

Spices market of India: An overview

Vivek Kumar

Director, Centre for Socio-Economic and Political Research, India

Abstract

Spices market is very complicated market because of its history and important landmarks, its importance and uses, different forms and variety, different players, high international demand, and high export. It is not at all an exaggeration to say that the history of the world is highly obliged to the history of spices. Spices led to many adventurous and resulted in the discovery of many continents, economic rivalries and in certain cases economic tie up. It may be useful to point out that India is largest producer, consumer and exporter of spices in the world. Lack of regulation and its great potential in livelihood, employment and foreign exchange make spices market very important aspects. Keeping this in mind, overview of spices market in India are given in context of important historical landmarks, importance and uses, classification, growing state, area and production, futures market and export of Indian spices.

Keywords: Spices, export, regulation, area, production, futures Market, production, consumption

1. Introduction

The first authentic records about spices belong to the pyramid age of Egypt approximately 2600 to 2100 B.C. Oriental spices were popular as priceless assets during the periods of Egyptian civilization. There are plenty of historical evidences asserting the significance of south India as a source of high quality spices even from the periods of Babylonian and Assyrian civilizations. Until the beginning of the Christian era the source of spices was a mystery to the western world. In the second and third millennium B.C., Arabian traders had the monopoly of carrying goods between east and west among which spices and other aromatic resins were the most important. Similarly, excavations in the Indus valley have substantiated the fact that spices were abundantly used during that period. The ancient Greek history has plenty of remarks about the spices trade with the east. During the periods the Greek imported eastern spices including pepper, cassia and cinnamon. Rome developed an active spice trade with Saudi Arabia and India, by the time the spice reached Rome, their prices got doubled. Small in bulk, high in price and steady in demand, spices were especially desirable articles of commerce. Several ancient trade routes were used to transport spices and other luxury goods from India to the western world, some by land, some by sea and some by the combination of the two. One of the earliest westerners to visit the east was a sixth century merchant and traveler, Cosmas Indicopleustes from Alexandria who visited India and Ceylon. In A.D. 548, he arrived at Malabar for the search of spices. There were well organised spices trade between India and Rome, which came to an end when the Arabs conquered Alexandria in A.D. 641. Following the examples of Arabs, the European spice traders and apothecaries of the middle ages prepared their spices drinks and other pharmaceutical preparations from spices. In 1453 Constantinople was captured by the Turks, which again influenced the trade history of spices and the world as a whole. After the fall of Constantinople to the Turks in A.D.1493, the need for a sea route to the orient became more urgent than ever. The spread of Ottoman Empire made the old land routes to the sources of silk and spices unsafe. Muslim

rulers imposed heavy duties on spices trade, which practically ruined the European spices trade. Christopher Columbus of Spain was appointed in the year 1492 as the Admiral of the ocean sea and Viceroy and Governor General of all the lands and islands he would discover, and a tax free share of 10 percent of the spices, stones or pearls he would bring to Spain. He started his voyage along with his crew and after much troubles and toils he reached Bahamas Islands and then Cuba, mistaken as Indian shores. Without finding spices he went back to Spain. In 1493, Columbus started his second voyage with 1500 men to establish Spanish power in the new world and continue the search for gold and spices, which was not fruitful as expected. During 1497 and 1498, England took up the search for sea route to Asia by the order of Henry VII; Italian navigators undertook voyages to the east in search of spices. During the same period, King Manuel I of Portugal ordered Vasco de Gama to search for a sea route to India. He started his voyage and taking advantage of monsoon winds, Gama arrived at Calicut on May 20, 1498, one of the most important landmarks in the history of India and the spices trade as well. The British founded their East India Company in A.D. 1600 as 'The Governor and Company of the Merchants of London Trading into the East Indies. Two years later the United East India Company of the Dutch was formed with sufficient share capital to undertake ambitious ventures. Their entry in the field increased rivalry in spice trade. Between A.D. 1605 and 1621, the Dutch managed to drive the Portuguese out of the spices islands achieving a monopoly in spices trading. It has been aptly remarked by Rosengarten that the story of spices in the East India in the seventeenth and eighteenth centuries was written in blood. This was due to the ruthless competition between the Dutch, the British and the Portuguese for domination over the spices producing countries and trade. However in A.D.1799 the Dutch East India Company went bankrupt due to many reasons and the Dutch ports of Malabar Coast were taken over by English. By the end of the eighteenth century, the United States, having achieved stature as a national power entered the scene of world spices trade. The most remunerative trade of the time

was that of spices, especially pepper. However pirates were so common that the United States authorized the arming of the American merchant vessels to fight off such attacks. Soon the American port of Salem became a major trade centre of spices, particularly pepper. After 1846 the overproduction of spices brought a general decline in the trade, which ended in the demise of the Salem pepper trade. However by the time Salem had produced some of the first milliners of America.

The richness of the culture and the fragrance of the spices were the major sources of glory of the ancient India. It is really amazing to see that India could maintain supremacy in the production and trade of spices even from Vedic ages dating back to 6000 B.C to the modern era. The history and destiny of our country, perhaps the whole world were influenced unbelievably by the spices. It was the taste of the 'Black gold' pepper and the flavour of the 'Queen of spices' Cardamom, which attracted the Arabs and Europeans to this country and ultimately led to the foreign domain. It was the search for spices, which tempted the mariners like Vasco de Gama of Portugal, Christopher Columbus of Spain and many others to undertake hazardous voyages to the East. The significance of the spices in the history of the world is evident from the fact that even the discovery of the American continent by Columbus was accidental during the search for spices. The history of the world would have been different had India not been the land of spices. Arrival of Vasco de Gama at Calicut was to obtain a direct link with the South India for spices trade, eliminating the Arab and Italian spices traders who had monopoly at that time. The international spices market was exclusively centered in India until the 16 century but the situation has changed considerably during the subsequent centuries. Substantial spice plantations were established in the Central and South American Countries. The inception of an International Pepper Exchange under the auspices of IPSTA is the latest development in the history of global spices trade. The exchange was inaugurated in 1997 at Cochin in Kerala. The Forward Markets Commission of India regulates it and it functions under a steering committee constituted by the Government of India. The exchange is only at the early stages of functioning and in future it may help our country to regain the past glory of being the centre of the world spice trade.

1.1. Important Landmarks in the History of Spices at a Glance

B.C

6000	Remarks about the importance and uses of spices in Vedic texts.
6000-2600	Remarks about spices in Epics.
6000-2100	Pyramid age remarks about spices in Egyptian history and the use spices in Mummies as preservative.
1550	Pepper referred to in Eber's papyrus.
1550-600	Panini recorded the use of pepper in spicing wine, Charaka and Sushruth mentioned the use of pepper in medicine
4 th	Century Theophrastus described the use of pepper.
1 st	Century Pliny reported about South Indian spices. A Chinese envoy visited the Malabar coast in search of pepper.

A.D

40	Rome Captured Egypt and the ancient pepper trade came under the control of Rome. Mariner Hippalus discovered the velocity of wind system of Indian Ocean.
40-90	The Greek physician Dioscorides mentioned about the medicinal use of spices.
176	Customs duty imposed on black pepper imported to Alexandria.
408	Fall of Rome. Arabic demands a ransom of 3000 pounds of pepper from Romans. The Arabs regain control over spices trade.
540	The Identity of Pepper as the fruit of vine growing in the Malabar Coast of India was established.
851	Chinese traveler, Sulaiman visited Kerala coast, recorded the black pepper cultivation and trade with China.
10-11 th	Raja Chola and his son Rajendra, the powerful South Indian kings extended their empire to Malay Archipelago and to Java - Bali Islands (at present Indonesia) which were major spices growing regions of the time.
1154- 1189	Reign of Henry II in England and the formation of pepper's guild.
1200	China imports large quantity of pepper from Malabar Coast and Java.
1280	Marcopolo described in detail the pepper growing regions of Java.
1430-1440	Nicolo Conti described the pepper trade in Kollam and Kozhikode of Malabar coast and pepper cultivation in Sumatra.
1498	Vasco de Gama discovered the sea route to India and arrived at Calicut.
1500	Pedro Alvares Cabral landed in Calicut and established supremacy of Portugal over spices trade in the Malabar Coast.
1511	Albuquerque sailed to Malacca and captured the land and spices trade. Portuguese was in full control of black pepper trade.
1600	Establishment of the British East India Company for trading in spices. British landed in India on 24 August, 1600 at Surat.
1602	British East India Company reached Sumatra and started trading in Pepper. The establishment of United East India Company by Dutch merchants.
1636	British started export of spices from Malabar Coast.
1641	Dutch conquered Malacca and the entire pepper trade from Far East came under their control.
1664	The Portuguese driven out from their settlements in Cochin by the Dutch and the Dutch East India Company gets control over the spices trade.
1700-1800	Dutch suffered defeat at the hands of the King of Travancore. The rise of British presence in Malabar who entered into contracts with local rulers to ensure for monopoly of spices trade. The French came for spices trade.

1795-1800	America entered the pepper trade.
1938-1954	Pepper introduced in Brazil and some African regions.
1952-1953	First research station for pepper established in India at Panniyur, Kerala.
1972	Establishment of International Pepper Community at Jakarta (Indonesia).
1986	Establishment of National Research Centre for Spices (NRCS).
1996	NRCS Upgraded as Indian Institute of Spice Research. (IISR).
1997	Establishment of International Pepper Exchange at Mattancherry, Kerala

Source: Compiled from various books and journals.

From the above, it is obvious that the present scenario of spices production and trade is the result of thousands of years of events and changes. During the process, spices directly or indirectly became the cause for changes in the standard of living, culture and even the economic and diplomatic relations between countries. It is not at all an exaggeration to say that the history of the world is highly obliged to the history of spices. The continuous efforts of the westerners to explore the original sources of spices led to many adventurous ventures and resulted in the discovery of many continents, economic rivalries and in certain cases economic tie up among different countries and wars. So any study about spices will be incomplete if preceded without observing their historical background and significance.

2. Importance of Spices

Importance of spices has also been mentioned in rationalistic period refer to the post epic period stretching up to 600 B.C. Yaksha, Panini, Charaka and Sushruth the renowned surgeon all refer to the uses of spices as medician purpose. Reference of uses of spices was also mentioned in the book Vatsyayana. Rigveda and the hymns of Yajurveda have plenty of remarks about the use and the importance of different types of spices. Ayurveda describes the uses and importance of almost all types of spices and their medicinal properties. The Epics, Ramayana and Mahabharata and both the old and new testaments of the Bible mention about spices on various occasions. It is really interesting to see that Prophet Mohammed was also an experienced spice merchant. Arthashastra written in the third century B.C. has plenty of remarks about spices including pepper, cardamom, ginger, fenugreek, coriander and mustard. Greek medical sciences also record the importance of medicinal values of spices. Hippocrates (460 - 377 B.C.), known as the father of modern medicine, the Greek philosopher and scientist Theophrastus (372- 287 B.C), Dioscorides, known as the father of Botany (A.D. 40 - 90) all had mentioned about spices in their writings. Romans were very lavish in the use of spices, which they used not only for cooking but as cosmetics also. It was customary for them to use cosmetics heavily for which they used spices extensively. Spice flavored wines were very popular. History says that spices were used as currency in ancient times to pay taxes, tolls, rents and even dowries. These all clearly indicate that spices were inevitable part of life even from the very early stages of human history.

The use of spice in food has started from time immemorial but they have found new applications in the course of history. A spices in the form of seed, fruit, root, bark, berry, bud or other vegetable substance primarily used for flavoring, coloring, tester and sometimes also as preservatives or anti-bacterial agents, or as refreshing or invigorating agents. They are used in the manufacture of medicine, pharmaceutical products, incense, perfumes, cosmetics, condiments, sweets, beverages, and many. Many value added products such as oils and oleoresins, curry powder, beverages, pickles, etc. are also produced from spices. Although spices are very commonly used in the form of a powder, some are used as tinctures obtained by extracting essential oils and many are used as a whole. Almost all countries in the world including those which do not produce, consume spices or spices products. Thus, spices have an important place in the world market. In developed countries, the usage of spices in food industry has increased substantially because of its taste, flavor and seasoning characteristics. It is known that spices are the foundation of the economies of most. Developing countries by way of providing food, creating income generating opportunities and export earnings to the people directly involved in agricultural activities. Spices also helps producing country earns huge foreign reserves and currencies. Therefore, unlike of other countries all over the world where the share of that specific sector in their respective GDP is quite marginal the growth and uses of spices has a significant role in the overall growth of Indian economy.

3. Indian Spices Market

India is known as the 'The home of spices'. India is the leading producer, consumer and exporter of spices in the world and meets nearly half of the global demand for spices. Spices are produced almost in all states of India. A whopping 75 spices out of 109 listed by ISO are produced in India. Harnessing the technological developments over a period of time, Indian spices cover a wider spectrum of industry such as spice and food processing industries, pharmaceutical and medical segments. India contributes around 75% of global spice production. An interesting and at the same time important point is that the major share of spices produced in our country is used for domestic consumption and only 6 - 7 percent of total production is exported. More than 120 crores of people with rapidly changing food habits, offers a very good domestic market for all types of spices produced in India. India is considered to be the premium grade and rules above all the international grade. There is a total area of 3.1 million hectares of land under spices cultivation in India. Its annual production is estimated at 58.3 lakh tons in 2013-14. More than 3 lakh farmers in rural areas in India are dependent on spices for livelihood and employment. Total export in 2013-14 of spices from India is 8.2 lakh tones and valued at 13735 crores. It has a share of about 46 per cent in quantity and 38 per cent in value in world spices trade (Spices Board, 2014). Indian tropical climate is considered as ideal for spices cultivation and the best quality spices are available in the country. Spices do not grow in extremely hot and cold regions. This peculiarity gives a special privilege for the spices producing countries like India in the spices production and trade because those countries which cannot produce spices have to fully depend on spices producing countries to meet their needs. Spices have huge capacity for income generation, export

earnings, foreign currency and livelihood in India. Sector has a significant role in the overall growth of Indian economy. In the future also this advantage will help the spices producing countries like India to have a sizeable share of the world trade in a globalised economy. India being one of the largest producer and consumer, the price of spices is determined largely by domestic factors apart from other producing nations. Spices are used mainly in form of bark, leaf, fruits, seed, root, flower bud and others (see graph 1). Although spices are also very commonly used in the form of a powder, some are used as tinctures obtained by extracting essential oils and many are used as a whole.

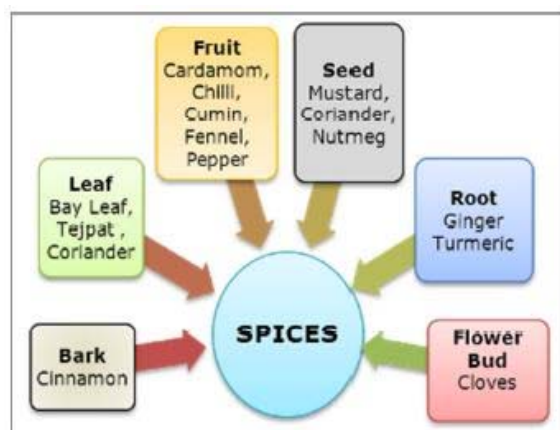


Fig 1: Classification of Spices



Fig 2: Spices Map of India

Table 1: Spices-wise growing States of India

	Spices	States		Spices	States		Spices	States
1	Pepper		7	Cardamom (Large)		16	Aniseed	
		Kerala			Sikkim			Punjab
		Karnataka			West Bengal			Uttar Pradesh
		Tamil Nadu	8	Ginger				Assam
2	Coriander				Andhra Pradesh			Uttarakhand
		Rajasthan			Karnataka	17	Vanilla	
		Uttar Pradesh			Kerala			Kerala
		Uttarakhand			Madhya Pradesh			Karnataka
3	Chilli				Meghalaya			TamilNadu
		Andhra Pradesh			Odhisa	18	Garlic	
		Gujrat			Arunachal Pradesh			Haryana
		Karnataka			West Bengal			Madha Pradesh
		Maharashtra			Mizoram			Maharashtra
		Odisha			Sikkim			Odisha
		Rajasthan			Himachal Pradesh			Uttar Pradesh
		Tamil Nadu			Tamil Nadu			Gujrat
		Uttar Pradesh			Uttarakhand			Karnataka
		West Bengal			Chattisgarh			Rajasthan

		Madhya Pradesh			Jharkhand			Chhatisgarh
		Uttrakhand	9	Fennel				Bihar
4	Cumin				Gujrat	19	Ajowan	
		Rajasthan			Rajasthan			Bihar
		Gujrat			Uttar Pradesh			Jammu & Kashmir
		Uttar Pradesh	10	Fenugreek		20	Dill Seed	
5	Turmeric				Rajasthan			Gujrat
		Andhra Pradesh			Uttar Pradesh			Rajasthan
		Karnataka			Gujrat	21	Kokam	
		Kerala	11	Celery				Karnataka
		Madhya Pradesh			Punjab	22	Mustard	
		Meghalaya			Uttar Pradesh			Uttar Pradesh
		Odisha	12	Clove				Bihar
		Arunachal Pradesh			Kerala			Andhra Pradesh
		West Bengal			Tamil Nadu	23	Tejpat	
		Mizoram			Karnataka			Arunachal Pradesh
		Sikkim	13	Nutmeg & Mace				Sikkim
		Himachal Pradesh			Kerala	24	Pomegranate seed	
		Tamil Nadu			Tamil Nadu			Maharashtra
		Uttrakhand			Karnataka			Tamil Nadu
		Chattisgarh	14	Cinnamon & Cassia		25	Herbal & Exotic Spices	
		Jharkhand			Kerala			Tamil Nadu
6	Cardamom (Small)				Tamil Nadu	26	Cambodge	
		Kerala	15	Saffron				Kerala
		Karnataka			Jammu & Kashmir			Karnataka
		Tamil Nadu						

Source: Spice Board of India

Table gives detail of 26 spices along with major producing states. Major Spices producing state are, pepper – Kerala, dhaniya (coriander)– Rajasthan, jeera (cumin)– Rajasthan, chilli – Andhra Pradesh, turmeric - Andhra Pradesh (see table 1).

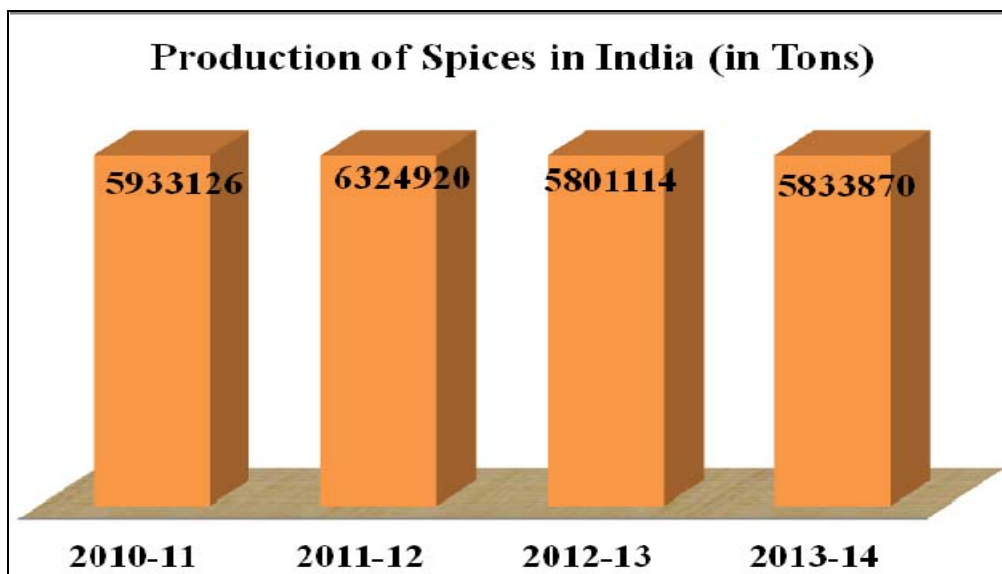
As per the latest data of 2014-15, area under cultivation and production of spices stood at 3145610 hectares 775820 tons respectively. Five south Indian states i.e., Andhra Pradesh, Telunghana, Karnataka, Tamil Nadu and Kerala dominate spices production with share of 40 percent in production and 26 percent in total area under spices cultivation in 2014-15.

Other than South Indian states Rajasthan and Karnataka share large portion in total production. Overall Gujarat is largest producer of spices with share of 14.5 percent in total India production, followed by Andhra Pradesh and Rajasthan at 13.3 and 11.6 percent respectively. Whereas in area under cultivation of spices Rajasthan covers 26.1 percent of total area covered under spices cultivation in India, followed by Gujrat and Karnataka with 17.2 and 6.1 percent in total spice cultivated area (see table 2). During 2010-11 to 2013-14, area covered under spices increased marginally by 3.4 percent whereas production has fallen by 1.7 percent.

Table 2: Major State-wise Area and Production of Spices in India.

States	2010-2011		2011-2012		2012-2013		2013- 2014(E)	
	Area (Hec)	Produ (Tons)	Area (Hec)	Produ (Tons)	Area (Hec)	Produ (Tons)	Area (Hec)	Produ (Tons)
Andhra Pradesh	293813	1171353	366281	1370759	298288	1246693	169360	775820
Telunghana	-	-	-	-	-	-	134170	551470
Gujarat	479721	792606	542414	882141	551665	882141	541810	848480
Rajasthan	702417	670732	973493	950876	720645	860889	821504	674832
Karnataka	251207	660887	211462	423333	213750	370070	191772	333822
Tamil Nadu	143160	370505	162225	466448	124380	279674	165995	554509
Uttar Pradesh	56640	202956	61151	227031	60173	212305	61656	244022
West Bengal	114388	213533	115154	214665	97555	207662	97555	207720
Orissa	266910	498890	281610	530170	123924	181500	123324	181500
Kerala	252660	137862	170947	135041	166353	119689	166948	114049
Maharashtra	77067	303971	65515	357821	120760	109040	120760	109040
Total India (Incl. Other)	3043583	5933126	3541804	6324920	3172468	5801114	3145610	5833870
(P): Provisional (E): Estimate								

Source: Spice Board of India



Source: Spice Board of India

Fig 3: Production of Total Spices in India

Table 3: Spice- wise Area and Production in India

Spices	2010 – 11		2011-12		2012-13		2013-14(E)	
	Area (Hec)	Produ (Tons)	Area (Hec)	Produ (Tons)	Area (Hec)	Produ (Tons)	Area (Hec)	Produ (Tons)
Pepper	183780	48000	201381	43000	122500	65000	122400	37000
Cardamom (Small)	71012	10380	71285	15000	69870	14000	69970	16000
Cardamom (Large)	26984	3918	26460	3860	26060	4145	26060	4465
Chilli	716428	1299191	793921	1448215	787530	1378400	791930	1376400
Ginger	167432	913890	125374	924417	134430	669350	138200	683160
Turmeric	232022	1268280	251824	1398862	194330	986690	207570	1092630
Coriander	474250	372366	362148	428687	531070	503240	516070	496240
Cumin	625087	403744	843401	462645	593980	394330	690080	445030
Celery	3776	4609	4176	5271	4070	5510	4070	5510
Fennel	81890	125710	92446	144112	99610	142940	94070	135930
Fenugreek	94760	127850	96304	121775	93110	112870	90500	110530
Ajwan	27257	19327	45693	28050	39690	26620	39260	26610
Dill seed	26698	33090	20849	24448	21900	23632	21900	23632
Garlic	202888	1085740	171800	898438	247430	1260210	238760	1221380
Tamarind	56530	203936	52788	182089	58300	189980	58720	191750
Clove	2195	963	2100	1035	2060	1060	2060	1060
Nutmeg	17760	12088	18407	12138	18730	12730	18730	12730
Grand total including others	3043583	5933126	3541804	6324920	3172468	5801114	3145610	5833870

(E): Estimate; (P): Provisional

Source: Spices Board of India

Overall Chilli is largest producing spice with share of 23.6 percent in total India spices production, followed by garlic, turmeric and ginger with 20.9, 18.7 and 11.7 percent share respectively. These four spices consist 75 percent of total spices production. Whereas in area under spice cultivation is highest for chilli with 25.2 percent in total area covered under spices cultivation in India, followed by cumin, coriander and garlic with 21.9, 16.4 and 7.6 percent share respectively. These four spices consist 71 percent of total area under spices production (see table 3).

4. Futures Market of Spices in India

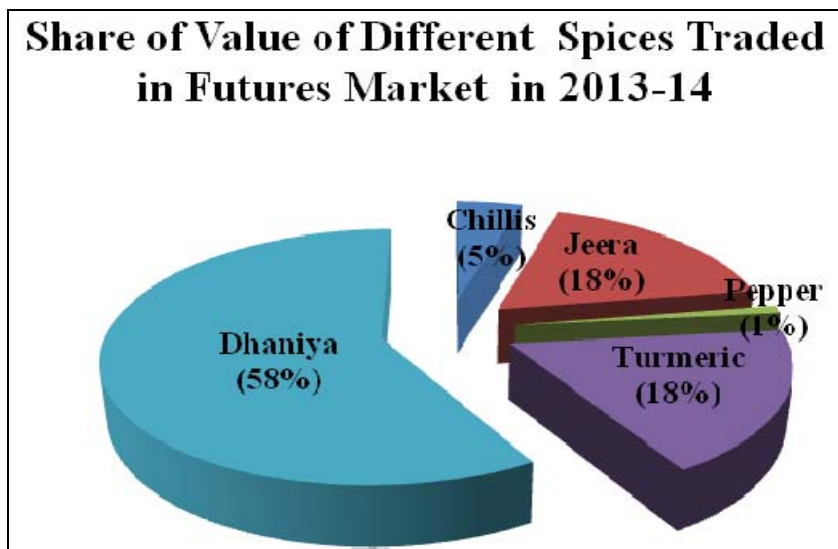
Table 4: List of Spices Notified Under Section 15 of the F.C. (R). Act

Aniseed	Coriander Seed (Dhaniya)
Betelnuts	Ginger
Cardamom	Methi
Chillies	Nutmegs
Cinnamon	Pepper
Cumin seeds (Jeera)	Turmeric

Source: Forward Market Commission

At present, 12 out of 113 commodities in which futures trading are permitted belong to spices category. However, six spices, viz., chilli, cumin (jeera), coriander (dhaniya), pepper and turmeric constitute spice complex for actual derivatives trading in India. Albeit the fact is that no other futures contracts of spices are actively traded on any of leading

international exchanges. Indian spices are considered to be the premium grade and rules above all the international grade. Some spices have been recently upgraded to international exchanges to deal in international contracts. Some spices products are only traded in India and deal in international trade.



Source: Annual Report, 2013-14, Forward Market Commission

Fig 4: Share of Value of Different Spices Traded in Futures Market in 2013-14

Among these spices traded in futures market, dhaniya percentage of share in value is largest with 58 percent. This means that in total spices traded at futures exchange, dhaniya alone constitute major portion of share in value of spices

traded. Turmeric and jeera shares are equal in total value traded with 18 percent. Chilli and pepper shares are very small in spices futures trade value with 5 and 1 percent respectively in 2013- 14 (see graph 3).

Table 5: Share of Value of Different Spices Traded in Futures Market in 2013-14

Name of Spices	2012-13		2013-14	
	Volume (lakh tonne)	Value (Rs. Crore)	Volume (lakh tonne)	Value (Rs. Crore)
Chillis	19.92 (0.5)	11752.8 (0.5)	12.53 (0.35)	7537.48 (0.5)
Jeera (Cumin)	45.45 (1.0)	65955.88 (3.1)	22.48 (0.62)	28917.5 (1.8)
Pepper	8.8 (0.2)	34742.45 (1.6)	0.42 (0.01)	1600.7 (0.1)
Turmeric	62.06 (1.41)	33083.6 (1.5)	49.31 (1.37)	29606.19 (1.8)
Dhaniya (Coriander)	98.92 (2.25)	52828.99 (2.5)	125.6 (3.48)	95259.02 (5.9)
Total Spices	235.15 (5.35) ((1.6))	198363.72 (9.2) ((1.2))	210.34 (5.82) ((2.4))	162920.89 (10.2) ((1.6))
Total Agricultural commodities	4398.11 (100.0) ((30.3))	2155700.42 (100.0) ((12.6))	3612.03 (100) ((40.9))	1602401.96 (100.0) ((15.8))
Grand Total	14510.08 ((100))	17046840.09 ((100))	8832.76 ((100.0))	10144794.98 ((100.0))

Sources: Various Annual Report, Forward Market Commission (FMC)

Figures in brackets are share (%) of individual spice in total agricultural futures trading

Figures in brackets are share (%) of individual spice in total futures trading

It may be useful to point out that the spices has a share of 5.82 percent in total agricultural commodity trading and 2.4 percent in total futures volume traded in futures market with trading volume of 210.34 lakh tonnes. Spices total value is 162920.89 Rs. crores, which is 10.2 percent of total agricultural commodities and 1.6 percent of total futures value traded in futures market in 2013-14. Share in volume of spices in total agricultural commodities has increased marginally from 5.35 percent in 2012-13 to 5.85 percent in 2013-14. Share of value of spices in total agricultural commodities has increased by 1

percent from 9.2 to 10.2 in 2013-14. Due to increase in share of value and volume of spices in total agricultural commodities, share of spices in total futures trading has also shown marginal increase in both value and volume (see table 5). Detail of different traded spices in futures market in terms of volume and value are also discussed in detail (see table 5). Share in value of spices is affected by the prices of commodities and volume share affected by physical nature of commodities.

5. Export Performance of Spices from India

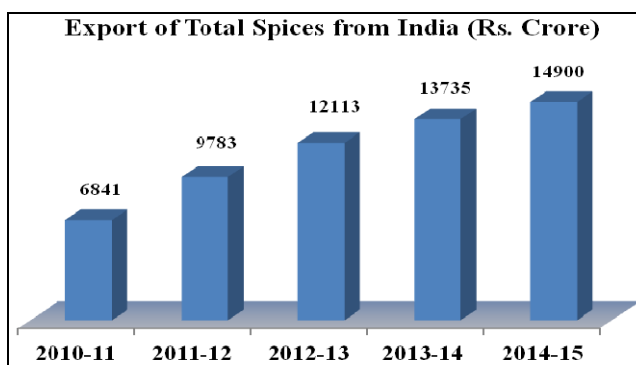
Table 6: Major Country-wise Export of Total Spices from India

Country	2010-11		2011-12		2012-13		2013-14 (P)	
	QTY (MT)	Value (lakhs)	QTY (MT)	Value (lakhs)	QTY (MT)	Value (lakhs)	QTY (MT)	Value (lakhs)
U.S.A	42816	98852	46046	160544	71087	211572	71038	235238
China	13058	63765	21015	86806	25751	201792	21571	162897
Vietnam	5249	7402	15929	27712	60908	63595	84214	106806
Malaysia	65414	50240	54953	54328	64947	49388	62796	62952
U.A.E	46434	35467	60946	58823	57238	47713	58932	58008
U.K	19417	33460	16511	40106	22101	46651	23249	55449
Germany	5766	26615	6427	36795	7125	39575	8148	40372
Singapore	6462	19394	8553	35615	7927	36674	8362	24576
Saudi Arabia	11825	19193	21922	42709	22351	35595	25812	35638
Thailand	8452	7447	13628	15299	38303	31870	5662	10402
Netherlands	5000	12746	5976	26073	6586	29694	7778	32958
Sri Lanka	41100	23970	51035	35599	48528	28744	58428	39140
Mexico	9287	10795	7641	12075	15383	22227	12602	18743
Bangladesh	53584	27123	35131	25171	34193	21382	18969	13308
Nepal	8454	4565	7238	3124	26047	18799	21525	14398
Brazil	4117	10629	5508	15768	6661	18470	8193	15705
Indonesia	13723	10184	26168	22232	22237	18331	73267	72699
Pakistan	44709	25285	34891	30617	20671	18009	7573	9573
Japan	7362	21318	7155	23873	6628	17773	6754	21290
France	2955	7850	3232	10524	3890	17569	3875	14168
Egypt	9217	6647	11532	10431	20911	17555	18814	17747
Spain	2872	6115	5815	11110	11031	17329	12756	22918
South Africa	10664	13222	9787	16306	12058	15807	11792	17112
Australia	3574	6657	4686	11545	5448	11652	5547	12848
Others	84239	135130	93546	165156	108603	173510	179650	262102
Total	525750	684071	575270	978342	726613	1211276	817250	1373539

Source: Spices Board of India
P: (Provisional)

During 2013-14, Indian spices exports have been able to continue its increasing trend both in volume and value. During the 2013-14 a total of 817250 metric tons of spices and spice products valued Rs.13735 crores has been exported from the country as against 726613 metric tons valued at Rs.12113 crores in 2012-13. During 2014-15, India total spices exports value is Rs. 14900 crores. The total export of Spices during 2014-15 has exceeded the target in terms of both volume and value. U.S.A has been the largest importer of Indian spices in terms of value followed by China, Vietnam and Indonesia.

These four importers consist of 42 percent of total import from India in terms of value. Whereas Vietnam has been the largest importer in terms of volume followed by Indonesia, U.S.A. and Malaysia. These top four importers consists 36 percent of total export from India in terms of volume. These countries remained dominant trade partners over period of time. All other spices importing country has shown increasing trends in terms of volume and value over period of time (see table 6). There is 55 percent increase in volume of spices export from 2010- 11 to 2013-14.



Source: Spice Board of India

Fig 5: Export of Total Spices from India in Rs. Crores

During 2010-11 to 2014-15 over period of four years, value of export has increased by more than 118 percent, indicating dominance of Indian spices in world market (see graph 4).

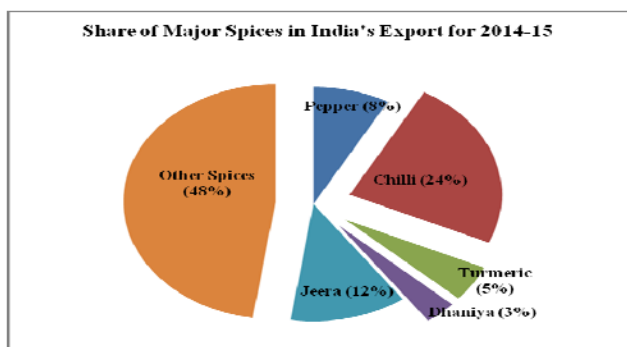
There is substantial increase in export value over years. Export value increased to 14900 crores in 2014- 15 as compared to 6841 in 2010-11.

Table 7: Major Spices- wise Export from India

	2010-11		2011-12		2012-13		2013-14 (E)		2014 -15 (E)	
	QTY (MT)	Value (lakhs)	QTY (MT)	Value (lakhs)	QTY (MT)	Value (lakhs)	QTY (MT)	Value (lakhs)	QTY (MT)	Value (lakhs)
Pepper	18850 (3.6)	38318 (5.6)	26700 (4.6)	87813 (9.0)	15363 (2.1)	63810 (5.3)	21250 (2.6)	94002 (6.8)	21450 (2.4)	120842 (8.1)
Chilli	240000 (45.6)	153554 (22.4)	241000 (41.9)	214408 (21.9)	301000 (41.4)	238061 (19.7)	312500 (38.2)	272227 (19.8)	347000 (38.8)	351710 (23.6)
Turmeric	49250 (9.4)	70285 (10.3)	79500 (13.8)	73434 (7.5)	88513 (12.2)	55488 (4.6)	77500 (9.5)	66676 (4.9)	86000 (9.6)	74435 (5.0)
Coriander	40500 (7.7)	16663 (2.4)	28100 (4.9)	16402 (1.7)	35902 (4.9)	20183 (1.7)	45750 (5.6)	37186 (2.7)	46000 (5.1)	49813 (3.3)
Cumin	32500 (6.2)	39598 (5.8)	45500 (7.9)	64442 (1.7)	85602 (11.8)	115307 (9.5)	121500 (14.9)	160006 (11.6)	155500 (17.4)	183820 (12.3)
Total	525750	684071	575270	978342	726613	1211276	817250	1373539	893920	1489968

E: Estimated Figures.

Chilli has been the largest exporter among Indian spices in terms of value as well as volume with 23.6 percent and 38.8 percent respectively in total spices export. In terms of value cumin, pepper, turmeric and coriander share are 12.3, 8.1, 5.0 and 3.3 percent respectively. Cumin, turmeric, coriander and pepper share in volume are 11.6, 9.6, 5.1 and 2.4 percent respectively out of total spices export (see table 7). These spices remained dominant commodities over period of time. All other spices also show increasing trends in terms of volume and value over period of time.



Source: Spice Board of India

Fig 6: Share of Major Spices in India's Export for 2014-15

Chilli is dominant among all spices exported from India in terms of value as well as volume with share of 23.6 and 38.8 percent respectively in 2014-15. These five spices consist of 52 percent and 73 percent of total export from India in terms of value and volume respectively in 2014-15.

Summary

Trading history of spices with important landmarks in the history of spices at a glance has been discussed. The richness of the culture and the fragrance of the spices were the major sources of glory of the ancient India. It is really amazing to see that India could maintain supremacy in the production and trade of spices even from Vedic ages dating back to 6000 B.C to the modern era. Spices directly or indirectly became the cause for changes in the standard of living, culture and even the economic and diplomatic relations between countries. It is not at all an exaggeration to say that the history of the world is highly obliged to the history of spices. The continuous efforts to explore the original sources of spices led to many adventurous ventures and resulted in the discovery of many

continents, economic rivalries and in certain cases economic tie up among different countries and wars. Importance of spices are mentioned from post epic period, in different books such as Vatsyayana, Rigveda, Yajurveda and in epics of Ramayana, Mahabharata, Bible and Quran. Medical purpose of spices is mentioned by different philosopher and researcher. The use of spice in food has started from time immemorial but they have found new applications in the course of history. A spices in the form of seed, fruit, root, bark, berry, bud or other vegetable substance primarily used for flavoring, coloring, tester and sometimes also as preservatives or anti-bacterial agents, or as refreshing or invigorating agents. They are used in the manufacture of medicine, pharmaceutical products, incense, perfumes, cosmetics, condiments, sweets, beverages, and many. Spices are also helpful in way of providing food, income generation, foreign reserves and export earnings to the people. Spices are classified in different forms i.e., bark, leaf, fruits, seed, root, flower bud and others. India is known as the 'The home of spices'. India is the leading producer, consumer and exporter of spices in the world and meets nearly half of the global demand for spices. Spices are produced almost in all states of India. A whopping 75 spices out of 109 listed by ISO are produced in India. India contributes around 75% of global spice production. There is a total area of 3.1 million hectares of land under spices cultivation in India. Its annual production is estimated at 58.3 lakh tons in 2013-14. More than 3 lakh farmers in rural areas in India are dependent on spices for livelihood and employment. Sector has a significant role in the overall growth of Indian economy. Major Spices producing state are, pepper – Kerala, dhaniya (coriander)– Rajasthan, jeera (cumin)– Rajasthan, chilli – Andhra Pradesh, turmeric - Andhra Pradesh. At present, 12 out of 113 commodities in which futures trading are permitted belong to spices category. However, six spices, viz., chilli, cumin (jeera), coriander (dhaniya), pepper and turmeric constitute spice complex for actual derivatives trading in India. Among these spices traded in futures market, dhaniya percentage of share in value is largest with 58 percent. Turmeric and jeera shares are equal in total value traded with 18 percent. Chilli and pepper shares are very small in spices futures trade value with 5 and 1 percent respectively in 2013- 14. It may be useful to point out that the spices has a share of 5.82 percent in total agricultural commodity trading and 2.4 percent in total futures volume traded in futures market with trading volume of 210.34 lakh

tonnes. Spices total value is 10.2 percent of total agricultural commodities and 1.6 percent of total futures value traded in futures market in 2013-14. Share in volume of spices in total agricultural commodities has increased marginally from 5.35 percent in 2012-13 to 5.85 percent in 2013-14. During 2014-15, India total spices exports value is Rs. 14900 crores. The total export of spices during 2014-15 has exceeded the target in terms of both volume and value. U.S.A has been the largest importer of Indian spices in terms of value followed by China, Vietnam and Indonesia. These four importers consist of 42 percent of total import from India in terms of value. Whereas Vietnam has been the largest importer in terms of volume followed by Indonesia, U.S.A. and Malaysia. These top four importers consists 36 percent of total export from India in terms of volume. During 2010-11 to 2014-15 over period of four years, value of export has increased by more than 118 percent, indicating dominance of Indian spices in world market. There is substantial increase in export value over years. Export value increased to 14900 crores in 2014- 15 as compared to 6841 in 2010-11. In terms of commodity, chilli has been the largest exporter among Indian spices in terms of value as well as volume with 23.6 percent and 38.8 percent respectively in total spices export. In terms of value cumin, pepper, turmeric and coriander share are 12.3, 8.1, 5.0 and 3.3 percent respectively. Cumin, turmeric, coriander and pepper share in volume are 11.6, 9.6, 5.1 and 2.4 percent respectively out of total spices export. Chilli is dominant among all spices exported from India in terms of value as well as volume with share of 23.6 and 38.8 percent respectively in 2014-15. These five spices consist of 52 percent and 73 percent of total export from India in terms of value and volume respectively in 2014-15.

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