

Dhaniya (Coriander)

Introduction

Coriander is an annual herb that belongs to the carrot family - Umbelliferae. Its name is derived from the Greek Koris, meaning bedbug, because of the unpleasant, fetid, bug-like odour of the green herb and unripened fruits. Coriander is a native of the Mediterranean region. It is one of the earliest spices used by mankind. Coriander is an important spice crop having a prime position in flavoring food. The plant is a thin stemmed, small, bushy herb, 25 to 50 cm in height with many branches and umbels. Leaves are alternate, compound. The whole plant has a pleasant aroma. Inflorescence is a compound umbel comprises 5 smaller umbels. Fruit is globular, 3 to 4 mm diameter, when pressed break into two locules each having one seed. Fruit has delicate fragrance; seeds are pale white to light brown in colour.

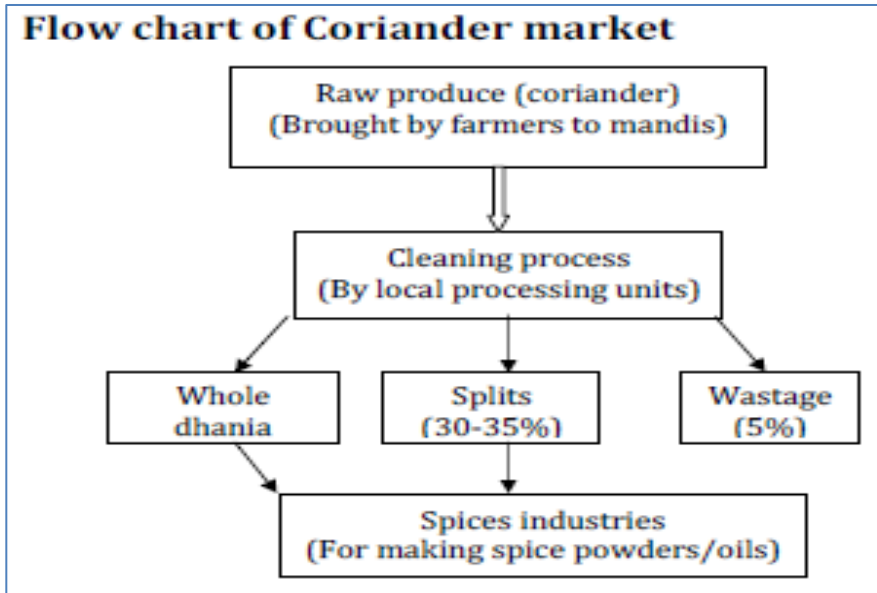
It is a native of Mediterranean and commercially produced in India, Morocco, Russia, East European countries, France, Central America, Mexico, and USA. Coriander is a tropical crop and can be successfully cultivated as a Rabi season crop in an area free from severe frost during February when the crop flowers and sets its seeds.

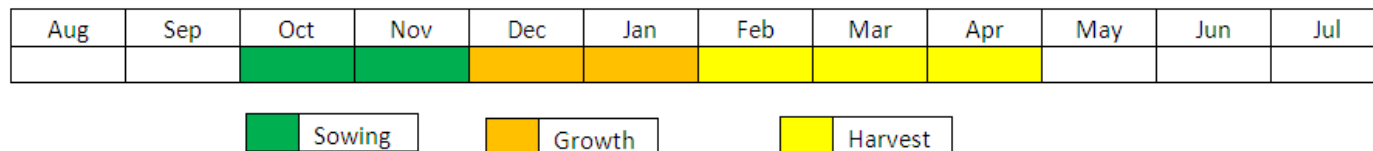
Crop Cycle

Coriander requires cool climate during growth stage and warm dry climate at maturity. It can be cultivated in all most all types of soils but well drained loamy soil suits well. It is observed that quality of seed is superior & essential oil content is more when the crop is grown in colder regions & at high altitudes.

15 to 20 Kg of seed is required for sowing of one hectare area. Usually coriander is cultivated during Rabi season. The best time for sowing of coriander is 15th October to 15th November. Seed should be rubbed to split into two halves before sowing. While rubbing care should be taken to save the sprouting portion. Timely sowing is beneficial as in early sowing germination is affected on account of excess sun shine and late sowing leads to paltry growth of plants and development of various diseases. Sowing time may be adjusted in frost prone areas so that the frost incidence can be avoided during flowering stage. Sowing should be done in rows at spacing of 30 cm apart.

This crop matures in about 110 to 140 days. At maturity, seeds turn to yellowish green colour. On pressing, mature seeds are medium-hard. After harvest, the crop should be dried under partial shade to retain the green colour and its aroma. When the plants are completely dried, the seeds should be separated by thrashing. Seeds should be cleaned by winnowing or with the help of sieve or by vibrator and graded. About 500 to 800 Kg / ha from rain fed crop and 1200 to 2000 Kg from irrigated crop can be obtained.



Crop Calendar**Varieties and Grades**

Improved varieties like Guj.Coriander-1, Guj.Coriander-2, RCr-41, UD-20, Rajendra Swati (RD-44), CS-287, CO-1, CO-2, CO-3, Sadhana, Swati and Sindhu may be cultivated to get high yield. Coriander is classified into grades like Badami, Eagle, Scooter, single parrot, double parrot, green medium, green extra and green special. After the harvesting of coriander, it is dried in sunlight; the excess drying leads to brown color and fetch a low price. These brown color seeds are called the Badami grade. The finer quality is called green and it is traded at a premium to all other grades. However, the Badami grade has the highest market share, constituting 50% of the total produce. Many improved varieties of coriander are now available for cultivation in Tamil Nadu, Andhra Pradesh, Gujarat and Rajasthan states.

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Variety	Parentage	Characteristics
CO ₁	A pure line selection	Released by TANU, Coimbatore. Tall plant, many umbels per plant, suitable for green and grains. Duration 110 days. Yield 500kg per ha.
CO ₂	A reselection from culture P ₂ of Gujarat	Released by TANU, Coimbatore. High yield, dual purpose variety, tolerant to drought, oil 0.3%. Duration 90-110 days. Yield 600-700kg per ha.
CO ₃	Reselection from Acc. No. 695	Released by TANU, Coimbatore. High yield, dual purpose, medium size grain, seed oil 0.38-0.41%. Duration 103 days. Yield 640kg per ha.
Gujarat Corinader-1	A selection from local	Released by GAU, Jagudan. High yield, more number of branches, seeds bolder and greenish in colour. Duration 112 days. Yield 1100kg per ha.
Gujarat Coriander-2	A selection from CO ₂	Released by GAU, Jagudan. High yield, more branches, dense, foliage, umbels large size, grain purpose variety, bold seeds, no lodging. Duration 110-115 days. Yield 1500kg per ha.
Rajendra Swati	A mass selection from germplasm type	Released by RAU, Dholi. High yield potential, suitable for intercropping, fine seeded rich in essential oil, resistant to stem gall disease. Duration 110 days. Yield 1200-1400kg per ha.
Rcr-41	Recurrent selection from UD 41	Released by RAU, Jobner. High yield, tall erect, suitable for irrigated areas, resistant to stem gall. Duration 130-140 days. Yield 1200kg per ha.
Swati	Mass selection	Released by APAU, Guntur. High yield, semi erect, suitable for delayed sowing. Duration 80-90 days. Yield 885kg per ha.
Sadhana	Mass selection	Released by APAU, Guntur. High yield, suitable for rain fed areas, semi erect, resistant to aphid and mites. Duration 95-105 days. Yield 1000kg per ha.

Source: National Horticulture Board (NHB)

Domestic Scenario

Status of Supply & Value of Dhaniya in India

(MT)

Year	Production (MT)	Maximum (Rate / Q)	Minimum (Rate / Q)	Avg. (Rate / Q)	Crores
2011-12	428687	5775.00	3875.80	4825.40	2068.59
2012-13	503240	7853.15	3875.80	5864.47	2951.24
2013-14	496240	11855.75	5671.45	8763.60	4348.85
2014-15	546800	11883.65	6926.65	9405.15	5142.74
2015-16	572987	11883.65	6926.65	9405.15	5389.03
2016-17(Est.)	426480	8367.60	4594.60	6481.10	2764.06
2017-18 (Est.)	394570	7889.00	4272.00	6080.50	2399.18

Source: Spice Board of India & Industry Sources

Indian Production Scenario

India is the largest producer of the spice, accounting for nearly 80% of global output. The coriander is used in the spice industry and plays a major role in Indian cuisine, especially in the southern states. Coriander production in the past few years has varied drastically. In the year 2015-16 production was around 5.72 lakh MT whereas it is expected that the Production may lower to 4.26 lakh Mt and in 2017-18 to 3.94 lakh MT.

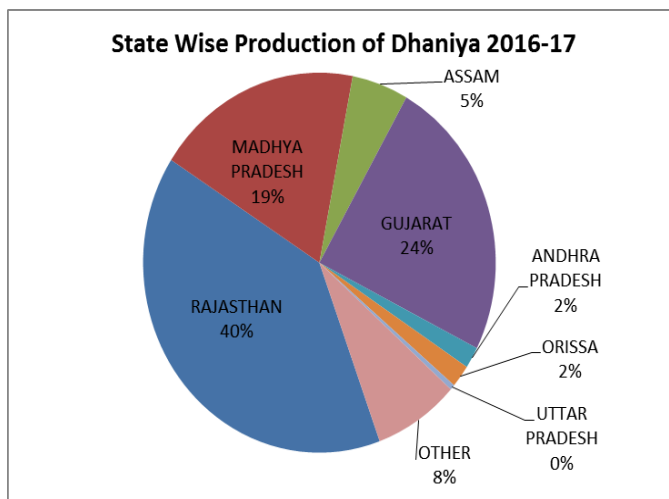
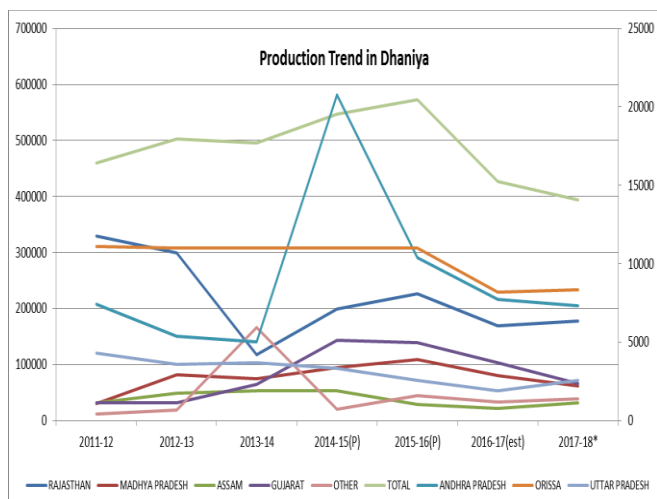
State wise Production of Dhaniya

(MT)

MAJORE STATES	2011-12	2012-13	2013-14	2014-15(P)	2015-16(P)	2016-17(Est)	2017-18*
RAJASTHAN	329402	300000	117084	198760	227203	169109	177954
MADHYA PRADESH	30456	82000	75000	94910	108487	80748	61333
ASSAM	31960	49500	53136	53960	29676	22088	31389
GUJARAT	32310	32310	64350	143380	138800	103310	66481
ANDHRA PRADESH	7427	5356	5018	20780	10398	7739	7315
ORISSA	11100	11000	11000	11000	11000	8187	8333
UTTAR PRADESH	4328	3613	3684	3330	2575	1917	2572
OTHER	12160	19461	166968	20680	44848	33381	39193
TOTAL	459143	503240	496240	546800	572987	426480	394570

Source: Spice Board of India & Industry Sources

* NBHC Estimate (Trade Source)



Grade Parameters

The quality of Coriander is primarily adjudged by the colour of the dried seeds, besides other parameters like split percentage in whole, foreign matter content, etc.

Green Colour	Medium Green	Brown
Single/Double Parrot	Eagle/Scooter	Badami



Global Trade of Dhaniya (India)

The major production of coriander is consumed by domestic buyers in India. They are spice processing agencies, which consume around 50% of the production are mostly located in the southern states of India and Delhi. The demand from this sector peaks during April to June, which also coincides with the peak arrival period. Strong export demand from other countries boosted exports from India.

Country wise export of Dhaniya (MT)

COUNTRY	2011-12	2012-13	2013-14(P)	2014-15(P)	2015-16(Est)
MALAYSIA	8856.19	9252.17	11490.59	11684.61	11931.85
U.A.E	4451.22	5858.57	4573.30	4484.18	4540.08
U.K	1907.43	2005.95	2458.85	2875.68	2961.88
PAKISTAN	1618.75	1658.92	2680.03	4816.42	4146.00
SAUDI ARABIA	2918.47	3041.72	3174.33	2625.53	2331.57
U.S.A	556.88	1085.58	1279.61	1185.22	1322.37
SOUTH AFRICA	1536.77	2126.20	2464.39	2524.32	2105.08
NEPAL	355.16	2485.98	2219.61	796.83	1739.89
OMAN	715.23	563.83	693.11	740.71	1056.64
SINGAPORE	894.72	822.42	951.72	773.65	797.58
OTHER	4289.21	7000.76	13764.46	13492.85	7167.06
TOTAL	28100.03	35902.10	45750.00	46000.00	40100.00

Source: Spice Board of India

Malaysia, U.A.E, U.K, Pakistan, Saudi Arabia are the major importing countries.

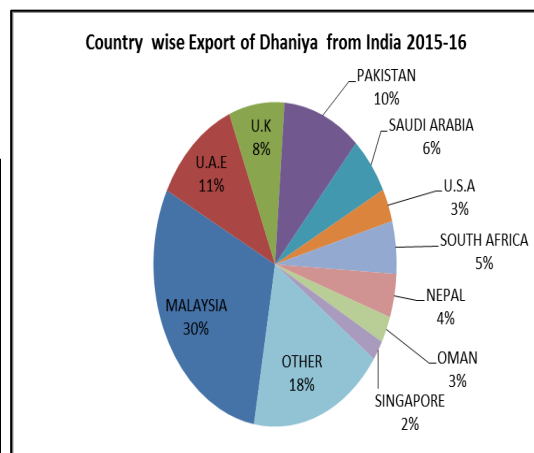
Import is expected to take a hike of 44,485 MT as the sowing is low this year i.e. in 2017-18 .The export of coriander seed during 2012-13 has been at 35,902 MT which further increased to 45,750 MT in 2013-14, which remained high till 2015, which further started declining to 40,100 MT in 2015-16 and its expected that it will decline more to around 30,300 MT. Major markets for India are Malaysia 30 per cent, UAE 11 per cent Pakistan 10 per cent and Saudi Arabia 6 per cent.

Years	Quantity(MT)
2012-13	4,470
2013-14	4,640
2014-15	9,750
2015-16(P)	25,305
2016-17(E)	44,485

Source: Spice Board of India

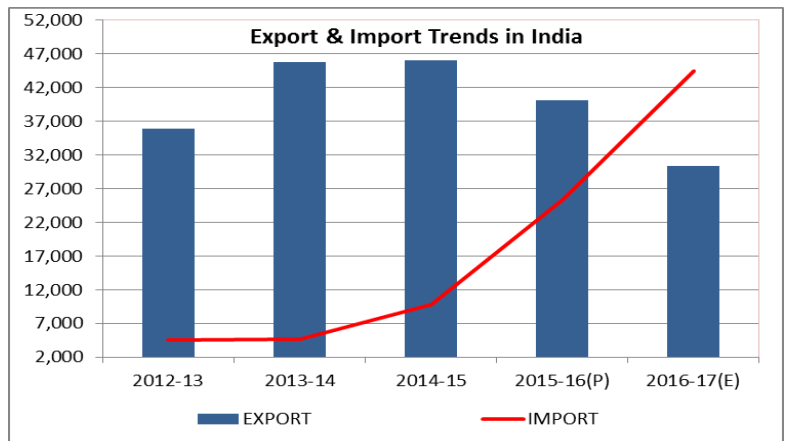
Years	Quantity(MT)
2012-13	35,902
2013-14(*)	45,750
2014-15(*)	46,000
2015-16(*)	40,100
2016-17(EST)	30,300

Source: Spice Board of India



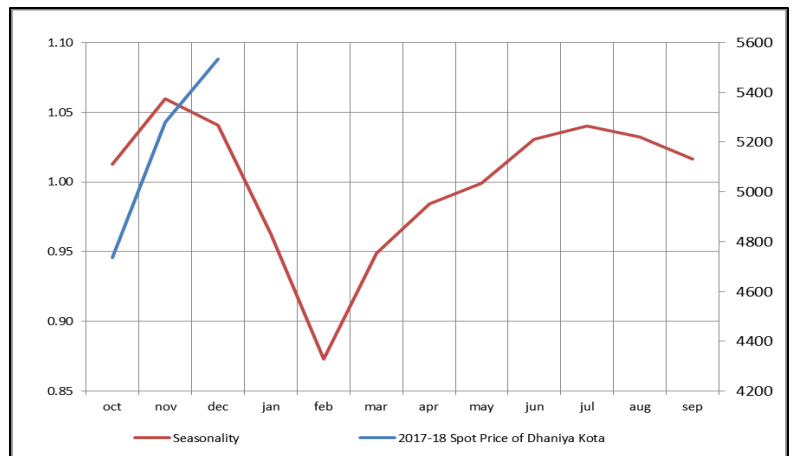
International Scenario

India is the largest-producer and exporter of coriander in the global market. The exports were increasing from 2012 which was increasing till 2015 significantly due to strong demand from the overseas markets, but low production in India itself lead to decrease the Export from 2015 onwards which is estimated to decrease in 2016-17 more than previous year. The changing pattern of food consumption or consumption of more spicy foods, especially in developed countries and the large population of Indian origin in these countries has resulted in good demand for Indian spices.



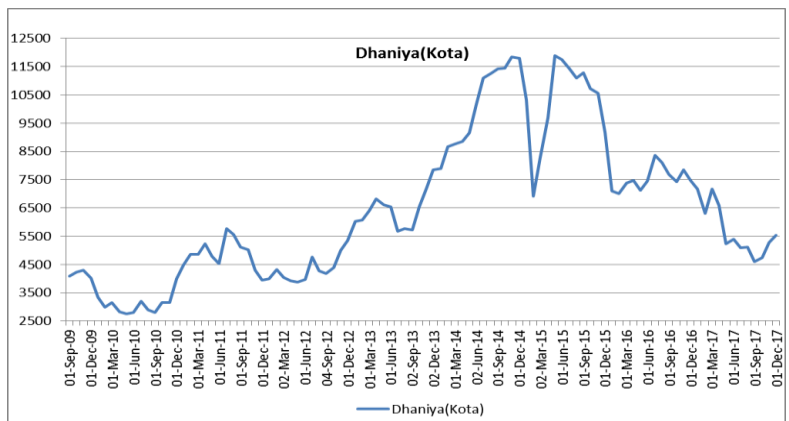
Dhaniya Price Seasonality

Coriander is a rabi crop where sowing starts in October post the harvest of kharif crops. Coriander arrivals begin in February and extend till Jul-Aug. However, peak arrivals are seen only during Mar-May in the spot markets. The major markets for coriander are located in Rajasthan and Madhya Pradesh. The three largest mandis, namely, Kota, Ramganj and Baran Mandi are located in the south-eastern parts of Rajasthan. The seasonality analysis of coriander indicates that arrivals are very seasonal in nature. Arrivals begin to increase from February and peak arrivals last until June. These arrivals recede July onwards, and the lean season continues until the next arrival in February of the following year. However, small spikes in arrivals are seen in Nov-Dec as traders offload their old stocks before new arrivals start in February.



Price Outlook

Overall, the price of coriander has been in the range of 4000 -6000 until 2014 since 2009 baring few small ups and downs. But, the year, 2014 was a significant landmark year as the prices spiraled upwards and within a span of three months the price doubled itself and it continued to remain on the higher end throughout the year as good demand and low availability of quality stocks kept supporting the bullishness in the market. That year, the crop faced adverse weather conditions as unseasonal rains during the harvesting season in Rajasthan and Madhya Pradesh and affected the crop severely. Unseasonal rains damaged the crop to the tune of 30 per cent, while 10 per cent of the crop was



damaged due to disease and pest, thus 2014-15 met with an overall damage of 40 per cent during the season as it can be seen in the graph above. Whereas, in 2015 higher acreage and favorable weather conditions in the key growing regions kept prices under pressure throughout the sowing season.

In the current year of 2017-18, the Coriander area is likely to go down by around 20 – 30 per cent in Madhya Pradesh and Rajasthan, while in Gujarat 15 – 20 per cent area may go down this is mainly because the prices for Coriander are moving to bottom level than other alternative crop like Jeera, Chana and Garlic, the other reason of less sowing in Rajasthan is moisture stress level. With the report of decreased area under production for the current season, the current years’ production is expected to be 394570 MT, and decrease by 7.04 per cent and it is expected that the prices may take a hike due to low sowing and production this year.

Technical Recommendation:



The market is expected to trade bullish in the coming months with the Bottom Side Support of 4700. Technically it can test levels of 6900 & 8400 in the coming 3 - 4 months.

Price Expectation

Commodity	Units	Current Market (29.12.2017)	Market View	Technical Projections		
				Support	T1	T2
Dhaniya (Coriander)	Rs. / Qtl	5450	↑	4700	6900	8400

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