CASTOR SEED CROP 2021-22 FINAL ESTIMATE

Conduted by Indian Agribusiness Systems Ltd. on behalf of The Solvent Extractors' Association of India

EXECUTIVE SUMMARY

- The Solvent Extractors' Association of India is an all India apex body of solvent extraction industry and presently, almost all-working solvent extraction units are its members. The Association continuously gives feedback to the members about the developments taking place in the country and world.
- As one of its activities, SEA conducts Castor crop survey for crop estimation in major growing states like Gujarat, Rajasthan, Andhra Pradesh and Telangana every year. This year, SEA commissioned Indian Agribusiness Systems Ltd, known as "Agriwatch" in the industry, to conduct a crop estimation study in above states through field surveys and remote sense data analysis.
- Agriwatch is one of the premier organisations, specialised in agri-commodity research and consulting with requisite experience, expertise and infrastructure to conduct such studies.
- Agriwatch has been doing many such crop surveys for different commodities for other corporate and Government departments.
- This report is based on four rounds of field survey and remote data analysis. Acreage estimates are kept intact and taken from state government
- Agriwatch has undertaken 4th round of survey during May to re-validate the yield expectation of farmers. The final estimates has slightly changed after 4th round of survey

GUJARAT

- Total area under castor in Gujarat for the year 2021-22 is taken to be 6,52,300 hectares as per the government's estimates, against last year's estimate of 6,38,000 hectares, which has increased by about 2.2% as compared to the previous year.
- Agriwatch field survey suggests area under castor to be 6,88,900 hectares this year, up by 8% as compared to last year's government's estimate.

- Using remote sensing technique, the castor acreage for the state is estimated at 6,53,520 hectares for the year 2021-22.
- The major reasons cited for increase in acreage this year is late rainfall and crop rotation.
- After 4th round of field survey, the estimated average yield for year 2021-22 is revised downward to 2220 Kg/Ha against the 1st estimate of 2,371 Kg/Ha, a decline of 6%.
- Major deviation (decline) from previous estimated yield is reported in Surendernagar, Ahmedabad and Gandhinagar. It is mainly due to delayed sowing and higher temperature during March-April
- Accordingly, final expected seed production in the state is revised down to 14.55 lakh tons for 2021-22 as compared to 15.47 lakh tons in the 1st estimate of 2021-22 and last year's production of 14.94 lakh tons.

District wise Area, Yield and Production of Castor Seeds in Gujarat for 2021-22

Districts	Castor Acreage ("000" Ha) #		Castor Yield Estimates (Kg/Hectare) \$			Production Estimates ("000" Tons)			Production ('000 Tons
	2020-21	2021-22	2021-22	2021-22	2021-21	2021-	2021-	2021-	
			(1st	(2nd	(3rd &	22	22	22	2021-22
			Est)	Est)	Final)	(1st	(2nd	(3rd &	
						Est)	Est)	Final Est)	
Ahmedabad	47.6	50.9	2362	2244	1928	120	114	98	119
Aravalli	10.6	13.7	2299	2265	2265	31	31	31	26
Banaskantha	98.9	78.9	2655	2343	2480	209	185	196	239
Gandhinagar	24.8	16.6	2454	2380	2140	41	40	36	53
Kheda	12.2	12.8	2419	2400	2300	31	31	29	29
Kutch	126.4	132.9	2250	2184	2100	299	290	279	264
Mehsana	81.4	82.9	2341	2367	2410	194	196	200	222
Morbi	6.6	10.9	2203	2084	2094	24	23	23	14
Patan	99.6	95.9	2480	2519	2480	238	242	238	254
Sabarkantha	23.6	21.3	2431	2390	2225	52	51	47	65
Surendranagar	65	75	2205	2146	1915	165	161	144	117
Vadodara	23.9	37.3	2420	2390	2240	90	89	84	53
Others	17.4	23.2	2220	2220	2200	52	52	51	38
Total	638	652.3	2371	2305	2230	1547	1504	1455	1494

State Govt. Estimates, \$ Farmers Survey

RAJASTHAN

- Total acreage under castor in Rajasthan for the year 2021-22 is taken to be 1,20,000 hectares as per the government's estimates against last year's estimate of 1,25,700 hectares, which has declined by 4.53% compared to the previous season.
- However, Agriwatch's estimate for Rajasthan's 2021-22 area under castor stands at 1,28,120 hectares, an increase by about 2% when compared to last year's Govt. acreage estimate. Using remote sensing technique, the castor acreage for the state is estimated at 1,37,390 hectares for 2021-22.
- The major reasons cited for the increase in acreage of castor seed are less rainfall and crop rotation.
- After 4th round of survey during harvest end, Average yield estimate for year 2021-22 is revised downwardsto 1620 kg/Ha compared to our 1st estimate of 1690 Kg/Ha and 2nd estimate of 1646 Kg/Ha. Final yield is based on sample survey of farmers after 100% harvest is completed.
- The reasons are downward revision of expected yield are change in weather, hot winds and higher temperature.
- Accordingly, total expected seed production in the state is revised down to 1.94 lakh tons for 2021-22 against the 1st estimate of 2.03 lakh tons and last year's productions estimate of 2.24 lakh tons.

District wise Area, Yield and Production of Castor Seeds in Rajasthan for 2021-22

Districts	Acı	Castor Acreage ("000" Ha) #		Castor Yield Estimates (Kg/Hectare) \$			Production Estimates ("000" Tons)		
	2020-21	2021-22	2021-22	2021-22	2021-21	2021-	2021-	2021-	
			(1st	(2nd	(3rd &	22	22	22	2021-22
			Est)	Est)	Final)	(1st	(2nd	(3rd &	
						Est)	Est)	Final Est)	
Barmer	34.6	36.6	1680	1690	1720	61.5	61.9	63.0	69.2
Jalore	41	26.29	1640	1560	1420	43.1	41.0	37.3	64.8
Jodhpur	23.8	20.8	1990	1970	1990	41.4	41.0	41.4	48.8
Sirohi	17.6	26.08	1520	1415	1380	39.6	36.9	36.0	27.5
Others	8.7	10.23	1680	1645	1630	17.2	16.8	16.7	13.5
Total	125.7	120	1690	1646	1620	202.8	197.6	194.3	224

\$ - Primary Survey, # Acreage as per State Govt. Estimates

ANDHRA PRADESHA AND TELANGANA

- Total area under castor in Andhra Pradesh & Telangana for the year 2021-22 is taken to be 23,320 hectares as per the government's estimates against last year's estimate of 28,830 hectares, which has declined by 19% as compared to the previous year.
- However, Agriwatch's remote sensing estimate for AP/Telangana's 2021-22 area under castor seed crop stands at 27,040 hectares, a gain of about 16% compared to Government's estimated area for 2020-21.
- Average yield for year 2021-22 is estimated to be 1498 kg/ha compared to 1465 kg/ha in 2020-21, based on farmer's response on their yield estimates.
- Total production in these two state is estimated to be 0.35 lakh tons during the year 2021-22 as compared with 0.56 lakh tons in 2020-21. It is based on government acreage estimate for 2021-22 and yield estimate from farmer's survey.

District wise Area, Yield and Production of castor seeds in AP &Telangana for 2021-22

Districts	Aci	astor reage)" Ha) #	Castor Yield Estimates (Kg/Hectare) \$			Production Estimates ("000" Tons)			
	2020-21	2021-22	2021-22	2021-22	2021-21	2021-	2021-	2021-	
			(1st	(2nd	(3rd &	22	22	22	
			Est)	Est)	Final)	(1st Est)	(2nd Est)	(3rd & Final Est)	
Kurnool	3.2	4.32	1520	1520	1520	6.57	6.57	6.57	
AP-Others	1.51	2.8	1515	1515	1515	4.24	4.24	4.24	
Telangana	13.7	3.7	1420	1420	1420	5.25	5.25	5.25	
Total	28.83	23.32	1498	1498	1498	34.94	34.94	34.94	

\$- Primary Survey, #- Acreage as per State Govt. Estimates

ALL INDIA

- Total area under castor seed cultivation in India for the year 2021-22 is taken to be 8,11,000 hectares as per the government's estimates against 8,26,000 hectares in 2020-21, which has declined by 2% compared to the previous year.
- After downward revision of Gujarat and Rajasthan yield estimate, India's average castor seed productivity for the year 2021-22 is revised down to 2,088 kg/Ha against 1st estimate of 2,212 Kg/Ha and 2nd estimate of 2152 Kg/Ha.
- Accordingly, the final seed production in India is revised down to 16.94 lakh tons for 2021-22 against the 1st estimate of 17.95 lakh tons and last year's productions estimate of 17.56 Lakh tons.

State wise Area, Yield and Production of castor seeds in India for 2021-22

Districts	Castor Acreage ("000" Ha) #		Castor Yield Estimates (Kg/Hectare) \$			Production Estimates ("000" Tons)			Production ('000 Tons
	2020-21	2021-22	2021-22	2021-22	2021-21	2021-	2021-	2021-	
			(1st	(2nd	(3rd &	22	22	22	2021-22
			Est)	Est)	Final)	(1st	(2nd	(3rd &	
						Est)	Est)	Final Est)	
Gujarat	638	652.3	2371	2305	2230	1547	1504	1455	1494
Rajasthan	125.7	120	1690	1646	1620	203	198	194	224
AP &Telangana	38.22	23.32	1500	1500	1498	35	35	35	23
Others	24	15.7	650	650	630	10	10	10	15
India	825.92	811.32	2212	2152	2088	1795	1746	1694	1756

\$- Primary Survey (Revised) ;# - Acreage as per State Govt. Estimates Note:

- Above estimates are based on four rounds of field surveys and remote sensing analysis.
- The yield validation rounds were conducted during April and May month to reconfirm the actual yield in major districts of Gujarat and Rajasthan.
- The Crop estimation is based on Government acreage and yield estimates obtained after primary research through farmers' interviews

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