

# ACHRAYA N G RANGA AGRICULTURAL UNIVERSITY Lam, GUNTUR - 522034.



# **Crop Outlook Reports of Andhra Pradesh**

### **TURMERIC**

(January to December, 2022)



Centre for Agriculture & Rural Development Policy Research (CARP)

ANGRAU, Lam, Guntur - 522 034.

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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 13.3 lakh tonnes of turmeric in an area of 3.5 lakh ha with a productivity of 3656 kg/ha during 2020-21 (4<sup>th</sup> 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** 

|     |        | Exp           | ort        |         | Import         |            |  |
|-----|--------|---------------|------------|---------|----------------|------------|--|
| Y   | ears   | Quantity      | Value (Rs. | Years   | Quantity (000' | Value (Rs. |  |
|     |        | (000' tonnes) | Lakhs)     |         | tonnes)        | Lakhs)     |  |
| 20  | 15-16  | 88.5          | 92165      | 2015-16 | 15.33          | 14634.6    |  |
| 20  | 16-17  | 116.5         | 124190.7   | 2016-17 | 14.15          | 16498.2    |  |
| 20  | 17-18  | 107.3         | 103567.6   | 2017-18 | 17.12          | 18433.6    |  |
| 20  | 18-19  | 133.6         | 141616     | 2018-19 | 30.58          | 29947.4    |  |
| 20  | 19-20  | 137.6         | 128690     | 2019-20 | 28.58          | 24579.3    |  |
| 202 | 20-21* | 183.8         | 167660     | 2020-21 | 25.71          | 22916.9    |  |
| 202 | 21-22* | 153.2         | 178433     | 2021-22 | 24.48          | 24576.9    |  |

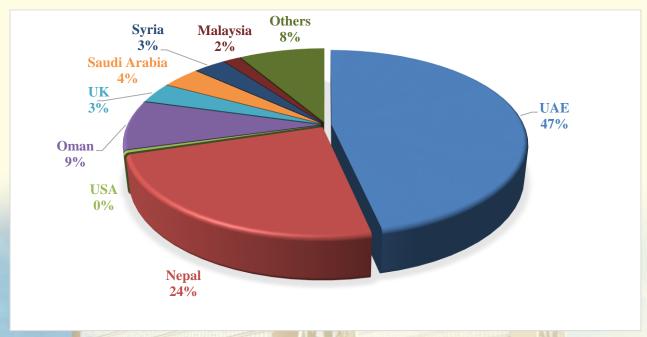
Source: Spice Board, Cochin indianspices.com and indiastat.com,

\*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 2021-22 the exports were 1.53 lakh tonnes with a value of Rs 1784.33 crores. On the other hand, the import of Turmeric was 0.24 lakh tonnes with a value of Rs. 245.76 crores.

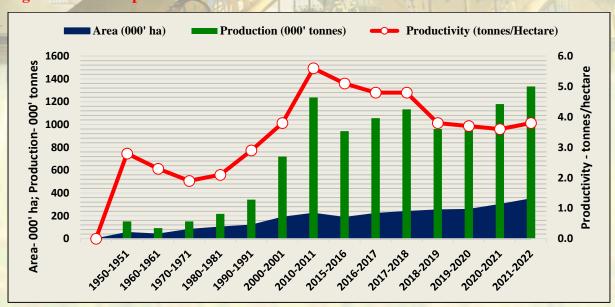
Figure 1: Major importing countries of Turmeric from India during 2021-22 (in lakh tonnes)



Source: indiastat.com

From Figure 1 it is depicted that in 2021-22, the major importing countries of Indian Turmeric are UAE (47 %) followed by Nepal (24 %), Oman (9 %) and Saudi Arabia (4 %).

Figure 2: Growth parameters of Turmeric in India



Source: indiatstat.com, indianspices.com, E - Estimate

India has acreage of 3.49 lakh hectares under turmeric with the production of 13.34 lakh tonnes in 2021-22. Turmeric occupies about 7.77 per cent of the total area under spices and condiments in India and contributes 12.33 per cent share to total spices and condiments production. Andhra Pradesh produced 0.75 lakh tonnes of turmeric in an area of 0.26 lakh hectares in the year 2021-22 contributing 5.59 % 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)

|                   | 2000-01 |        | 2010-11 |         | 2015-2016 |        | 2021-22 |         |
|-------------------|---------|--------|---------|---------|-----------|--------|---------|---------|
| States/UTs        | A       | P      | A       | P       | A         | P      | A       | P       |
| Telangana         | 0       | 0      | 0       | 0       | 42.54     | 184.29 | 50.06   | 330.26  |
| Orissa            | 25.30   | 60.60  | 26.80   | 202.90  | 2.48      | 30.00  | 31.17   | 68.85   |
| Andhra<br>Pradesh | 73.90   | 375.80 | 69.20   | 466.90  | 17.02     | 121.12 | 25.59   | 74.69   |
| Tamil Nadu        | 33.00   | 158.60 | 51.40   | 278.00  | 34.73     | 132.40 | 24.22   | 104.40  |
| Karnataka         | 9.30    | 41.00  | 18.00   | 90.40   | 12.82     | 76.78  | 21.31   | 130.97  |
| West Bengal       | 13.90   | 22.50  | 15.80   | 38.30   | 16.71     | 42.41  | 18.79   | 51.01   |
| India             | 187.40  | 719.60 | 222.90  | 1237.40 | 185.90    | 943.30 | 349.43  | 1334.31 |

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 Orissa (Table 2). The highest acreage contribution of Turmeric in India is from Telangana with 14.33 per cent followed by Orissa (8.92 %), Andhra Pradesh (7.32 %), Tamil Nadu (6.93%), Karnataka (6.10 %) and West Bengal (5.38 %). 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

|                             | Before 1 | Bifurcation | After Bifurcation |       |         |       |         |       |
|-----------------------------|----------|-------------|-------------------|-------|---------|-------|---------|-------|
| <b>Particulars</b>          | 2010-11  |             | 2015-16           |       | 2018-19 |       | 2021-22 |       |
|                             | AP       | India       | AP                | India | AP      | India | AP      | India |
| Area (in 000' ha)           | 69       | 2,22        | 17                | 186   | 28      | 261   | 26      | 349   |
| Production (in '000 tonnes) | 467      | 1,237       | 121               | 943   | 69      | 957   | 75      | 1334  |
| Yield (in<br>Kg/Hectare)    | 6,751    | 5,600       | 7,117             | 5,100 | 2464    | 3666  | 2918    | 3818  |

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 14.33 per cent of total area with 24.75 per cent production and 6600 kg/ha productivity during 2021-22. Andhra Pradesh was left with an area of 26 thousand hectares with 75 thousand tonnes of production during 2021-22. 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 2021-22 (Rs./ha)

| S NO | Particulars                  | Turmeric      |
|------|------------------------------|---------------|
| 1    | Labour costs (Rs/ha)         | 146399(36.30) |
| 2    | Material costs(Rs/ha)        | 140790(34.91) |
| 3    | Variable costs(Rs/ha)        | 292215(72.46) |
| 4    | Fixed costs(Rs/ha)           | 74399(18.45)  |
| 5    | Total cost(Rs/ha)            | 403275(100)   |
| 60   | Yield (Qtl/ha)               | 48            |
| 7    | Price (Rs./qtl)              | 6100          |
| 8    | Gross returns (Rs/ha)        | 293807        |
| 9    | Net returns (Rs/ha)          | -109469       |
| 10   | Gross Margin (Rs/ha)         | 1591          |
| 11   | Return on rupee BCR          | 0.73          |
| 12   | Return on VC                 | 1.01          |
| 13   | Cost of Production (Rs./qtl) | 8373          |

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 2021-22 is presented in Table 4. Cost of Production in turmeric was Rs. 8373/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. 1591 per ha and Rs. – 109469 per ha respectively. Return on rupee investment was 0.73 which is concerned to tenant farmers and return on variable costs was 1.01 which is related to owner farmers.

#### **Turmeric Price Outlook:**

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 (2022)

| Months    | Arrivals | Price  |  |
|-----------|----------|--------|--|
| January   | 84.01    | 116.69 |  |
| February  | 196.76   | 112.50 |  |
| March     | 261.63   | 111.48 |  |
| April     | 180.75   | 107.13 |  |
| May       | 71.96    | 98.10  |  |
| June      | 31.66    | 97.74  |  |
| July      | 11.92    | 96.62  |  |
| August    | 66.24    | 90.25  |  |
| September | 82.26    | 93.01  |  |
| October   | 86.82    | 87.31  |  |
| November  | 91.82    | 92.33  |  |
| December  | 34.16    | 96.83  |  |

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 March and prices are highest in the month of February. The average monthly prices of turmeric were Rs. 5355, 5027, 5316 and 5575 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.

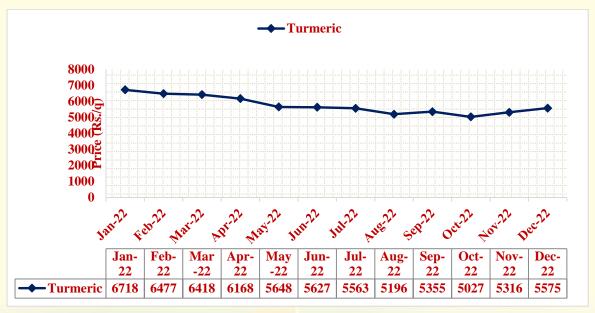


Figure 3: Average Monthly Prices of Turmeric in Andhra Pradesh.

Source: Data obtained from Andhra Pradesh AMCs

As per the information shared by Agricultural Market Intelligence Centre, ANGRAU, demand from major importing countries like Bangladesh, USA and Malaysia has declined however interest from UAE is still intact and pace of export is reportedly good. Overall exports still reported up by 5.26% from the same period last year due to health awareness and demand from China and Bangladesh for newly harvested crops during the start of the current season. In Andhra Pradesh as on 28<sup>th</sup> December 2022, 0.18 lakh hectares of turmeric was sown compared to 0.19 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. 4700 to Rs. 5200 per quintal for bulbs and Rs. 4900 to 5500 per quintal for fingers of turmeric in this Rabi Marketing/harvesting season 2022-23.

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