

A COMPREHENSIVE STUDY ON KERALA'S SPICE EXPORT

A Project submitted to the Indian Maritime University in partial fulfillment of the requirement of the MBA in International Transportation and Logistics Management

By

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**INDIAN MARITIME UNIVERSITY
SCHOOL OF MARITIME MANAGEMENT
KOCHI CAMPUS**

MAY 2022

DECLARATION

I hereby declare that this submission is my work and that to the best of my knowledge and belief, it contained no materials previously published or written by another person nor materials which have been accepted for the award of degree or diploma of any university or institution of higher learning, except due acknowledgement has been made in the text.

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CERTIFICATE

This is to certify that the MBA project entitled “A Comprehensive Study on the Export of Kerala’s Spice” is a bonafide record of research work done by Mr. M. Johnson Jossy and is submitted partial fulfilment of the requirement for the award of MBA in International Transportation and Logistics Management. It is also certified that the above work has not previously formed the basis for the award of any degree, diploma, fellowship or other similar titles and it is an independent work done by this candidate.

DATE:

DR. JAYAN P.A

PLACE:

(PROJECT GUIDE)

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First of all, I wish to thank God almighty by whose grace I was able to complete this work successfully.

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CHAPTER 1

INTRODUCTION

Since the ancient time spice was a major source to enhance the forex reserve of the nation. Indian spices have been spreading its essence globally since time immemorable. As per the historian Prof. A Sreedhara Menon in his book *A survey of Kerala History*, he says that in the Old Testament of the Bible, there are plentiful reference of cinnamon and cardamon spices indigenous to Kerala. Cinnamon is referred in the text as one of the ingredients of the Holy anointing oils and perfumes used in the ritual of the tabernacle erected by Moses. Spice trade was one of the major reasons that helped the ancient Port of Muzaris to grow to the fame of a global maritime hub. It brought the Romans, Babylonians, Phoenicians, Chinese, Arabs, Portuguese, Dutch, French and finally the British to Kerala. Along with them came some foreign culture, art and religion like the Christianity and Islam. The spice history of India is often intertwined with the ancient golden ages of India and the emergence of foreign powers in India.

In the ancient days during the Middle Ages, a pound of ginger was worth a sheep, a pound of mace worth 3 sheep or half a cow. Pepper, the most valuable spice of all, a sack of pepper said to worth a man's life.

India is the top producer of Spice and the state of Kerala is considered as the Spice capital of the World.

SPICE EXPORT FROM INDIA

India is the world's largest producer and exporter of Spices. Despite of the limitation and bottlenecks in the supply chain due to the pandemic the Indian spice exports has been showing an upward trend and during 2020-21, India's spice exports crossed the milestone of US \$3.6 billion mark for the first time in the history by exporting 15,65,000 tonnes of spices. India export spices to 180 destinations. The leading among them were China, the USA, Bangladesh, Thailand, the UAE, Sri Lanka, Malaysia, UK, Indonesia and Germany. These 9 destinations contributed more than 70% of the total export of 2020-21. The Honourable Union Minister of Commerce & Industry Piyush Goyal in the event of the Coral Anniversary of the Spice Board said "let us aspire to double our exports to \$10 Bn in the next five years, by 2027 & then further double our exports (by) USD 10bn in the next five years". According Minister the Spice exports having increased by 115% in volume and 84% in value (USD) between 2014-21. Out of the total spice produced in India, 70-75% are domestically consumed, 15-20 % are exported and 5-10% are used to make oleoresins, pharmaceuticals and cosmetics. Indian spices have a high demand in global market due to its quality and during the time of pandemic people started to demand more spices considering its medicinal value. The export of spices contributes 41% of the total exports' earnings from all horticulture crops in the country and it ranks 4th among agriculture commodities.

Export of spices from India during 2016-17 compared with 2015-16

Estimated Export of Spices from India during 2016-17 compared with 2015-16						
Item	2016-17		2015-16		Per cent change in 2016-17	
	Qty (Tonnes)	Value (₹ lakhs)	Qty (Tonnes)	Value (₹ lakhs)	Qty	Value
Pepper	17,600	114,312.50	28,100	173,041.50	-37	-34
Cardamom(S)	3,850	42,150.00	5,500	44,982.75	-30	-6
Cardamom(L)	780	8,265.50	600	7,550.70	30	9
Chilli	400,250	507,075.00	347,500	399,743.97	15	27
Ginger	24,950	25,705.00	24,800	27,595.56	1	-7
Turmeric	116,500	124,189.00	88,500	92,165.00	32	35
Coriander	30,300	29,207.50	40,100	42,680.50	-24	-32
Cumin	119,000	196,320.00	97,790	153,113.00	22	28
Celery	6,250	6,246.00	5,310	5,328.24	18	17
Fennel	35,150	30,875.50	15,320	17,239.60	129	79
Fenugreek	34,680	18,276.50	33,330	23,380.70	4	-22
Other seeds (1)	18,100	15,455.00	23,880	16,205.75	-24	-5
Garlic	32,200	30,711.50	23,085	15,959.00	39	92
Nutmeg & mace	5,070	23,641.65	4,050	20,928.25	25	13
Other spices(2)	40,210	50,595.00	43,955	58,348.50	-9	-13
Curry powders/ paste	28,500	59,910.00	26,550	53,174.50	7	13
Mint products(3)	22,300	252,750.00	23,250	258,130.47	-4	-2
Spice oils & oleoresins	12,100	230,775.00	11,635	214,255.00	4	8
Total	947,790	1,766,460.65	843,255	1,623,822.99	12	9
Value in million US \$	2633.30		2,482.83		6	

(1) Include Mustard, Aniseed, Ajwanseed, Dill Seed, Poppy Seed etc.
(2) Include Tamarind, Asafoetida, Cassia, Saffron etc.
(3) Include Mint Oils, Menthol & Menthol Crystal.
Source: Estimate based on file from customs, report from RO's and last year's export trend, etc.

Table: 1 (Source: Annual Report - Spice Board of India)

Table -VII Export of spices from India during 2017-18 compared with 2016-17

Item	2017-18 (*)		2016-17		Per cent change in 2017-18	
	Qty	Value	Qty	Value	Qty	Value
	(Tonnes)	(Rs. Lakhs)	(Tonnes)	(Rs. Lakhs)		
Pepper	16,840	82,078.00	17,600	114,312.50	-4%	-28%
Cardamom(S)	5,680	60,908.50	3,850	42,150.00	48%	45%
Cardamom(L)	760	5,646.00	780	8,265.50	-3%	-32%
Chilli	443,900	425,633.00	400,250	507,075.00	11%	-16%
Ginger	22,605	21,606.55	24,950	25,705.00	-9%	-16%
Turmeric	107,300	103,567.00	116,500	124,189.00	-8%	-17%
Coriander	35,185	27,274.70	30,300	29,207.50	16%	-7%
Cumin	143,670	241,799.50	119,000	196,320.00	21%	23%
Celery	6,480	5,950.40	6,250	6,246.00	4%	-5%
Fennel	34,550	25,906.50	35,150	30,875.50	-2%	-16%
Fenugreek	29,280	12,688.90	34,680	18,276.50	-16%	-31%
Other Seeds (1)	22,175	16,045.80	18,100	15,455.00	23%	4%
Garlic	46,980	30,936.00	32,200	30,711.50	46%	1%
Nutmeg & Mace	5,500	22,094.30	5,070	23,641.65	8%	-7%
Other Spices(2)	38,305	60,192.75	40,210	50,595.00	-5%	19%
Curry Powders/Paste	30,150	61,619.50	28,500	59,910.00	6%	3%
Mint Products(3)	21,500	322,835.50	22,300	252,750.00	-4%	28%
Spice Oils & Oleoresins	17,200	266,172.40	12,100	230,775.00	42%	15%
Total	1,028,060	1,792,955.30	947,790	1,766,460.65	8%	1%
Value in Million US \$		2781.46		2,633.29		6%

(1) Include Mustard, Aniseed, Ajwanseed, Dill Seed, Poppy Seed etc.

(2) Include Tamarind, Asafoetida, Cassia, Saffron etc.

(3) Include Mint Oils, Menthol & Menthol Crystal

Source: *Estimate based on DLE from Customs, Report from RO, last year's export trend etc.

Table: 2 (Source: Annual Report - Spice Board of India)

Export of Spices from India during 2018-19 compared with 2017-18

ITEM	APRIL - MARCH 2018-19(*)		APRIL - MARCH 2017-18		% CHANGE IN	
	QTY (TONNES)	VALUE (Rs.LAKH)	QTY (TONNES)	VALUE (Rs.LAKH)	2018-19	
					QTY	VALUE
Pepper	13,730	57,165.50	16,840	82,078.48	-18%	-30%
Cardamom (s)	3,320	39,052.43	5,680	60,908.15	-42%	-36%
Cardamom (l)	1,040	7,505.15	760	5,646.60	37%	33%
Chilli	452,000	519,130.00	443,900	425,632.74	2%	22%
Ginger	17,550	18,583.00	22,605	21,607.49	-22%	-14%
Turmeric	129,100	125,666.00	107,300	103,567.63	20%	21%
Coriander	48,550	35,078.50	35,185	27,274.96	38%	29%
Cumin	170,750	273,590.00	143,670	241,798.78	19%	13%
Celery	6,020	6,568.90	6,480	5,950.30	-7%	10%
Fennel	25,850	24,230.00	34,550	25,906.35	-25%	-6%
Fenugreek	26,720	12,809.40	29,280	12,688.57	-9%	1%
Other Seeds (1)	29,590	18,567.30	22,175	16,045.55	33%	16%
Garlic	25,840	14,146.10	46,980	30,936.38	-45%	-54%
Nutmeg & Mace	3,270	14,613.60	5,500	22,094.31	-41%	-34%
Other Spices (2)	40,850	60,345.00	38,305	65,253.17	7%	-8%
Curry Powders/Paste	33,500	74,440.00	30,150	61,619.55	11%	21%
Mint Products (3)	20,750	353,875.00	21,500	322,834.86	-3%	10%
Spice Oils & Oleoresins	14,590	229,135.00	17,200	266,172.39	-15%	-14%
Total	1,063,020	1,884,500.88	1,028,060	1,798,016.24	3%	5%
Value In Million Us \$		2710.44		2,789.35		-3%

(1) Include Mustard, Aniseed, Ajwainseed, Dill Seed, Poppy Seed etc.
(2) Include Tamarind, Asafoetida, Cassia, Saffron etc.
(3) Include Mint Oils, Menthol & Menthol Crystal
(*) Include Late Reports of previous months
SOURCE : Estimate based on DLE from Customs, Report from ROs and last year's Export trend etc.

Table: 3 (Source: Annual Report - Spice Board of India)

ITEM	APRIL - MARCH 2019-20		APRIL - MARCH 2018-19		% CHANGE IN	
	QTY (TONNES)	VALUE (Rs.LAKH)	QTY (TONNES)	VALUE (Rs.LAKH)	2019-20	
					QTY	VALUE
PEPPER	16,250	55,187.00	13,540	56,868.00	20%	-3%
CARDAMOM(S)	2,090	42,629.50	2,850	35,625.00	-27%	20%
CARDAMOM(L)	1,100	6,758.50	860	6,106.00	28%	11%
CHILLI	484,000	622,170.00	468,500	541,117.50	3%	15%
GINGER	50,410	44,905.00	18,150	19,602.00	178%	129%
TURMERIC	136,000	121,640.00	133,600	141,616.00	2%	-14%
CORIANDER	50,250	41,110.00	48,900	35,208.00	3%	17%
CUMIN	210,000	322,500.00	180,300	288,480.00	16%	12%
CELERY	6,510	7,175.50	6,100	6,649.00	7%	8%
FENNEL	23,800	22,888.00	26,250	24,412.50	-9%	-6%
FENUGREEK	27,660	16,383.60	27,150	13,846.50	2%	18%
OTHER SEEDS (1)	32,700	19,257.00	29,740	18,736.20	10%	3%
GARLIC	23,350	17,232.50	29,500	17,110.00	-21%	1%
NUTMEG & MACE	2,955	13,630.75	3,300	15,015.00	-10%	-9%
OTHER SPICES(2)	41,050	66,303.00	43,300	61,486.00	-5%	8%
CURRY POWDERS/PASTE	38,200	83,410.00	33,850	74,470.00	13%	12%
MINT PRODUCTS(3)	22,725	383,835.00	21,610	374,933.50	5%	2%
SPICE OILS & OLEORESINS	13,950	264,525.00	12,750	219,300.00	9%	21%
TOTAL	1,183,000	2,151,540.35	1,100,250	1,950,581.20	8%	10%
VALUE IN MILLION US \$		3033.44		2,805.50		8%

(1) INCLUDE MUSTARD, ANISEED, AJWANSEED, DILL SEED, POPPY SEED, ETC.
(2) INCLUDE TAMARIND, ASAFOETIDA, CASSIA, SAFFRON, ETC.
(3) INCLUDE MINT OILS, MENTHOL & MENTHOL CRYSTAL.
Source : Estimate based on dle from customs, report from ro's and last year's export trend, etc.

Table: 4 (Source: Annual Report - Spice Board of India)

ITEM	2020-21 (E)		2019-20 (F)		Change (%)	
	QTY (TONNES)	VALUE (Rs LAKHS)	QTY (TONNES)	VALUE (Rs LAKHS)	2020-21	
					QTY	VALUE
CHILLI	601500	842975.00	496000	671039.53	21%	26%
CUMIN	299000	425310.00	214190	332806.00	40%	28%
MINT PRODUCTS(3)	27400	366825.00	24470	383202.24	12%	-4%
SPICE OILS & OLEORESINS	16450	330675.00	13000	244682.74	27%	35%
TURMERIC	183000	167660.00	137650	128690.53	33%	30%
CARDAMOM(S)	6500	110675.00	1850	42537.15	251%	160%
CURRY POWDERS/PASTE	38450	89145.00	38370	81278.66	0%	10%
GINGER	125700	75665.00	60410	52905.00	108%	43%
OTHER SPICES(2)	44000	70942.50	37235	66545.96	18%	7%
PEPPER	16300	54445.50	17000	57370.94	-4%	-5%
CORIANDER	57000	48982.50	47135	39831.38	21%	23%
OTHER SEEDS (1)	48800	30008.00	37580	22080.72	30%	36%
FENNEL	31800	27630.00	24220	23162.14	31%	19%
FENUGREEK	38300	24642.00	26570	15690.38	44%	57%
NUTMEG & MACE	3875	19000.00	2900	13280.00	34%	43%
GARLIC	17950	15630.00	22280	17182.52	-19%	-9%
CELERY	7650	9983.50	6230	6903.85	23%	45%
CARDAMOM(L)	1325	9126.25	1310	7090.17	1%	29%
TOTAL	1565000	2719320.25	1208400	2206279.9	30%	23%
VALUE IN MILLION US \$		3624.76		3110.63		17%

(E) Estimate, (F) Final
(1) INCLUDE MUSTARD, ANISEED, AJWANSEED, DILL SEED, POPPY SEED, ETC.
(2) INCLUDE TAMARIND, ASAFOETIDA, CASSIA, SAFFRON, ETC.
(3) INCLUDE MINT OILS, MENTHOL & MENTHOL CRYSTAL.
SOURCE : Estimate based on DLE from customs, report from RO's and last year's export trend, etc.

Table: 5 (Source: Annual Report - Spice Board of India)

IMPORTS

ITEM-WISE IMPORT OF SPICES INTO INDIA (QTY. IN TONNES & VALUE IN Rs. LAKHS)										
SPICES	2016-17		2017-18		2018-19		2019-20		2020-21(F)	
	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE	QTY	VALUE
PEPPER (1)	20,265	111590.58	29,650	109,083.80	24,950	77,991.40	26,230	58,153.34	29,416	78,134.80
CARDAMOM(SMALL)	1,720	8870.19	685	4,378.80	479	4,135.87	470	5,687.65	311	5,663.33
CARDAMOM(LARGE)	3,120	24241.56	5,670	33,109.20	3,343	17,599.12	6,300	32,045.70	7,799	39,810.54
CHILLI / PAPRIKA	1,055	1931.90	1,450	2,699.50	1,230	1,960.95	1,280	2,120.70	1,808	4,263.50
GINGER FRESH / DRY	35,605	9201.48	34,300	10,060.32	30,085	16,154.35	18,874	11,025.87	15,385	13,926.65
TURMERIC	14,150	16498.20	17,120	18,433.60	30,578	29,947.46	28,580	24,579.30	25,709	22,916.95
CORIANDER	44,485	22048.60	28,040	13,199.70	13,230	5,609.30	12,000	8,027.26	8,777	5,880.88
CUMIN BLACK / WHITE	2,800	4975.40	3,420	6,066.05	950	1,831.35	2,615	4,419.37	7,139	11,120.82
MUSTARD SEED	850	477.50	300	216.31	30	47.80	10	10.04	414	303.70
POPPY SEED	18,010	29514.75	8,540	14,005.30	18,450	31,788.40	19,940	44,176.78	879	1,310.69
GARLIC	80	207.50	450	987.55	445	718.85	2,750	953.05	7,586	3,599.69
CLOVE	17,095	86969.90	19,510	96,758.70	16,940	82,139.30	27,190	112,866.48	27,176	98,852.33
NUTMEG	340	1458.00	530	1,817.05	1,195	4,551.45	1,645	5,545.07	912	2,906.43
MACE	1,055	7284.25	1,750	11,887.85	1,890	15,817.05	1,910	21,136.88	1,669	19,600.21
CASSIA	22,280	29062.45	26,430	33,250.50	28,180	42,133.10	30,000	57,288.10	37,897	79,497.84
STAR ANISE	4,965	9530.00	7,900	15,106.83	5,825	12,019.25	6,600	24,758.22	4,218	19,075.08
OTHER SPICES (2)	12,090	45648.00	16,880	77,611.00	26,090	107,446.50	27,545	169,814.62	34,060	153,927.73
OILS & OLEORESINS (3)	3,260	51182.50	3,580	51,545.15	3,410	51,314.00	6,362	82,632.71	9,867	140,571.93
NON SPICE ITEMS	-	-	-	-	-	-	-	-	2,507	648.34
OTHERS	-	-	-	-	-	-	-	-	98	1,044.66
TOTAL	203,225	460692.75	206,205	500,217.21	207,300	503,205.50	220,305	665,241.16	223,627	703,056.08
VALUE IN MILLION US \$	203.225	686.78	206.205	776.07	207.300	724.18	220.305	936.29	223.627	948.54

Note: 2020-21 figures are taken from only DGCI& S ,Kolkatta and include re-import also)

(P) Provisional: F: FINAL

(1) INCLUDE WHITE PEPPER, LIGHT PEPPER AND BLACK PEPPER

(2) INCLUDE ANISEED, ASAFOETIDA, CINNAMON, PEPPER LONG, CAMBODGE, HERABAL SPICES AND SPICES NES.

(3) INCLUDE SPICES OILS & OLEORESINS AND MINT PRODUCTS.

SOURCE : DLI FROM CUSTOMS / D G C I & S., CALCUTTA

Table: 6 (Source: Annual Report - Spice Board of India)

MULTILATERAL TRADE AGREEMENT WITH SIGNIFICANT IMPACT ON SPICE TRADE

NAME	MEMBER COUNTRIES	NATURE OF AGREEMENT
Asia Pacific Trade Agreement (APTA)	Bangladesh, China, Republic of Korea, Sri Lanka, India	Preferential Trade Agreement
ASEAN	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam, India	Free Trade Agreement
Global System of Trade Preference (GSTP)	Algeria, Argentina, Bangladesh, Benin, Bolivia, Brazil, Cameroon, Chile, Cuba, Ecuador, Egypt, Ghana, Guinea (Republic of Guinea), Guyana, India,	Preferential Trade Agreement

	Indonesia, Iran, Iraq, Libya, Malaysia, MERCOSUR, Mexico, Morocco, Mozambique, Myanmar, Nicaragua, Nigeria, North Korea (the Democratic People's Republic of Korea), Pakistan, Peru, Philippines, Singapore, South Korea (Republic of Korea), Sri Lanka, Sudan, Thailand, Tanzania, Trinidad and Tobago, Tunisia, Venezuela, Viet Nam, and Zimbabwe	
South Asia Free Trade Agreement (SAFTA)	India, Nepal, Sri Lanka, Bangladesh, Bhutan, Maldives & Pakistan	Free Trade Agreement

Multilateral trade agreements standardize import and export procedures giving economic benefits to all members and helps in removing many hinderances for trade. Thus, it brings down cost and give a better market access. When it comes to the case of some weaker nations and markets, these agreements can at time creates a disadvantage situation as the foreign products will be available at the local markets at competitive price which will a challenge for local produces.

INDIAN SPICES

Out of 109 spices listed by ISO (International Standards Organization), India produces around 75 spices in its various climatic regions. India is one of the largest producer, consumer and exporter of spices in the world. In order to enhance the demand of certain spices which have a unique quality are awarded GI tag by Geographical Indication Registry under the Department of Industry Promotion and Internal Trade, Ministry of Commerce and Industry. This helps to enhance the demand and value of the product in global market. Currently the 14 spices have GI tag which helps to enhance their demand and value in the global market. They are:

1. Malabar Pepper
2. Alleppy Green Cardamon
3. Coorg Green Cardamon
4. Naga Mircha
5. Guntur Sannam Chilli
6. Byadagi Chilli
7. Sikkim Large cardamon
8. Mizo Chilli
9. Assam Karbi Anglong Ginger
10. Waigaon Turmeric
11. Sindhudurg Ratnagiri Kokum

KERALA

The state of Kerala is often referred as the Spice capital of India. The western ghats in Kerala acts as ideal location for many spices like cardamon, clove, Black pepper and vanilla. The southern part of western ghat is called as the cardamon hills. Spice export is a major agro based export from Kerala. The major spices which grow in Kerala includes Black pepper, cardamon, clove, tamarind, nutmeg and ginger. These exports help in bringing in Forex to our economy. Kerala is the top producer of cardamon(small), nutmeg and currently the 2nd largest producer in case of pepper in India. The supply chain of spice offers occupation to many people as Indian Spices have a high demand in global market due to its superior quality.

CHAPTER 2

REVIEW LITERATURE

- As per IBEF (India Brand Equity Foundation), the total spice export in FY21 was US \$4 Bn and for the month of March 2021 it was US \$448.77 million. During FY 19, India's chilli export stood at 468,500 tonnes, cumin export at 180,300 tonnes, turmeric export at 133,600 tonnes and cardamon large export at 860 tonnes.
- As per PIB publication in 26th February, the Hon. Minister of Commerce & Industry Shri.Piyush Goyal while addressing the 5th anniversary function of Spice Board, through video conference he said "let us aspire to double our exports to \$10 Bn in the next five years, by 2027 & then further double our exports (by) USD 10bn in the next five years"
- As per Economic Times, in a news published in 2nd March 2022, they say that in midst of Russia- Ukraine Conflict, the prices of Spices have increased due to local shortage and strong global demand. Ukraine is one of the most exporter of coriander seeds. Coriander rice have increased about 30% during the past few months as the crop is smaller. Now, we expect increased export demand of Indian Coriander as supplies from the Black Sea region will be restricted.
- "India and Indonesia have set an ambitious \$50 Billion target trade over the next 6 years", said Agus P Saptono, Consul General of Republic of Indonesia. While addressing FICCI business delegation comprising mainly spice exporters and traders at Kochi, he mentioned that Indonesia has emerged as the second largest trading partner of India in ASEAN region as Indonesia is an important market for Indian spice buyers from where raw materials are imported for value addition and then re-exported. (Business Times, 28th Oct 2021)
- India's exports of cardamon to Saudi Arabia, its largest buyer, have come to a standstill after the Western Asian nation tightened chemical residual norms last month, traders said.
Cardamon exports to Saudi Arabia, which resumes in May this year after a long gap, have again stopped since July, as they have removed the relaxation of the maximum residual level (MRL) of certain pesticides" said an MD of an exporting firm in Kerala. (Economic Times, 13th Aug 2020)
- The Indian spice trade has sought the Centre's intervention to tide over the crisis arising out of a shortage of containers for export and soaring freight costs.
The spices trade, particularly black pepper exports, have been hit badly by non-availability of containers as well as liners. Even vessels that arrive are fully booked with hardly any space, leading to shipments delays.

"We request the intervention of the government to ensure that the export trade is not hampered because of the lack of space on ships and availability of empty containers for loading cargo," Kishor Shamji of the Kochi-based Kishore Spices told *Business Line*. The sharp hike in ocean freight has forced exporters to pay high rates demanded by the liners to fulfil their export commitments. He cited the instance of freight rates to New York that have risen to \$18,000 from \$2000. (Business Lines, 12th August 2021)

SCOPE OF THE STUDY

The spice exports from India have been showing a growth despite of the challenges created by the pandemic. Kerala is often known for its spices from the ancient days. A study on the export of spices from Kerala will help us to analyse and understand the relevance, current trend and existing bottle necks in export of spices from Kerala. Spices from Kerala enjoys a premium tag in most global markets. Through this study, one can understand the cause and effects of the present increase in export and to find some effective solutions that can ensure sustainable growth in this area as spice export it is one of the major export and source of Forex for the nation.

OBJECTIVE OF THE STUDY

- To understand the current situation of spice exports from Kerala
- Recommending some suggestion to overcome some bottle necks in the existing system

CHAPTER 3

RESEARCH METHODOLOGY

RESEARCH METHODOLOGY

In order to carry out the study on the Export of Spices from Kerala, both primary and secondary data was collected. The primary data was collected from various entities involved in the supply chain of spice export through personal interactions and questionnaire. The secondary data was collected from websites of Spices Board, DGCI & S and books.

STUDY AREA

The study was carried out in Kerala, a state on India's tropical Malabar Coast, has nearly 580Km of Arabian Sea shoreline. It is known for its palm-lined beaches and backwaters, a network of canals. Inland are the Western Ghats, mountains whose slopes support tea, coffee and spice plantation as well as wildlife. Kerala is rich in its Flora and Fauna due to the diverse climatic condition, the major flora includes wild cardamon, Black pepper, Vetiver grass. Kerala lies between northern latitude of 8°7'30'' N and 12°47'40'' N and east longitudes 74°27'47''E and 77°37'12''E. Kerala's climate is mainly wet and maritime tropical, heavily influenced by seasonal heavy rains brought up by the monsoon. The state consists of 14 districts and has a Union Territory within its geographical boundary. Trivandrum (Thiruvananthapuram) is the capital of Kerala where the Legislative and administrative houses are situated. The district of Ernakulam is known as the commercial capital of Kerala.

SPICE BOARD OF INDIA

Spice Board is the statutory organization constituted on 26th February 1987, under the Spice Board Act, 1986 with the merger of the erstwhile Cardamon Board and Spice Export Promotion Council under the Ministry of Commerce & Industry, Government of India. The spice board is the flagship organization for the development and world-wide promotion of Indian Spices. It helps in promotion of exports of 52 scheduled spices from India. The Board has been spearheading activities for the excellence of Indian spices, so as to help the Indian spice industry in attains the vision of becoming the international processing hub and premier supplier of clean and value-added spices and herbs to the industrial, retail and food service segment of the global spice market. The mandate of the Board is primarily development of cardamon (small & large), promotion of exports and regulating the quality of spices for export.

PLANT QUARANTINE

The plant quarantine department comes under the Directorate of Plant Protection, quarantine & storage under the Ministry of Agriculture & Farmers welfare. It was established in 1946. The plant protection activities encompass activities aimed to minimizing crop losses due to pest through integrated pest management, plant quarantine, regulation of pesticides, locust warning & control. When it comes to the export and import of agricultural products, it is mandatory to get the certificate of this authority. They inspect and ensures that the consignment

is pest free and also, they fumigate and quarantine them as per the regulations and demand of India and importing nations.

LIMITATION OF STUDY

1. Companies won't usually share their data and the only available data is the those available in the official websites of Government institutions.
2. Due certain challenges and policies, companies won't easily give appointment or will co-operate to fill questionnaires.
3. Limitation in the availability of data related export specifically from Kerala.

CHAPTER 4

RESULT AND DISCUSSION

The present study concentrated on Spice Export from Kerala, which is often referred as the spice capital of India. The spices from Kerala enjoys a premium tag in most global markets. Thus, it has a potential to dominate in global market if we are able to enhance the production and overcome some bottle necks.

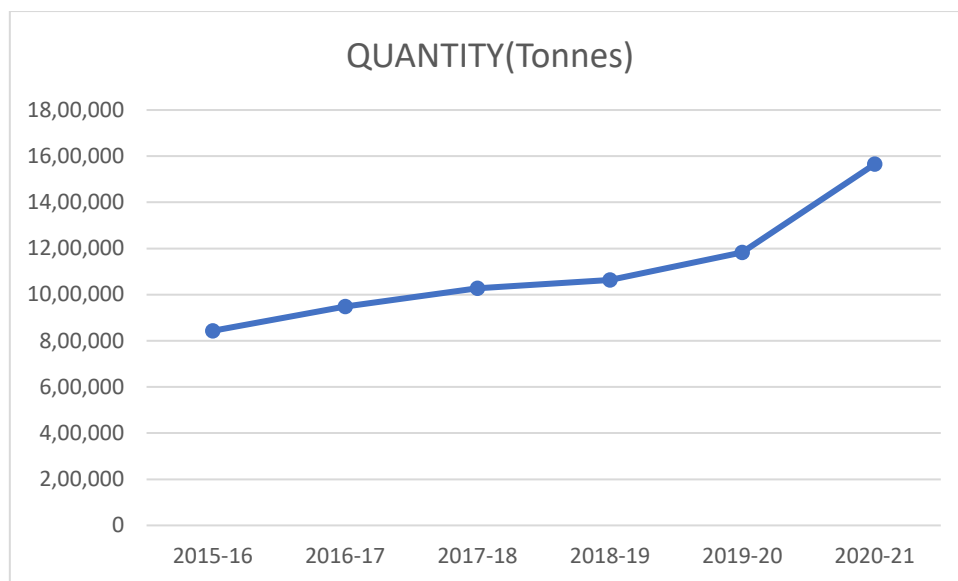
From the Export data (table), it is observed that the spice exports from India is showing an upward trend while comparing the data of FY 2020-21 and FY 2019-20, there is an increase of nearly 17% (value) and 30% (quantity). Along with the exports it is observed that there is an increase in the volume of Imports by 6.2% (FY 2020-21) and 1.5% (FY 2021-22).

To evaluate the exports from Kerala, there is a limitation in the getting the accurate data, hence it is done on the basis of the data available from the Cochin Chamber of Commerce & Industry which is mainly focus on the exports from Cochin Port. Also, to understand the trends in the production, the data from the annual reports of Spice Board of India are considered. While considering the export data of Cochin Chamber of Commerce & Industry, we can see an increase in the quantity of spices exports. Such a trend is observed because there is a concentration of spices processing and exporting companies in Kerala. Here spices from other states are brought and they undergo value addition and then they are exported. Also, while considering the imports, we can see an increase in spice imports and in Kerala some companies import spices from foreign countries like Indonesia and then they are processed and later exported as extracts or oleoresins. So even if there is decrease in the production and cultivation area of some spice crops in Kerala, we can yet see an increase in exports from Kerala. Cochin Port has a hinterland from northern part of Kollam district to the northern end of Kerala which covers the major spice producing areas, hence the export consignment from these areas mainly depends on Cochin Port as a gateway for export.

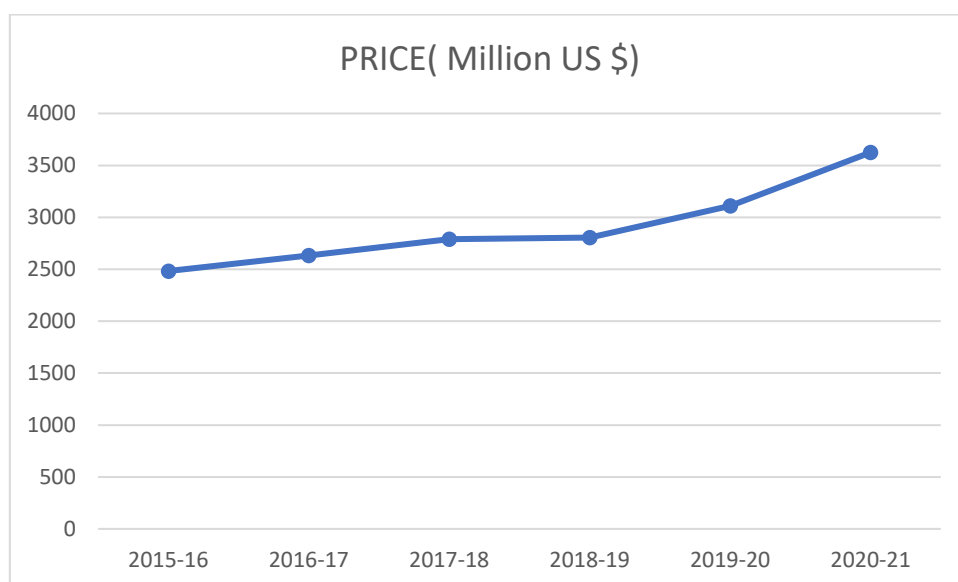
EXPORT OF SPICES FROM INDIA

YEAR	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
QUANTITY (Tonnes)	8,43,255	9,47,790	10,28,060	10,63,020	11,83,000	15,65,000
PRICE (In Billion USD \$)	2482.83	2633.29	2789.35	2805.5	3110.63	3624.76

Table: 7 (Source: Annual Report - Spice Board of India)



Graph:1

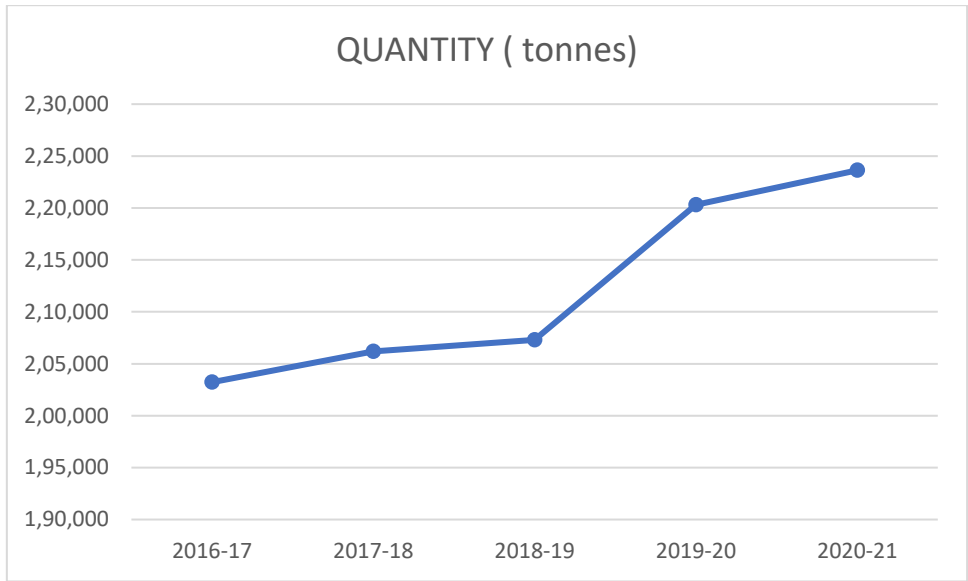


Graph:2

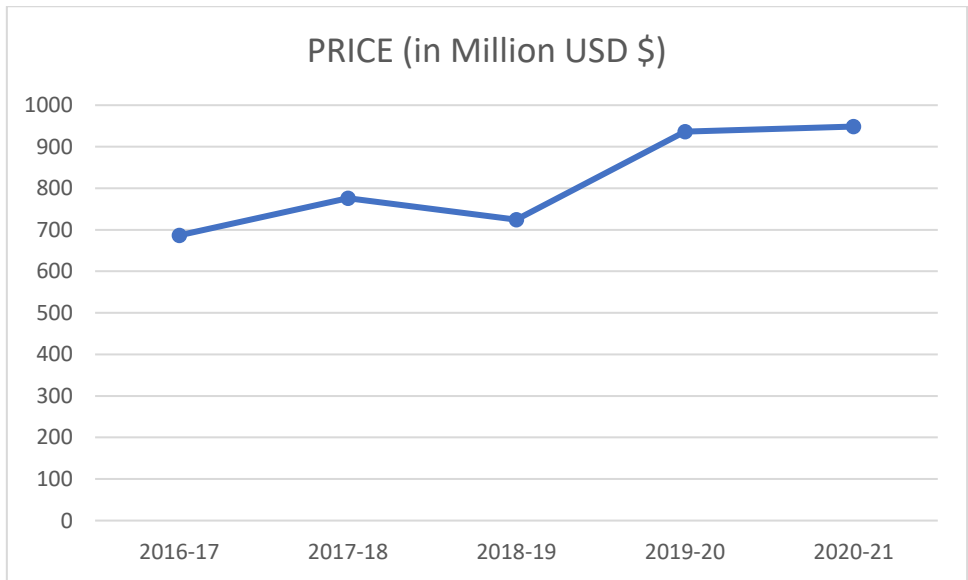
IMPORT OF SPICES TO INDIA

YEAR	2016-17	2017-18	2018-19	2019-20	2020-21
QUANTITY (tonnes)	2,03,225	2,06,205	2,07,300	2,20,305	2,23,627
PRICE (Million USD \$)	686.78	776.07	724.18	936.29	948.54

Table: 8 (Source: Annual Report - Spice Board of India)



Graph:3



Graph:4

SPICE PRODUCTION IN KERALA

SPICE	2016-17		2017-18		2018-19		2019-20		2020-21	
	AREA (Hector)	PRODUCTION (Tonns)	AREA (Hector)	PRODUCTION (Tonns)	AREA (Hector)	PRODUCTION (Tonns)	AREA (Hector)	PRODUCTION (Tonns)	AREA (Hector)	PRODUCTION (Tonns)
PEPPER	85210	20000	85140	22000	82761	17000	83770	20000	83788	22000
CARDAMOM (SMALL)	39080	15650	39080	18350	38882	11535	39697	10075	39143	20570
GINGER	5151	95220	4370	86270	3275	70330	2819	55414	2752	55014
TAMARIND	11550	37500	10610	36470	9984	24040	9962	34406	10713	33824
CLOVES	1070	80	1020	70	882	63	854	71	1001	71
NUTMEG	22070	13750	22700	14680	22771	14598	23329	15010	22512	14342

Table: 9 (Source: Annual Report - Spice Board of India)

SPICE	RANKING BASED ON PRODUCTION (In India)
PEPPER	2
CARDAMOM (SMALL)	1
GINGER	7
TAMARIND	3
CLOVES	3
NUTMEG	1

Table: 10 (Source: Annual Report - Spice Board of India)

MAJOR EXPORT DESTINATIONS FROM COCHIN PORT

NATION	2018 (in Kgs)	2019 (in Kgs)	2020(in Kgs)	2021(in Kgs)
USA	22727149	27352695	28954848	37004701
UAE	6356450	5592939	6715756	8262377
SAUDI ARABIA	4966789	5106472	7380967	7103222
UK	4602488	5109705	5109052	6270506
AUSTRALIA	3296381	3702684	4465849	4828143
INDONESIA	2326807	2561768	4479771	3737980

Table: 11 (Source: Cochin Chamber of Commerce & Industry)

ANNUAL EXPORT QUANTITY FROM COCHIN PORT

YEAR	GRAND TOTAL (Kgs)
2018	7,83,54,219
2019	8,52,03,389
2020	9,41,99,674
2021	10,92,09,653

Table: 12 (Source: Cochin Chamber of Commerce & Industry)

CHAPTER 5

FINDINGS & CONCLUSION

Decline in Cultivation area: Considering the data in Table:9 there is a decline in the area under the cultivation of certain crops are declining. There is a decline of 1.6% ↓ for pepper, ginger 46.5% ↓, Tamarind 7.2% ↓ and clove 6.4% ↓ in case of land. Such a trend can be observed as the price of these commodities are decreasing or have just recovered from a dip in price. From a source it was known that the cultivation in Kerala doesn't have a consistent spice crop, they farmer switches the crop depending on the return and profit. Currently we can see an increase in the area and volume of cardamom (small) due to increase in its price. Decline in the land for spice cultivation will gradually result in decrease in production, as a result the state then has to depend on foreign producers for spices and compared to Kerala the ease of doing business is more in neighboring states and the companies may prefer to shift to neighboring states like Tamil Nadu where the producers get better facility and the cost associated with transportation, labor are less compared to Kerala.

This can be solved by introducing some effective schemes by both state government and the authorities to encourage intensive cultivation and production of certain spice crops.

Un hygienic and improper storage facilities results in pest attacks: The state of Kerala is having a humid climate due which special care has to be taken care while storing the spices or else they will have pest attacks, especially *Cigarette betels*, *Khapra betel*. In case of presence of pests in the export cargo, it has to be fumigated to ensure that it is pest free, this will result in cost and time. Hence special care has to be taken care regarding the hygiene and condition of the storage facilities and warehouses. Also care has to be taken as spices will lose their essence and smell. Hence proper storage is a major factor.

Container shortage: Since the emergence of the pandemic Covid-19, the global trade is facing a great challenge due to container shortage. This issue can be resolved by encouraging the production of container within India through new entrepreneurs or CONCOR India.

Decline due to diseases & rain: Due to unprecedented torrential rain in Kerala, spice crops get destroyed. After rain, there are also attack from some pests.

Decline in Industries in Kerala: The number of industries in Kerala are declining due to the high wages and demands of labors and unions. This results in high cost and decline in profit for the operator, meanwhile neighboring states offers better facilities for business, thus producers find it economical to operate there. Also, those states are showing a trend of increase in the production of spices, hence there is availability of material. Thus, it is economical for industries to operate at neighboring states.

This can only be resolved by implementing steps to encourage business in Kerala and the labor unions have to be more co-operative. Also, the government must offer special economic zones to encourage production for exports.

Not much young farmers: Only few among the young generation ventures into the spice cultivation. In the recent time due to the increase in the price of Cardamom (small), many youngsters ventured into the cultivation of cardamom and also some farmers shifted their cultivation into cardamom from other spices thus reducing the production of other spices. This can be resolved by educating the youth at educational institutes or at local level about the scope and need of farming and the benefits in doing this business as many are not aware about the same and also the general trend that is observed in Kerala is that families encourage youths to go abroad and settle there or to join any service sector for job rather than going for startups and new business considering the difficulty in doing business in Kerala.

Labelling of DG cargo: Some spice extracts like those of Pepper will be labeled as DG cargo while exporting to certain countries and due to this, extra care has to be taken care and a considerable time has to be invested in its handling and clearance as there are stringent international laws governing the handling of DG Cargo.

Quality issue: Due to the impact of some weedicides used earlier, the soil will contain some portion of the same resulting in the presence of those chemicals in the spice produced from that land. Also, for spices like cardamom, there isn't any organic pesticides. Hence the farmers have to depend on the usage of chemical pesticides to keep the plant and its produce from the attack of pests and fungus.

Cleanliness and proper handling at CFS and storage: There should be a proper storage facility for spices, if it is not taken care the spices will lose its essence and also at times get damaged due to fungus or pests. Also, the cargo for export at CFS get damaged due to the mis handling of equipment or labors.

Availability of alternative at a cheaper price at global market: The pepper from Vietnam is posing a threat to the demand of the Black pepper produced in Kerala. Those pepper from Vietnam is available at a cheaper cost and is bigger in size. So, the consumers abroad and also within India switches to those imported peppers.

This can be solved only through intensive marketing techniques and identifying new markets. It has to be understood that though spices from other countries are available at competent prices, they can't match with the quality of Indian spices. Indian spices still maintain its fame for being the best spices in the world.

Usage of traditional methods: Many farmers still resort to the traditional ways rather than resorting to modern methods and mechanization to enhance production. Still the rate of infusion of technology in to Indian Farming in general is very low. This can be resolved by educating the farmers about the need for using new equipment and the Govt. can introduce some schemes to promote the usage of the same.

Lack of advanced public warehouses: Currently the public warehouse facility in Kerala is not advanced. Warehousing is an important aspect in spice export. Spices have to be stored with due care or else it may lose its essence. Hence the warehouses have to be well planned and advanced. For this the government can encourage new entrepreneurs to venture into this area and build such advanced warehousing facility which can act as a common warehousing facility for exporters.

CHAPTER 6

SUMMARY

The study is focused on the exports of spices from Kerala. From the historic records and ancient texts, it is known that India was known for its Spices and the state of Kerala played a dominant role in the export of spices. The Port of Muzaris, which was once hailed as a global hub was able to grow to its fame and also the reason for the emergence of new ports even after the decline of Muzaris was due to the Spice exports from Kerala. The significance of the Spice trade from Kerala is intertwined with the emergence of foreign culture to Kerala and alas the emergence of foreign powers to India.

Out of 109 spices listed by ISO (International Standards Organization), India produces around 75 spices in its various climatic regions. India is one of the largest producer, consumer and exporter of spices. While focusing on the export of spices from Kerala, we can see that it is not showing a huge growth like that of entire spice exports from India. In this study the some of the bottle necks for spice exports were identified. They are the general decline in cultivation area in Kerala, un hygienic storage facilities which results in pest attack, the container shortage and the sky rocketing of freight rates, decline in Industry in Kerala, quality related issue caused by the presence of some pesticides, not much youngster's venture into farming and finally the availability of alternatives like Pepper from Vietnam at lower price. Some of these challenges are being gradually been removed by the steps taken by the authorities such the steps taken by the Spices Board to educate the farmers about the usage of pesticides and some challenges can't be easily changed like the general attitude of labour and unions and un-president shift in the weather. Kerala has a potential to still emerge as a major exporter but it requires some drastic changes and intensive drives to improve cultivation.

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