



Turmeric Seasonal Report 2021

(Release date: 17 March 2021)



Eventell Global Advisory Pvt. Ltd
#155, Brahmalingeshwara Complex, HAL Airport
Road, Kodihalli,
Bangalore – 560008 INDIA Tel: +91-80-41535476
Fax: +91 080 25276154
Mail: Swapna@eventellglobal.com,
Web: www.eventellglobal.com

CONTENTS

Executive Summary

Price variation analysis – Oct 2020 to Feb 2021

Market review and Procurement Strategy

State-wise area under turmeric

Monsoon influence in turmeric sowing

Trade Flow – Dry turmeric and turmeric powder

Cost of Cultivation

Executive Summary

Turmeric production in 2021 is estimated at around 4.80 lakh Mt, a decline of 11% compared to 2020 due to reduction in acreage as well as yield. Hence, estimated total supply for the year 2021 is about 6.88 lakh Mt, dropped by 8.5% compared to last year. Area under turmeric in 2020 is estimated at 140,543 hectares as compared to 155,856 hectares in 2019.

Why did India turmeric demand increase in 2020?

Turmeric demand in India as well as rest of the world increased sharply on account of covid-19 pandemic, given its rich medicinal uses. India demand during 2020 is estimated at about 3.30 lakh Mt as compared to 3.05 lakh Mt in 2019. Industrial consumption, especially in Pharma reported an increase of 15,000 to 20,000 Mt, while household demand increased by about 5000 to 8000 Mt.

Would turmeric demand remain firm in 2021?

Curcumin demand in pharma industries increased by 20% in pharma industries during 2020 in the countries such as United States, Republic of Korea etc. The trend is expected to continue in 2021 as world seeks 'immunity boosters' to counter covid-19. In India, people have started consuming turmeric added milk. Besides, washing vegetables, flesh/meat with turmeric prior to consumption has become a regular habit in many families, as a preventive measure. Considering these facts, turmeric consumption in 2021 is expected remain firm even at the prevailing high price levels.

Indian turmeric exports witnessed record volumes in 2020. Dry turmeric exports touched 1.17 lakh Mt, a 54% year on year increase, while powdered turmeric export hit 48,000 Mt, increasing by 11% over 2019. Of the total export, Bangladesh alone accounted for about 42%, followed by Iran 10%. Bangladesh imported higher volumes mainly for domestic consumption. Apart from the key destinations, Nepal and Turkey imported about 1800 Mt and 1642 Mt in 2020 as against 272 Mt and 885 Mt respectively during 2019.

Table:1 India – Turmeric Demand & Supply 2021

Indian turmeric Demand & Supply (values in '000' Mt) *Estimates					
Particulars	2017	2018	2019	2020	2021*
Opening Stock	193	146	157	217	208
Production	391	455	520	535	480
Total Supplies	584	601	677	752	688
Seed retention for sowing	34	33	34	34	34
Pulverising/ house hold/ industrial	294	301	305	330	347
Exports	110	110	121	180	190
Total Consumption	438	444	460	544	571
Closing Stocks	146	157	217	208	117
Nizam Finger price in Rs/kg – Low (2021 till 15 Mar)	48	42	40	42	51
Nizam Finger price in Rs/kg – High(2021 till 15 Mar)	77	84	72	63.50	90

Source: Trade estimates; * 2021 is a forecast.

Price variation analysis (Note: Arrival figures include both finger and bulk grades)

Price and arrivals trend – Oct 2020 to Feb 2021

Nizamabad

Particulars	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21
Price - Min	53	53.5	53	54	59
Price- Max	55	55	55.5	61	70.3
Price - Average	53.8	54.2	54	57.2	65
% Min to Max	3.8%	2.8%	4.7%	13.0%	19.2%
% Avg to Max	2.2%	1.5%	2.8%	6.6%	8.2%
% Avg to Min	1.5%	1.3%	1.9%	5.9%	10.2%
Total arrivals	24,500	24,900	23,500	22,700	2,77,000

Arrivals in Bags (each 70 Kg), Price INR/Kg

Erode

Particulars	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21
Price - Min	48	45	50	48	56
Price- Max	63.7	69	65.9	69	90
Price - Average	54.7	57	58.5	60	72
% Min to Max	32.7%	53.3%	31.8%	43.8%	60.7%
% Avg to Max	16.4%	21.1%	12.6%	15.0%	25.0%
% Avg to Min	14.0%	26.7%	17.0%	25.0%	28.6%
Total arrivals	30,446	35,186	54,353	42,647	50,780

Arrivals in Bags (each 70 Kg), Price INR/Kg

Market review and Procurement Strategy



Technical Review

Since 2017 Turmeric prices have been drifting down on account of higher production and higher closing stock. In 2020, after several years, there was a huge upswing in demand. Exports jumped from 120,000 tons to 180,000 tons equivalents in all forms of turmeric.

Domestic consumption is estimated to have increased by at least 10% on the large base of 300,000 tons to 330,000 tons. In 2021, crop is expected to lower by 10% from last year to about 480,000 tons. So, on the back of lower expected crop and expectation of pent-up demand in 2021, the likely scenario is a steep drop in end-stock for 2021 to about 117,000 tons.

Current rally which started in January 2021 is very strong as seen by the steepness of the ascent. The rally is induced by strong demand and also relatively weak production expectations. Such rallies usually last between 25 months to 34 months (2008-2010 rally is a classic example. Incidentally it also started in Nov / Dec of 2007).

Usual correction in such a strong rally is at best 38.2% of the price range covered. For the current upmove, 38% corresponds to about Rs. 8000 per quintal level. May be a spike up to Rs. 7800 per quintal is possible. So, processors are advised to accumulate between Rs. 8200 to Rs. 7800 per quintal levels for three to six months requirements.

On the higher side, the immediate target looks to be Rs. 10,000 per quintal. If south west monsoon is delayed or deficit, then the rally could get extended higher. The ensuing marriage season from mid-April'21 for three months is also another positive for the demand.

On the risk factors, if the monsoon starts normal and if it rains adequately in June and July, then area under turmeric could increase in the next season. This could temporarily halt the rally and could also correct the prices lower. Second aspect is the USDINR value. If INR appreciates to 71-70 level to a USD, then price could correct lower. Given the current situation, we believe that Rs. 7200 per quintal should hold. If that is breached, then the strong bullish outlook is negated.

Supporting indicators such as RSI and MACD confirm the broader long-term bullish trend, although in the short-term indicators point to slight weakness.

Procurement strategy

Those following our fortnightly would have been benefited by our earlier advice made in Jan and then in Feb 2021.

Additional purchases are recommended at staggered levels.

Preferably between Rs. 8200 to Rs. 7800 per quintal levels for processors.

Additional purchases are recommended around Rs. 7300 per quintal level. It is advisable to cover requirements till Aug/Sept 2021.

Short term trade on sell side is very risky. So, we suggest traders to avoid such calls.

Recommendation given on Jan 1, 2021 fortnightly

NCDEX April Turmeric futures contract closed on Rs. 5848/quintal on January 1, 2021. Divergence in RSI and price indicates that **the bottom is in place and price is likely to move upwards although gradually.**

Buy position can be initiated at around Rs. 5810/quintal – Rs. 5775/quintal levels. The stop loss could be placed at Rs. 5650 /quintal on closing basis. Profit targets could be Rs. 6075 / quintal and then Rs. 6150/quintal.

Recommendation made on Feb 21, 2021 fortnightly

NCDEX Turmeric prices have run up too fast. Currently April contract is trading at Rs. 7664/quintal (16/02/2021). RSI is around 75+. Current prices are at important resistance levels. Usually, one witnesses a slight correction from these levels. Typically for a strong upmove, a 38% retracement is considered as good. Should that happen, then market could provide a buying opportunity at around Rs. 7000 – 6750 /quintal levels. Should the uptrend continue with strong volumes and should price break and close above Rs. 8000/quintal, then price may not fall immediately and may move to 9500 levels (low probability).

It is suggested to be on the buy side. However, fresh buys can be initiated at slightly lower levels of Rs. 7000- 6750/quintal.

Turmeric varieties and applications – an article

Alleppey turmeric is mostly imported by the United States, where it is used as a spice and a food colorant. The Madras turmeric is preferred by the British and Middle Eastern markets where it is used as curry powder. The Bengal type is preferred for use in dyes in India. The turmeric content in curry powder blends ranges from 10-15% to 30%.

Variety	Volatile oils	Curcumin
Alleppey turmeric	3.5% to 5.5%	4.0% to 7.0%
Madras	2%	2%

Turmeric composition in curry powder

Indian curry powder for meat and fish dishes contains 20-30% turmeric, 22-26% coriander, 12% cardamom, 10% and cumin, 4% or 10% fenugreek, ginger, cayenne, cloves and fennel in proportions from 1% to 7%. Curry mixes for vegetarian dishes contain less turmeric, in the range of 5 to 10%, because of the bitter flavor it would impart to the dish.

Applications

Food industry: Turmeric is used in a number of products including dairy products, sauces, ketchups, biscuits and cakes. It is also used as a natural coloring agent in foods. It is also used in the food, pharma, confectionary and rice milling industries. Turmeric is widely used food additive for products that are specially packaged to protect from sunlight.

Cosmetics: Turmeric is used to manufacture various sunscreen, fairness creams and lotions. The anti-oxidant properties help to lighten the skin. It is widely used as part of cosmetic preparations from the traditional kumkum (sindoor) to anti- acne and pimple creams.

Natural Dye: Due to its strong colour, it is used as a natural dyeing agent for silk, wool, cotton and other fabrics

Turmeric and isolated compounds from turmeric have several pharmacological activities Antioxidant/ antiarthritic / antithrombotic / antivenom by neutralizing the hemorrhagic effect of the venom in mice / antibacterial / antifungal / antiviral / nematocidal / choleric and antihepatotoxic activities. Low incidence of Alzheimers disease in regions where turmeric is extensively used in cuisine and as an herbal remedy suggests that it may protect against this disease since areas of high consumption such as those in India have very low Alzheimers incidence.

Characteristics of prominent varieties of turmeric

Variety	Yield (t/ha)	Crop Duration (days)	Dry recovery (%)	Curcumin (%)	Oleoresin (%)	Essential oil (%)
Suvarna	17.4	200	20.0	4.3	13.5	7.0
Suguna	29.3	190	12.0	7.3	13.5	6.0
Sudharshan	28.8	190	12.0	5.3	15.0	7.0
IISR Prabha	37.5	195	19.5	6.5	15.0	6.5
IISR Prathibha	39.1	188	18.5	6.2	16.2	6.2
Roma	20.7	250	31.0	9.3	13.2	4.2
Suroma	20.0	255	26.0	9.3	13.1	4.4
Ranga	29.0	250	24.8	6.3	13.5	4.4
Rasmi	31.3	240	23.0	6.4	13.4	4.4
Rajendra Sonia	42.0	225	18.0	8.4	-	5.0
IISRAppey Supreme	35.4	210	19.3	6.0	16.0	4.0
IISR Kedaram	34.5	210	18.9	5.5	13.6	3.0
Duggirala red	32.0	240	17.6	4.5	14.6	4.0

Source: Turmeric Research Station Kammarpalle

State-wise area under turmeric 2020-2021

Farmers in most of the growing regions shifted to other alternative crops in 2020 due to lower price realizations for their 2019 output. Notably, in Tamil Nadu, area under turmeric declined by about 30%. Maharashtra saw a drop of 20% in acreage.

Area in Hectares			
State	2020	2019	% Diff.
Maharashtra	43,000	54,000	-20.4
Telangana	41,485	48,119	-13.8
Karnataka	20,500	19,000	7.9
Tamil Nadu	12,000	17,000	-29.4
Andhra Pradesh	23,558	17,737	32.8
Total	1,40,543	1,55,856	-9.8

Telangana		
Area in hectares		
District	2020	2019
Nizamabad	13,911	13,549
Jagtial	8560	13,707
Nirmal	6492	8005
Warangal (rural)	5435	4612
Mahabubabad	3585	4424
Vikarabad	1644	2037
Jayashankarbhupalpalli	444	194
Peddapalli	405	384
Warangal (urban)	264	341
Sangareddy	222	—
Karimnagar	111	303
Others	412	563
Total	41,485	48,119

Maharashtra		
District	2020	2019
Marthwada region	35,000	40,000
Other	8000	14,000
Total	43,000	54,000

Andhra Pradesh		
Area in hectares		
District	2020	2019
Visakhapatnam	9643	5304
YSR Kadapa	4280	2940
Guntur	4262	4764
Krishna	3178	2435
Kurnool	1097	1178
Prakasam	680	446
Srikakulam	88	206
Others	330	464
Total	23,558	17,737

Tamil Nadu

As per the information from Tamil Nadu Horticulture Department, area under turmeric in 2020 stood at around 11,000 to 12,000 hectares as compared to 17,000 hectares in 2019, a decline of about 30%.

Monsoon influence on turmeric sowing

During the time of sowing, rainfall remained consistent in all the major turmeric cultivation area. However, it remained below normal levels most of the weeks.

Rainfall in Sangli remained excess during second and third week of October 2020 which impacted yield levels. In Nizamabad, rainfall remained excess during second and third week of August and September respectively.

Week	Nizamabad			Erode			Sangli			Hingoli		
	Actual (mm)	Normal (mm)	Difference	Actual (mm)	Normal (mm)	Difference	Actual (mm)	Normal (mm)	Difference	Actual (mm)	Normal (mm)	Difference
June												
1	10.7	24.5	-13.8	2.3	12.9	-10.6	20.8	31.9	-11.1	2.6	22	-19.4
2	60.3	43	17.3	0	9.3	-9.3	38.5	30.7	7.8	102.6	43.5	59.1
3	50.7	42.7	8	1.8	7.7	-5.9	24.6	28.8	-4.2	27.8	51.6	-23.8
4	29.4	50.5	-21.1	40.5	9.7	30.8	58.4	28.4	30	83.6	54.1	29.5
July												
5	34	56.1	-22.1	14.3	9.6	4.7	13.5	30.8	-17.3	42.4	49.9	-7.5
6	32.8	62.3	-29.5	34.6	10.9	23.7	30.5	27.5	3	34.8	47.6	-12.8
7	55.7	65	-9.3	56.4	12.5	43.9	47.4	30.9	16.5	71.8	49.9	21.9
8	51.6	75.5	-23.9	28.2	11.6	16.6	7.7	33.9	-26.2	65.8	57	8.8
August												
9	43.9	80.5	-36.6	4.1	8.9	-4.8	47.8	32.2	15.6	33	56.4	-23.4
10	100	72.8	27.2	7.3	10.9	-3.6	52.3	31.1	21.2	50.2	57.1	-6.9
11	160.6	70.2	90.4	0	13.4	-13.4	70.6	20.8	49.8	88.6	55.3	33.3
12	50.8	64.8	-14	1.5	18.7	-17.2	15.9	22.3	-6.4	21.6	57.5	-35.9
September												
13	13.9	49.8	-35.9	46.3	16.2	30.1	5.6	21	-15.4	10	54.5	-44.5
14	16.1	54	-37.9	28.8	16	12.8	68.8	20.3	48.5	24	45.1	-21.1
15	98.2	32.7	65.5	17.4	22.7	-5.3	25.9	26.6	-0.7	56.3	22.1	34.2
16	82.2	38.1	44.1	2.4	29.4	-27	72.5	42.8	29.7	102	39.7	62.3
17	28	33.3	-5.3	41.1	32.6	8.5	8.3	42	-33.7	26.2	25.9	0.3
October												
18	8.4	34	-25.6	8.5	29.4	-20.9	29.2	42	-12.8	2.6	18.9	-16.3
19	53	16.9	36.1	41.9	32.3	9.6	96.1	32.1	64	57.6	19	38.6
20	6.6	22.2	-15.6	36.2	36.9	-0.7	133.2	16.9	116.3	14.8	12.9	1.9
21	0	17.5	-17.5	0.4	38.6	-38.2	13.9	12.7	1.2	3.4	11.4	-8
November												
22	0	7.8	-7.8	10.5	35.8	-25.3	0.5	5.4	-4.9	0	4.3	-4.3
23	0	3.1	-3.1	21.5	38	-16.5	0	8.1	-8.1	0	6.2	-6.2
24	0	3.1	-3.1	47.9	21.5	26.4	0.4	7.3	-6.9	0	3.6	-3.6
25	0	3.4	-3.4	2.7	23	-20.3	0	4.7	-4.7	0	4.5	-4.5
December												
26	0	2.2	-2.2	7.2	12.6	-5.4	0.7	1.3	-0.6	0	2.4	-2.4
27	0	2.3	-2.3	36.2	16	20.2	0	2.2	-2.2	0	5.2	-5.2
28	0	1	-1	0	9.9	-9.9	0	1.8	-1.8	0	0.9	-0.9
29	0	0.4	-0.4	2.7	9.2	-6.5	0	0.4	-0.4	0	1.5	-1.5

Trade Flow

Dry turmeric export from India during 2020 touched all-time-high on account of covid-19 pandemic. Similarly, turmeric powder export from India also incremented by 11% compared to 2019.

Turmeric export from India					
Product	2020		2019		% Diff. Quantity
	Quantity in Mt	USD/Mt (Dec 2020)	Quantity in Mt	USD/Mt (Dec 2019)	
Dry turmeric	1,17,747	901	76,028	1026	54.87
Turmeric powder	48,092	1433	43,186	1579	11.36
Total	1,65,840	-	1,19,214	-	39.11

Source: Indian Ministry of Commerce and Industry

Dry turmeric export

Dry Turmeric - HS Code 09103020 (Quantity in MT)						
Month	2015	2016	2017	2018	2019	2020
January	2992	2832	3990	4422	3576	5395
February	3153	2457	4251	4483	4493	9174
March	3345	4064	6693	5866	8159	8322
April	3156	4602	7607	6606	6637	3089
May	4842	6481	6684	5606	6447	10,767
June	4784	6025	5842	7329	7192	14,619
July	3426	5621	3993	5975	8119	20,791
August	2922	4240	3525	6790	3978	8410
September	3217	3314	3632	6432	5001	12,226
October	3264	3462	3435	5281	5680	6615
November	2926	3573	3574	5980	7091	8299
December	4292	3725	5268	5134	9656	10,039
Total	42,320	50,398	58,495	69,904	76,028	1,17,747

Source: Indian Ministry of Commerce

Dry Turmeric - HS Code 09103020 (USD/Mt)						
Month	2015	2016	2017	2018	2019	2020
January	1290	1607	1356	1386	1205	1053
February	1351	1546	1270	1367	1115	1013
March	1420	1548	1221	1256	1091	971
April	1362	1538	1156	1184	1080	1042
May	1425	1515	1124	1245	1121	980
June	1369	1517	1109	1280	1150	893
July	1375	1461	1250	1315	1059	881
August	1355	1467	1347	1236	1089	906
September	1334	1439	1407	1140	1062	906
October	1406	1427	1424	1161	1070	921
November	1459	1349	1363	1107	991	889
December	1570	1369	1344	1186	1026	901
Total	1393	1482	1281	1239	1088	946

Source: Indian Ministry of Commerce

Turmeric Seasonal Report 2021

Turmeric powder export

Powder turmeric - HS Code 09103030 (Quantity in MT)						
Month	2015	2016	2017	2018	2019	2020
January	2419	2473	2825	3149	3330	3065
February	2586	2801	3121	2882	3273	3801
March	2932	3276	3942	3943	3914	2617
April	3100	4745	3518	3084	3410	1609
May	2899	5417	3830	3836	3983	3621
June	3179	5921	3733	4084	3651	4978
July	2759	3378	3431	3244	2896	5030
August	2525	3116	3624	3923	3914	4468
September	3085	2901	3529	3617	3365	5268
October	2682	3056	3212	4025	3789	4569
November	1877	2629	3068	2915	3976	4598
December	2813	2995	2972	3617	3685	4468
Total	32,855	42,709	40,806	42,319	43,186	48,092

Source: Indian Ministry of Commerce

Curcumin exports from India

Quantity in Mt			
Country	2020	2019	% Diff.
United States of America	2492.3	2115.9	17.8
Republic of Korea	429.1	245.0	75.1
China	217.3	119.2	82.3
Germany	210.8	168.8	24.8
Australia	182.2	131.2	38.9
Japan	182.0	151.1	20.5
Italy	130.2	154.2	-15.6
United Kingdom	96.4	67.9	42.0
UAE	88.8	55.6	59.7
Spain	71.0	184.8	-61.6
Others	791.1	657.1	20.4
Total	4891.1	4050.7	20.7

Dry turmeric export destination-wise

Quantity in Mt		
Country	2020	2019
Bangladesh	49,041	13,909
Iran	11,683	11,619
Morocco	8030	8925
Malaysia	7430	5653
UAE	6544	2581
Saudi Arabia	3753	3632
Iraq	3150	3287
Tunisia	3063	2373
Japan	2854	2405
Egypt	2269	1772
Nepal	1840	273

Turmeric Seasonal Report 2021

Quantity in Mt		
Country	2020	2019
Turkey	1709	1050
Brazil	1642	886
Others	14,740	18,260
Total	1,17,747	76,623

Source: Indian Ministry of Commerce and Industry

Cost of Cultivation

Turmeric cost of cultivation in Nizamabad remained almost similar to last with minimal increment in labour charge. However, yield levels are reported at 1.9 tons per acre, hence the cost of production is estimated at INR 55 to 55.50 per kg.

Particulars	Quantity	Unit	INR/per unit	Total (INR)
Inputs				
Seed	9	Quintal	2300	20,700
Land preparation using farm machinery	10	Hours	850	8500
Manures	20	MT	500	10,000
Fertilizers	350	kg	17	5950
Weedicides				200
Tank silt	65	MT	125	8125
Plant protection				2500
Subtotal				55,975
Labour				
Sowing	8	Man-days	350	2800
Manures and Fertilizers	1	Man-days	330	330
Weeding	25	Man-days	300	7500
Plant protection	2	Man-days	300	600
Irrigation	18	Man-days	310	5580
Harvesting	10	Man-days	390	3900
Cleaning and separations	35	Man-days	370	12950
Subtotal				33,660
Processing				
Boiling	30	Drums	180	5400
Firewood for boiling	10		340	3400
Drying	8	Man-days	380	3040
Polishing	20	Quintal	115	2300
Transport to Market	20	Quintal	80	1600
Subtotal				15,740
Grand total				1,05,375
Yield (dry basis)				1.9 tons
Cost of Production INR/Kg				55.5

Disclaimer: The report is based on the research done at Eventell Global Advisory Pvt. Ltd, Bangalore, based on available secondary data and information collected directly from market participants. Due care has been taken to check the accuracy of the data. All technical and fundamental outlook on markets is arrived at based on objective analysis. Eventell or its employees do not trade in any of the commodities presented in the report. Eventell or its employees will not be responsible for any losses incurred by any subscriber directly or