

# A STUDY OF CHILLI PRODUCTION AND EXPORT FROM INDIA

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## Abstract

Chilli is considered as one of the commercial spice crops. It is the most widely used universal spice, named as wonder spice. The objective of the paper is to understand the area, production and productivity of chillies in India and export marketing of chillies. The study are based on the secondary data. The largest producer of chillies in the world is India accounting for 13.76 million tonnes of production annually. In India, Chilli was grown in an area 774.9 thousand hectare and production 1492.10 thousand tonnes and the productivity was 1.93 tonnes per hectare in 2014-15. If the country is able to meet the strict quality demands of the international market, the exports can be further improved. Necessary steps have to be taken by the Government encouraging the exporters to maintain the Indian dominance in the world market.

**Keyword:** Chilli, Area, Production, productivity, Export, marketing.

## INTRODUCTION

Chilli is considered as one of the commercial spice crops. It is the most widely used universal spice, named as wonder spice. Different varieties are cultivated for various uses like vegetable, pickles, spice and condiments. In daily life, chillies are the most important ingredient in many different cuisines around the world as it adds pungency, taste, flavor and color to the dishes. Indian chilli is considered to be world famous for two important commercial qualities namely, its colour and pungency levels. Some varieties are famous for the red colour because of the pigment and other quality parameters in chilli are length, width and skin thickness. The world production of chilli crop to around 7 million tones, which is cultivated on 1.5 million hectares of land. India is the world leader in chilli production followed by China and Pakistan. This shows that the bulk share of chilli production is held by the Asian countries, though it is produced throughout the world. A large demand for chilli comes from several chilli-consuming countries such as India, China, Mexico, Thailand, USA, UK, Germany and Sweden. Indian share in global production ranges between from 50 to 60 per cent. However, India is the only one source for hot chillies.

## OBJECTIVES OF THE STUDY

The study is proposed with the following main objectives –

1. To study the India's position in the world of Chillies.
2. To understand the Area, Production and Productivity of Chillies in India.
3. To evaluate the Export Marketing of Chillies.

## METHODOLOGY OF THE STUDY

The research study is descriptive in nature. The entire study is based on Secondary sources of data. The Secondary data has been collected from reputed Books, Journals, Govt. Report and Web-sites. In order to fulfill constructed objectives of the present study the secondary data has been assembled.

## ORIGIN OF THE CHILLIES

The origin of chillies is believed to be as old as 7000 B.C. used in Mexico. Chillies were grown and cultivated from 3500 B.C. Christopher Columbus who discovered America in 1493 brought chilli to the rest of the world. Christopher had set from Spain to reach India to bring spices such as pepper back to his country. Christopher not only mistook America for India, but also mistook chilli as the black pepper. Christopher Columbus, the founder of America, was one of the first Europeans who consumed chilli, and called it pepper due to the similarity in taste. He took chilli pepper back to Spain where it became a very famous spice. Chilli became popular in

Portugueses. In 1498, the Portuguese explorer Vasco-da-Gama reached Indian shores bringing with him the pungent spice. Chilli seeds were brought to North America for cultivation. In 1888, experiments began for cross breeding of chilli plants. It became popular in the whole of Asia rapidly and native Asian started cultivating this crops well. Today, the most sharp and valued varieties of chillies are grown in Asia only. India, Mexico, Japan, Ethiopia, Uganda, Nigeria, Thailand, Turkey, Indonesia, China and Pakistan are the major chilli growing countries. It is also grown in Italy, Spain, Hungary and the United States. In India, its introduction is believed to be through the Portuguese in 17<sup>th</sup> century. The Portuguese brought capsicum from Brazil to India during the year 1584. The most popular for chilli production because of India has immense potential to grow and export different best-suited climate, soil, irrigation facilities, skill and types of chillies required to various markets around the intensive cultivation practices adopted by the farmers of world.

## WORLD SCENERIO

Chilli is raised over an area of 2020 thousand hectares in the world, with a production of 3762 thousand tones. Major chilli growing countries are India, Myanmar, Bangladesh, Pakistan, Thailand, Vietnam, Romania, China, Nigeria and Mexico etc. India is the world leader in chilli production followed by China, Thailand and Pakistan. The area, production and Yield of chilli in major producing countries in the world are given in Table

**TABLE 1**  
**Area, Production and Productivity of Major Chillies Producing Countries for During 2013**

S. No.	Country	Area ('000 ha)	Production ('000tons)	Productivity (tons/ha)
1.	India	792.000 (39.19)	1376.000 (36.57)	1.74
2.	Myanmar	131.500 (6.51)	129.000 (3.43)	0.98
3.	Bangladesh	73.000 (3.61)	95.000 (2.53)	1.30
4.	Pakistan	65.000 (3.22)	150.000 (3.99)	2.31
5.	Thailand	70.000 (3.46)	156.000 (4.15)	2.23
6.	Vietnam	64.000 (3.17)	93.000 (2.47)	1.45
7.	Romania	51.649 (2.56)	47.725 (1.27)	0.92
8.	China	44.000 (2.18)	300.000 (7.97)	6.82
9.	Nigeria	32.000 (1.58)	60.000 (1.59)	1.88
10.	Mexico	32.500 (1.61)	60.000 (1.59)	1.85
11.	Others Countries	665.261 (32.92)	1295.409 (34.43)	1.95
	World	2020.910 (100.00)	3762.134 (100.00)	1.86

Source : <http://faostat.fao.org/site>

( ) : denote column wise percentage

In the world area and production of chilli is around 20.20 million hectare and 37.62million tonnes respectively. The largest producer of chillies in the world is India accounting for 13.76 million tonnes of production annually followed by China with a production of around 3 million tones. Out of the total (37.62 million tonnes) world chilli production, 36.57 per cent is contributed by India followed by China 7.97 per cent. India also leads in the context of maximum area covered under chilli cultivation. The world trade in chilli account for 18 per cent of the total spice trade in the world occupying second position after black pepper.

## WORLD CHILLIES AREA, PRODUCTION AND YIELD

India is the main producer contributing about half of the world chilli production. A brief description of the area under cultivation, production and yield of chillies in the world is given in the Table

**TABLE**  
**Area, Production and Yield of Chillies in the World from 2005 to 2013**

Year	Area ('000 ha)	Trend Value	Production ('000tons)	Trend Value	Productivity (tons/ha)	Trend Value
2005	1838.34	1901.81	3076.76	3115.33	1.67	1.64
2006	1905.62	1923.46	3202.59	3194.51	1.68	1.66
2007	1989.50	1945.10	3338.66	3273.69	1.68	1.68
2008	1959.80	1966.75	3432.60	3352.87	1.75	1.70
2009	2080.89	1988.40	3363.35	3432.05	1.62	1.73
2010	2023.37	2010.04	3394.42	3511.23	1.68	1.75
2011	2030.63	2031.69	3621.22	3590.41	1.78	1.77
2012	2046.52	2053.34	3696.72	3669.59	1.81	1.79
2013	2020.91	2074.99	3762.13	3748.77	1.86	1.81
Average	1988.40		3432.05		1.73	

Source : <http://faostat.fao.org/site>

The average area under cultivation, production and productivity of chillies in the world is 1988.40 thousand hectares, 3432.05 thousand tonnes and 1.73 thousand tonnes per hectares respectively for the period from 2005 to 2013. Chilli was grown in an area of 1838.34 thousand hectares with a total production of 3076.76 thousand tonnes and the yield was 1.67 tonnes per hectare in 2005. During 2009, the chilli was grown in an area of 2080.89 thousand hectare with a total production of 3363.35 thousand tonnes and the yield was 1.62 tonnes per hectare. The area under cultivation, production and yield of chilli in the world during 2013 was 2020.91 thousand hectares, 3762.13 thousand tonnes and 1.86 tonnes per hectare respectively. The trend value for area under chilli cultivation had increased from 1901.81 thousand hectare in 2005 to 2074.99 thousand hectare in 2013. The trend value for production under chilli cultivation had increased from 3115.33 thousand tonnes in 2005 to 3748.77 thousand hectare in 2013 and the productivity of chilli trend value had increased from 1.64 tonnes per hectare in 2005 to 1.81 tonnes per hectare in 2013.

## INDIAN SCENARIO

Chilli is one of the most important commercial crops of India. There are over 50 spices produced in India and good number of them are grown in the country which is indigenous. Among them pepper, cardamom, ginger and turmeric are important. Among spices, a few spices viz. clove, nutmeg, vanilla and certain varieties of chillies were introduced to the country. Many varieties of chilli are grown for vegetables, spices, condiments, sauce and pickles. India is the largest producer and consumer of chilli among other major producers in the world. India contributes 36 per cent to total world's production and remained in first position in terms of international trade by exporting nearly 30 per cent from its total production. The area, production and Yield of chilli in major producing State in India are given in the Table

**TABLE**  
**Area, Production and Productivity of Major Chillies Producing State in India for during 2014-15(2<sup>nd</sup> Adv. Est.)**

S. No.	State	Area ('000 ha)	Production ('000tons)	Productivity (tons/ha)
1.	Andra Pradesh	131.3 (16.94)	602.0 (40.35)	4.58
2.	Telangana	78.9 (10.18)	279.8 (18.75)	3.55
3.	Karnataka	89.6 (11.56)	111.6 (7.48)	1.25
4.	West Bengal	63.6 (8.21)	100.0 (6.70)	1.57

5.	Madhya Pradesh	54.4 (7.02)	93.6 (6.27)	1.72
6.	Odisha	75.0 (9.68)	70.0 (4.69)	0.93
7.	Gujarat	43.4 (5.60)	68.5 (4.59)	1.58
8.	Maharashtra	99.5 (12.84)	45.6 (3.06)	0.46
9.	TamilNadu	50.7 (6.54)	23.1 (1.55)	0.46
10.	Punjab	10.6 (1.37)	17.7 (1.19)	1.67
11.	Assam	18.9 (2.44)	16.5 (1.11)	0.87
12.	Other State	59.0 7.61	63.7 (4.27)	1.08
	Total	774.9 (100.00)	1492.10 (100.00)	1.93

Source : Horticulture Statistics Division, DAC & FW

In India, chilli is grown in almost all states. In India, Chilli was grown in an area 774.9 thousand hectare and production 1492.10 thousand tonnes and the productivity was 1.93 tonnes per hectare . Andhra Pradesh is having largest area of Chilli in India and contributes about 131.3 (16.94 per cent) thousand hectare with a production of 602 (40.35 per cent) thousand tonnes and the productivity was 4.58 tonnes per hectare followed by Telangana, Karnataka, west Bengal, Gujarat and Maharashtra. In Tamil Nadu, Chilli was grown in an area of 50.7(6.54 per cent) thousand hectares with a total production of 23.1 (1.55 per cent) thousand tones and the productivity was 0.46 tonnes per hectare followed by Punjab and Assam. In Other state , the chilli was grown in an area of 59.0 (7.61 per cent) thousand hectare with a total production of 63.7(4.27 per cent) thousand tonnes and the productivity was 1.08 tonnes per hectare.

### AREA , PRODUCTION AND PRODUCTIVITY OF CHILLIES IN INDIA

The details of area under chilli cultivation, production and yield of chillies in India are given in Table

**TABLE**  
**Area, Production and Yield of Chillies in the India**

Year	Area ('000 ha)	Trend Value	Production ('000tons)	Trend Value	Productivity (tons/ha)	Trend Value
2004-05	737.50	737.03	1185.50	1117.23	1.61	1.52
2005-06	654.00	742.65	1014.60	1147.64	1.55	1.54
2006-07	763.20	748.27	1242.10	1178.06	1.63	1.57
2007-08	805.80	753.88	1297.90	1208.47	1.61	1.60
2008-09	779.10	759.50	1269.90	1238.88	1.63	1.63
2009-10	767.20	765.12	1202.90	1269.30	1.57	1.66
2010-11	792.10	770.74	1223.40	1299.71	1.54	1.69
2011-12	804.80	776.35	1276.30	1330.12	1.59	1.72
2012-13	794.10	781.97	1304.40	1360.54	1.64	1.74
2013-14	774.87	787.59	1492.14	1390.95	1.93	1.77
2014-15 (3 <sup>rd</sup> Adv.Est)	743.64	793.20	1453.13	1421.37	1.95	1.80
Average	765.12		1269.30		1.66	

Sources : Directorate of Arecanut and spices Development (DASD)

The average area under cultivation, production and yield of chillies in India are 765.12 thousand hectares, 1269.30 thousand tonnes and 1.66 tonne per hectare respectively for the period from 2004-05 to 2014-15. Chilli was grown in an area of 737.50 thousand hectare with a total production of 1185.50 thousand tonnes and the yield was 1.61 tonnes per hectare in 2004-05. During 2008-09, chilli was grown in an area of 779.10 thousand tonnes with a



production of 1269.90 thousand tonnes and the yield was 1.63 tonnes per hectare. During 2010-11, chilli was grown in an area of 794.10 thousand hectare with a production of 1304.40 thousand tonnes and the yield was 1.64 tonnes per hectare. The area under cultivation, production and productivity of chilli in India during 2014-15 were 743.64 thousand hectare, 1453.13 thousand tonnes and 1.66 tonnes per hectare respectively. The trend value for area under chilli cultivation had increased from 737.03 thousand hectare in 2004-05 to 793.20 thousand hectare in 2014-15. The trend value for production under chilli cultivation had increased from 1117.23 thousand tonnes in 2004-05 to 1431.37 thousand tonnes in 2014-15 and the productivity of chilli trend value had increased from 1.52 tonnes per hectare in 2004-05 to 1.80 tonnes per hectare in 2014-15.

## EXPORT OF CHILLIES FROM INDIA

Chilli is the largest spice item exported from India it occupies first position in terms of value. During 2015-16, chilli exported 24.21 per cent by value of the total exports of spices from India. The mandatory quality-testing of chilli and chilli products has made Indian chilli more acceptable in the International market and helped to achieve this higher level of exports.

The market for chillies is affected by seasonal price fluctuations, overall production in the country, world demand, stocks available in cold storages and hedging among the various varieties of chilli. Chillies are exported as chilli powder, dried chillies, pickled chillies and chilli oleoresins.

### Export of Chillies from India

(Qty. in MT, Value in Rs. Lakhs)

Country	2011-12		2012-13		2013-14		2014-15(Est)		Average	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Vietnam	3751.02	3132.50	43658.64	36201.06	32485.31	35856.67	51829.10	63537.42	32931.02	34681.91
Thailand	11974.78	10781.95	33591.81	26234.74	21849.64	30141.15	47708.06	45184.38	28781.07	28085.56
Srilanka	44666.20	31955.73	38635.45	22479.86	44360.83	28679.84	49900.51	38783.38	44390.75	30474.7
Malaysia	35447.39	37544.85	38187.62	31579.24	43578.29	36416.93	33868.09	38144.86	37770.35	35921.47
Bangladesh	17365.98	14176.34	19392.92	13212.92	21076.37	32647.89	41916.79	32977.11	24938.02	23253.57
USA	13528.00	17626.34	25405.88	27728.64	7709.38	29080.69	23109.12	31652.51	17438.1	26522.05
Mexico	5300.01	6166.27	12869.30	14472.87	18095.24	9098.30	13280.30	16377.14	12386.21	11528.65
Indonesia	21297.31	17748.93	11730.85	7527.29	9207.10	14150.42	17479.58	15545.03	14928.71	13742.92
UAE	21040.89	11708.36	19545.43	9459.26	2508.30	13319.26	18049.71	12774.48	15286.08	11815.34
Pakistan	24137.75	18998.32	8544.15	4867.37	5307.78	2906.01	11113.24	7776.45	12275.73	8637.038
UK	2810.34	4346.88	3901.39	4697.69	5909.14	6724.79	5053.62	6825.68	4418.623	5648.76
Nepal	290.15	161.29	4832.11	2454.05	3306.37	3432.97	6327.72	4384.13	3689.088	2608.11
Singapore	2353.67	2600.37	2979.85	2481.49	5192.72	4009.67	3826.15	4274.90	3588.098	3341.608
Saudi Arabia	3052.58	3153.53	2917.85	2794.46	2312.29	3650.93	4091.13	3559.05	3093.463	3289.493
South Africa	2135.62	2401.90	2591.99	2312.29	2508.30	2906.01	2881.12	3252.30	2529.258	2718.125
China	13633.21	11062.58	9537.81	7824.71	3531.51	3170.85	2378.34	2469.37	7270.218	6131.878
Others	18214.9	20841.9	22677.2	21732.96	83561.4	16034.82	14187.4	24191.8	34660.23	20700.36
<b>Total</b>	<b>241000</b>	<b>214408</b>	<b>301000</b>	<b>238060</b>	<b>312500</b>	<b>272227</b>	<b>347000</b>	<b>351710</b>	<b>300375</b>	<b>269101.5</b>

Sources : Spices Board Statistics Report, 2015-16

The major importers of Indian chillies are Malaysia, Sri Lanka, Indonesia, The Us, Bangladesh, Singapore, UK, Nepal and Mexico. The above table shows the chilli exports from India from 2011-12 to 2014-15. Chilli export from India mainly depended on Vietnam, Thailand, Malaysia and Sri Lanka. The average quantity of chilli exported was 300375 Metric tonnes with value of Rs,269101.5 lakhs. The US and UK are other significant importers of Indian Chilli. Malaysia is the largest importer of Chilli from India. Most of chillies imported by Malaysia are processed and re-exported to other countries.

## CONCLUSION

Chilli is a very popular vegetable, not only in India but all over the world. The native place of chilli is considered to be tropical America, especially Brazil where it is still found growing in wild state. There are more than 400 varieties of chillies found all over the world. The most popular for chilli production because of India has immense potential to grow and export different best suited climate, soil, irrigation facilities, skill and types of chillies required to various markets around the intensive cultivation practices adopted by the farmers of world.

India is known as 'The Home of Spices'. No Indian meal is considered complete without the tangy and delectable flavor of Indian Spices, locally known as 'masala'. Indian spices famous the world over for their

gastronic value is known to possess high medicinal values. Though Indian exports are showing satisfactory trends, nowadays India is facing a very tough competition in the international export market as price of Indian chilli powder is considered too high for the market and other competitive countries are providing chilli at very competitive rates to the major importing countries. If the country is able to meet the strict quality demands of the international market, the exports can be further improved. Necessary steps have to be taken by the Government encouraging the exporters to maintain the Indian dominance in the world market.

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