

Acharya N.G. Ranga Agricultural University

Crop Outlook Reports of Andhra Pradesh

TURMERIC - January to December 2021

Turmeric is an ancient spice derived from the rhizomes of *Curcuma longa* which is a member of ginger family (Zingiberaceae) also known as ‘Golden Spice of India’ and is native to Asia and India. The tuberous rhizomes or underground stems of turmeric have been used from antiquity as condiments, a dye and as an aromatic stimulant in several medicines. It is widely used as a spice in South Asian and Middle Eastern cooking. It is an important commercial spice crop grown in India and known as “Indian saffron”. India produced 10.64 lakh tonnes of turmeric in an area of 2.91 lakh ha with a productivity of 3656 kg/ha during 2020-21 (3rd Advance estimates, agricoop.nic.in). India is the largest producer, consumer and exporter of turmeric in the world. Indian Turmeric is considered to be the best quality due to its high curcumin content and thus it is increasingly used in medicinal and cosmetic applications. 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.

Table 1: Turmeric export and Import

Years	Export		Years	Import	
	Quantity (000' tonnes)	Value (Rs. Lakhs)		Quantity (000' tonnes)	Value (Rs. Lakhs)
2015-16	88.5	92165	2015-16	15.33	14634.6
2016-17	116.5	124190.7	2016-17	14.15	16498.2
2017-18	107.3	103567.6	2017-18	17.12	18433.6
2018-19	133.6	141616	2018-19	30.58	29947.4
2019-20	137.6	128690	2019-20	28.58	24579.3
2020-21*	183	167660	2020-21	NA	NA

Source: Spice Board, Cochin indianspices.com and indiastat.com,

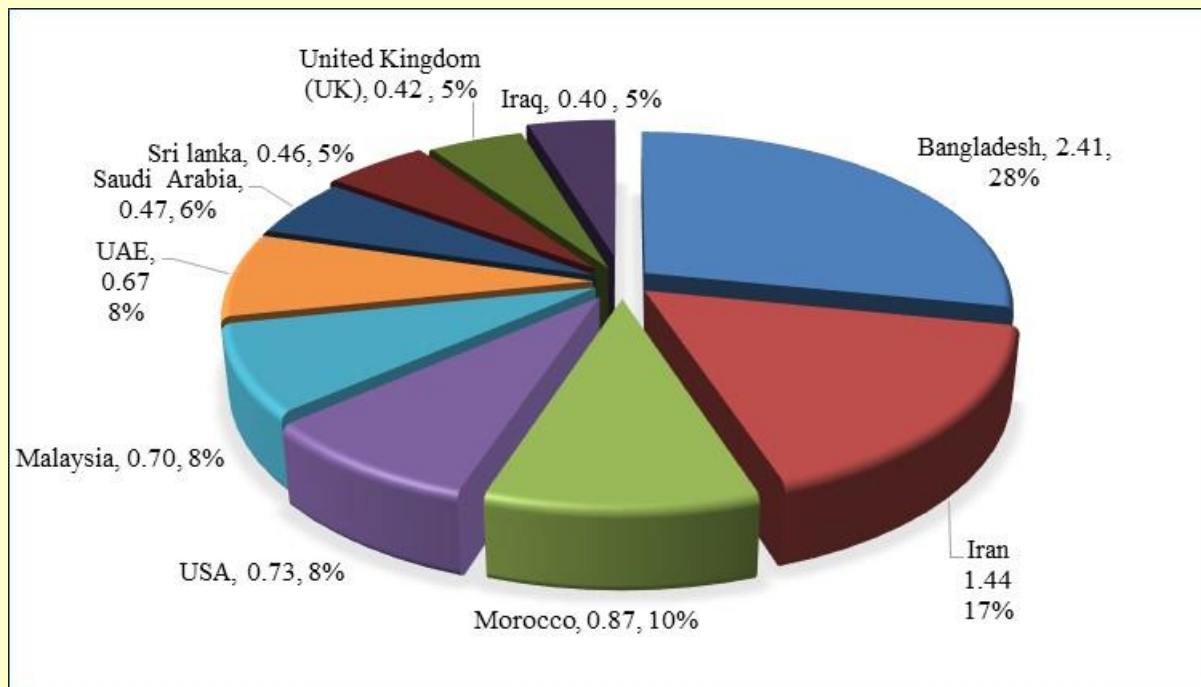
*Estimate NA-Not available

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 chilli and cumin (jeera). Table 1 shows that the exports of turmeric have been increasing over the years and in 2020-21 the exports were 1.83 lakh tonnes with a

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value of Rs 1676.60 crores. On the other hand, in 2019-20 the import of Turmeric was 0.28 lakh tonnes with a value of Rs. 245.79 crores.

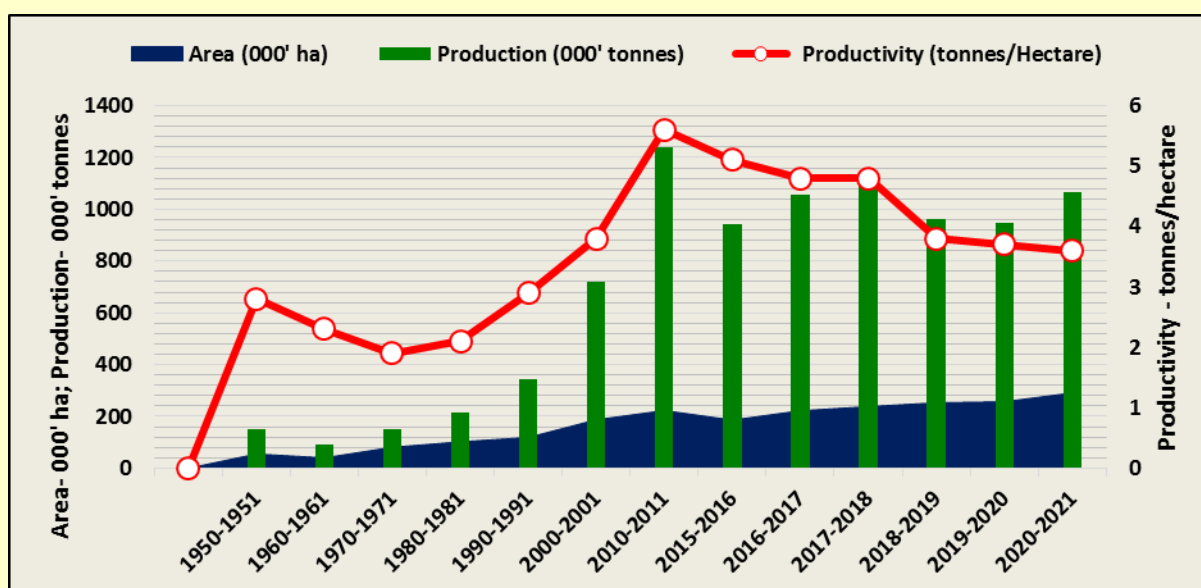
Figure 1: Major importing countries of Turmeric from India during 2019-20 (in lakh tonnes)



Source: *indiastat.com*

From Figure 1 it is depicted that in 2019-20, the major importing countries of Indian Turmeric are Bangladesh (28 %) with 2.41 lakh tonnes followed by Iran (17 %), Morocco (10 %), USA (8 %) and Malaysia (8 %).

Figure 2: Growth parameters of Turmeric in India



Source: *indiastat.com, indianspices.com, E - Estimate*

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India has acreage of 2.91 lakh hectares under turmeric with the production of 10.64 lakh tonnes in 2020-21. Turmeric occupies about 6.42 per cent of the total area under spices and condiments in India and contributes 9.96 per cent share to total spices and condiments production. Andhra Pradesh produced 0.73 lakh tonnes of turmeric in an area of 0.31 lakh hectares in the year 2020-21 contributing 6.86% to total country's production (Spice Board of India). Figure 2 shows the decadal comparison of area, production and productivity of turmeric in India.

Table 2: Major Turmeric producing states in India (Area-000' ha, Production-000'tonnes)

States/UTs	2000-01		2010-11		2015-2016		2020-21 (E)	
	A	P	A	P	A	P	A	P
Telangana	0	0	0	0	42.54	184.29	49.00 (16.8%)	313.00 (29.4%)
Andhra Pradesh	73.90	375.80	69.20	466.90	17.02	121.12	30.52 (10.4%)	73.24 (6.8%)
Orissa	25.30	60.60	26.80	202.90	2.48	30.00	27.86 (9.5%)	43.61 (4.1%)
Karnataka	9.30	41.00	18.00	90.40	12.82	76.78	21.50 (7.4%)	130.93 (12.3%)
Tamil Nadu	33.00	158.60	51.40	278.00	34.73	132.40	20.89 (7.1%)	86.51 (8.13%)
West Bengal	13.90	22.50	15.80	38.30	16.71	42.41	17.75 (6.1%)	45.70 (4.3%)
India	187.40	719.60	222.90	1237.40	185.90	943.30	291	1064

Source: *agricoop.nic.in, Spice Board of India, indianspices.com. E- Estimates.*

Figures in parentheses indicate per cent share to the total.

The major producing states of Turmeric in India are Telangana, Karnataka, Tamil Nadu, Andhra Pradesh and Karnataka (Table 2). The highest acreage contribution of Turmeric in India is from Telangana with 16.8 per cent followed by Andhra Pradesh (10.4 %), Orissa (9.5%), Karnataka (7.4 %), Tamil Nadu (7.1%) and West Bengal (6.1 %). The major trading hubs of Turmeric in India are mainly Nizamabad (Telangana), Duggirala (Andhra Pradesh), Sangli (Maharashtra) and Salem, Erode, Dharmapuri and Coimbatore (Tamil Nadu).

Table 3: Area, production and yield of Turmeric before and after bifurcation in Andhra Pradesh

Particulars	Before Bifurcation		After Bifurcation					
	2010-11		2015-16		2018-19		2020-21	
	AP	India	AP	India	AP	India	AP	India
Area (in 000' ha)	69	2,22	17	186	28	261	30	291
Production (in '000 tonnes)	467	1,237	121	943	69	957	73	1064

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Yield (in Kg/Hectare)	6,751	5,600	7,117	5,100	2464	3666	2433	3745
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Source: *agricoop.nic.in, indiastat.com and Spice Board of India- indianspices.com*

Table 3 shows the area, production and yield of turmeric in Andhra Pradesh state. As the major turmeric producing area is under Telangana, after bifurcation the area under turmeric in Andhra Pradesh has decreased. But an increasing area under turmeric was observed in recent years in Andhra Pradesh. Telangana is the major producing state of Turmeric in India with 16.6 per cent of total area with 28.4 per cent production and 6500 kg/ha productivity during 2020-21. Andhra Pradesh was left with an area of 30 thousand hectares with 73 thousand tonnes of production during 2020-21. The productivity in Andhra Pradesh in recent years was low due to crop damage caused by cyclones.

Table 4: Cost-return structure of Turmeric in Krishna Zone 2020-21 (Rs./ha)

S NO	Particulars	Turmeric
1	Labour costs (Rs/ha)	105382(34.99)
2	Material costs(Rs/ha)	117960(39.17)
3	Variable costs(Rs/ha)	223342(74.16)
4	Fixed costs(Rs/ha)	77812(25.84)
5	Total cost(Rs/ha)	301154(100)
6	Yield (Qtl/ha)	39.52
7	Price (Rs./qtl)	6150
8	Gross returns (Rs/ha)	243048
9	Net returns (Rs/ha)	-58106
10	Gross Margin (Rs/ha)	19706
11	Return on rupee BCR	0.81
12	Return on VC	1.09
13	Cost of Production (Rs./qtl)	7260.3

Source: *Survey Data, Figures in the parentheses indicate the per cent of the item to the total cost, BCR-Benefit Cost Ratio, VC – Variable Costs*

The cost-return structure of turmeric in Krishna Zone (Guntur, Prakasam and Krishna districts) of Andhra Pradesh for the year 2020-21 is presented in Table 4. Cost of Production in turmeric was Rs. 7260.30/quintal. Gross margin implies the returns over variable costs which is pertained to owner farmers and net returns implies returns over the total costs which is pertained to tenant owners. Gross margin and Net returns were Rs. 19706 per ha and Rs. – 58106 per ha respectively. Return on rupee investment was 0.81 which is concerned to tenant farmers and return on variable costs was 1.09 which is related to owner farmers.

Turmeric Price Outlook:

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Seasonal indices measure the monthly per cent deviation from the average arrivals and prices from 2015 to 2021. Modal prices of turmeric bulb and fingers from Duggirala AMC was taken for calculating seasonal indices.

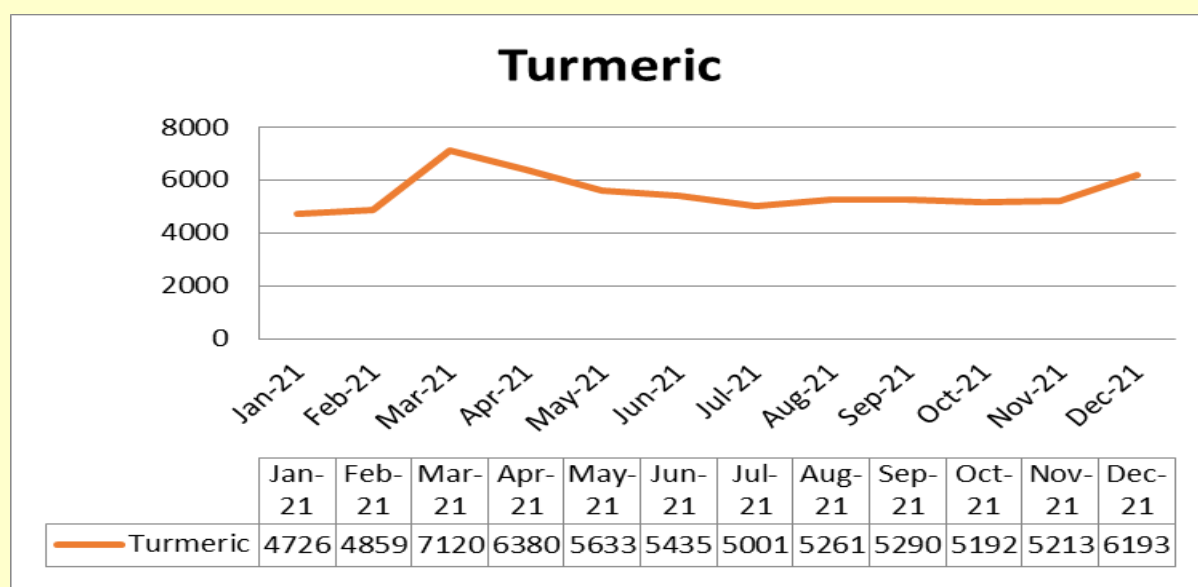
Table 5: Seasonal indices of Turmeric arrivals and prices of Duggirala market of Andhra Pradesh (Agricultural Years 2015-2021)

Months	Arrivals	Price
June	138.19	104.45
July	91.39	102.43
August	81.51	98.78
September	65.92	80.83
October	66.75	94.39
November	136.51	103.13
December	101.12	100.08
January	87.33	106.59
February	110.41	116.25
March	124.61	94.41
April	68.44	84.16
May	127.82	114.48

Source: Data obtained from Duggirala AMCs

The results in Table 5 shows the seasonal indices of turmeric cumulative arrivals and average prices in Duggirala market. The results shows that the arrivals are highest in the month of June and prices are highest in the month of February. The average monthly prices of turmeric were Rs. 5542, 5560, 5301 and 6575 for the months of September, October, November and December 2021 respectively in Duggirala market. The average monthly prices of turmeric in Andhra Pradesh obtained from major markets is presented in Figure 3.

Figure 3: Average Monthly Prices of Turmeric in Andhra Pradesh.



Source: Data obtained from Andhra Pradesh AMCs

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As per the information shared by Agricultural Market Intelligence Centre, ANGRAU, due to unseasonal rainfall in Turmeric growing regions supported the prices. Buyers were active for old stocks in the spot market. Turmeric standing crop quality is reported well as of now. However, continuous rainfall and cloudy weather in growing regions in AP and Telangana may concern for Turmeric crop. In Andhra Pradesh as on 29th December 2021, 0.20 lakh hectares of turmeric was sown compared to 0.21 lakh hectares last year (apagrisnet.gov.in).

Under these circumstances, the AMIC, ANGRAU is here with providing the latest information with regard to forecast price range of Rs. 6000 to Rs. 6400 per quintal for bulbs and Rs. 6300 to 6600 per quintal for fingers of turmeric in this Rabi Marketing/harvesting season 2021-22.
