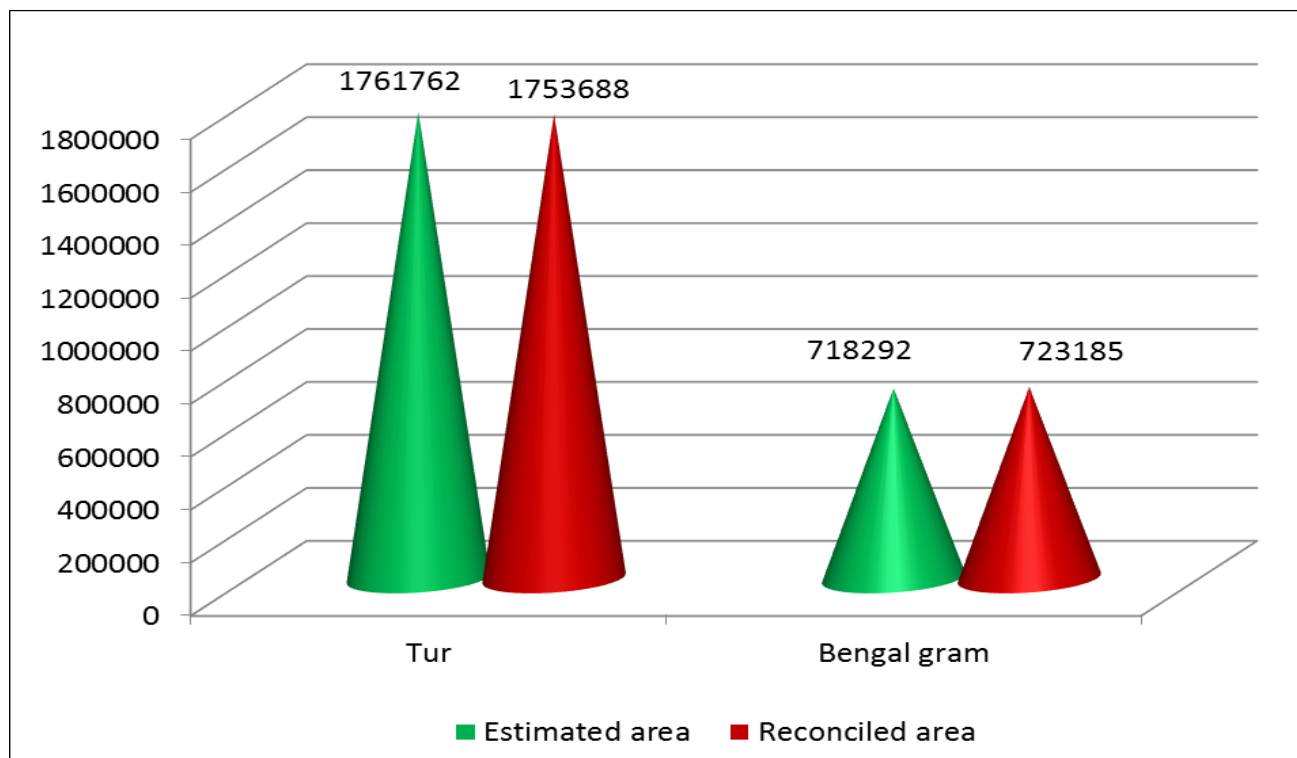
Details of Estimated area under Tur and Bengal gram crop is given in Table-14 and district wise details are given in Appendix-2.5.

Table – 14
Estimated 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)	% variation over Reconciled area
1	2	3	4
Tur	1761762	1753688	0.5
Bengal gram	718292	723185	-0.7

Estimated area for pulse crops under ratio method and reconciled area is graphically presented below.

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



2.9 Groundnut

Groundnut is an important oilseed crop grown in about 4.5 lakh hectares in the State. Though it is grown in Kharif and Summer seasons, about 90% of the area is cultivated during kharif season alone. Predominant groundnut growing districts are Chitradurga (1.4 lakh hectares) and Tumkur (0.68 lakh hectares), which accounted for 47% of the total area of the State. Season wise estimates of area are given in Table-15.

Table – 15

Season wise Estimated and Reconciled area under Groundnut crop

Area in hectares			
Season	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	% variation over Reconciled area
1	2	3	4
Kharif	412531	406260	1.5
Summer	42889	44889	-4.5
Total	455420	451149	0.9

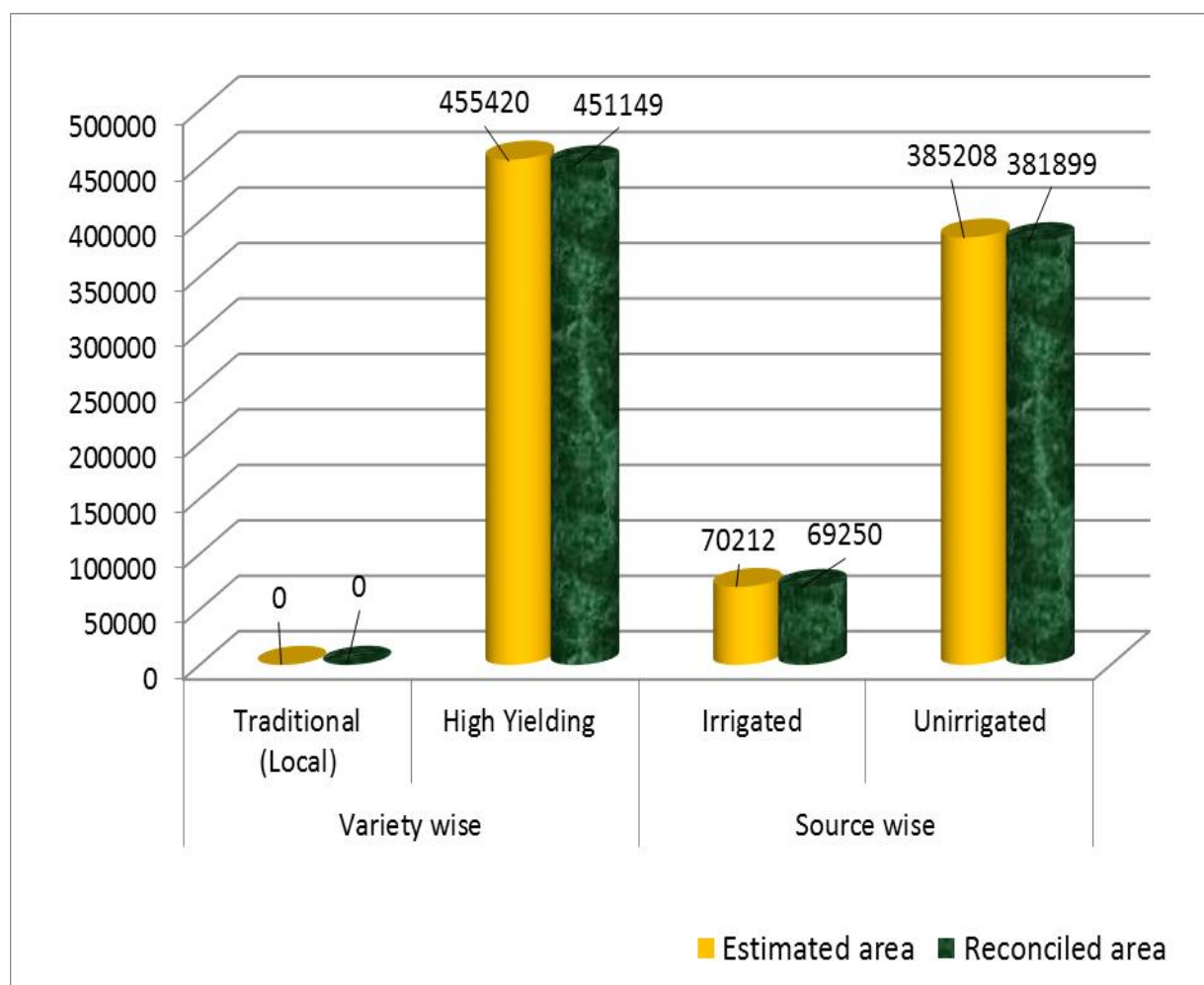
The estimated area under ratio method was higher side to the extent of 0.9% when compared with Reconciliation area. Variety wise and irrigated/un irrigated details are given in Table-16.

Table – 16
Season and variety wise estimated area by Ratio method and Reconciled area under Groundnut crop

Area in hectares								
Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method			Reconciled area (as per Crop survey)			% variation over Reconciled area
		Kharif	Summer	Total	Kharif	Summer	Total	
1	2	3	4	5	6	7	8	9
Traditional (Local)	Irrigated	0	0	0	0	0	0	0.0
	Unirrigated	0	0	0	0	0	0	0.0
	Total	0	0	0	0	0	0	0.0
High Yielding	Irrigated	27345	42867	70212	24433	44817	69250	1.4
	Unirrigated	385186	22	385208	381827	72	381899	0.9
	Total	412531	42889	455420	406260	44889	451149	0.9
Total	Irrigated	27345	42867	70212	24433	44817	69250	1.4
	Unirrigated	385186	22	385208	381827	72	381899	0.9
	Total	412531	42889	455420	406260	44889	451149	0.9

It is seen from the above table that, the estimated area under irrigated and unirrigated as per ratio method was on higher side to the extent of 1.4% and 0.9% respectively. The total area under high yielding variety was on higher side to the extent of 0.9% 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 1.7 lakh hectares in the State. Gadag had the largest area (0.25 lakh hectares) followed by Koppal (0.20 lakh hectares), Raichur (0.19 lakh hectares) and Bagalkote (0.17 lakh hectares). Total area in these four districts contributes 49% of sunflower area of the State.

Season wise estimated area under ratio method is given in Table – 17

Table – 17**season wise Estimated and Reconciled area under Sunflower crop**

Area in hectares

Season	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	% variation over Reconciled area
1	2	3	4
Kharif	114213	117453	-2.8
Rabi	48513	46352	4.7
Summer	2080	2250	-7.6
Total	164806	166055	-0.8

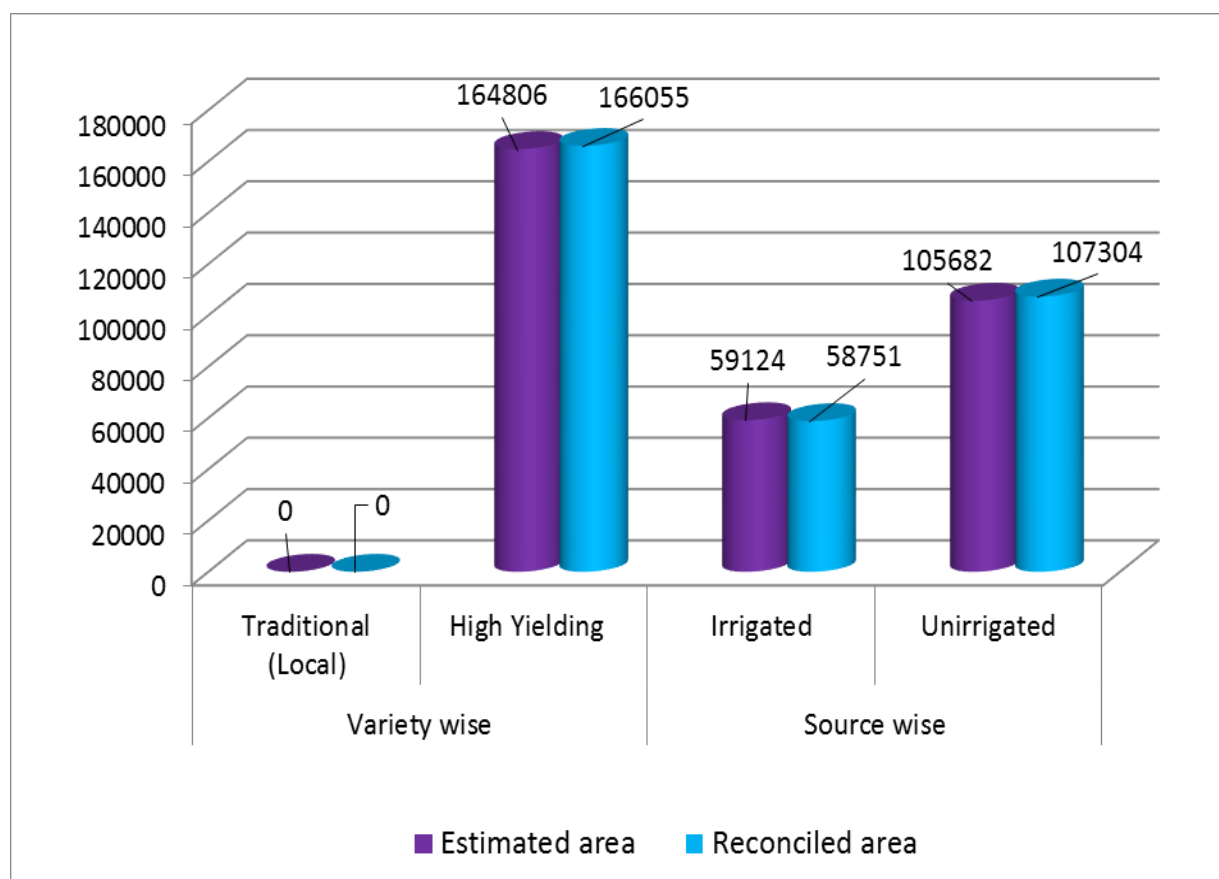
It is seen from the above table that, the area estimated under ratio method was lower side when compared with reconciled area. Comparative information showing the season wise and variety wise estimates of area irrigated and high yielding variety by ratio method and reconciled area are given in Table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

Table – 18**Season and variety wise area Estimated under Ratio method and reconciled area under Sunflower crop**

Area in hectares

Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method				Reconciled area (as per Crop survey)	% variation over Reconciled area
		Kharif	Rabi	Summer	Total		
1	2	3	4	5	6	7	8
Traditional (Local)	Irrigated	0	0	0	0	0	0.0
	Unirrigated	0	0	0	0	0	0.0
	Total	0	0	0	0	0	0.0
High Yielding	Irrigated	30276	26768	2080	59124	58751	0.6
	Unirrigated	83937	21745	0	105682	107304	-1.5
	Total	114213	48513	2080	164806	166055	-0.8
Total	Irrigated	30276	26768	2080	59124	58751	0.6
	Unirrigated	83937	21745	0	105682	107304	-1.5
	Total	114213	48513	2080	164806	166055	-0.8

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 hybrid variety was lower to the extent of 0.8% when compared to the reconciled area. The percentage variation of area estimated under ratio method over reconciled area was -0.8. The entire area under the crop was high yield variety. District wise details are given in Appendix –2.7.

2.11 Sesamum

Sesamum crop is grown in 0.32 lakh hectares, mainly in rain fed areas during kharif season only. It is largely grown in Mandya 0.08 lakh hectares, Koppal 0.05 lakh hectares and Hassan 0.04 lakh hectares. Percentage variation of estimated area under ratio method over reconciled area was lower to the extent of 13.7%. The entire area under the crop was grown as high yield 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 0.40 lakh hectares of area in Rabi season during 2021-22. It is largely grown in Bidar district (0.15 lakh hectares) followed by Dharwad (0.08 lakh hectares) and Kalaburgi (0.07 lakh hectares). Estimated area by ratio method was lower to the extent of 1.4% when compared to reconciled area. The entire area under the crop was grown as high yield variety. Estimated area under Safflower is given in Table-19. District wise area details are given in Appendix - 2.8.

2.13 Linseed

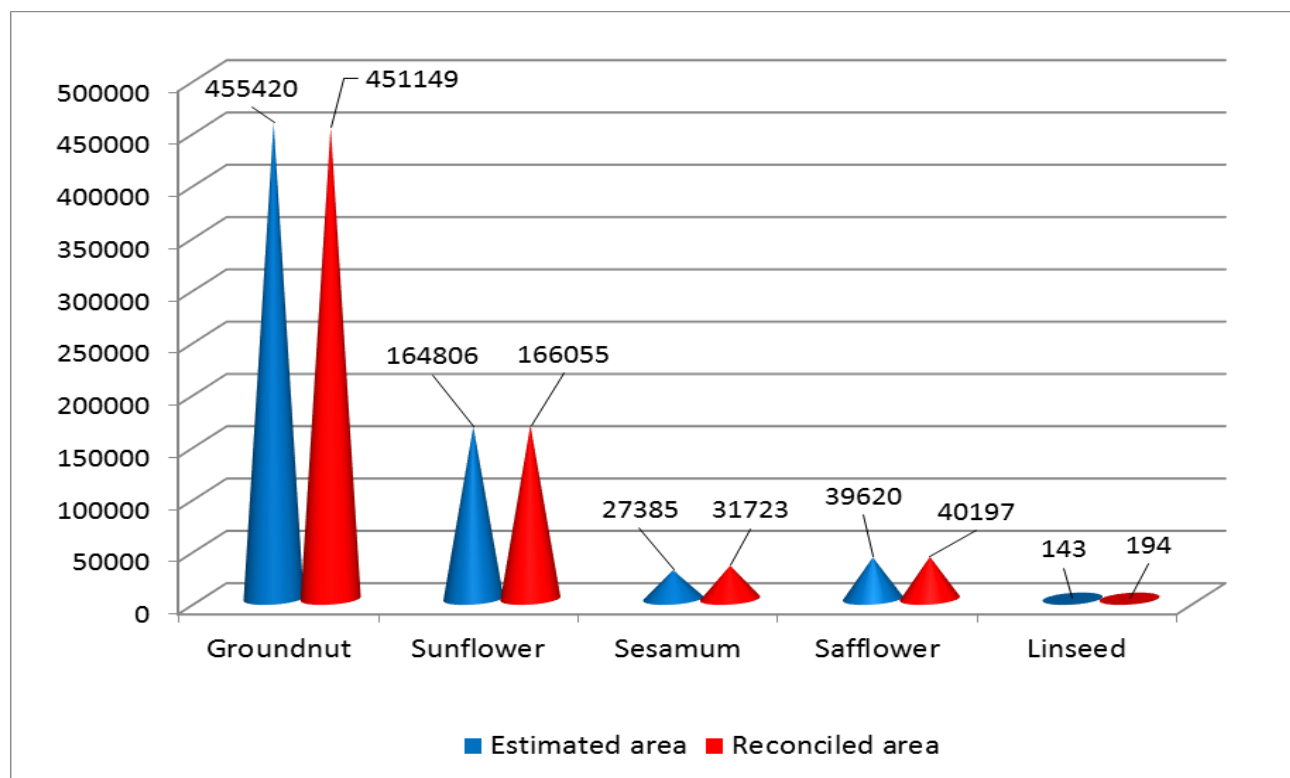
Linseed is another oilseed crop grown in the State during Rabi season only. Out of 194 hectares of area about 68% of area was sown in Tumkur and Chitradurga districts. Estimated area by ratio method was lower to the extent of 26.3% when compared with reconciled area. Estimated area under Linseed is given in Table-19. District wise area sown 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)	% variation over Reconciled area
1	2	3	4
Groundnut	455420	451149	0.9
Sunflower	164806	166055	-0.8
Sesamum	27385	31723	-13.7
Safflower	39620	40197	-1.4
Linseed	143	194	-26.3

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



2.14 Cotton

Cotton is an important cash crop largely grown in Dharwad, Gadag, Yadagir and Belagavi districts. 0.10 lakh hectares of area was covered under the crop during 2021-22. The variation of estimated area over reconciled area as per ratio method was 5.7%. Variety wise and irrigated/unirrigated details are given in Table-20. The district wise area details are given in Appendix-2.9.

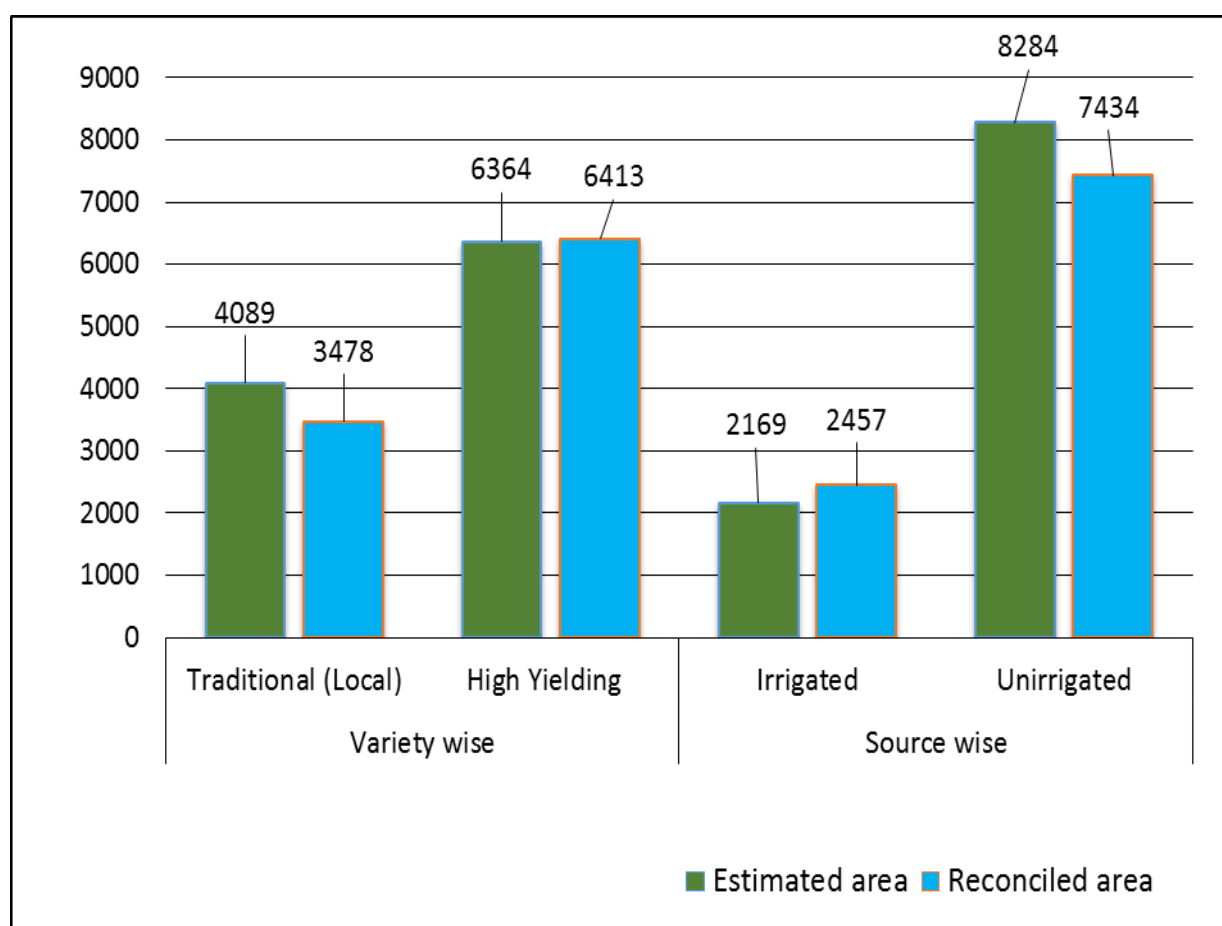
Table - 20

Variety wise Estimated and Reconciled area under Cotton crop

Area in hectares

Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	% variation over Reconciled area
1	2	3	4	5
Traditional (Local)	Irrigated	14	53	-73.6
	Unirrigated	4075	3425	19.0
	Total	4089	3478	17.6
High Yielding	Irrigated	2155	2404	-10.4
	Unirrigated	4209	4009	5.0
	Total	6364	6413	-0.8
Total	Irrigated	2169	2457	-11.7
	Unirrigated	8284	7434	11.4
	Total	10453	9891	5.7

Variety wise and Source wise Estimated (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 2.9 lakh hectares of area under the crop, 56% of cropped area is found in Belagavi district alone followed by, Bagalkote (23%) and Vijayapura (6%) districts. Estimated area by Ratio method was lower to the extent of 2% when compared to reconciled area.

Variety wise and irrigated/unirrigated details are given in Table-21. District wise details of estimates are given in Appendix – 2.9.

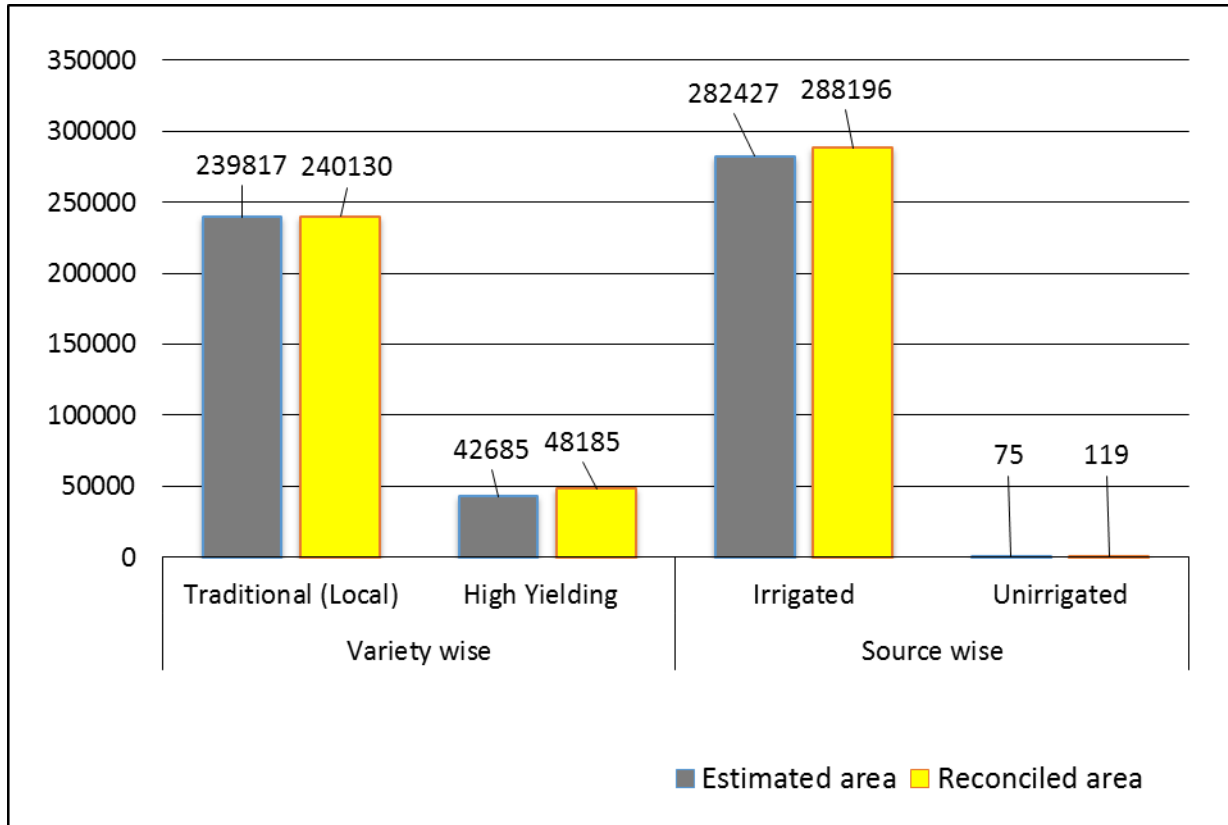
Table – 21

Varietywise Estimated and Reconciled area under Sugarcane crop

Area in hectares

Variety	Irrigated/ Unirrigated	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	% variation over Reconciled area
1	2	3	4	5
Traditional (Local)	Irrigated	239767	240038	-0.1
	Unirrigated	50	92	-45.7
	Total	239817	240130	-0.1
High Yielding	Irrigated	42660	48158	-11.4
	Unirrigated	25	27	-7.4
	Total	42685	48185	-11.4
Total	Irrigated	282427	288196	-2.0
	Unirrigated	75	119	-37.0
	Total	282502	288315	-2.0

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



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 5933 villages of the State during 2021-22, which belong to the first 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 (100%) in Kharif, Rabi and Summer season.
- 3.4 During the year 2021-22 percentage of supervision by Statistics, Agriculture and Horticulture Departments personnel was 98.51%, 97.25% and 97.76% respectively.
- 3.5 The estimated area under ratio method was high in respect of Maize, Bajra, Tur, Groundnut and Cotton crops and it was low in case of Paddy, Jowar, Ragi, Wheat, Bengal gram, Sunflower, Sesamum, Safflower, Linseed and Sugarcane crops when compared to the reconciled area.

APPENDIX - 1

Districtwise & Seasonwise receipt position of village crop abstracts during 2021-22

Sl. No.	Districts	No. of villages selected	Kharif		Rabi		Summer	
			No. of villages from which crop abstracts received	Percentage	No. of villages from which crop abstracts received	Percentage	No. of villages from which crop abstracts received	Percentage
1	Bagalkote	124	124	100	124	100	124	100
2	Belagavi	241	241	100	241	100	241	100
3	Bellari	131	131	100	131	100	131	100
4	Bengaluru Rural	214	214	100	214	100	214	100
5	Bengaluru Urban	119	119	100	119	100	119	100
6	Bidar	130	130	100	130	100	130	100
7	Chamarajanagara	93	93	100	93	100	93	100
8	Chikkaballapur	305	305	100	305	100	305	100
9	Chikkamagalur	226	226	100	226	100	226	100
10	Chitradurga	206	206	100	206	100	206	100
11	Dakshina Kannada	76	76	100	76	100	76	100
12	Davanagere	168	168	100	168	100	168	100
13	Dharwad	83	83	100	83	100	83	100
14	Gadag	68	68	100	68	100	68	100
15	Hassan	511	511	100	511	100	511	100
16	Haveri	142	142	100	142	100	142	100
17	Kalaburgi	188	188	100	188	100	188	100
18	Kodagu	105	105	100	105	100	105	100
19	Kolar	364	364	100	364	100	364	100
20	Koppal	131	131	100	131	100	131	100
21	Mandya	298	298	100	298	100	298	100
22	Mysuru	263	263	100	263	100	263	100
23	Raichur	163	163	100	163	100	163	100
24	Ramanagara	162	162	100	162	100	162	100
25	Shivamogga	312	312	100	312	100	312	100
26	Tumkur	547	547	100	547	100	547	100
27	Udupi	57	57	100	57	100	57	100
28	Uttara Kannada	260	260	100	260	100	260	100
29	Vijayapura	143	143	100	143	100	143	100
30	Yadagir	103	103	100	103	100	103	100
	STATE TOTAL	5933	5933	100	5933	100	5933	100

APPENDIX - 2.1
Districtwise and Seasonwise Estimated Area under Ratio method and
Reconciled Area for the year 2021-22

Crop: Paddy

Area: in hectares

Sl. No.	Districts	Kharif		Rabi		Summer		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	25	35	537	3	0	0	562	38
2	Belagavi	57003	57100	166	168	5	6	57174	57274
3	Bellari	101590	105169	19	3118	70327	72304	171936	180591
4	Bengaluru Rural	170	163	684	6	18	25	872	194
5	Bengaluru Urban	303	203	611	4	0	0	914	207
6	Bidar	643	614	0	35	0	89	643	738
7	Chamarajanagara	9292	8330	0	826	1194	1194	10486	10350
8	Chikkaballapur	4067	3629	1487	860	2512	2363	8066	6852
9	Chikkamagalur	10478	10739	0	8	432	323	10910	11070
10	Chitradurga	1249	1248	458	163	195	172	1902	1583
11	Dakshina Kannada	6468	6264	6	1127	5	0	6479	7391
12	Davanagere	61003	67793	0	525	53982	54497	114985	122815
13	Dharwad	13777	13049	536	33	0	1	14313	13083
14	Gadag	3711	3545	0	51	2486	2654	6197	6250
15	Hassan	38195	35114	0	18	200	78	38395	35210
16	Haveri	33706	31710	5474	831	10618	10715	49798	43256
17	Kalaburgi	8729	8906	122	1493	2539	3081	11390	13480
18	Kodagu	19561	20205	674	4	0	0	20235	20209
19	Kolar	4034	3938	279	461	730	680	5043	5079
20	Koppal	60246	59128	3519	1647	46257	47581	110022	108356
21	Mandya	53498	56889	591	412	15978	17007	70067	74308
22	Mysuru	83933	81568	699	25	13855	13786	98487	95379
23	Raichur	187657	190638	37	2502	135018	147422	322712	340562
24	Ramanagara	3308	3035	43	18	121	123	3472	3176
25	Shivamogga	75579	75138	1321	126	10008	11807	86908	87071
26	Tumkur	3021	3049	2658	0	146	275	5825	3324
27	Udupi	36791	37742	23	5776	0	36	36814	43554
28	Uttara Kannada	43157	45408	1573	633	501	407	45231	46448
29	Vijayapura	210	128	28	34	0	10	238	172
30	Yadagir	98132	97648	0	569	45537	49950	143669	148167
	STATE TOTAL	1019536	1028125	21545	21476	412664	436586	1453745	1486187

RCA: Reconciled Crop Area

APPENDIX - 2.2

Districtwise and Seasonwise estimated area under Ratio method and Reconciled area for the year 2021-22

Crop: Jowar

Sl. No.	Districts	Kharif		Rabi		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	1490	1556	57637	56552	59127	58108
2	Belagavi	8446	8853	122983	121198	131429	130051
3	Bellari	11111	9579	13543	14086	24654	23665
4	Bengaluru Rural	2814	2571	141	157	2955	2728
5	Bengaluru Urban	1044	942	5	14	1049	956
6	Bidar	3041	2233	31917	32611	34958	34844
7	Chamarajanagara	18068	19176	55	94	18123	19270
8	Chikkaballapur	2516	2494	405	581	2921	3075
9	Chikkamagalur	925	1714	2677	2880	3602	4594
10	Chitradurga	3048	2796	3224	3660	6272	6456
11	Dakshina Kannada	0	0	0	0	0	0
12	Davanagere	359	309	2683	2725	3042	3034
13	Dharwad	264	170	36521	38188	36785	38358
14	Gadag	514	493	41158	40162	41672	40655
15	Hassan	1775	1606	0	5	1775	1611
16	Haveri	123	99	68525	69120	68648	69219
17	Kalaburgi	395	453	49474	49871	49869	50324
18	Kodagu	0	1	0	0	0	1
19	Kolar	1523	1345	186	134	1709	1479
20	Koppal	1340	1667	17929	20396	19269	22063
21	Mandya	0	0	0	0	0	0
22	Mysuru	5760	5644	256	422	6016	6066
23	Raichur	3164	2703	40636	39520	43800	42223
24	Ramanagara	1838	1730	106	127	1944	1857
25	Shivamogga	28	15	112	65	140	80
26	Tumkur	6066	8576	978	895	7044	9471
27	Udupi	0	0	0	0	0	0
28	Uttara Kannada	142	92	71	75	213	167
29	Vijayapura	25	38	37485	38511	37510	38549
30	Yadagir	174	97	12209	12241	12383	12338
	STATE TOTAL	75993	76952	540916	544290	616909	621242

RCA: Reconciled Crop Area

APPENDIX - 2.3
Districtwise and Seasonwise Estimated area under Ratio method and
Reconciled area for the year 2021-22

Crop: Ragi

Area: in hectares

Sl. No.	Districts	Kharif		Rabi		Summer		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	52	61	18	36	0	0	70	97
2	Belagavi	1221	1308	66	70	34	33	1321	1411
3	Bellari	13465	14441	18307	19958	2921	2855	34693	37254
4	Bengaluru Rural	67643	66564	289	334	13	25	67945	66923
5	Bengaluru Urban	19959	18186	142	114	0	1	20101	18301
6	Bidar	83	49	8	16	0	4	91	69
7	Chamarajanagara	7863	6896	107	135	75	93	8045	7124
8	Chikkaballapur	42094	40593	1856	1849	1626	1662	45576	44104
9	Chikkamagalur	54638	54749	857	940	0	37	55495	55726
10	Chitradurga	44263	43062	2972	3282	2618	2841	49853	49185
11	Dakshina Kannada	0	0	0	0	0	0	0	0
12	Davanagere	13237	10949	11008	9565	988	0	25233	20514
13	Dharwad	29	31	47	54	0	796	76	881
14	Gadag	37	57	24	43	0	0	61	100
15	Hassan	95976	96903	4603	6478	111	134	100690	103515
16	Haveri	144	91	154	193	82	37	380	321
17	Kalaburgi	67	43	67	86	0	13	134	142
18	Kodagu	18	18	0	0	0	0	18	18
19	Kolar	55012	56892	149	212	247	183	55408	57287
20	Koppal	43	68	26	27	0	4	69	99
21	Mandya	61426	57354	5211	4137	3383	3391	70020	64882
22	Mysuru	54839	58087	25413	35718	344	507	80596	94312
23	Raichur	84	99	57	53	0	2	141	154
24	Ramanagara	76855	74648	488	379	245	280	77588	75307
25	Shivamogga	521	417	0	1	21	47	542	465
26	Tumkur	163746	164566	29	19	332	500	164107	165085
27	Udupi	0	1	0	0	0	0	0	1
28	Uttara Kannada	0	3	0	3	0	0	0	6
29	Vijayapura	39	54	77	88	0	4	116	146
30	Yadagir	7	9	41	65	0	1	48	75
	STATE TOTAL	773361	766199	72016	83855	13040	13450	858417	863504

RCA: Reconciled Crop Area

APPENDIX - 2.4
Districtwise and Seasonwise estimated area under Ratio method and
Reconciled area for the year 2021-22

Crop: Maize

Area: in hectares

Sl. No.	Districts	Kharif		Rabi		Summer		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	67800	63435	10746	12656	4429	5820	82975	81911
2	Belagavi	144996	141156	49343	49845	10831	11339	205170	202340
3	Bellari	215732	211677	5732	6078	314	396	221778	218151
4	Bengaluru Rural	5534	5262	74	109	54	68	5662	5439
5	Bengaluru Urban	1019	771	0	5	0	0	1019	776
6	Bidar	887	686	203	175	258	476	1348	1337
7	Chamarajanagara	22529	25309	5831	6054	2987	3639	31347	35002
8	Chikkaballapur	51126	50814	959	1053	1548	1775	53633	53642
9	Chikkamagalur	9255	9416	562	584	42	63	9859	10063
10	Chitradurga	109326	107258	6111	7752	1539	1583	116976	116593
11	Dakshina Kannada	0	0	0	0	0	0	0	0
12	Davanagere	123072	129696	2973	2487	1240	1074	127285	133257
13	Dharwad	52765	53945	6232	7376	371	476	59368	61797
14	Gadag	118512	99775	8084	7836	250	353	126846	107964
15	Hassan	107524	109697	4155	4772	328	489	112007	114958
16	Haveri	227013	224891	19161	23551	11308	10544	257482	258986
17	Kalaburgi	1401	1792	228	226	132	126	1761	2144
18	Kodagu	2397	2211	0	0	0	0	2397	2211
19	Kolar	1497	1218	578	496	790	804	2865	2518
20	Koppal	98002	101730	8219	8398	1000	761	107221	110889
21	Mandya	4062	4444	982	823	1346	1523	6390	6790
22	Mysuru	49908	49523	7289	6218	819	971	58016	56712
23	Raichur	849	679	1016	996	0	5	1865	1680
24	Ramanagara	4027	3594	376	344	96	119	4499	4057
25	Shivamogga	47767	46226	479	425	8481	7828	56727	54479
26	Tumkur	27040	29840	625	759	147	249	27812	30848
27	Udupi	0	0	64	53	0	0	64	53
28	Uttara Kannada	8407	7319	967	1041	435	724	9809	9084
29	Vijayapura	59085	59108	6303	6072	1588	2747	66976	67927
30	Yadagir	106	59	104	63	5	36	215	158
	STATE TOTAL	1561638	1541531	147396	156247	50338	53988	1759372	1751766

RCA: Reconciled Crop Area

APPENDIX - 2.5

Districtwise and Cropwise estimated area under Ratio method and Reconciled area for the year 2021-22

Area: in hectares

Sl. No.	Districts	Bajra		Wheat		Tur		Bengalgram	
		Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	21350	22470	31557	31793	69409	70174	46556	49192
2	Belagavi	7606	7063	51326	52918	17473	18167	110585	111019
3	Bellari	13057	9673	31	44	16078	14114	13059	13386
4	Bengaluru Rural	7	9	0	0	635	698	67	73
5	Bengaluru Urban	4	2	0	0	867	527	0	0
6	Bidar	84	44	12934	11883	133392	133293	89453	88747
7	Chamarajanagara	623	710	2	5	342	165	1597	1561
8	Chikkaballapur	211	118	0	0	3890	3266	135	120
9	Chikkamagalur	15	6	0	2	156	124	7849	7479
10	Chitradurga	982	1069	79	74	9224	9519	40670	38336
11	Dakshina Kannada	0	0	0	0	0	0	0	0
12	Davanagere	284	243	146	149	2238	2244	7595	7074
13	Dharwad	20	12	20583	20810	284	190	113271	112801
14	Gadag	2107	1407	15200	16631	741	674	114466	120219
15	Hassan	22	22	0	4	611	483	1204	1051
16	Haveri	15	7	308	289	102	200	5198	4221
17	Kalaburgi	557	591	6092	6214	629583	633797	28723	30649
18	Kodagu	0	0	0	0	0	0	0	0
19	Kolar	121	88	0	0	1432	1235	0	3
20	Koppal	49900	50370	636	746	53349	49654	66098	65034
21	Mandya	0	3	0	0	496	392	0	2
22	Mysuru	5	10	0	0	2057	1458	1172	603
23	Raichur	24250	24767	59	65	159798	154044	30099	30364
24	Ramanagara	0	3	0	0	792	908	0	1
25	Shivamogga	5	19	0	0	60	64	0	0
26	Tumkur	155	178	0	0	11824	11583	743	825
27	Udupi	0	0	0	0	0	0	0	0
28	Uttara Kannada	0	2	0	0	0	1	0	1
29	Vijayapura	16826	17606	25059	25850	540632	539129	39250	39765
30	Yadagir	5497	5578	72	95	106297	107585	502	659
	STATE TOTAL	143703	142070	164084	167572	1761762	1753688	718292	723185

RCA: Reconciled Crop Area

APPENDIX - 2.6

Districtwise and Seasonwise estimated area under Ratio method and Reconciled area for the year 2021-22

Crop: Groundnut

Area: in hectares

Sl. No.	Districts	Kharif		Summer		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	1515	1842	6353	7402	7868	9244
2	Belagavi	18286	18804	1313	1203	19599	20007
3	Bellari	35944	34128	7575	7471	43519	41599
4	Bengaluru Rural	170	165	0	0	170	165
5	Bengaluru Urban	91	42	0	0	91	42
6	Bidar	53	32	120	219	173	251
7	Chamarajanagara	3223	3342	26	33	3249	3375
8	Chikkaballapur	29090	28148	567	840	29657	28988
9	Chikkamagalur	3247	3560	0	14	3247	3574
10	Chitradurga	138993	138009	3919	3746	142912	141755
11	Dakshina Kannada	0	0	0	0	0	0
12	Davanagere	4565	4774	261	243	4826	5017
13	Dharwad	23950	26234	340	456	24290	26690
14	Gadag	34643	33973	6222	6122	40865	40095
15	Hassan	375	434	136	155	511	589
16	Haveri	21396	19611	3210	3557	24606	23168
17	Kalaburgi	284	375	400	324	684	699
18	Kodagu	0	1	0	0	0	1
19	Kolar	9265	8749	33	27	9298	8776
20	Koppal	8757	8599	3070	3742	11827	12341
21	Mandya	362	414	22	29	384	443
22	Mysuru	1498	1297	0	3	1498	1300
23	Raichur	878	824	5235	5229	6113	6053
24	Ramanagara	845	864	0	0	845	864
25	Shivamogga	120	129	32	55	152	184
26	Tumkur	70283	67735	471	405	70754	68140
27	Udupi	0	0	0	0	0	0
28	Uttara Kannada	30	31	0	37	30	68
29	Vijayapura	4060	3615	2720	2711	6780	6326
30	Yadagir	608	529	864	866	1472	1395
	STATE TOTAL	412531	406260	42889	44889	455420	451149

RCA: Reconciled Crop Area

APPENDIX - 2.7

**Districtwise and Seasonwise estimated area under Ratio method and
Reconciled area for the year 2021-22**

Crop: Sunflower

Area: in hectares

Sl. No.	Districts	Kharif		Rabi		Summer		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	14784	15227	739	975	639	665	16162	16867
2	Belagavi	4063	3900	11330	10685	267	263	15660	14848
3	Bellari	11042	11309	1751	1832	24	43	12817	13184
4	Bengaluru Rural	11	10	1	2	0	0	12	12
5	Bengaluru Urban	13	5	0	0	0	0	13	5
6	Bidar	117	44	66	94	151	200	334	338
7	Chamarajanagara	15051	14550	176	169	66	52	15293	14771
8	Chikkaballapur	23	18	79	101	238	276	340	395
9	Chikkamagalur	1051	0	0	5	0	0	1051	5
10	Chitradurga	3102	3852	164	186	7	12	3273	4050
11	Dakshina Kannada	0	0	0	0	0	0	0	0
12	Davanagere	536	937	757	607	40	35	1333	1579
13	Dharwad	99	94	5323	5134	0	0	5422	5228
14	Gadag	10404	10033	15353	15229	140	122	25897	25384
15	Hassan	322	652	0	0	0	0	322	652
16	Haveri	244	200	8948	8086	290	335	9482	8621
17	Kalaburgi	2380	2422	73	112	0	6	2453	2540
18	Kodagu	0	0	0	0	0	0	0	0
19	Kolar	0	3	0	1	0	6	0	10
20	Koppal	18571	17796	2637	1872	77	63	21285	19731
21	Mandya	9	27	0	1	0	7	9	35
22	Mysuru	2340	2437	0	1	0	0	2340	2438
23	Raichur	16244	18340	205	219	0	11	16449	18570
24	Ramanagara	1	8	0	0	0	0	1	8
25	Shivamogga	0	2	397	404	0	4	397	410
26	Tumkur	71	114	0	0	0	0	71	114
27	Udupi	0	1110	0	0	0	0	0	1110
28	Uttara Kannada	0	0	0	2	0	0	0	2
29	Vijayapura	12250	13032	446	563	131	127	12827	13722
30	Yadagir	1485	1331	68	72	10	23	1563	1426
	STATE TOTAL	114213	117453	48513	46352	2080	2250	164806	166055

RCA: Reconciled Crop Area

APPENDIX - 2.8
Districtwise and Cropwise Estimated area under Ratio method and
Reconciled area for the year 2021-22

Sl. No.	Districts	Sesamum		Safflower		Linseed	
		Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	325	386	175	296	20	15
2	Belagavi	30	38	1521	1465	0	3
3	Bellari	327	256	140	175	0	0
4	Bengaluru Rural	6	4	0	0	0	0
5	Bengaluru Urban	0	3	0	0	0	0
6	Bidar	402	379	14473	15249	4	2
7	Chamarajanagara	3446	3351	0	0	0	0
8	Chikkaballapur	3	3	0	2	13	6
9	Chikkamagalur	2917	3052	0	2	0	0
10	Chitradurga	340	263	120	180	23	40
11	Dakshina Kannada	0	0	0	0	0	0
12	Davanagere	10	8	30	53	0	0
13	Dharwad	0	10	7754	7523	0	0
14	Gadag	52	44	5144	4828	0	6
15	Hassan	1986	3947	0	0	0	0
16	Haveri	7	17	905	1034	0	2
17	Kalaburgi	1341	1198	6974	6709	0	7
18	Kodagu	0	0	0	0	0	0
19	Kolar	8	8	0	0	0	0
20	Koppal	5528	5225	769	802	0	0
21	Mandya	5111	7547	0	0	0	0
22	Mysuru	3415	3895	0	1	0	0
23	Raichur	738	723	133	100	0	2
24	Ramanagara	692	486	0	0	0	0
25	Shivamogga	0	3	0	0	0	0
26	Tumkur	504	755	0	7	72	92
27	Udupi	0	0	0	0	0	0
28	Uttara Kannada	0	0	0	0	0	0
29	Vijayapura	166	102	1423	1715	11	19
30	Yadagir	31	20	59	56	0	0
	STATE TOTAL	27385	31723	39620	40197	143	194

RCA: Reconciled Crop Area

APPENDIX - 2.9

Districtwise and Cropwise estimated area under Ratio method and Reconciled area for the year 2021-22

Area: in hectares

Sl. No.	Districts	Cotton		Sugarcane	
		Ratio	RCA	Ratio	RCA
1	Bagalkote	121	199	65050	65473
2	Belagavi	1203	1241	161304	162724
3	Bellari	487	477	2214	3238
4	Bengaluru Rural	0	0	0	10
5	Bengaluru Urban	0	0	0	1
6	Bidar	106	46	5945	7668
7	Chamarajanagara	210	278	2819	3799
8	Chikkaballapur	31	36	0	10
9	Chikkamagalur	0	39	0	6
10	Chitradurga	0	0	0	7
11	Dakshina Kannada	0	0	0	0
12	Davanagere	64	110	238	399
13	Dharwad	2749	2467	8046	7735
14	Gadag	2938	2095	891	872
15	Hassan	0	14	772	773
16	Haveri	0	0	2680	3086
17	Kalaburgi	303	332	3667	3774
18	Kodagu	0	0	0	0
19	Kolar	0	7	0	0
20	Koppal	97	167	394	639
21	Mandya	0	0	6191	5323
22	Mysuru	0	0	1815	3313
23	Raichur	708	636	222	217
24	Ramanagara	0	2	43	64
25	Shivamogga	0	0	40	53
26	Tumkur	0	0	18	22
27	Udupi	0	0	1	2
28	Uttara Kannada	0	0	1135	1135
29	Vijayapura	475	498	18918	17858
30	Yadagir	961	1247	99	114
	STATE TOTAL	10453	9891	282502	288315

RCA: Reconciled Crop Area

APPENDIX - 3

Cropwise percentage variation of estimates of area by ratio method over reconciled area for the year 2020-21 & 2021-22

Sl. No.	Crop	% variation over Reconciled area	
		2020-21	2021-22
I	Kharif		
1	Paddy	-9.8	-0.8
2	Jowar	-3.1	-1.2
3	Ragi	-0.1	0.9
4	Maize	-2.4	1.3
5	Bajra	-2.6	1.1
6	Tur	-1.3	0.5
7	Groundnut	-0.1	1.5
8	Sunflower	-3.2	-2.8
9	Sesamum	-6.6	-13.7
II	Rabi		
1	Paddy	-3.1	0.3
2	Jowar	-2.4	-0.6
3	Ragi	-5.6	-14.1
4	Maize	-0.9	-5.7
5	Wheat	2.4	-2.1
6	Bengal gram	-1.1	-0.7
7	Sunflower	-2.2	4.7
8	Safflower	-8.1	-1.4
9	Linseed	-38.2	-26.3
10	Cotton	-8.4	5.7
11	Sugarcane	-1.5	-2.0
III	Summer		
1	Paddy	-1.5	-5.5
2	Ragi	-17.7	-3.0
3	Maize	-6.7	-6.8
4	Groundnut (Rabi & Summer)	-4.6	-4.5
5	Sunflower	-17.9	-7.6