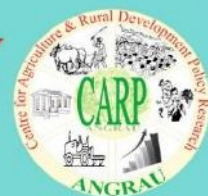




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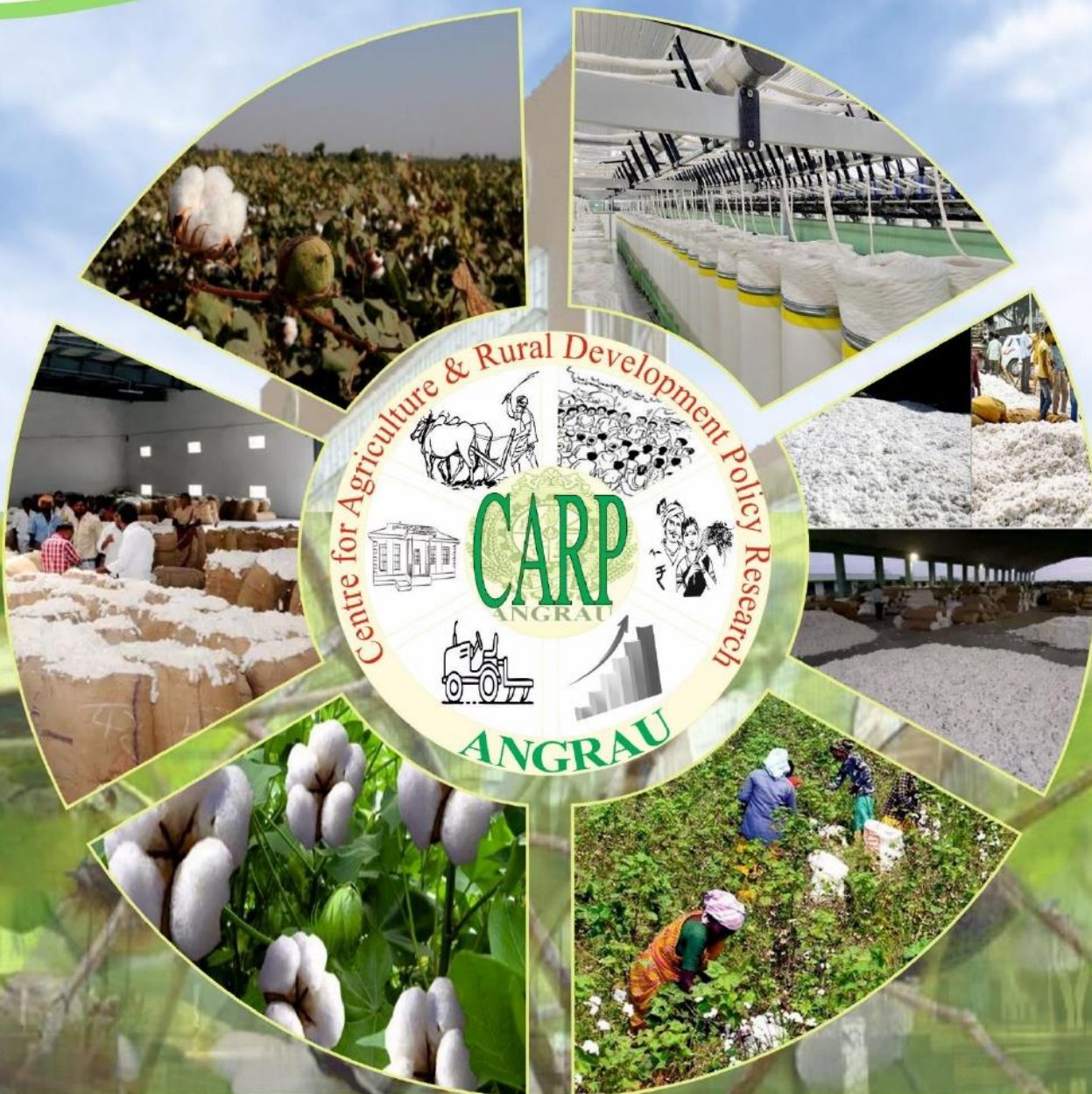
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Crop Outlook Reports of Andhra Pradesh

COTTON

(June, 2023 to May, 2024)



Centre for Agriculture & Rural Development Policy Research (CARP)

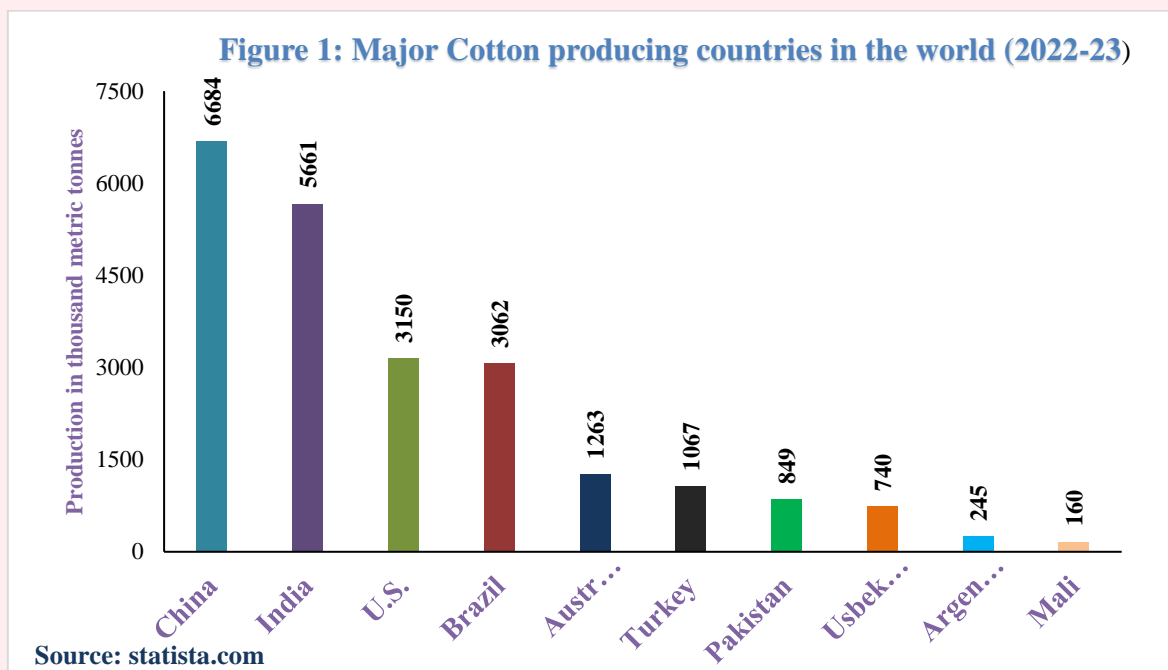
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ANGRAU Crop Outlook Reports of Andhra Pradesh Cotton – June to May, 2023-24

Factsheet of Cotton

- Approximately 150 million people worldwide are involved in the production and further processing of Cotton. The largest producers of this natural fiber are China, India, the USA, and Brazil.
- China has highest productivity of 2027 kg per hectare followed by Australia with 1943 kg per hectare. India stands at 36th position in productivity with 448 kg per hectare.
- India has the highest Cotton cultivation acreage globally, with over 11.7 million hectares compared to 31.2 million hectares worldwide.
- India is the world's largest Cotton producer, contributing about 23% of the global Cotton production. More than 40-50 million people in India are engaged in the Cotton trade and processing industry.
- More than 80% of India's Cotton comes from the states of Gujarat, Maharashtra, Telangana, Andhra Pradesh, and Madhya Pradesh.
- Gujarat is expected to have the highest Cotton yield among all Indian states, at 572 kg/hectare, followed by Rajasthan with a yield of approximately 558 kg/hectare.
- According to a recent USDA report, India's total Cotton crop for the 2024-25 season is projected at 25 million bales, down from 26 million bales in the previous year. Consumption is expected to rise by 2% year-on-year to 25.2 million bales, leading to lower ending stocks of 10.82 million bales compared to 11.52 million bales in 2023-24, which will support domestic market prices.
- For the current season, the Cotton cultivation area in India is expected to be around 120.55 lakh hectares, with an estimated yield of 444.8 kg/hectare.
- Indian Cotton exports have surged significantly, driven by more attractive domestic Cotton prices compared to international rates, according to the Cotton Association of India (CAI).
- The Confederation of Indian Textile Industry (CITI) reported a remarkable 17% increase in key segments such as Cotton yarn, fabrics, and made-up exports in February compared to the previous year.
- In the Andhra Pradesh, the cost of cultivating cotton is Rs. 1,62,019.99 per hectare, with labor costs making up 49.26% of the total expenditure.

Cotton is one of the most important fiber and cash crop in India and plays a dominant role in the industrial and agricultural economy of the country. Cotton is cultivated in about 60 countries of the world but 10 countries viz., Russia, USA, China, India, Brazil, Pakistan, Turkey, Egypt, Mexico and Sudan account for about 85 % of the total production. Globally, the area under Cotton for the year 2023–24 was projected at 31.8 million hectares, and production was estimated at about 113 million bales of 217.72 kg each (USDA). China is projected at 27.50 million bales with 2.95 million hectares in 2023–24, followed by India (25.5 million bales), Brazil (14.6 million bales), the United States (12.10 million bales), and Pakistan (6.70 million bales).



India has emerged as the largest producer of Cotton in the world and occupies the first position in area and second production (Figure 1). According to the third advance estimates 2023-24, Government of India Cotton production is estimated at 343.11 lakh bales as compared to 337.60 lakh bales in previous year. As on 28nd December 2023, 124.69 lakh hectares of Cotton was sown compared to 129.47 lakh hectares last year in India (agricoop.nic.in). In India, there are nine major Cotton growing states which fall under three zones, *viz.* the North Zone (Punjab, Haryana and Rajasthan), the Central Zone (Maharashtra, Madhya Pradesh and Gujarat), and the Southern Zone (Telangana, Andhra Pradesh and Karnataka). Nearly 65 per cent of the Cotton crop is cultivated under rainfed conditions in the country. Nearly 2/3rd of the Cotton production in India comes from the states of Maharashtra, Gujarat, Andhra Pradesh, and Telangana, collectively known as the Cotton Basket of India.

Table 1: Major producing states of Cotton in India

States	Area (Lakh Hectares)				Production (Lakh Bales of 170 Kgs)			
	2015-16	2020-21	2023-24*	Rank	2015-16	2020-21	2023-24*	Rank
Gujarat	27.22	22.79	26.83	2	94.00	73.97	89.65	1
Maharashtra	42.07	42.26	42.34	1	75.00	62.47	82.43	2
Telangana	17.73	24.13	18.18	3	36.61	77.52	48.12	3
Rajasthan	4.48	6.68	7.91	4	12.14	24.51	27.43	4
Karnataka	6.42	8.20	6.83	5	19.50	23.20	16.93	5
Andhra Pradesh	6.66	6.06	4.27	8	18.88	16.04	11.58	8
India	122.92	129.47	124.69		300.05	353.84	323.11	

Source: Cotton Advisory Board, cotcorp.org.in (*): Provisional

Among the states, Gujarat is leading in Cotton production with 89.65 lakh bales (Table 1) followed by Maharashtra (82.43 lakh bales), Telangana (48.12 lakh bales), Rajasthan (27.43 lakh bales) and Karnataka (16.93 lakh bales). Andhra Pradesh stands 8th position in both area and production with 4.27 lakh ha and 11.58 lakh bales respectively. With a productivity of 461.03 kg/ha stands 5th among Cotton grown states in India during 2023-24.

Table 2: Balance sheet for the year 2019-20 to 2023-24 (in lakh bales)

Particulars	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)
Supply					
Opening Stock	56.52	120.79	71.84	39.48	61.16
Production	365.00	352.48	311.17	336.60	323.11
Import	15.50	11.03	21.13	14.60	12.00
Total Supply	437.02	484.30	404.14	390.68	396.27
Demand					
Mill Consumption	233.70	297.45	284.93	197.80	201.00
Consumption By SSI	20.49	22.42	21.48	99.83	100.00
Non-Mill Consumption	15.00	15.00	16.00	16.00	16.00
Exports	47.04	77.59	42.25	15.89	27.00
Total Demand	316.23	412.46	364.66	329.52	344.00
Ending Stock	120.79	71.84	39.48	61.16	52.27

Source: Cotton Association of India,; Bale -170 kg. (P)- Provisional

The balance sheet in Table 2 explains that the demand for Cotton was 344 lakh bales in 2023-24 and the exports have decreased from 47.04 lakh bales in 2019-20 to 27 lakh bales in 2023-24. Total supply was 396.27 lakh bales in 2023-24. Imports have decreased from 15.50 lakh bales to 12 lakh bales from 2019-20 to 2023-24.

Imports and Exports

The Cotton Association of India (CAI) estimated Cotton exports to rise about 27 per cent to 28 lakh bales during 2023-24 crop year. In 2022-23 crop season (October-September), Cotton exports were at 22 lakh bales. The demand for Indian Cotton went up as the prices ruled 8-10 per cent lower than the international prices during December 2023 till March 2024.

Table 3. Indian Cotton Exports and Imports during last 5 years

Year	Exports (in lakh bales)	Imports (in lakh bales)
2017-18	67.59	15.8
2018-19	43.55	35.37
2019-20	47.04	15.5
2020-21	77.59	11.03
2021-22	42.25	21.13
2022-23	15.5	14.6
2023-24*	27	12

Source: DGCIS, Kolkata *upto 31st march,2023

Indian Cotton is mainly exported to countries like Bangladesh, China and Vietnam. From Table 3 it is observed the exports were increased in the year 2023-24 compared to the previous year. Whereas over the period of time exports were decline in nature.

Cotton Consumption Statistics

Consumption of Cotton by SSI and non-SSI mills is explained in table 4. It is shown that the consumption of Cotton by SSI mills increased by 2.89 per cent whereas non-SSI mills, whose growth rate over the years was 3.39 per cent. Consumption of Cotton by organized sector textile mills (non-SSI) has increased consistently from 149.36 lakh bales in 2000-01 to 275 lakh bales in 2022-23. Consumption of Cotton by SSI mills have also increased from 10.97 lakh bales in 2000-01 to 20.00 lakh bales in 2022-23.

Table 4: Cotton Consumption by Organized sector Textile mills (Non-SSI Mills) and Small-Scale Spinning Mills (SSI) Units in India

Year	Non-SSI mills		SSI mills	
	Average Consumption (Quantity in lakh bales)			
	Cotton Consumption	Monthly Consumption	Cotton Consumption	Monthly Consumption
2005-06	180.00	15.00	19.00	1.67
2006-07	194.89	16.24	21.26	1.32
2007-08	195.67	16.31	22.08	1.59
2008-09	190.00	15.83	20.00	1.58
2009-10	219.00	18.25	23.00	1.92
2010-11	221.77	18.48	24.46	2.04
2011-12	223.59	18.63	22.12	1.84
2012-13	251.74	20.97	23.59	1.97
2013-14	268.03	22.34	25.20	2.10
2014-15	278.06	23.17	26.38	2.20
2015-16	270.20	22.50	27.08	2.26
2016-17	262.70	22.00	26.21	2.18
2017-18	280.11	23.33	26.18	2.18
2018-19	270.78	22.57	22.43	1.87
2019-20	233.70	19.48	20.49	1.71
2020-21	297.45	24.79	22.42	1.87
2021-22(P)	276.90	23.08	20.87	1.74
2022-23(P)	275.00	22.92	20.00	1.67
CAGR (%)	3.39**	3.40**	2.89**	2.99**

Source: Cotton Advisory Board, cotcorp.org.in (P): Provisional **-Significant at 5 per cent level

In Andhra Pradesh as on 9th January 2024, 4.27 lakh hectares of Cotton was sown compared to 7.04 lakh hectares last year (apagrisnet.gov.in). The major six districts, viz., Kurnool, Palnadu, Ananthapuramu, Prakasam, Y.S.R and N.T.R hold 85% of the Cotton area and contribute 83% to the state total Cotton production (Table 5). Among these districts, Kurnool ranks first in area and production due to its high

productivity, followed by Palnadu and N.T.R. districts. Among the 26 districts, N.T.R., Guntur, and Palnadu districts had the highest productivity of over 520 kg/ha during 2022–23.

Table 5. Inter-District Comparison of Cotton lint production in Andhra Pradesh

Major Districts	Area (in '000 ha)			Production (in lakh tonnes)		
	2021-22	2022-23	Rank	2021-22	2022-23	Rank
Kurnool	248	273	1	474	615	1
Palnadu	89	105	2	311	318	2
Ananthapuramu	42	79	3	33	90	4
Prakasam	32	50	4	62	86	5
Y.S.R	29	50	5	49	41	8
N.T.R	35	39	6	134	131	3
Total of 6 districts	475	596		1063	1281	
Other Districts	79	108		210	266	
Andhra Pradesh	554	704		1273	1547	
Share (%) of 6 districts	85.7	84.7		83.5	82.8	

Source: Andhra Pradesh Agricultural statistics at a glance, 2022-23.

The Cotton Corporation of India procures the Cotton from the farmers at MSP by arranging infrastructure in the form of regular procurement centers as well as satellite centers so that farmers are not compelled to travel long distances to sell their Cotton kapas produce. Besides MSP operations, to fulfil the raw material requirements of the domestic textile industry, CCI also undertakes viable commercial purchase operations as and when required. The main aim of these operations is to meet at least the annual cost of the minimum infrastructure maintained by the Corporation for Price Support operations.

The cost-return structure of Cotton in Andhra Pradesh for the year 2023–24 is presented in Table 7. Cultivation of Cotton costs Rs. 1,62,019.99 per hectare, among which labor costs have a lion share of 49.26% of the total cost. In total, the working capital share is 82.03%, and the fixed capital share is 17.97%. The cost of production in Cotton was Rs. 8,222.28 per quintal. Gross margin implies returns over variable costs, which are pertained to owner farmers, and net returns implies returns over total costs, which are pertained to tenant owners. Because of the high cost of production and lower productivity during 2023–24, the gross margin and net returns were Rs. -1,817.52 per ha and Rs. -30,924.62 per ha, respectively. The return on rupee investment was 0.82, which is concerned with tenant farmers, and the return on variable costs was 0.99, which is mostly related to owner farmers.

Table 7: Cost-return structure of Cotton in Andhra Pradesh 2023-24 (Rs./ha)

S.No.	Particulars	Cost (Rs.)
1	Labour costs (Rs/ha)	79,812.00 (49.26%)
2	Material costs (Rs/ha)	51,083.45 (31.53%)
3	Variable costs (Rs/ha)	1,32,912.88 (82.03%)
4	Fixed costs (Rs/ha)	29,107.11 (17.97%)
5	Total cost (Rs/ha)	1,62,019.99 (100%)
6	Yield (Qtl/ha)	19.71
7	Price (Rs./qtl)	6,653.50
8	Gross returns (Rs/ha)	1,31,095.37
9	Net returns (Rs/ha)	-30,924.62
10	Gross Margin (Rs/ha)	-1,817.52
11	Return on rupee BCR	0.81
12	Return on VC	0.99
13	Cost of Production (Rs./qtl)	8,222.28

Source: Survey Data, BCR-Benefit Cost Ratio, VC – Variable Costs

Cotton Production and Price Outlook:

Percent deviations from yearly average arrivals and prices were calculated for Cotton for the year 2023–24 by using modal prices and market arrivals of Cotton kapas from major markets of Andhra Pradesh.

Table 8: Seasonal Indices of Cotton in Adoni Market (2023-24)

Months	Arrivals		Price	
	Tonnes	% deviation	Rs./Qtl	% deviation
June-23	19962	49.21	6990	97.03
July-23	12866	31.72	6926	96.15
August-23	18566	45.77	7287	101.16
September-23	60185	148.36	7374	102.37
October-23	83208	205.12	7327	101.72
November-23	89013	219.43	7271	100.94
December-23	85104	209.79	6978	96.87
January-24	50301	124.00	6922	96.09
February-24	32055	79.02	6961	96.63
March-24	22056	54.37	7504	104.18
April-24	12177	30.02	7440	103.29
May-24*	1300	3.20	7460	103.56
Yearly Average	40566	100	7203	100

Source: Data obtained from Adoni AMC; *up to 2-May-2024.

The results depict Cotton arrivals picking up from September to January, with the highest arrivals reported during the month of November (219.43%) against the yearly average of 40566 metric tons.

Similarly, the average price of Cotton during the period is Rs. 7,203 per quintal, with no significant changes; prices vary by 3%.

Table 9: Minimum Support Price for the Cotton from 1980-81 to 2024-25.

Year	Cotton		Difference in amount increase over preceding year	
	Medium Staple	Long Staple	Medium Staple	Long Staple
1980-81	304	-	316	750
1990-91	620	750		
2000-01	1,625	1,825	875	1175
2010-11	2,500	3,000		
2015-16	3,800	4,100		
2016-17	3,860	4,160	60	60
2017-18	4,020	4,320	160	160
2018-19	5,150	5,450	1130	1130
2019-20	5,255	5,550	105	100
2020-21	5,515	5,825	260	275
2021-22	5,726	6,025	211	200
2022-23	6,080	6,380	354	355
2023-24	6,620	7,020	540	640
2024-25	7,121	7,521	501	501

From the table 9, it shows the MSP prices for the Cotton over the years, the major hike was occurred in the year 2018-19 with difference from the previous year of Rs. 1130 for medium and long staple type. Cotton MSP prices increased for 2024-25 by Rs. 501 for medium and long staple varieties, compared to the previous year.

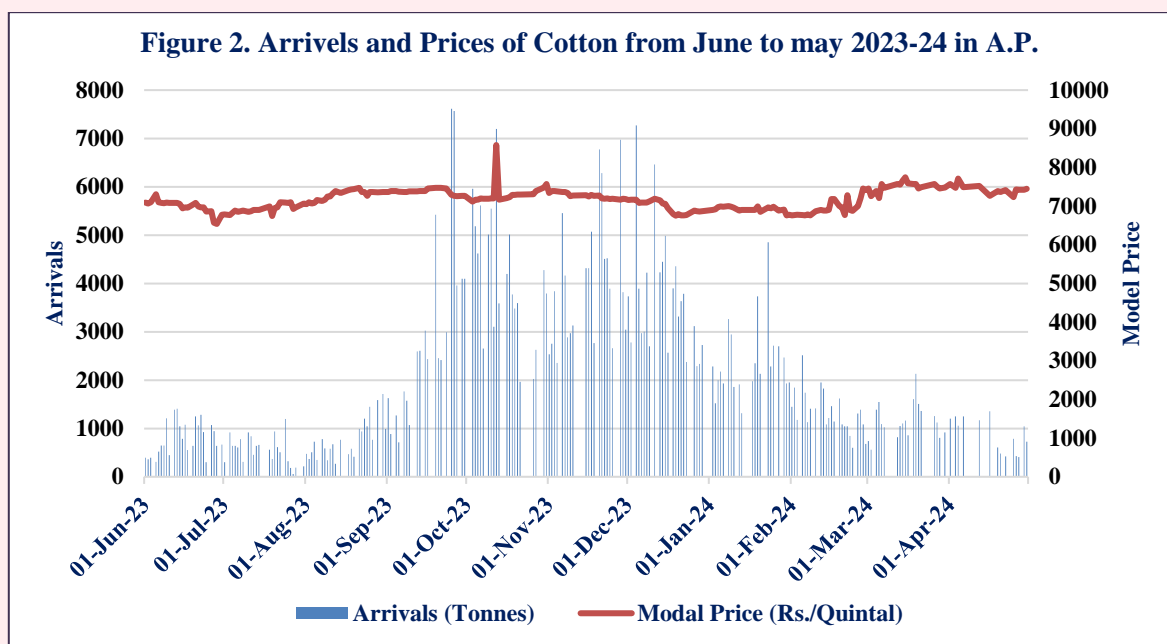
Table 10. MSP vis-a-vis Market Prices of Cotton in Andhra Pradesh during June to May, 2023-24

Crop	MSP (Rs. /qtl)	Major Markets	Average days and months of trading			
			Greater than MSP		Less than MSP	
			No. of Days	Month	No. of Days	Month
Cotton	6620 (MS) & 7020 (LS)	Adoni, Tadikonda	265	June to August and January to May	23	October

Note: MS- Medium Staple; LS- Long Staple; Source: vyavasayamarketingshakha.ap.gov.in

Table 10 details the number of days when Cotton market prices were above, below, or equal to the MSP in the Adoni and Tadikonda markets of Andhra Pradesh during June-May 2023-24. On average, for 265 days from June to August and January to May, Cotton prices were above the MSP, while for 23 days from October, prices were below the MSP.

The figure 2 shows the monthly average prices of Cotton in Andhra Pradesh, obtained from all major markets. As per the information shared by Agricultural market Intelligence Centre, ANGRAU, Cotton arrivals in the domestic market are not increasing as farmers are holding stock in anticipation of higher prices. Overall weather is favorable for the Cotton crop.



Source: Data obtained from Andhra Pradesh AMC

Based on data from the Directorate of Economics and Statistics, Andhra Pradesh (DESAP), the time series analysis shows that the area for Cotton cultivation is expected to decrease to 475.22 thousand hectares during the kharif season and 9.24 thousand hectares during rabi season of 2024-25. Under normal conditions, the estimated annual production is 141.46 thousand tonnes in Andhra Pradesh.

Under these circumstances, Agricultural Market Intelligence Centre, ANGRAU is here with providing the latest information with regard to the forecast price range of **Rs. 7,200-8,100 per quintal** for Cotton in kharif marketing/harvesting season 2024-25.

Note: The predicted / forecast values given in the report were estimated using historical data analyzed by different econometric models with the assumption of prevalence of normal weather and market conditions.

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