



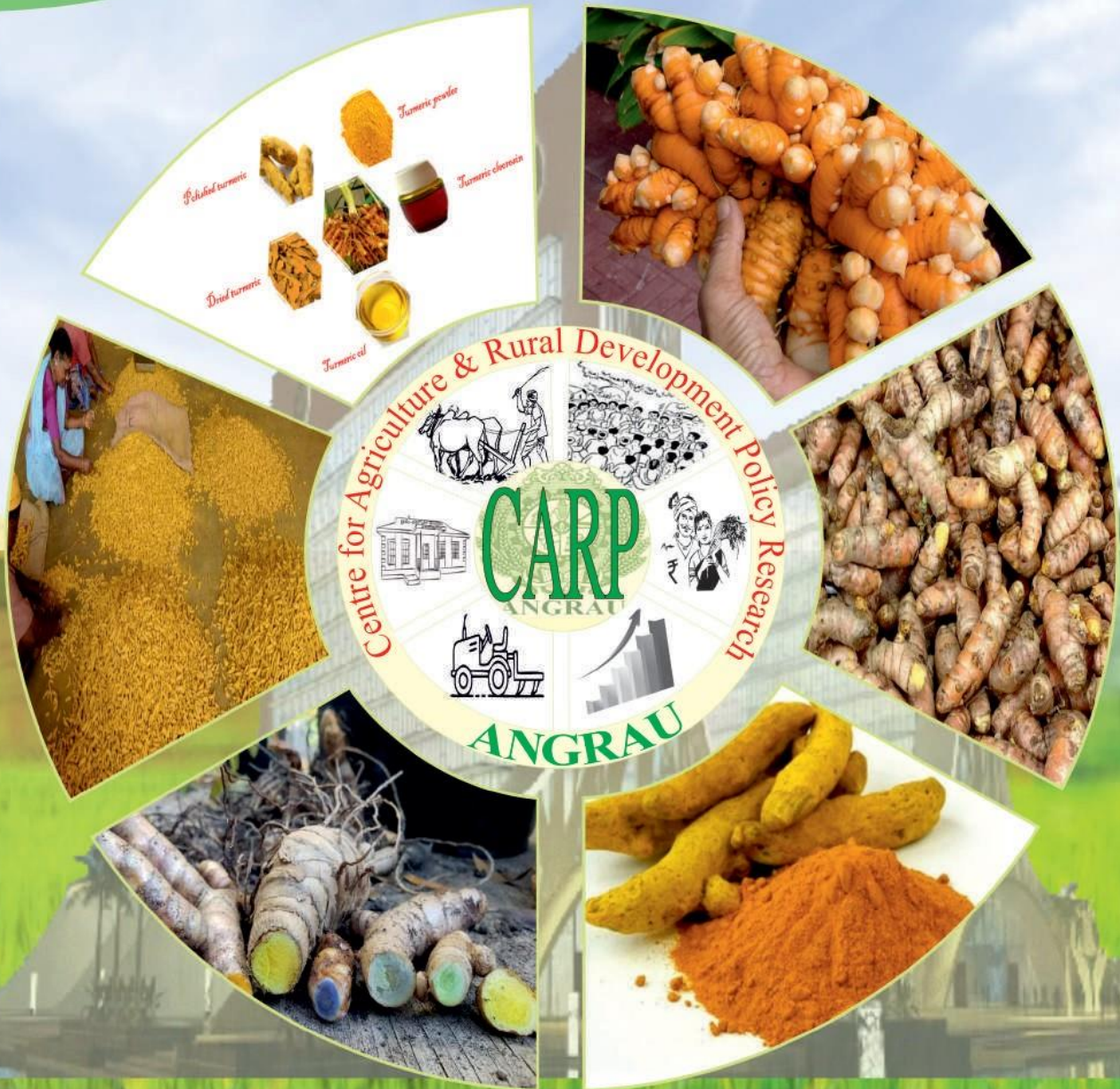
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**Crop Outlook Reports of Andhra Pradesh**

**TURMERIC**  
**(June, 2023 to May, 2024)**



**Centre for Agriculture & Rural Development Policy Research (CARP)**

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## ANGRAU - Crop Outlook Reports of Andhra Pradesh

### Turmeric – June to May, 2023-24

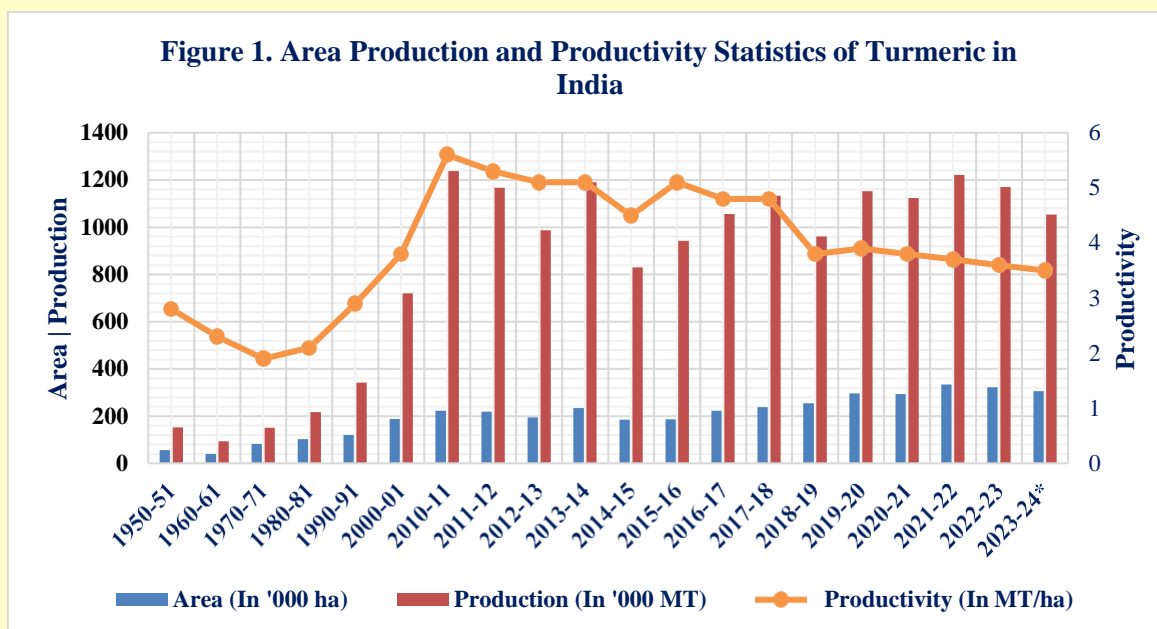
#### *Factsheet of Turmeric*

- Annually, 13.5 lakh tonnes of turmeric are produced globally. India leads in production, contributing 80% of the total, followed by China at 8%, Myanmar at 4%, and Nigeria and Bangladesh at 3% each.
- India has 3.05 lakh hectares of area under turmeric during 2023-24. The annual production was estimated about 10.54 lakh tonnes, with an and a productivity of 3656 kg/ha.
- In India, Maharashtra tops in turmeric production with 326.97 thousand metric tons, followed by Karnataka (129.4 thousand MT) and Tamil Nadu (111.67 thousand MT).
- The highest turmeric productivity was reported in Telangana (6.72 MT/ha), Puducherry (6.29 MT/ha), Karnataka (6.26 MT/ha), Arunachal Pradesh (5.1 MT/ha), and Tamil Nadu (4.5 MT/ha).
- India exported 162.02 thousand tones with a value of Rs. 187.59 crores of turmeric to countries like Bangladesh, UAE, USA, Malaysia, Morocco and Iran.
- Popular cultivars grown in India are Duggirala, Tekkurpet, Sugandham, Amalapuram, Erode local, Salem, Alleppey, Moovattupuzha and Lakdong, and improved varieties are Pragati, Suvarna, Varna and Kanti while in Andhra Pradesh, prominent cultivars are Duggirala, Amalapuram and varieties are Pragati, Prathibha and Suvarna.
- Cultivation of turmeric in Andhra Pradesh costs Rs. 3,10,670 per hectare. The gross margin and net returns were estimated about Rs. 80,101 per ha and Rs. 41,620 per ha, respectively.
- AMIC, ANGRAU expects the price range of 9,500 to Rs. 10,250 Rs./qtl for turmeric bulbs and 10,000 to 11,100 Rs./qtl for turmeric fingers for coming Kharif marketing season.

Turmeric is an ancient spice obtained from the rhizomes of *Curcuma longa*, belongs to the ginger family. It originates from Asia and India, popularly known as the 'Golden Spice of India'. Historically, the tuberous rhizomes of turmeric have been used as condiments, a dye, and an aromatic stimulant in various medicines. It is a staple spice in South Asian and Middle Eastern cuisines. As an essential commercial spice crop in India, it is also referred to as "Indian saffron". The global turmeric production stands at 13.5 lakh tonnes annually, with India leading the market by contributing 80%, followed by China (8%), Myanmar (4%), Nigeria (3%), and Bangladesh (3%). The global turmeric market size is forecast to be valued at USD 4,419.3 million in 2023. Total turmeric sales worldwide are likely to rise at 5.5% CAGR, taking the overall market valuation past USD 7,579.2 million by 2033 ([FMI](#)).

India is the largest producer, consumer, and exporter of turmeric in the world. Indian turmeric is considered to be of the best quality due to its high curcumin content, making it increasingly popular in

medicinal and cosmetic applications. Turmeric production in India is estimated to be about 10.54 lakh tonnes, with an area of 3.05 lakh hectares and a productivity of 3656 kg/ha during 2023-24 (2nd AE, agriwelfare.gov.in). Since the 1950s, the area under turmeric cultivation has increased by 454.91%, with a Compound Annual Growth Rate (CAGR) of 2.71%. Production has increased by 593.55% (CAGR of 4.05%), and productivity has increased by 25% (CAGR of 1.3%).



In India, the sown area for turmeric was 305.24 thousand hectares, which is 15.54 thousand hectares less compared to the previous year (Table 1). The major turmeric-growing states are Maharashtra (29.2%), Odisha (10.2%), Tamil Nadu (8.1%), Madhya Pradesh (7.9%), Andhra Pradesh (7.9%), and Karnataka (6.8%).

**Table 1. State-wise Area, Production and Productivity of Turmeric in India**

States	Area ('000 ha)			Production ('000 MT)			Productivity (MT/ha)		
	2023-24*	2022-23	2021-22	2023-24*	2022-23	2021-22	2023-24*	2022-23	2021-22
Maharashtra	89.27	88.32	102.67	326.97	323.22	367.84	3.66	3.66	3.58
Odisha	31.24	31.24	31.17	69.1	69.1	68.83	2.21	2.21	2.21
Tamil Nadu	24.81	24.75	24.17	111.67	136.37	124.92	4.5	5.51	5.17
Madhya Pradesh	24.25	22.42	20.53	90.21	82.43	74.65	3.72	3.68	3.64
Andhra Pradesh	22.37	33.42	25.59	38.03	73.52	74.69	1.7	2.2	2.92
Karnataka	20.68	19.57	19.4	129.4	119.39	110.03	6.26	6.1	5.67
<b>India</b>	<b>305.24</b>	<b>320.78</b>	<b>333.02</b>	<b>1054.17</b>	<b>1169.98</b>	<b>1221.72</b>	<b>3.45</b>	<b>3.65</b>	<b>3.67</b>

Source: Indiatat

The highest productivity was reported in Telangana (6.72 MT/ha), Puducherry (6.29 MT/ha), Karnataka (6.26 MT/ha), Arunachal Pradesh (5.1 MT/ha), and Tamil Nadu (4.5 MT/ha) during 2023-24

(MoA&FW, 2024). The state of Maharashtra, with 326.97 thousand metric tons, was the leading producer of turmeric in India during 2023-24. Karnataka (129.4 thousand MT) and Tamil Nadu (111.67 thousand MT) were second and third in the ranking during that year. In Andhra Pradesh, turmeric was grown on 22.37 thousand hectares, which is 11.05 thousand hectares less compared to the previous year. The annual production is estimated to be about 38.03 thousand tonnes, with a productivity of 1.7 MT/ha during 2023-24. The state ranks 8<sup>th</sup> in turmeric production and 22<sup>nd</sup> in productivity.

Major Turmeric producing countries include Bangladesh, Pakistan, Sri Lanka, Taiwan and China. Major Turmeric exporting countries are India, Thailand, Taiwan, and several other Southeast Asian, Central and Latin American countries. India is the largest manufacturer, consumer and exporter of turmeric, contributing more than 80 per cent of the global production. Turmeric ranks third in the total exports of spices from India after turmeric and cumin (jeera).

**Table 2. Balance sheet of Turmeric fingers for the year 2021-22 to 2023-24 (in ‘000 MT)**

Particulars	2020-21	2021-22	2022-23	2023-24*
<b>Supply</b>				
Opening Stock	207	155	122	94
Production	480	499	520	440
<b>Total Supply</b>	<b>687</b>	<b>654</b>	<b>642</b>	<b>534</b>
<b>Demand</b>				
Exports	147	154	160	136
Seed retention	35	38	38	40
Consumption	350	340	350	340
<b>Total Demand</b>	<b>532</b>	<b>532</b>	<b>548</b>	<b>516</b>
Ending Stock	<b>155</b>	<b>122</b>	<b>94</b>	<b>18</b>

*Source: Eventellglobal; \*Advance Estimates*

The balance sheet in Table 2 shows that the demand for turmeric fingers was 516 thousand tonnes in 2023-24, with exports decreasing from 1.6 lakh tonnes in 2021-22 to 1.36 lakh tonnes in 2023-24. The total supply was 534 thousand tonnes in 2023-24. Though domestic consumption of fingers was estimated to decrease by 3% in 2023-24, seed retention of bulbs increased by 5.6%, indicating the possibility of an increase in the turmeric cultivation area in the coming season. The annual production of turmeric fingers is estimated to be about 534 thousand tonnes.

**Table 3. Turmeric export and Import**

Years	Export	
	Quantity ('000 MT)	Value (Rs. Crore)
2019-20	137.65	128.69
2020-21	183.87	172.26
2021-22	152.76	153.44
2022-23	170.08	166.70
2023-24	162.02	187.59

Source: *Indianspices.com*

Table 3 shows that in 2023-24 the exports were 162.02 thousand tones with a value of Rs. 187.59 crores. Major turmeric importing countries from India are Bangladesh (21,847 MT), UAE (21,502 MT), USA (7,659 MT), Malaysia (7,510 MT), Morocco (6,612 MT) and Iran (4,787 MT).

**Table 4. Cost-return structure of Turmeric in Krishna Zone of AP during 2023-24 (Rs. /ha)**

S.No.	Particulars	Cost (Rs.)
1	Labour costs (Rs/ha)	1,46,399.43 (47.12%)
2	Material costs (Rs/ha)	1,25,790.11 (40.49%)
3	Variable costs (Rs/ha)	2,72,189.54 (87.61%)
4	Fixed costs (Rs/ha)	38,480.88 (12.39%)
5	<b>Total cost (Rs/ha)   Cost C2</b>	<b>3,10,670.42 (100%)</b>
6	Yield (Qtl/ha)	48
7	Price (Rs. /qtl)	7,339.40
8	<b>Gross returns (Rs/ha)</b>	<b>3,52,291.20</b>
9	Net returns (Rs/ha)	41,620.78
10	Gross Margin (Rs/ha)	80,101.66
11	Return on rupee BCR	1.13
12	Return on VC	1.29
13	COP [C2] (Rs. /qtl)	6,472.30

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

The cost-return structure of turmeric in Andhra Pradesh for the year 2023–24 is presented in Table 4. Cultivation of turmeric costs Rs. 3,10,670.42 per hectare, among which labor costs have a lion share of 47.12 percent of the total cost. In total, the working capital share 87.61 percent, and the fixed capital share is 12.39 percent. The cost of production for turmeric was Rs. 6,472.30 per quintal. Gross margin refers to returns over variable costs, which pertain to owner farmers, while net returns refer to returns over total costs, which pertain to tenant farmers. The gross margin and net returns were Rs. 80,101.66 per hectare and Rs. 41,620.78 per hectare, respectively. The return on rupee investment was 1.13, which concerns tenant farmers, and the return on variable costs was 1.29, which mostly relates to owner farmers.

***Turmeric Production and Price Outlook:***

Percent deviations from yearly average arrivals and prices were calculated for turmeric fingers and bulbs for the year 2023–24 using modal prices and market arrivals of turmeric from the Duggirala market in Andhra Pradesh. The results depict both fingers and bulbs arrivals picking up from April to August, with the highest arrivals reported in July, against the yearly average of 5967 quintals (fingers) and 2896 quintals (bulbs). Similarly, turmeric prices picked up from February to May, with the average price during this period being Rs. 10,593 per quintal for fingers and Rs. 10,522 per quintal for bulbs, showing a 25% significant deviation from the average prices.

**Table 5: Turmeric Arrivals and Prices Statistics in Andhra Pradesh (2023-24)**

Month	Fingers				Bulb			
	Arrivals		Prices		Arrivals		Prices	
	Quantal	% deviation	Rs./qtl	% deviation	Quantal	% deviation	Rs./qtl	% deviation
Jun-23	12354	207.0	5477	51.7	5359.5	185.1	5382	51.1
Jul-23	13434	225.1	7800	73.6	6058.5	209.2	7759	73.7
Aug-23	8506	142.5	10340	97.6	5451	188.2	10302	97.9
Sep-23	2004	33.6	9373	88.5	759	26.2	9596	91.2
Oct-23	870	14.6	9740	91.9	407.25	14.1	9787	93.0
Nov-23	1635	27.4	10011	94.5	803.25	27.7	10045	95.5
Dec-23	3339	56.0	10260	96.9	2405.25	83.0	10265	97.6
Jan-24	3953	66.2	10000	94.4	1645.25	56.8	10014	95.2
Feb-24	3397	56.9	11093	104.7	1440.25	49.7	11021	104.7
Mar-24	2440	40.9	13477	127.2	1427.25	49.3	13446	127.8
Apr-24	7829	131.2	14494	136.8	4291	148.2	14111.11	134.1
May-24	11846	198.5	15055	142.1	4707	162.5	14535.95	138.1
<b>Average</b>	<b>5967</b>	<b>100</b>	<b>10593</b>	<b>100</b>	<b>2896</b>	<b>100</b>	<b>10522</b>	<b>100</b>

*Source: AMC, Duggirala*

Based on data from the Directorate of Economics and Statistics, Andhra Pradesh (DESAP), the time series analysis shows that the area for turmeric cultivation is expected to increase to 23.43 thousand hectares during the Kharif season of 2024-25. Under normal conditions, the estimated annual production is 39.83 thousand tonnes in Andhra Pradesh.

Under these circumstances, the Agricultural Market Intelligence Centre, ANGRAU, expects the price range of Rs. 9,500 to Rs. 10,250 per quintal for turmeric bulbs and Rs. 10,000 to 11,100 per quintal for turmeric fingers during the Kharif marketing / harvest season of 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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