

## Original Research Article

# Dynamics of Arrivals and Prices Behaviour of Turmeric in Sangli District of Maharashtra, India

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## ABSTRACT

Present study was conducted to access the Seasonal indices of monthly arrivals and prices of turmeric in Sangali district of Maharashtra. Multistage sampling design was used. Sangali district was selected purposively because turmeric is grown on large scale in the district and six villages from Miraj and Palus tehsil were selected randomly. The information pertaining to the objective was collected from 60 samples of turmeric growers from selected villages, data pertaining to agricultural year 2016-17. Percentage, average, standard deviation were used to access socio-economic condition of the respondents, while coefficient variation was used to test the stated hypothesis. The seasonal indices of monthly arrivals and prices of turmeric were worked out by using the ratio to moving average method. It showed the extent of fluctuations in the arrivals and prices from month to month. The seasonal indices of arrivals and prices for Sangali market during 2001-2002 to 2014-2015 were depicted. The result indicates that for the Sangali market, the indices of arrivals were noticed highest in the month of March i.e. 293.01 followed by April and May and it was 205.60 and 183.93, respectively and seasonal indices were lowest in October i.e. 22.13. In case of prices, the highest indices were noticed in the month of October i.e. 121.20 and lowest in the month of March i.e. 88.59. The fluctuations in arrivals were more than the price of turmeric during the period of study in Sangli market.

## Keywords

Turmeric,  
Seasonal  
indices,  
Arrivals and  
prices

## Introduction

Turmeric (*curcuma longa* L.) is the dried underground rhizome belongs to the family 'Zingi beraceae'. Turmeric is native of India and china. The world turmeric is derived from the French word 'Terre-merite' meaning merit of the earth. The genus name *curcuma* is probably derived from the Persian word 'kurkum' a name also applied to saffron. Turmeric is called as 'Yellow gold', 'Indian saffron', and 'The golden spice of life'. It is one of the most essential spice used as an important ingredient in culinary all over the world. The plant is an

herbaceous perennial, 60-90 cm high with short stem and tufted leaf. It is tropical herb and can grow on different type of soils.

For turmeric the soils such as light black, red soils, sandy loam to clay loams are preferred and requires a temperature within range of 20-30o C with an annual rainfall of 1500 mm. Turmeric gets ready for harvest within 7-9 month after planting. Harvested green rhizomes are boiled in water, which are then spread out on a clean floor and allowed to dry in the sun for about 10-15

days. Turmeric cultivation does occur in India, China, Indonesia, Iran, Sri Lanka, Peru and Pakistan. India is leading country in the spices scenario and enjoy monopoly in the spices production because of suitable climatic condition. India is known as "Home of Spices" and "Spice bowl of the world ". India is largest producer, consumer and exporter of turmeric in the world.

Turmeric is grown only in 6% of the total area under spices and condiments in India. India is the largest producer and exporter of turmeric in the world and accounts for 80% world's total production and 60 % of world export.

Turmeric production in India has shown a fluctuating trend in last five years. It was 43000tonnes in 2011-12, and increased to 65000 tonnes in 2012-13. Again decreased to 37000 tonnes in 2013-14 and then increased to 70000 tonnes in 2014-15. The annual turmeric production was 48500 tonnes in 2015-16.Hence price of turmeric is not fixed and tend to fluctuate year by year.

Maharashtra state in India ranks sixth in area under turmeric cultivation. The area under crop was 11000 hectare with a production of 45000 tonnes and productivity of 4.09 tonnes/hectare during 2015-16. In Maharashtra Sangali, Satara, Hingoli, Nanded, Parbhani are the major turmeric growing districts. It is one of the major crops in Sangali district. In Sangali the area under turmeric is 1500 hectares; whereas production and productivity is 13000 tonnes and 8.6 tonnes/hectare, respectively in 2015-16.

### **Materials and Methods**

Multistage sampling design was used for selection of district, tehsils, villages and the turmeric growers. In first stage, Sangali

district was selected purposively because turmeric is grown on large scale in the district. In second stage, two tehsils viz. Miraj and Palus were selected randomly. In Third stage, from each tehsil three villages were selected randomly. At the last stage, from each selected villages ten turmeric growers were selected randomly. Thus, from six villages, 60 turmeric growers were selected for the present study. Required data were collected by personal interview method with the help of specially designed schedule for the agricultural year 2015-16. The objectives of the study were completed by applying simple statistical tools like means, averages, percentage, ratio etc.

### **Results and Discussion**

#### **Arrivals and prices of turmeric in Sangali market**

The seasonal indices of monthly arrivals and prices of turmeric were worked out by using the ratio to moving average method. It shows the extent of fluctuations in the arrivals and prices from month to month. It is helpful to indicate the optimum time for the sale of the produce.

The seasonal indices of arrivals and prices for Sangali market during 2001-2002 to 2014-2015 are depicted and presented month wise in Table 1.1.

The seasonal indices of arrivals and prices of turmeric indicates that for the Sangali market, the arrivals were noticed and were highest in the month of March i.e. 293.01 followed by April and May and it was 205.60 and 183.93, respectively and lowest in October i.e. 22.13.

In case of prices, the higher indices were noticed in the month of October i.e.121.20 and lowest in the month of March i.e. 88.59.

**Table.1** Seasonal indices of arrivals and prices of turmeric in Sangali market

Sr. No.	Month	Sangali	
		Arrivals indices	Prices indices
1.	January	55.23	95.77
2.	February	149.29	89.48
3.	March	<b>293.01</b>	<b>88.59</b>
4.	April	205.60	92.49
5.	May	183.93	91.95
6.	June	95.87	92.24
7.	July	54.66	93.85
8.	August	39.31	96.02
9.	September	33.04	105.78
10.	October	<b>22.13</b>	<b>121.20</b>
11.	November	32.47	118.26
12.	December	35.48	114.38

**Table.2** Arithmetic mean and coefficient of variation for arrivals and prices of turmeric in Sangali market (2001-02 to 2014-2015)

Sr. No.	Month	Sangali			
		Arrival		Prices	
		Mean	C. V.	Mean	C.V.
		(qt)	(%)	(qt)	(%)
1.	January	25576.13	140.44	4899.40	<b>54.28</b>
2.	February	60652.73	59.88	4866.67	64.72
3.	March	152013.93	<b>144.00</b>	5018.40	72.33
4.	April	80830.60	58.88	5114.87	67.89
5.	May	71329.60	<b>51.59</b>	5152.80	71.30
6.	June	37869.40	52.79	5143.53	72.76
7.	July	21392.87	73.65	5244.93	73.37
8.	August	15618.67	85.99	5509.33	<b>77.85</b>
9.	September	13054.80	89.02	5900.73	76.68
10.	October	9900.60	96.30	6122.80	61.89
11.	November	11558.60	93.08	6159.60	68.03
12.	December	14652.33	111.29	6184.20	76.17
	Total	514420.27	<b>1056.91</b>	65317.27	<b>837.27</b>

The variability in arrivals and prices of turmeric was depicted and presented in table 1.2. The variability in arrivals and prices of turmeric was 1056.91 and 837.27 per cent respectively in Sangali market, at an overall level. The minimum variability was in the month of May i.e. 51.59 per cent for arrivals

and for prices minimum variability was in the month of January i.e. 54.28 per cent.

The maximum variability in arrivals was observed in the month of March i.e. 144 per cent and for prices it was observed in the month of August i.e. 77.85 per cent.

The fluctuations in arrivals were more than the prices of turmeric during the period of study in Sangali market. It is suggested that turmeric farmers should develop sufficient storage facilities so that turmeric will be available for marketing throughout the year.

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