



Government of Karnataka

***REPORT ON ESTIMATES OF
AREA OF PRINCIPAL CROPS UNDER
TIMELY REPORTING SCHEME
IN KARNATAKA
2020-21***

*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. Districtwise area under selected principal crops has been estimated based on the data from sample villages for all the three seasons during 2020-21 which constitute 20 percent of total villages. This report is based on the fifth set of 20% villages selected among the five sets of villages commencing from 2016-17 to 2020-21 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.

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TIMELY REPORTING OF ESTIMATES OF AREA OF PRINCIPAL CROPS IN KARNATAKA 2020-21

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 2020 to 31th March 2021 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 2020 to 30 th June 2020 1 st July 2020 to 31 st August 2020	1 st July 2020 to 9 th July 2020 1 st Sept 2020 to 9 th Sept 2020
2	Rabi	1 st Sept 2020 to 30 th Dec 2020	1 st Jan 2021 to 9 th Jan 2021
3	Summer	1 st Jan 2021 to 31 st March 2021	1 st April 2021 to 9 th April 2021

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 2016-17, 20% of villages are selected every year under the scheme, so that 100% villages are covered in five years i.e. by 2020-21. This report is based on the data collected from the fifth set of villages selected for the year 2020-21.

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 app based Crop Survey was started and conducted during kharif season only. From 2019-20 onwards crop survey was conducted in all 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/Revenue 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 5712 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	5712	5712	5712
2.	No. of Villages from which crop abstracts received	5706	5644	5424
3.	Percentage response	100	99	95

1.9 Supervision

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

Table-2
Number of villages Supervised

Sl. No.	Agency	No. of villages (Kharif + Rabi + Summer)			
		2020-21		Percentage of supervision	
		Allotted	Supervised	2020-21	2019-20
1	2	3	4	5	6
1	Statistics	11514	11223	97.47	99.44
2	Agriculture	1742	1711	98.22	97.26
3	Horticulture/ Revenue	1655	1615	97.58	97.02

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

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

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 15.14 hectares of area during 2020-21. The area covered under the crop was more in Raichuru followed by Ballary and Yadagiri districts. About 69.92 % of the area under the crop was covered in Kharif season alone.

Seasonwise 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	954912	1058794	-9.8
Rabi	33104	34152	-3.1
Summer	414823	421344	-1.5
Total	1402839	1514290	-7.4

Compared to reconciled total area, the estimated area of Paddy under ratio method was lower. During all the three seasons, the percentage of variation over reconciled area was lower.

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

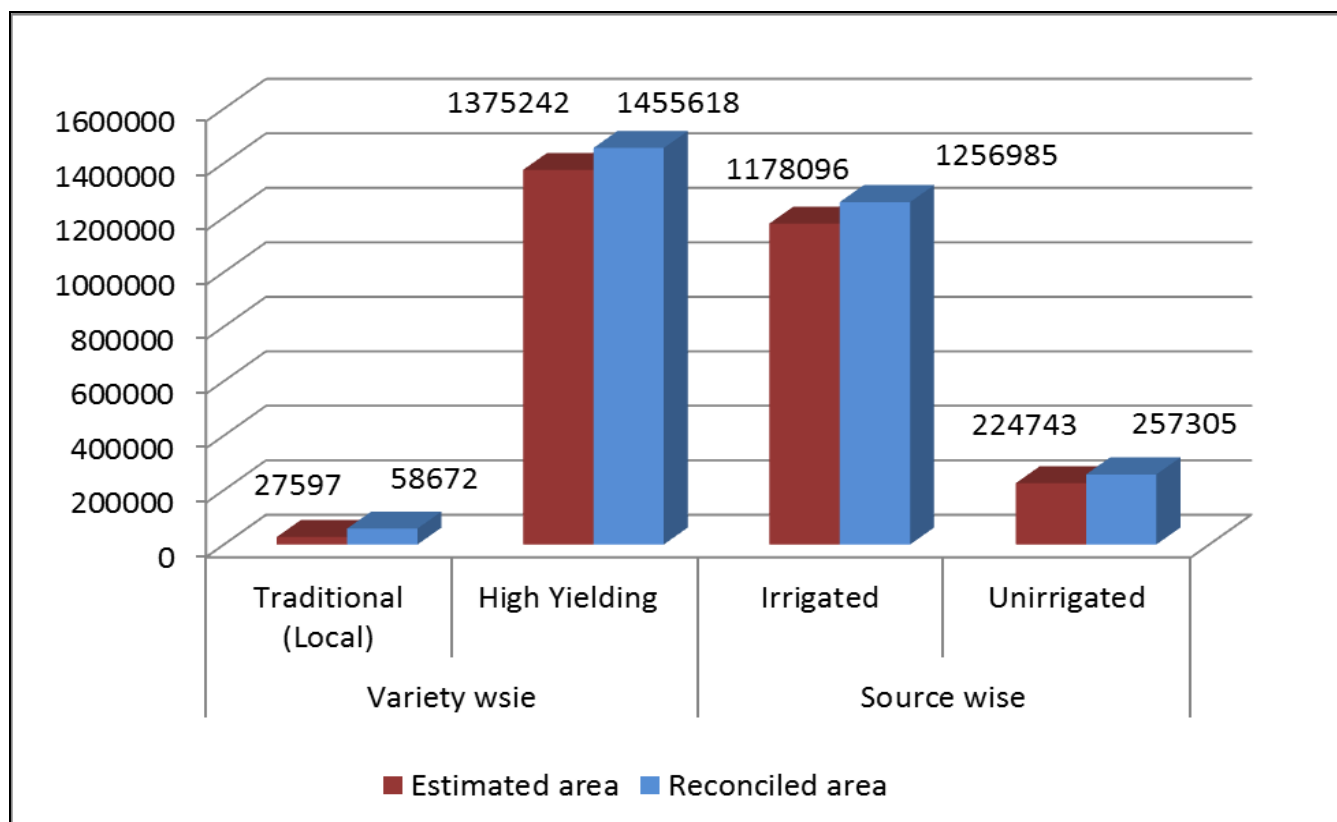
Table-4

Season and Varietywise 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	10226	196	126	10548	15771	-33.1
	Unirrigated	16949	100	0	17049	42901	-60.3
	Total	27175	296	126	27597	58672	-53.0
High Yielding	Irrigated	721979	30872	414697	1167548	1241214	-5.9
	Unirrigated	205758	1936	0	207694	214404	-3.1
	Total	927737	32808	414697	1375242	1455618	-5.5
Total	Irrigated	732205	31068	414823	1178096	1256985	-6.3
	Unirrigated	222707	2036	0	224743	257305	-12.7
	Total	954912	33104	414823	1402839	1514290	-7.4

Varietywise and Sourcewise Estimated Area (Ratio Method) and Reconciled Area under Paddy Crop (in hectares)



As per the reconciled area, the irrigated area under paddy crop was 83.01% and unirrigated was 16.99%, whereas under ratio method it was 83.98% and 16.02% respectively. In case of high yielding and traditional varieties the percentage of area under reconciled area was 96% and 4% as against the estimated area of 98% and 2% respectively. The percentage variation of estimated area under ratio method over reconciled area was -6.3% under irrigated category, -12.7 % under unirrigated category and -7.4% to the total during 2020-21. Districtwise details are given in Appendix-2.1.

2.2 Jowar

Jowar is another important cereal crop with 7.5 lakh hectares of area in the State, of which 88.04% of area was cultivated during Rabi season alone. Belagavi stands first in the area coverage i.e., 20% followed by Kulburgi (11%) and Haveri (10%). Seasonwise information is given in Table-5.

Table – 5

Seasonwise 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	86896	89680	-3.1
Rabi	643967	659992	-2.4
Total	730863	749672	-2.5

From the above table, the variation of area under ratio method compared to reconciled area was -3.1% and -2.4% 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

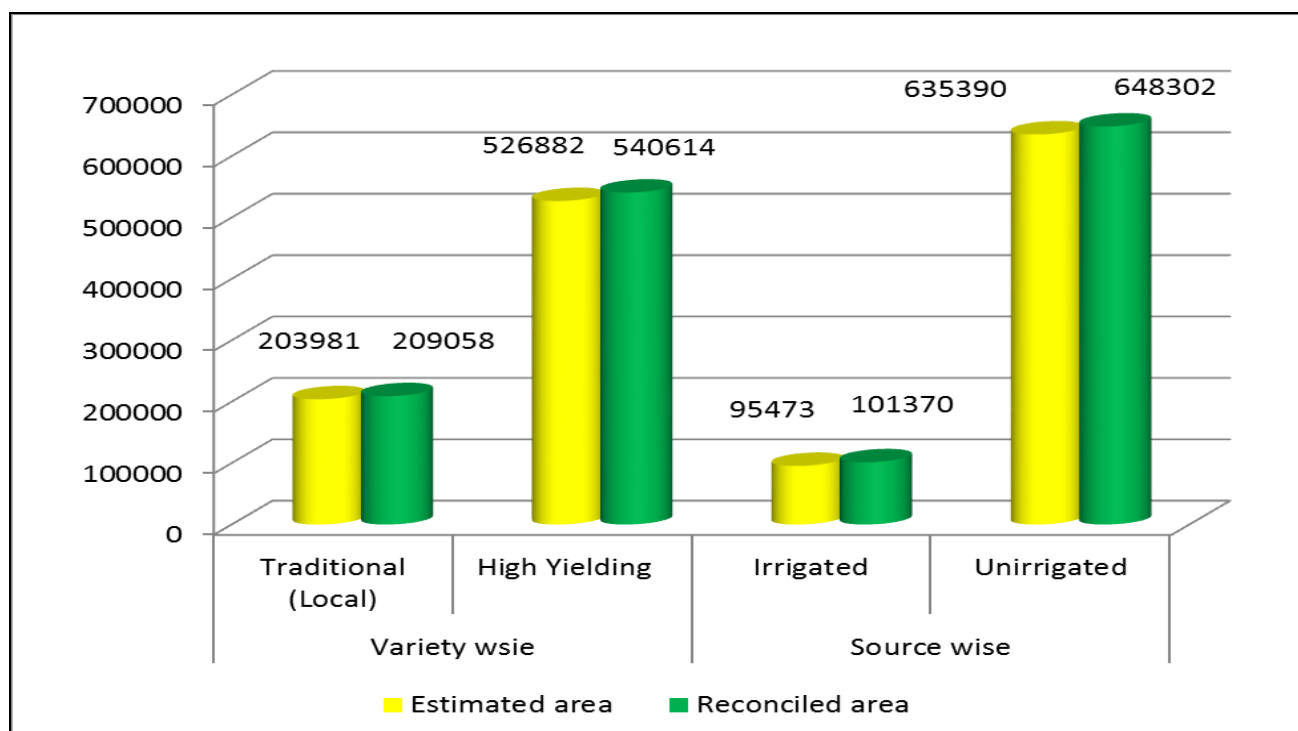
Season and Varietywise area estimated by Ratio method and Reconciled area under Jowar crop

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	1900	8370	10270	10753	-4.5
	Unirrigated	15774	177937	193711	198305	-2.3
	Total	17674	186307	203981	209058	-2.4
High Yielding	Irrigated	15341	69862	85203	90617	-6.0
	Unirrigated	53881	387798	441679	449997	-1.8
	Total	69222	457660	526882	540614	-2.5
Total	Irrigated	17241	78232	95473	101370	-5.8
	Unirrigated	69655	565735	635390	648302	-2.0
	Total	86896	643967	730863	749672	-2.5

Out of total estimated area and reconciled jowar area, in both the cases 28% of area was under traditional variety and the remaining 72% area was under hybrid variety. District-wise details are given in Appendix – 2.2.

Varietywise and Sourcewise 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 lakh hectares of area during 2020-21. The major Ragi growing districts are Tumakuru (21%), Hassan (10%), Mysuru (10%), Mandya (9%) and Ramanagara (9%) which account for 59% of the total Ragi area of the State. About 90% 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	717208	718048	-0.1
Rabi	66230	70141	-5.6
Summer	10320	12545	-17.7
Total	793758	800734	-0.9

The percentage variation of area estimated by ratio method over reconciled area was -0.9 compared to reconciled area. Estimated area under Ratio method was lower in all the three seasons.

Table-8 depicts estimated area by status of irrigation.

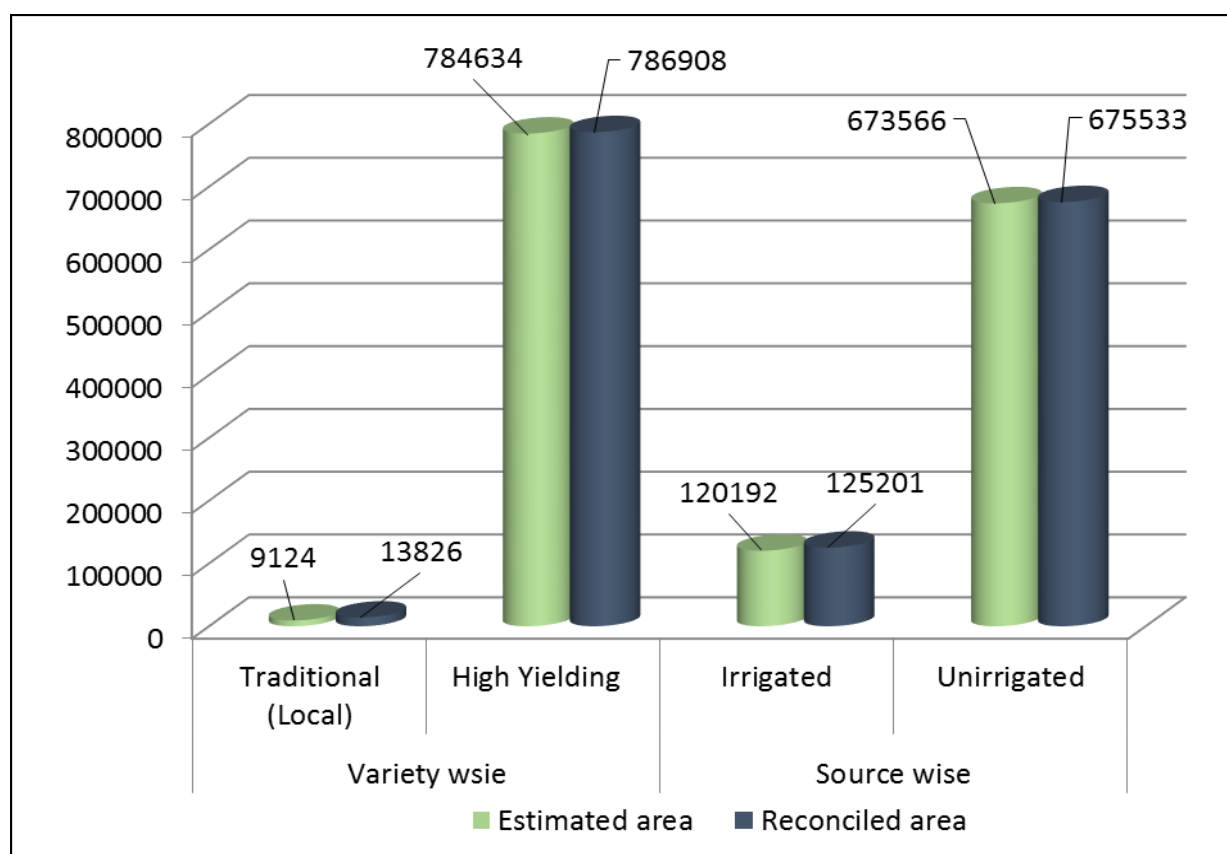
Table – 8

Season and Varietywise 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	100	3897	524	4521	7295	-38.0
	Unirrigated	4560	43	0	4603	6531	-29.5
	Total	4660	3940	524	9124	13826	-34.0
High Yielding	Irrigated	65368	40507	9796	115671	117906	-1.9
	Unirrigated	647180	21783	0	668963	669002	-0.01
	Total	712548	62290	9796	784634	786908	-0.3
Total	Irrigated	65468	44404	10320	120192	125201	-4.0
	Unirrigated	651740	21826	0	673566	675533	-0.3
	Total	717208	66230	10320	793758	800734	-0.9

Varietywise and Sourcewise Estimated Area (Ratio Method) and Reconciled area under Ragi Crop (in hectares)



786908 hectares of reconciled area was covered by high yielding varieties of which, 85% was unirrigated. Out of total estimated area 98.9% was covered by High Yield variety and remaining under local variety. Estimated area was lower under Traditional and high yielding variety when compared to reconciled area. The percentage of variation under Irrigated and Unirrigated area was -4.0 and -0.3 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 Belagavi (13%), Haveri (13 %) and Ballary (11 %). 89% of the area was covered under kharif season alone.

Seasonwise estimated area as per ratio method is given in Table – 9

Table – 9

Seasonwise 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	1526138	1563684	-2.4
Rabi	148097	149419	-0.9
Summer	45865	49147	-6.7
Total	1720100	1762250	-2.4

The Variation of estimated area under ratio method over reconciled area was -2.4% in kharif, -0.9% in Rabi and -6.7% in summer season. The total estimated area was lower 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.

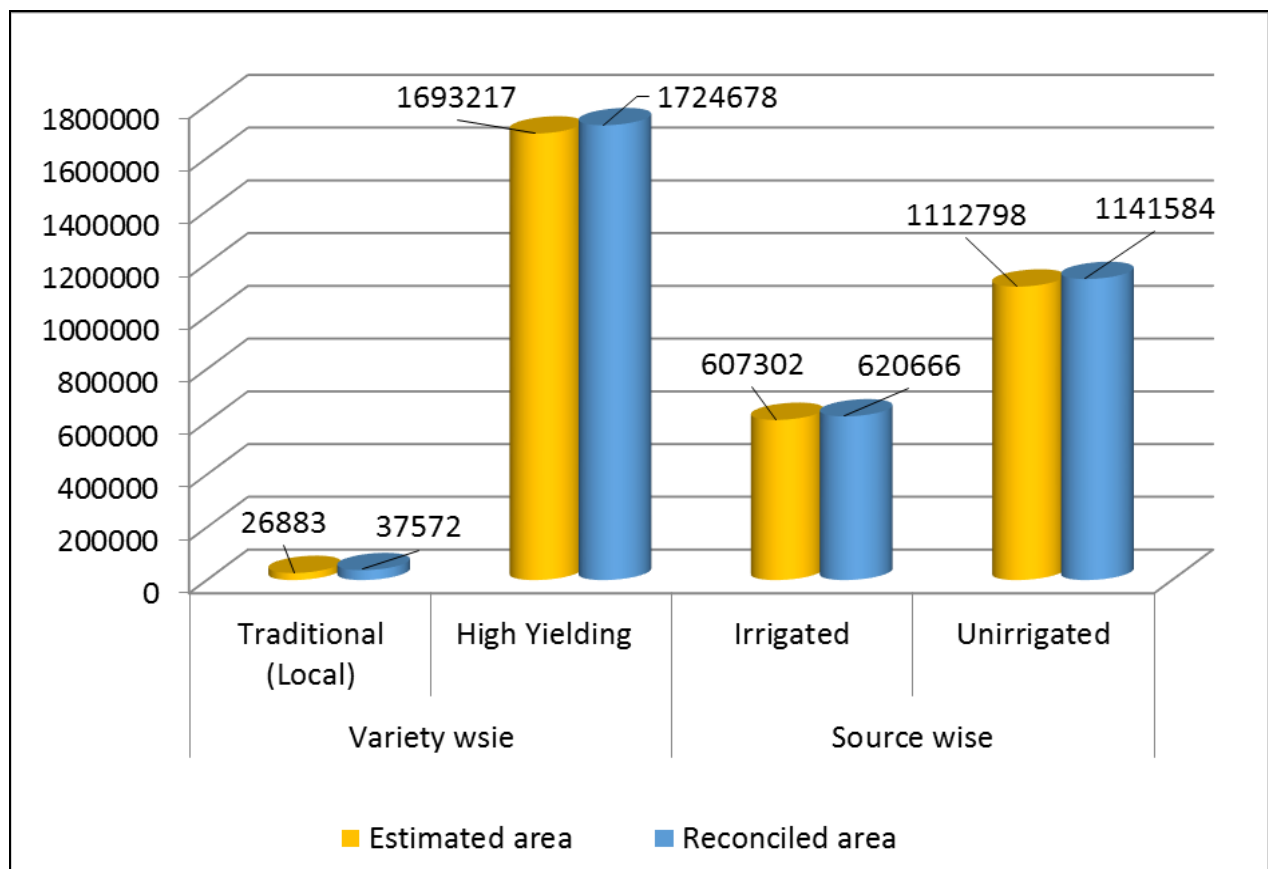
Table – 10

Season and Varietywise 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	3071	4435	343	7849	11992	-34.5
	Unirrigated	17633	1401	0	19034	25580	-25.6
	Total	20704	5836	343	26883	37572	-28.4
High Yielding	Irrigated	430379	123552	45522	599453	608674	-1.5
	Unirrigated	1075055	18709	0	1093764	1116004	-2.0
	Total	1505434	142261	45522	1693217	1724678	-1.8
Total	Irrigated	433450	127987	45865	607302	620666	-2.2
	Unirrigated	1092688	20110	0	1112798	1141584	-2.5
	Total	1526138	148097	45865	1720100	1762250	-2.4

Varietywise 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 35.3%, out of which 98.7% of area sown with hybrid variety. As per reconciled area, 35.2% of area was irrigated, of which the area sown with hybrid variety was 98.1% . The variation of estimated irrigated and unirrigated area by ratio method over reconciled area was low i.e. -2.2% and -2.5% respectively. Districtwise details are given in Appendix-2.4

2.5 Bajra

Bajra crop was grown in 2.2 lakh hectares in the State during the year. It is largely grown in Koppal (35%), Bagalakote (18%), Raichuru (16%), Vijayapura (13%) and Ballari (7%) districts in the State. These 5 districts alone contribute 89% of the total cropped area of the Bajra crop in the State. Total area estimated under the crop by ratio method was lower compared to the reconciled area. Only 0.4% of area estimated had traditional variety and the remaining 99.6% of the area was sown with high yielding variety as per ratio estimates whereas, under reconciled area 0.9% area was covered under traditional variety and 99.1% area was covered under hybrid variety.

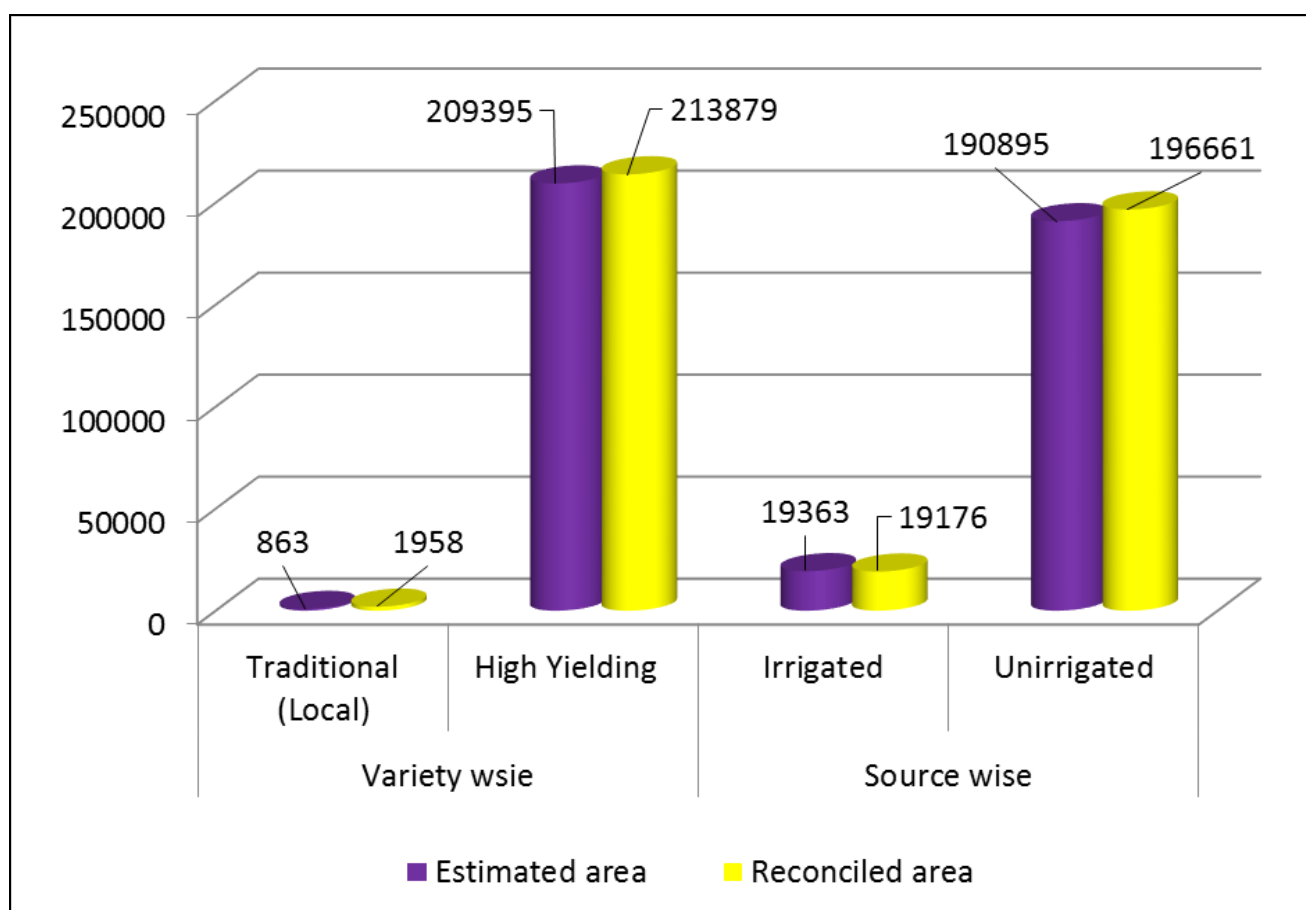
Estimated area of Bajra crop varietywise and irrigated/unirrigated category by ratio method and reconciled area are given in Table-11.

Table – 11
Varietywise 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	14	30	-53.3
	Unirrigated	849	1928	-56.0
	Total	863	1958	-55.9
High Yielding	Irrigated	19349	19146	1.1
	Unirrigated	190046	194733	-2.4
	Total	209395	213879	-2.1
Total	Irrigated	19363	19176	1.0
	Unirrigated	190895	196661	-2.9
	Total	210258	215837	-2.6

Varietywise and Sourcewise 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 1.0% under irrigated area and -2.9% under unirrigated area whereas, the variation under hybrid and traditional variety is -2.1% and -55.9% respectively when compared to reconciled area. Districtwise details are given in Appendix-2.5

2.6 Wheat

Wheat crop is grown only in Rabi season nearly in 2.1 lakh hectares. About 64990 hectares of area is covered by Belagavi district (31.5%) followed by Vijayapura district 46350 hectares (22.5%). As per Ratio Method the total estimated area was high when compared to reconciled area. Details are given in Table – 12.

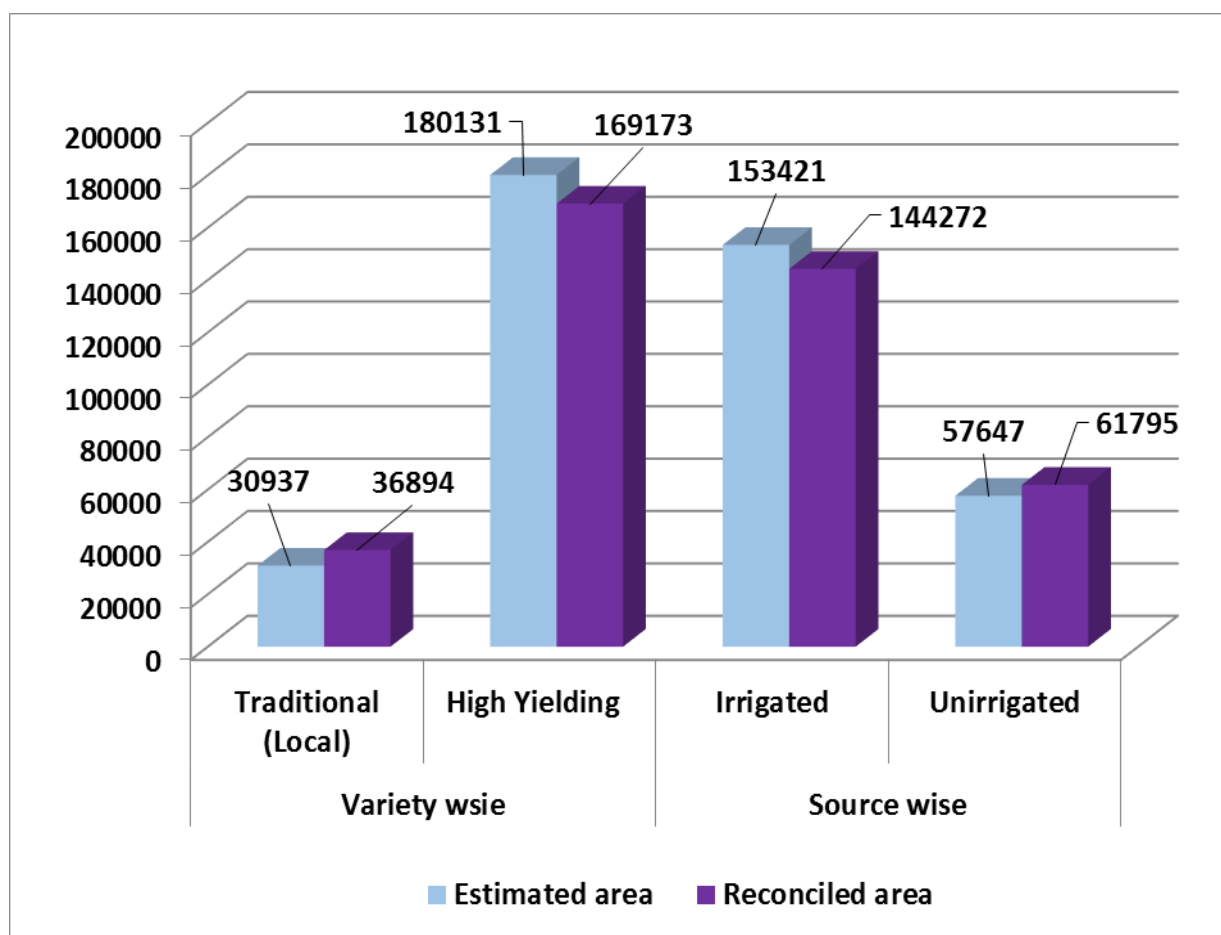
Table – 12

Varietywise 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	11551	12941	-10.7
	Unirrigated	19386	23953	-19.1
	Total	30937	36894	-16.1
High Yielding	Irrigated	141870	131331	8.0
	Unirrigated	38261	37842	1.1
	Total	180131	169173	6.5
Total	Irrigated	153421	144272	6.3
	Unirrigated	57647	61795	-6.7
	Total	211068	206067	2.4

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



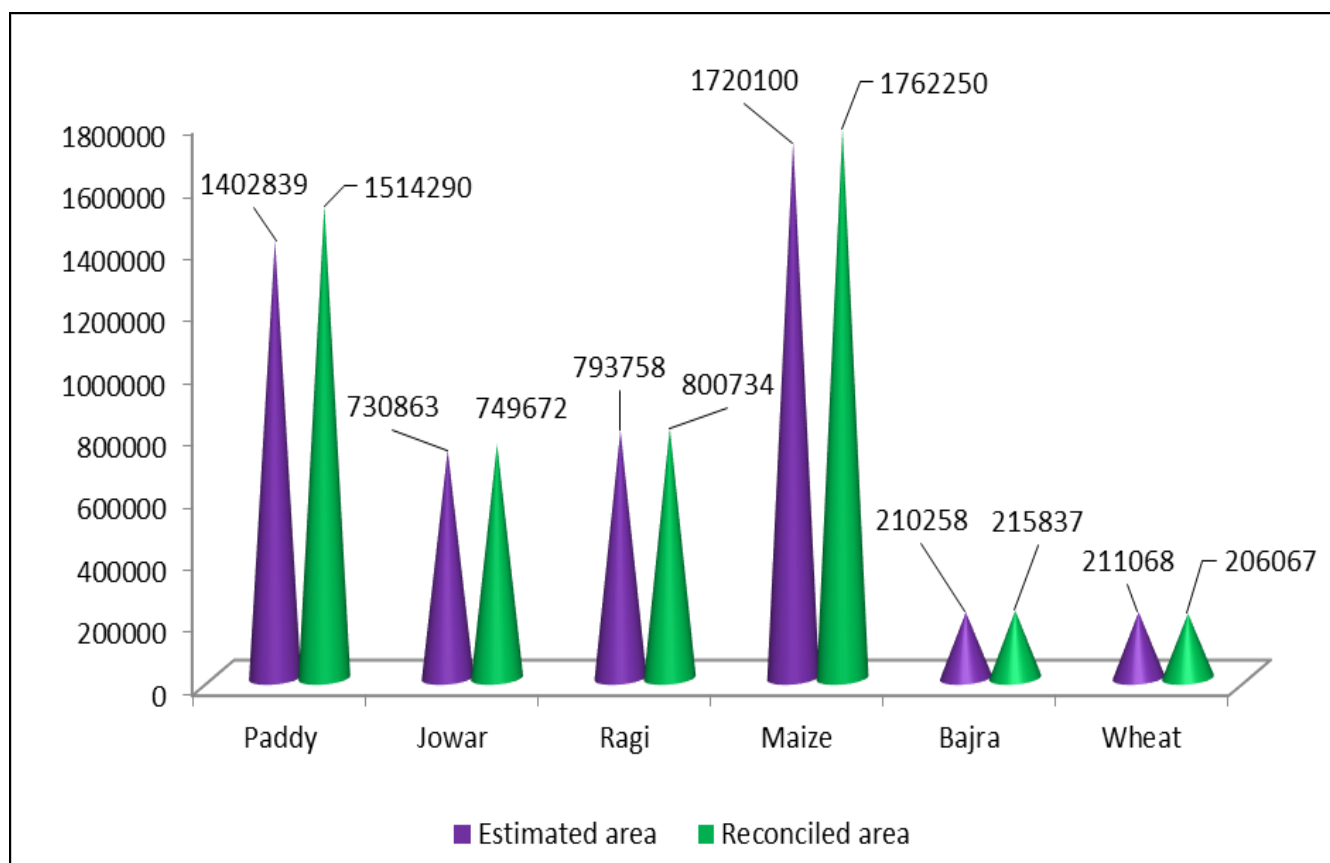
It can be seen from the above table that, under Ratio Method out of total estimated area irrigated area was 153421 (73%) of which, the irrigated area under High Yield Variety was 92% and Traditional (Local) was 8%. Under reconciled area, the area under irrigation was 144272 (70%) of which, area under High Yield Variety was 91% and Traditional (Local) was 9%. Districtwise 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 (Ratio Method) and reconciled (as per crop survey) 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	1402839	1514290	-7.4
Jowar	730863	749672	-2.5
Ragi	793758	800734	-0.9
Maize	1720100	1762250	-2.4
Bajra	210258	215837	-2.6
Wheat	211068	206067	2.4

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 16.6 lakh hectares of area was under this crop during 2020-21 of which, 5.9 lakh hectares grown in Kulburgi and 5.2 lakh hectares in Vijayapura districts which constitutes 67.2% 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 1.3% when compared to the reconciled area. Details of estimated area given in table-14 and districtwise details are given in Appendix-2.5.

2.8 Bengalgram

Bengalgram is also an important pulse crop of the State grown in nearly 7.2 lakh hectares in Rabi season. Gadaga district is covered with 1.2 lakh hectares of area which works out to 17.3% of the total State area. The estimated area by ratio method was lower to the extent of 1.1% when compared the reconciled area.

Estimated area under Tur and Bengal gram crop is given in Table-14 and districtwise details are given in Appendix-2.5.

Table – 14

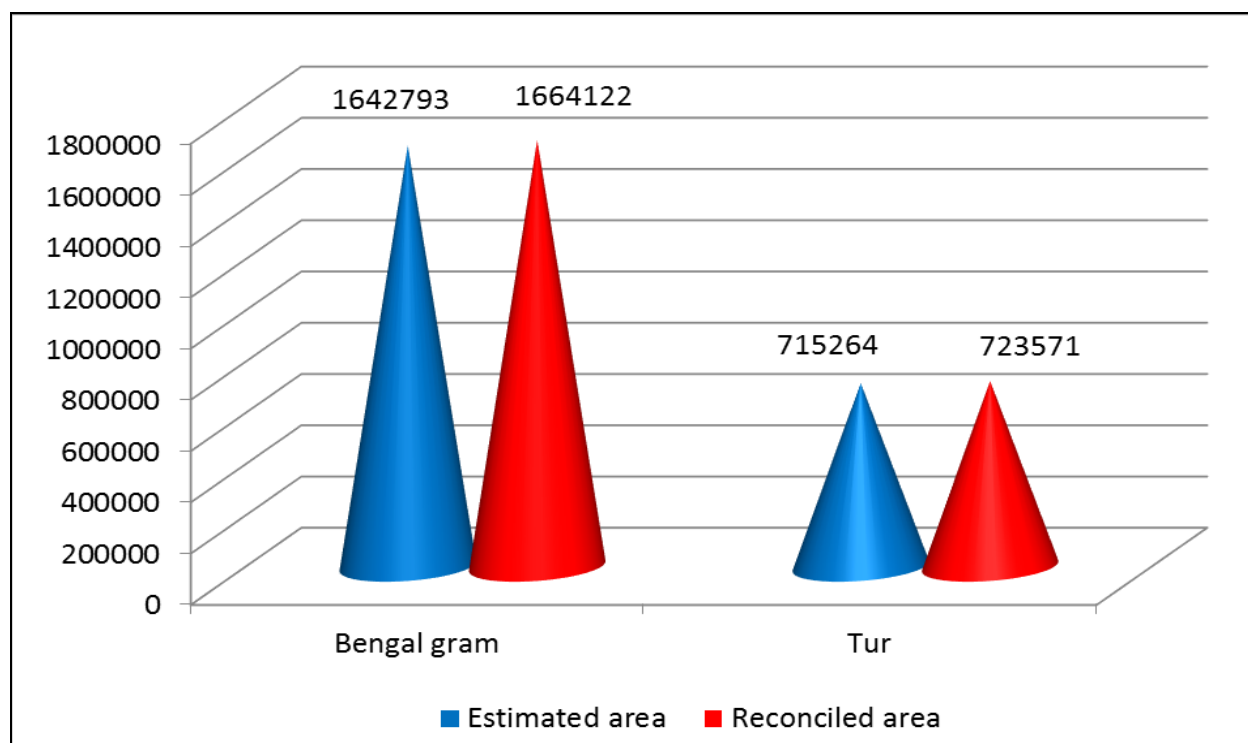
Estimated and Reconciled area under Tur and Bengal gram crops

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	1642793	1664122	-1.3
Bengal gram	715264	723571	-1.1

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 5.9 lakh hectares in the State. Though it is grown in Kharif and Summer seasons, about 86% of the area is cultivated during kharif season alone. Predominant groundnut growing districts are Chitradurga (1.6 lakh hectares) and Tumakuru (0.88 lakh hectares), which accounted for 43% of the total area of the State. Seasonwise estimates of area are given in Table-15.

Table – 15**Seasonwise 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	508068	508774	-0.1
Summer	76444	80133	-4.6
Total	584512	588907	-0.7

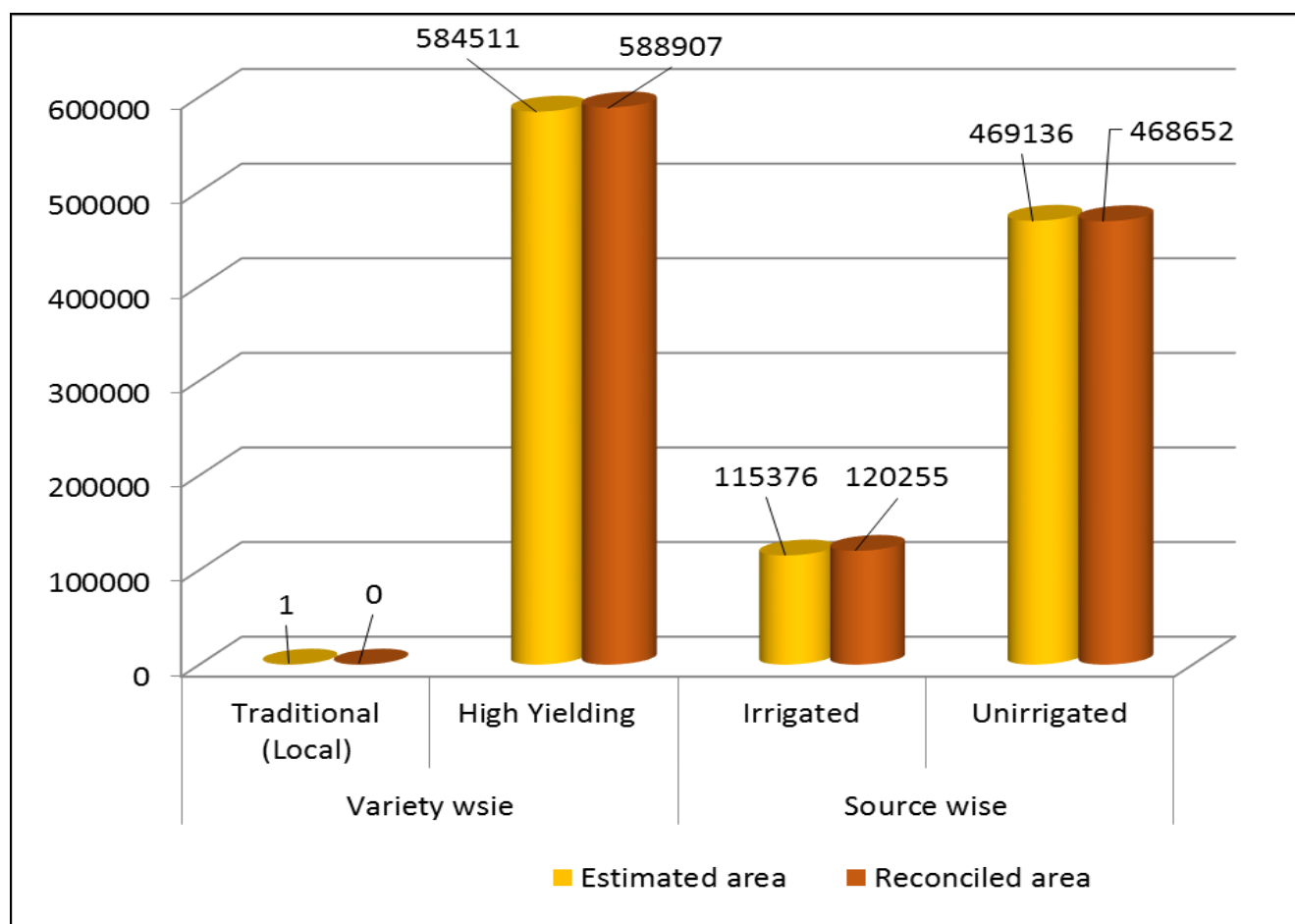
The estimated area under ratio method was lower side to the extent of 0.7% when compared with Reconciliation area. Varietywise and irrigated/un irrigated details are given in Table-16.

Table – 16**Season and Varietywise 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	1	0	1	0	0	0	0.0
	Total	1	0	1	0	0	0	0.0
High Yielding	Irrigated	38998	76378	115376	40241	80014	120255	-4.1
	Unirrigated	469069	66	469135	468533	119	468652	0.1
	Total	508067	76444	584511	508774	80133	588907	-0.7
Total	Irrigated	38998	76378	115376	40241	80014	120255	-4.1
	Unirrigated	469070	66	469136	468533	119	468652	0.1
	Total	508068	76444	584512	508774	80133	588907	-0.7

Varietywise and Sourcewise Estimated Area (Ratio Method) and Reconciled area under Groundnut Crop (in hectares)



It is seen from the above table that, the estimated area under irrigation as per ratio method was on lower side to the extent of 4.1% and under unirrigated it was higher side to the extent of 0.1%. The total area under high yielding variety was on lower side to the extent of 0.7% when compared with reconciled area. Districtwise details are given in Appendix – 2.6

2.10 Sunflower

Sunflower is another important oilseed crop grown in about 1.2 lakh hectares in the State. Gadaga had the largest area (0.21 lakh hectares) followed by Bagalkote (0.20 lakh hectares), Belagavi (0.18 lakh hectares) and Koppal (0.12 lakh hectares). Total area in these four districts alone contributes 58% of sunflower area of the State.

Seasonwise estimated area under ratio method is given in Table – 17

Table – 17**Seasonwise 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	74107	76541	-3.2
Rabi	42280	43252	-2.2
Summer	2907	3540	-17.9
Total	119294	123333	-3.3

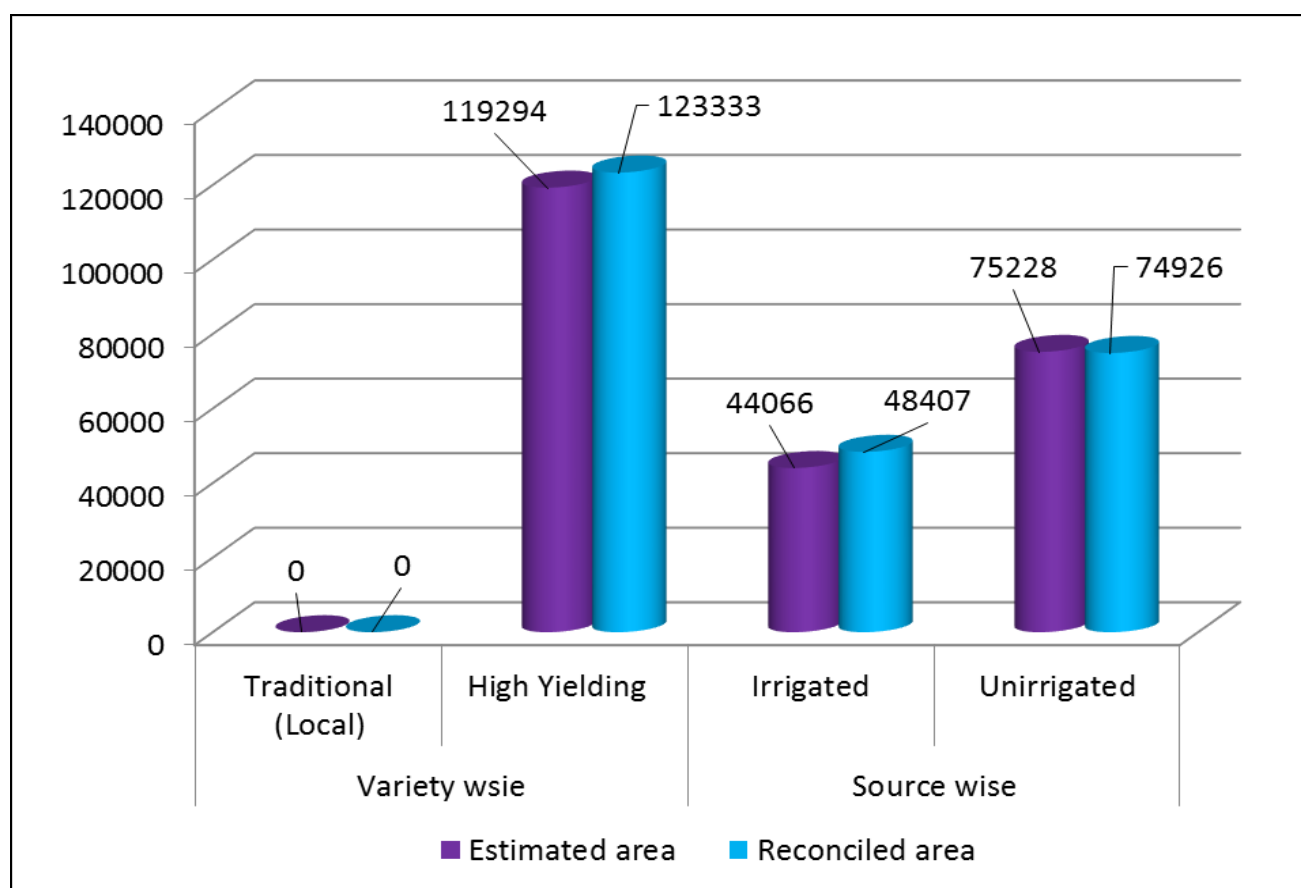
It is seen from the above table that, the area estimated under ratio method was lower side when compared with reconciled area. Comparative information showing the season wise and variety wise estimates of area irrigated and high yielding variety by ratio method and reconciled area are given in Table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

Table – 18**Season and Varietywise 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	16603	24556	2907	44066	48407	-9.0
	Unirrigated	57504	17724	0	75228	74926	0.4
	Total	74107	42280	2907	119294	123333	-3.3
Total	Irrigated	16603	24556	2907	44066	48407	-9.0
	Unirrigated	57504	17724	0	75228	74926	0.4
	Total	74107	42280	2907	119294	123333	-3.3

Varietywise and Sourcewise 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 when compared to the reconciled area. The percentage variation of area estimated under ratio method over reconciled area was -3.3. The entire area under the crop was high yield variety. Districtwise details are given in Appendix –2.7.

2.11 Sesamum

Sesamum crop is grown in 0.22 lakh hectares, mainly in rain fed areas during kharif season only. It is largely grown in Koppala 0.07 lakh hectares, Kulburgi 0.04 lakh hectares and Mysuru 0.02 lakh hectares. Percentage variation of estimated area under ratio method over reconciled area was lower to the extent of 6.6%. The entire area under the crop was grown as high yield variety. Estimated area under Sesamum, is given in Table-19. Districtwise area details are given in Appendix -2.8

2.12 Safflower

Safflower is an important oilseed crop grown about 0.27 lakh hectares of area in Rabi season during 2020-21. It is largely grown in Bidar district (0.08 lakh hectares) followed by Dharwad (0.07 lakh hectares) and Gadaga (0.04 lakh hectares). Estimated area by ratio method was lower to the extent of 8.1% 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. Districtwise area details are given in Appendix - 2.8.

2.13 Linseed

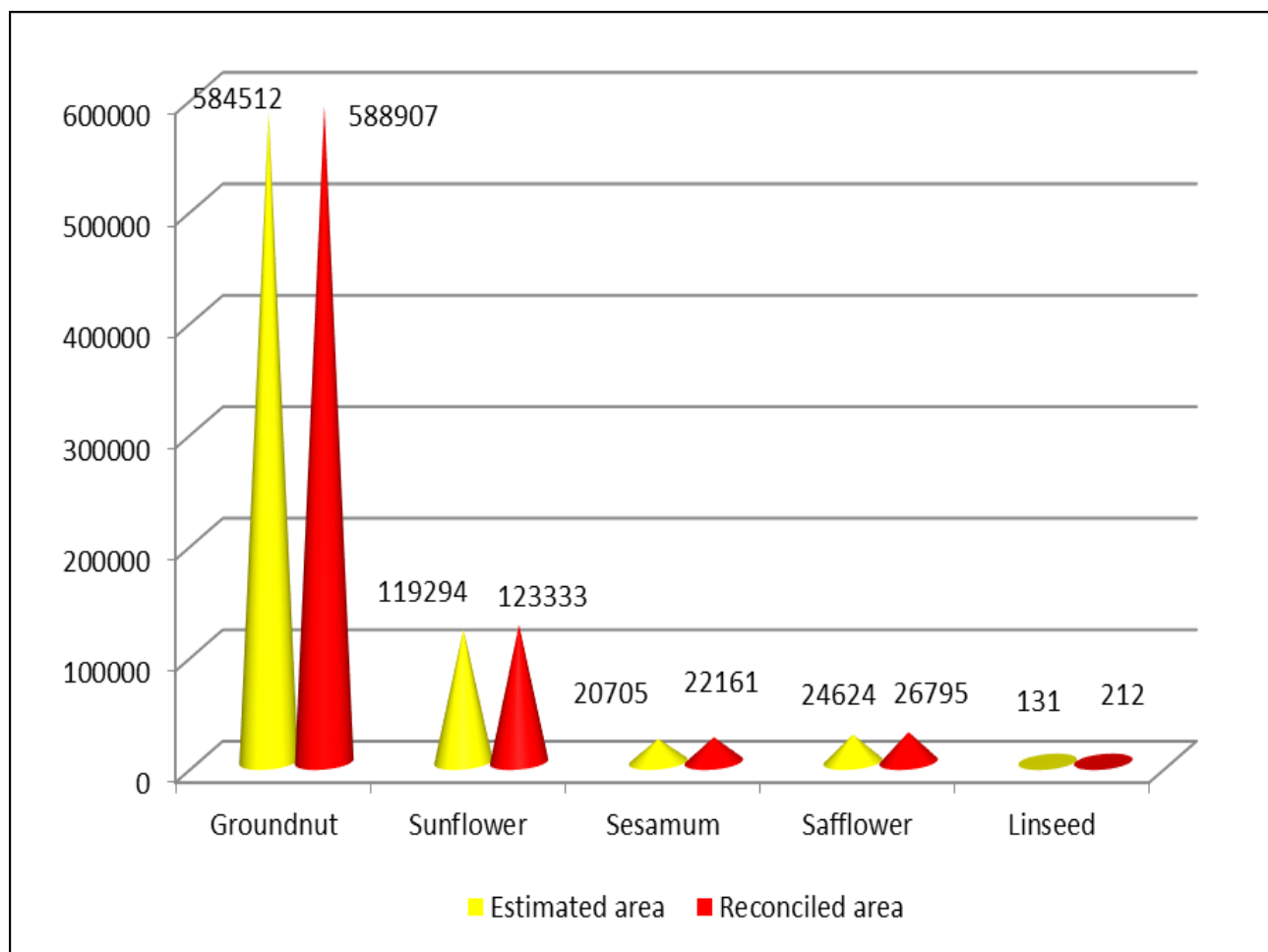
Linseed is another oilseed crop grown in the State during Rabi season only. Out of 212 hectares of area about 38% of area was sown in Belagavi and Chitradurga districts. Estimated area by ratio method was lower to the extent of 38.2% when compared with reconciled area. Estimated area under Linseed is 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	584512	588907	-0.7
Sunflower	119294	123333	-3.3
Sesamum	20705	22161	-6.6
Safflower	24624	26795	-8.1
Linseed	131	212	-38.2

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



2.14 Cotton

Cotton is an important cash crop largely grown in Dharwad, Gadaga, Yadgir and Kulburgi districts. 0.17 lakh hectares of area was covered under the crop during 2020-21. The variation of estimated area over reconciled area as per ratio method was -8.4%. Variety wise and irrigated/unirrigated details are given in Table-20. The district wise area details are given in Appendix-2.9.

Table - 20**Varietywise 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	149	166	-10.2
	Unirrigated	3407	4323	-21.2
	Total	3556	4489	-20.8
High Yielding	Irrigated	3129	3758	-16.7
	Unirrigated	8592	8426	2.0
	Total	11721	12184	-3.8
Total	Irrigated	3278	3924	-16.5
	Unirrigated	11999	12749	-5.9
	Total	15277	16673	-8.4

2.15 Sugarcane

Sugarcane is an irrigated crop, which is grown in all the seasons. Out of 2.6 lakh hectares of area under the crop, 52% of cropped area is found in Belagavi district alone followed by, Bagalakote (22%), Vijayapura (10%) and Mandya (3%) districts. Estimated area by Ratio method was lower to the extent of 1.5% 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	189973	189888	0.0
	Unirrigated	0	8	-100.0
	Total	189973	189896	0.0
High Yielding	Irrigated	68393	72369	-5.5
	Unirrigated	191	230	-17.0
	Total	68584	72599	-5.5
Total	Irrigated	258366	262257	-1.5
	Unirrigated	191	238	-19.7
	Total	258557	262495	-1.5

Area estimated under Ratio method and reconciled area under Cotton and Sugarcane crops is given in Table-22

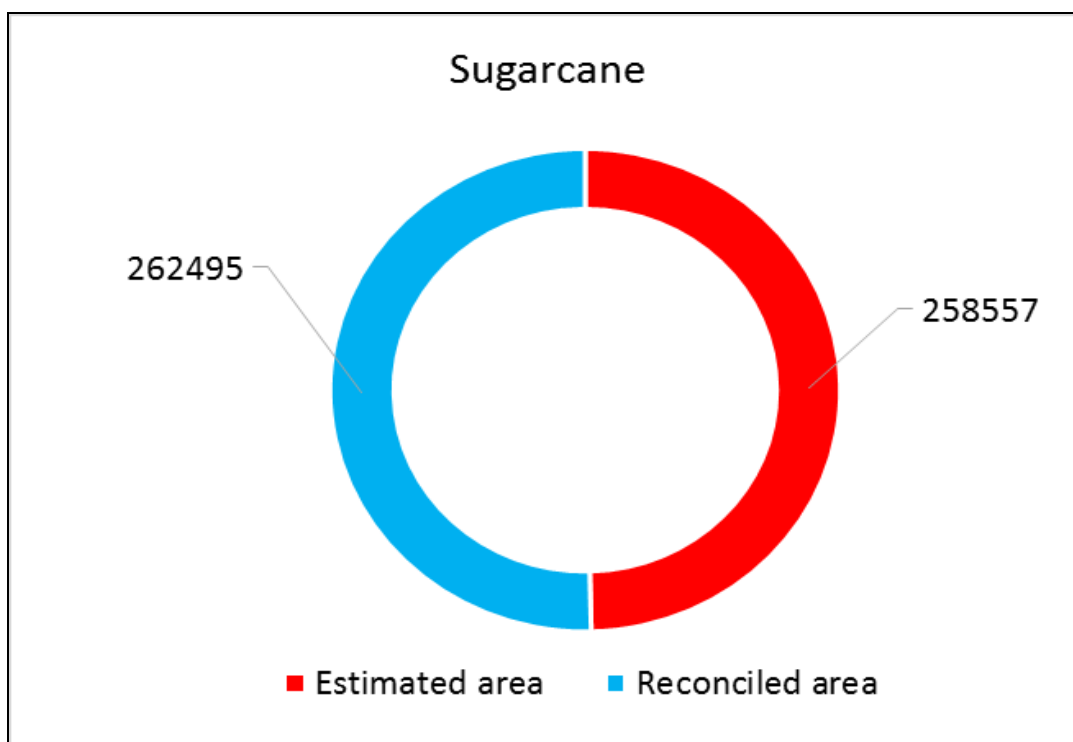
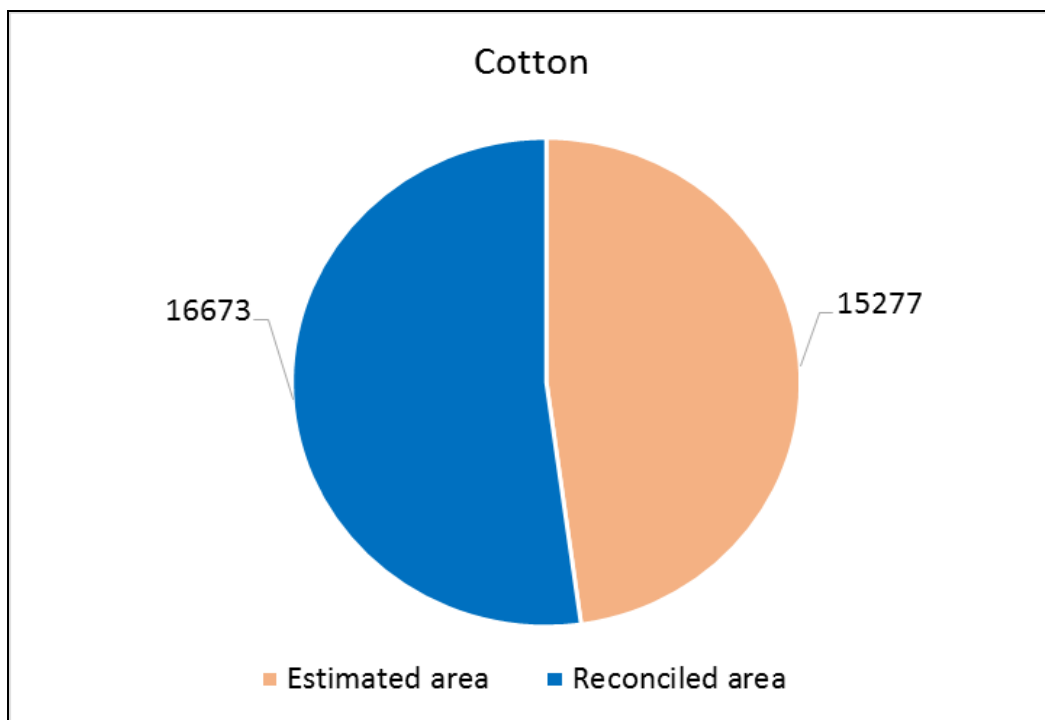
Table-22**Estimated and Reconciled area under Cotton and Sugarcane crops**

Area in hectares

Crop	Estimated area as per Ratio Method	Reconciled area (as per Crop survey)	% variation over Reconciled area
1	2	3	4
Cotton	15277	16673	-8.4
Sugarcane	258557	262495	-1.5

Graphical representation of estimated area under ratio method and reconciled area under cotton and Sugarcane crops are presented below.

Estimated (Ratio Method) and Reconciled Area under Cotton and Sugarcane Crops (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 5712 villages of the State during 2020-21, which belong to the fifth set of villages selected under the scheme for the years 2016-17 to 2020-21.
- 3.3 During the year the crop abstracts were received from 100% of villages in respect of Kharif, 99% of villages in Rabi and 95% of villages in Summer season.
- 3.4 During the year 2020-21 percentage of supervision by Statistics, Agriculture and Horticulture/Revenue Departments personnel was 97.47%, 98.22% and 97.58% respectively.
- 3.5 The estimated area under ratio method was high in respect of Wheat crop and was low in case of Paddy, Jowar, Ragi, Bajra, Maize, Tur, Groundnut, Sesamum, Sunflower, Bengal gram, Cotton, Sugarcane, Safflower and Linseed crops when compared to the reconciled area.

APPENDIX - 1
Districtwise & Seasonwise receipt position of village crop abstracts during 2020-21

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	118	118	100	118	100	118	100
2	Bengaluru Rural	211	211	100	211	100	211	100
3	Bengaluru Urban	105	105	100	100	95	100	95
4	Belagavi	229	228	100	227	99	187	82
5	Ballari	122	122	100	122	100	122	100
6	Bidar	124	124	100	124	100	124	100
7	Chamarajanagara	91	91	100	91	100	13	14
8	Chikkaballapura	300	300	100	300	100	300	100
9	Chikamagaluru	220	218	99	219	100	220	100
10	Chitradurga	207	207	100	205	99	207	100
11	Dakshina Kannada	69	69	100	69	100	69	100
12	Davanagere	164	164	100	163	99	108	66
13	Dharwad	76	76	100	75	99	76	100
14	Gadaga	64	64	100	64	100	64	100
15	Hasana	509	509	100	508	100	507	100
16	Haveri	133	133	100	133	100	133	100
17	Kalaburgi	181	180	99	181	100	177	98
18	Kodagu	54	54	100	0	0	54	100
19	Kolara	351	351	100	351	100	333	95
20	Koppala	124	124	100	124	100	116	94
21	Mandya	295	295	100	294	100	295	100
22	Mysuru	257	257	100	257	100	257	100
23	Raichuru	175	173	99	175	100	173	99
24	Ramanagara	155	155	100	155	100	155	100
25	Shivamogga	311	311	100	311	100	306	98
26	Tumakuru	537	537	100	537	100	537	100
27	Udupi	53	53	100	53	100	53	100
28	Uttara Kannada	250	250	100	250	100	250	100
29	Vijayapura	127	127	100	127	100	78	61
30	Yadagiri	100	100	100	100	100	81	81
	STATE TOTAL	5712	5706	100	5644	99	5424	95

Note: Crop Abstracts not received due to

* 6 Villages - Mapping issue/Sub merged due to flooding/Technical issues/Village under wildlife area.

** 68 Villages - Mapping issue/Sub merged due to flooding/Technical issues/zero extent/Village under wildlife area.

*** 288 Villages - Mapping issue/Zero Extent/Forest/Wild area.

APPENDIX - 2.1
Districtwise and Seasonwise Estimated Area under Ratio method and
Reconciled Area for the year 2020-21

Crop: Paddy

Area: in hectares

Sl. No.	Districts	Kharif		Rabi		Summer		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	64	58	37	44	0	2	101	104
2	Ballari	110370	109291	2726	2840	68184	69971	181280	182102
3	Belgavi	59727	61531	288	283	27	156	60042	61970
4	Bengaluru Rural	133	207	4	7	34	42	171	256
5	Bengaluru Urban	279	242	1	1	30	7	310	250
6	Bidar	1026	989	263	260	0	0	1289	1249
7	Chamarajanagara	10683	10931	264	339	1281	1226	12228	12496
8	Chikkaballapur	1952	2100	971	918	555	692	3478	3710
9	Chikkamagalur	12637	13834	0	0	694	494	13331	14328
10	Chitradurga	1340	1252	224	282	517	287	2081	1821
11	Dakshina Kannada	7434	7039	1101	1233	0	18	8535	8290
12	Davanagere	0	68111	388	488	58786	60027	59174	128626
13	Dharwad	11145	12540	46	93	0	0	11191	12633
14	Gadag	3055	3356	17	30	2513	2680	5585	6066
15	Hassan	40906	39758	0	17	866	620	41772	40395
16	Haveri	32159	34404	251	365	9193	9496	41603	44265
17	Kalaburagi	8732	8690	5557	5234	1595	1726	15884	15650
18	Kodagu	12372	21764	0	0	0	6	12372	21770
19	Kolar	3756	3907	621	523	570	841	4947	5271
20	Koppal	56719	61912	1369	1247	40570	40845	98658	104004
21	Mandya	60267	58406	376	304	15274	15247	75917	73957
22	Mysuru	76551	78018	0	0	10751	10851	87302	88869
23	Raichur	190437	191147	10166	11365	147971	150769	348574	353281
24	Ramnagara	3775	3507	36	32	61	79	3872	3618
25	Shivamogga	77333	77556	122	196	12170	12264	89625	90016
26	Tumakuru	3656	3457	0	0	987	624	4643	4081
27	Udupi	37651	36005	5062	4951	42	45	42755	41001
28	Uttara Kannada	29864	46484	896	1036	471	443	31231	47963
29	Vijayapura	132	141	60	63	0	0	192	204
30	Yadgir	100757	102157	2258	2001	41681	41886	144696	146044
	STATE TOTAL	954912	1058794	33104	34152	414823	421344	1402839	1514290

RCA: Reconciled Crop Area

APPENDIX - 2.2
Districtwise and Seasonwise estimated area under Ratio method and
Reconciled area for the year 2020-21

Crop: Jowar

Sl. No.	Districts	Kharif		Rabi		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	1448	1623	62055	61235	63503	62858
2	Ballari	11336	11494	10765	13312	22101	24806
3	Belgavi	10559	11022	139722	138974	150281	149996
4	Bengaluru Rural	3000	3907	188	308	3188	4215
5	Bengaluru Urban	1348	1114	0	11	1348	1125
6	Bidar	7569	7775	30644	31769	38213	39544
7	Chamarajanagara	10328	10287	45	56	10373	10343
8	Chikkaballapur	4570	4822	170	258	4740	5080
9	Chikkamagalur	14	50	1749	2836	1763	2886
10	Chitradurga	4875	4599	4143	4154	9018	8753
11	Dakshina Kannada	0	0	0	0	0	0
12	Davanagere	888	815	2465	3145	3353	3960
13	Dharwad	593	610	42881	43447	43474	44057
14	Gadag	803	1110	51841	55549	52644	56659
15	Hassan	4414	5323	136	158	4550	5481
16	Haveri	263	334	76793	76709	77056	77043
17	Kalaburagi	749	772	81289	78507	82038	79279
18	Kodagu	1	0	0	0	1	0
19	Kolar	2351	2165	188	274	2539	2439
20	Koppal	2114	2208	23018	26275	25132	28483
21	Mandya	0	0	6	9	6	9
22	Mysuru	4242	4953	168	116	4410	5069
23	Raichur	3134	3210	42148	49046	45282	52256
24	Ramnagara	1657	1572	235	341	1892	1913
25	Shivamogga	25	66	367	383	392	449
26	Tumakuru	10372	9602	435	455	10807	10057
27	Udupi	0	3	0	0	0	3
28	Uttara Kannada	23	32	56	53	79	85
29	Vijayapura	0	19	51345	51473	51345	51492
30	Yadgir	220	193	21115	21139	21335	21332
	STATE TOTAL	86896	89680	643967	659992	730863	749672

RCA: Reconciled Crop Area

APPENDIX - 2.3
Districtwise and Seasonwise Estimated area under Ratio method and
Reconciled area for the year 2020-21

Crop: Ragi

Area: in hectares

Sl. No.	Districts	Kharif		Rabi		Summer		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	52	60	64	73	0	0	116	133
2	Ballari	11591	11052	13218	12025	1361	974	26170	24051
3	Belgavi	1687	1604	119	122	0	14	1806	1740
4	Bengaluru Rural	55791	56282	524	790	24	64	56339	57136
5	Bengaluru Urban	18611	17615	146	161	0	3	18757	17779
6	Bidar	94	76	0	22	0	0	94	98
7	Chamarajanagara	8727	8911	36	38	128	238	8891	9187
8	Chikkaballapur	40996	42754	786	872	295	394	42077	44020
9	Chikkamagalur	49975	50990	585	841	0	0	50560	51831
10	Chitradurga	39302	38332	7922	8186	1272	3376	48496	49894
11	Dakshina Kannada	0	0	0	0	0	0	0	0
12	Davanagere	5498	5730	5319	5153	1493	1503	12310	12386
13	Dharwad	25	52	27	35	0	0	52	87
14	Gadag	38	50	8	26	0	0	46	76
15	Hassan	72510	73765	4015	4590	115	108	76640	78463
16	Haveri	157	197	206	261	27	22	390	480
17	Kalaburagi	48	61	62	79	0	39	110	179
18	Kodagu	24	18	0	0	0	0	24	18
19	Kolar	66619	66602	0	0	116	136	66735	66738
20	Koppal	38	51	24	27	0	6	62	84
21	Mandya	56229	56793	9939	11984	3969	4138	70137	72915
22	Mysuru	54253	52971	22514	24113	652	460	77419	77544
23	Raichur	62	58	35	38	0	0	97	96
24	Ramnagara	68152	68388	479	472	599	561	69230	69421
25	Shivamogga	276	447	0	15	59	100	335	562
26	Tumakuru	166413	165119	77	80	210	395	166700	165594
27	Udupi	0	1	0	0	0	0	0	1
28	Uttara Kannada	0	3	8	11	0	0	8	14
29	Vijayapura	32	58	117	122	0	11	149	191
30	Yadgir	8	8	0	5	0	3	8	16
	STATE TOTAL	717208	718048	66230	70141	10320	12545	793758	800734

RCA: Reconciled Crop Area

APPENDIX - 2.4
Districtwise and Seasonwise estimated area under Ratio method and
Reconciled area for the year 2020-21

Crop: Maize

Area: in hectares

Sl. No.	Districts	Kharif		Rabi		Summer		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	64127	62780	13886	14400	3056	3736	81069	80916
2	Ballari	189758	191186	2200	2642	481	667	192439	194495
3	Belgavi	162457	164785	55217	52886	12697	13067	230371	230738
4	Bengaluru Rural	8476	8353	232	359	93	91	8801	8803
5	Bengaluru Urban	848	1063	25	19	1	4	874	1086
6	Bidar	984	1146	380	544	2	9	1366	1699
7	Chamarajanagara	31613	34955	2965	2956	731	911	35309	38822
8	Chikkaballapur	53371	54735	1432	1152	327	393	55130	56280
9	Chikkamagalur	18650	21266	384	431	0	0	19034	21697
10	Chitradurga	107512	112415	3544	3589	1115	949	112171	116953
11	Dakshina Kannada	0	1	0	0	0	0	0	1
12	Davanagere	127592	136731	1739	1694	2123	3720	131454	142145
13	Dharwad	54386	56404	8210	8195	739	809	63335	65408
14	Gadag	75075	81901	9743	10093	153	191	84971	92185
15	Hassan	119017	121705	2555	2911	416	344	121988	124960
16	Haveri	203718	204341	18622	18205	4606	5071	226946	227617
17	Kalaburagi	2760	2727	480	622	268	311	3508	3660
18	Kodagu	350	371	0	46	0	0	350	417
19	Kolar	1685	1741	721	858	311	379	2717	2978
20	Koppal	87406	89674	4301	5207	156	398	91863	95279
21	Mandya	4502	4666	736	869	638	824	5876	6359
22	Mysuru	42473	43564	5951	6285	603	766	49027	50615
23	Raichur	713	751	710	856	0	6	1423	1613
24	Ramnagara	3231	3252	826	986	524	518	4581	4756
25	Shivamogga	57534	57671	1746	2025	6053	7182	65333	66878
26	Tumakuru	37550	33791	253	336	127	93	37930	34220
27	Udupi	0	2	50	62	0	0	50	64
28	Uttara Kannada	7794	8519	1332	1307	213	695	9339	10521
29	Vijayapura	62475	63110	9607	9638	10407	7954	82489	80702
30	Yadgir	81	78	250	246	25	59	356	383
	STATE TOTAL	1526138	1563684	148097	149419	45865	49147	1720100	1762250

RCA: Reconciled Crop Area

APPENDIX - 2.5
Districtwise and Cropwise estimated area under Ratio method and
Reconciled area for the year 2020-21

Area: in hectares

Sl. No.	Districts	Bajra		Wheat		Tur		Bengalgram	
		Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	37421	38143	31546	31746	52441	53033	43806	47244
2	Ballari	15133	15698	117	103	14044	14185	12754	14106
3	Belgavi	10515	11937	69554	64990	13319	14747	114368	113314
4	Bengaluru Rural	0	19	0	0	947	1071	142	139
5	Bengaluru Urban	43	36	0	0	775	695	0	1
6	Bidar	432	604	7710	8215	141772	142503	71059	68910
7	Chamarajanagara	155	151	20	25	375	375	1803	2396
8	Chikkaballapur	164	175	0	2	3107	3548	169	331
9	Chikkamagalur	36	42	0	0	197	273	5332	6862
10	Chitradurga	1159	1928	403	338	4893	4982	36298	37056
11	Dakshina Kannada	0	0	0	0	0	0	0	0
12	Davanagere	543	442	100	180	431	520	5372	6379
13	Dharwad	0	42	19690	22763	138	290	100167	102766
14	Gadag	1546	2567	14559	16594	561	575	120453	124927
15	Hassan	0	14	0	0	633	745	1202	1253
16	Haveri	23	37	420	377	132	135	3428	3686
17	Kalaburagi	1915	1842	14267	12937	582364	593700	41727	35802
18	Kodagu	0	4	0	0	3	2	0	0
19	Kolar	0	134	0	0	1221	1258	3	11
20	Koppal	72679	74684	1090	1184	34046	34588	62899	63374
21	Mandya	7	10	0	1	667	617	0	4
22	Mysuru	4	11	0	0	3241	3355	251	286
23	Raichur	35056	34391	103	127	156309	156218	33953	35363
24	Ramnagara	28	29	0	4	1633	1780	0	13
25	Shivamogga	0	2	0	1	48	68	0	5
26	Tumakuru	221	149	0	0	14672	14344	551	552
27	Udupi	0	1	0	0	0	1	0	0
28	Uttara Kannada	0	3	0	0	0	12	0	14
29	Vijayapura	28404	28119	51387	46350	521656	524850	58743	58145
30	Yadgir	4774	4623	102	130	93168	95652	784	632
	STATE TOTAL	210258	215837	211068	206067	1642793	1664122	715264	723571

RCA: Reconciled Crop Area

APPENDIX - 2.6

Districtwise and Seasonwise estimated area under Ratio method and Reconciled area for the year 2020-21

Crop: Groundnut

Area: in hectares

Sl. No.	Districts	Kharif		Summer		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	2632	2803	24033	24200	26665	27003
2	Ballari	53697	53402	8607	9712	62304	63114
3	Belgavi	23966	24731	2830	2607	26796	27338
4	Bengaluru Rural	196	227	0	4	196	231
5	Bengaluru Urban	48	40	0	0	48	40
6	Bidar	37	84	0	2	37	86
7	Chamarajanagara	3217	3425	0	14	3217	3439
8	Chikkaballapur	35587	35259	201	300	35788	35559
9	Chikkamagalur	635	716	0	0	635	716
10	Chitradurga	161544	159881	3749	3967	165293	163848
11	Dakshina Kannada	0	5	0	0	0	5
12	Davanagere	9587	10670	485	599	10072	11269
13	Dharwad	30077	29292	373	321	30450	29613
14	Gadag	38574	39650	6144	7561	44718	47211
15	Hassan	0	173	120	198	120	371
16	Haveri	24765	24598	6587	6372	31352	30970
17	Kalaburagi	388	508	195	201	583	709
18	Kodagu	1	4	0	0	1	4
19	Kolar	11948	11600	31	49	11979	11649
20	Koppal	11112	11244	9151	9238	20263	20482
21	Mandya	321	442	0	32	321	474
22	Mysuru	1415	1518	0	8	1415	1526
23	Raichur	482	585	1008	1342	1490	1927
24	Ramnagara	1019	970	0	4	1019	974
25	Shivamogga	91	97	166	123	257	220
26	Tumakuru	87633	86872	1391	1054	89024	87926
27	Udupi	0	0	0	0	0	0
28	Uttara Kannada	0	31	31	42	31	73
29	Vijayapura	8491	9358	10339	11073	18830	20431
30	Yadgir	605	589	1003	1110	1608	1699
	STATE TOTAL	508068	508774	76444	80133	584512	588907

RCA: Reconciled Crop Area

APPENDIX - 2.7

Districtwise and Seasonwise estimated area under Ratio method and Reconciled area for the year 2020-21

Crop: Sunflower

Area: in hectares

Sl. No.	Districts	Kharif		Rabi		Summer		Total	
		Ratio	RCA	Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	17400	18147	1207	1205	1218	1331	19825	20683
2	Ballari	4781	4565	1427	1747	54	42	6262	6354
3	Belgavi	7737	8095	11518	9295	42	172	19297	17562
4	Bengaluru Rural	0	5	0	1	0	3	0	9
5	Bengaluru Urban	2	3	0	0	0	0	2	3
6	Bidar	50	68	20	37	0	0	70	105
7	Chamarajanagara	3963	4127	987	1082	127	277	5077	5486
8	Chikkaballapur	0	4	84	101	30	66	114	171
9	Chikkamagalur	55	80	0	0	0	0	55	80
10	Chitradurga	1291	1217	299	356	0	92	1590	1665
11	Dakshina Kannada	0	0	0	0	0	0	0	0
12	Davanagere	213	255	319	442	133	98	665	795
13	Dharwad	34	49	4094	4443	0	2	4128	4494
14	Gadag	8980	9263	9998	11683	87	70	19065	21016
15	Hassan	0	65	0	0	0	0	0	65
16	Haveri	70	100	8197	8521	611	717	8878	9338
17	Kalaburagi	4658	5053	65	72	0	13	4723	5138
18	Kodagu	0	0	0	0	0	0	0	0
19	Kolar	0	2	0	9	0	2	0	13
20	Koppal	9952	9946	2206	2160	154	191	12312	12297
21	Mandya	0	7	1	2	0	9	1	18
22	Mysuru	440	566	0	0	0	1	440	567
23	Raichur	7603	7528	214	247	0	1	7817	7776
24	Ramnagara	5	7	0	0	0	0	5	7
25	Shivamogga	0	1	1098	1395	245	126	1343	1522
26	Tumakuru	0	13	0	0	0	0	0	13
27	Udupi	0	0	0	0	0	0	0	0
28	Uttara Kannada	0	0	7	10	0	3	7	13
29	Vijayapura	6328	6787	520	419	206	262	7054	7468
30	Yadgir	545	588	19	25	0	62	564	675
	STATE TOTAL	74107	76541	42280	43252	2907	3540	119294	123333

RCA: Reconciled Crop Area

APPENDIX - 2.8
Districtwise and Cropwise Estimated area under Ratio method and
Reconciled area for the year 2020-21

Sl. No.	Districts	Sesamum		Safflower		Linseed	
		Ratio	RCA	Ratio	RCA	Ratio	RCA
1	Bagalkote	790	877	281	408	12	12
2	Ballari	184	202	283	182	0	2
3	Belgavi	141	146	1165	1133	40	46
4	Bengaluru Rural	0	2	0	5	0	3
5	Bengaluru Urban	3	3	0	0	0	0
6	Bidar	791	934	5452	7515	0	3
7	Chamarajanagara	230	216	0	3	0	2
8	Chikkaballapur	0	4	0	0	15	12
9	Chikkamagalur	1299	1598	0	1	0	0
10	Chitradurga	53	71	1165	1070	26	34
11	Dakshina Kannada	0	0	0	0	0	0
12	Davanagere	8	13	0	16	0	0
13	Dharwad	4	10	5310	6550	0	5
14	Gadag	79	117	4375	4149	0	1
15	Hassan	352	287	0	0	0	0
16	Haveri	2	5	459	561	0	9
17	Kalaburagi	4069	4386	3252	2442	20	24
18	Kodagu	0	0	0	0	0	0
19	Kolar	0	9	0	2	0	1
20	Koppal	6869	7261	1418	1352	0	29
21	Mandya	1757	1570	0	2	0	0
22	Mysuru	2478	2277	0	0	0	0
23	Raichur	1407	1899	123	251	0	0
24	Ramnagara	15	25	0	0	0	1
25	Shivamogga	0	3	0	0	0	1
26	Tumakuru	51	68	0	0	0	0
27	Udupi	0	0	0	0	0	0
28	Uttara Kannada	0	0	0	0	0	2
29	Vijayapura	87	148	1182	1016	18	25
30	Yadgir	36	30	159	137	0	0
	STATE TOTAL	20705	22161	24624	26795	131	212

RCA: Reconciled Crop Area

APPENDIX - 2.9
Districtwise and Cropwise estimated area under Ratio method
and Reconciled area for the year 2020-21

Area: in hectares

Sl. No.	Districts	Cotton		Sugarcane	
		Ratio	RCA	Ratio	RCA
1	Bagalkote	255	243	57469	58078
2	Ballari	1108	1118	3965	4641
3	Belgavi	863	1032	136962	137635
4	Bengaluru Rural	0	0	0	12
5	Bengaluru Urban	0	0	0	2
6	Bidar	10	11	5111	5919
7	Chamarajanagara	207	279	824	863
8	Chikkaballapur	23	39	14	12
9	Chikkamagalur	0	3	0	4
10	Chitradurga	214	196	11	21
11	Dakshina Kannada	0	0	0	0
12	Davanagere	54	49	300	446
13	Dharwad	3642	4191	7964	8737
14	Gadag	2984	3705	1924	1709
15	Hassan	0	6	389	424
16	Haveri	0	0	2423	3082
17	Kalaburagi	758	1237	4911	4782
18	Kodagu	0	0	0	0
19	Kolar	0	6	0	2
20	Koppal	259	256	451	649
21	Mandya	0	0	2980	2873
22	Mysuru	0	0	1754	2088
23	Raichur	1322	1183	471	478
24	Ramnagara	0	0	38	29
25	Shivamogga	0	2	10	36
26	Tumakuru	0	0	21	20
27	Udupi	0	0	15	19
28	Uttara Kannada	0	0	3065	3289
29	Vijayapura	722	791	27394	26546
30	Yadgir	2856	2326	91	99
	STATE TOTAL	15277	16673	258557	262495

RCA: Reconciled Crop Area

APPENDIX - 3

Cropwise percentage variation of estimates of area by ratio method over reconciled area for the year 2019-20 & 2020-21

Sl. No.	Crop	% variation over Reconciled area	
		2019-20	2020-21
I	Kharif		
1	Paddy	0.7	-9.8
2	Jowar	1.9	-3.1
3	Ragi	-1.9	-0.1
4	Bajra	-8.7	-2.6
5	Maize	0.7	-2.4
6	Tur	-0.2	-1.3
7	Groundnut	1.4	-0.1
8	Sesamum	-13.9	-6.6
9	Sunflower	1.6	-3.2
II	Rabi		
1	Paddy	-2.7	-3.1
2	Jowar	-1.6	-2.4
3	Ragi	-3.9	-5.6
4	Wheat	-12.4	2.4
5	Maize	-9.1	-0.9
6	Bengal gram	2.5	-1.1
7	Cotton	-6.8	-8.4
8	Sugarcane	-17.0	-1.5
9	Sunflower	12.0	-2.2
10	Safflower	-28.2	-8.1
11	Linseed	-55.4	-38.2
III	Summer		
1	Paddy	-0.2	-1.5
2	Maize	-2.5	-6.7
3	Ragi	-2.3	-17.7
4	Groundnut (Rabi & Summer)	-1.2	-4.6
5	Sunflower	-6.1	-17.9