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ON THE TOPIC

**IMPACT AND LEGAL EFFECT OF COVID19  
PANDEMIC ON INDIAN SPICE EXPORT**

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This is to certify that Ms. ARYA J CHANDRAN, REG NO: LM0220013, has submitted her Dissertation titled “IMPACT AND LEGAL EFFECT OF COVID19 PANDEMIC ON INDIAN SPICE EXPORT” in partial fulfilment of the requirement for the award of the Degree of Masters of Laws in International Trade Law to the National University of Advanced Legal Studies, Kochi under my guidance and supervision. It is also affirmed that the dissertation submitted by her is original, bona fide and genuine.

Date: 09/10/2021

Place: Kochi



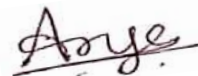
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## DECLARATION

I declare that this Dissertation titled “IMPACT AND LEGAL EFFECT OF COVID19 PANDEMIC ON INDIAN SPICE EXPORT” is researched and submitted by me to the National University of Advanced Legal Studies, Kochi in partial fulfilment of the requirement for the award of the Degree of Master of Laws in International Trade Law, under the guidance and supervision of Dr. ANIL R NAIR, Associate Professor, and is an original, bona fide and legitimate work and it has been pursued for an academic interest. This work or any type thereof has not been submitted by me or anyone else for the award of another degree of either this University or any other University.

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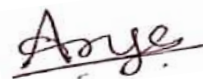
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## ABBREVIATIONS

AEP	Agri- Export Policy
AGMARK	Agriculture Mark
AOA	Agreement on Agriculture
APMC	Agriculture Produce Marketing Committee
ASTA	American Spice Trade Association
BHC	Benzene hexachloride
BI	Backward Integration
BIS	Bureau of International Standards/ Bureau of Indian Standards
BO	Branch Offices
BOE	Bill of Entry
BSM	Buyer Seller Meets
CAC	Codex Alimentarius Commission
CCSCH	Codex Committee on Spice and Culinary Herbs
CECA	Comprehensive Economic Cooperation Agreement
COVID19	Corona Virus Disease 2019
CPCRI	Central Plantation Crops Research Institute
DDT	Dichloro diphenyl trichloro ethane
EOU	Export Oriented Unit
EPCG	Export Promotion Capital Goods
EU	European Union
EXIM Policy	Export- Import Policy
FAO	Food and Agriculture Organisation
FDA	Food and Drug Administration
FEMA	Foreign Exchange Management Act

FOB	Free-on-Board
FPS	Focus Product Scheme
FSSA	Food Safety and Standards Act
FSSAI	Food Safety and Standards Authority of India
FTA	Free Trade Agreements
FY	Fiscal Year
GAP	Good Agriculture Practices
GATT	The General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GSP	Generalized System of Preferences
GST	Goods and Services Tax
HSRV	Human Respiratory Syncytial Virus
ICAR	Indian Council of Agriculture Research
IGM	Import General Manifest Filing
IGST	Integrated Goods and Services Tax
IISR	Indian Institute of Spices Research
IOSTA	International Organisation of Spice Trade Associations
IPM	Integrated Pest Management
IPPC	International Plant Protection Convention
IPR	Intellectual Property Rights
ISLFTA	Indo-Srilanka Free Trade Agreement
ISO	International Organisation for Standardization
ISPM	International Standard for Phytosanitary Measures
LPG	Liberalisation, Privatisation and Globalisation
MEIS	Merchandise Export Scheme from India
MFN	Most Favored Nation
MRL	Maximum Residue Limit

MTF	Medium Term Framework
NEP	New Economic Policy
NPPO	National Plant Protection Organisations
PPE	Personal Protective Equipment
QCI	Quality Control of India
RBI	Reserve Bank of India
R&D	Research and Development
SAFTA	South Asian Free Trade Agreement
SARS-CoV-2	Severe Acute Respiratory Syndrome Corona Virus 2
SCM	Agreement on Subsidies and Countervailing Measures
SME	Small and Medium Enterprises
SPS	Sanitary and Phytosanitary Measures
STDF	Standards and Trade Development Facility
TBT agreement	Agreement on Technical Barriers to Trade
TRACES	TDS Reconciliation Analysis and Correction Enabling System
TRIPS Agreement	Trade Related Aspects of Intellectual Property Rights Agreement
UAE	United Arab Emirates
UK	United Kingdom
UN	United Nations
USA	United States of America
VAT	Value Added Tax
VKGUY	Vishesh Krishi and Gram Udyog Yojana
VKUY	Vishesh Krishi Upaj Yojana
WHO	World Health Organisation
WTO	World Trade Organisation

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## Chapter-1

### **INTRODUCTION**

Trade is an essential economic concept involving the buying and selling of goods and services, with an amount called compensation paid by the buyer to the seller or the goods or services exchanged between parties. Trade took place within an economy between producers and consumers. It is the most important engine for economic development globally, and it includes both exports and imports. Imports can define as the goods or services purchased from the rest of the world by a country's residents rather than buying domestically produced items. Exports can define as the goods or services produced domestically but then sold to customers residing in other countries. Food and agriculture trade forms the vital link between the global trade network and developing economies. Spices are one of the most traded agricultural commodities across the globe. India is known as the homeland of spices. India is one of the primary producers, consumer and exporter of spices, and Spices stands fourth in export value among agricultural exports from India.

Spices are essential in food items and as medicine. They could change the look of food to make it more attractive in colour and bring out the unique natural taste of cuisines. Some of the spices grow in the wild and are an excellent source of food preservatives, especially for industrially processed foods. As medicine or food, the importance of spices cannot be overemphasising. All the medical importance of species is not yet known. We know the certainty that species can use to treat various ailments like cancer, fever, malaria, stomach offset, nausea, and many more. The medicinal values of spices in both dental and skincare are well establishing. India produces a wide variety of spices and holds a significant position in world spice production. From tropical to sub-tropical to temperate, the climates of India help in the growth of almost all spices. There is spice cultivation in almost all the states and union territories of India. As per the act of Parliament, a total of 52 spices brings under the purview of the Spices Board. However, 109 spices were notified in the ISO list. The most important spices are pepper, cardamom, chilli, mint products, cumin, turmeric, spice oils and oleoresin, contributing to 80% of total earnings from spice export. Ginger is recently getting more benefit since its export showed 47% growth just before the pandemic.

The Historical aspects show that the spice trade evolved from the Neolithic period itself. However, it flourished recently with the legal framework of the modern era. So, when we look into the Indian spice export, there are so many rules relating to the international spice export of India. Spices Board was established as a commodity board in 1987 by merging Spices Export Promotion Council and Cardamom Board. Spices Board is functioning under the Ministry of Commerce and Industry, Government of India, and it is the flagship organisation for developing and worldwide promoting Indian spices. The Board act as an international link between the importers abroad and the Indian exporters. The Board is spearheading activities for excellence of Indian quality spices by involving every industry segment. Moreover, now there are several schemes for supporting spice exporters operated by the Board. Apart from the Spices Board, other institutions such as the Export Inspection Council (established under the Export Quality Control and Inspection Act 1963) also play a significant role in ensuring the quality of the spices exported from India.

The pandemic Covid19 and lockdown negatively affected the international trade, Indian economy and the Indian spice export. According to the WTO estimates, the decline in world trade due to Covid19 is likely to be significantly higher than the downturn it suffered during the financial crisis of 2008. The Covid19 crisis damaged the world economy and international trade severely. Moreover, when the lockdown ended, the demand for Indian quality spices increased due to the immunity-boosting property of the spices. Even though there is no reported genetic predisposition in contracting Covid19, the mortality rate varies among different ethnic groups. Here we determined the potential correlation between Covid19 and spice consumption. Nations with lower consumption of spices per capita showed a more significant number of Covid19 cases per million populations. This data is not surprising as herbs and spices are well-known to boost immunity. In the wake of the Covid19 outbreak, entire humanity across the globe is suffering. Enhancing the body's natural defence system (immunity) plays a vital role in maintaining optimum health. So, this situation and the current demand for spices can be utilised to framing laws and policies which helps to improve the spice export from India.

## **1.1 STATEMENT OF THE PROBLEM**

India is one of the major exporters and producers of spices. Even though the spice export has a great history in India, the recent developments in law played a significant role in improving

spice exports. However, the pandemic Covid19 and resulted lockdown affected all international trades, including India's spice export. Now after lockdown, the spices are getting more demand due to the immunity-boosting capacity of spices. So, this study includes the existing legal framework on Indian spice export, how it is affected by covid19 and how this can help improve India's spice export.

## **1.2 SCOPE OF STUDY**

Now international trade affects everyone in one way or the other in their daily lives. Since India is the leading exporter of Spices, the spice trade sector greatly influences India. So, it is essential to understand international trade and the Indian spice trade. Though trade encompasses both export and imports, this study focuses on exporting spices since they are a significant component in India's agricultural exports. The spice trade started from the Neolithic period itself. However, it flourished recently due to the legal protection and safeguarded given to the exporters. Now pandemic Covid19 affected the international trade, including Indian spice export at the time of lockdown. So, it is essential to find out the current legal position of the spice trade to know how the pandemic affected the same. However, after lockdown, the spices having more demand due to the immunity-boosting capacity. The sector can be more improved by studying and developing the legal framework of the same. So, studying the legal effect of covid19 on the Indian spice trade at the time of lockdown and after lockdown is necessary for improving the spice export sector, India's most essential exporting item. The study mainly includes the spices pepper, cardamom, chilli, cumin, mint products, turmeric, spice oils and oleoresin, contributing to 80% of total earnings from spice export. It also includes ginger which showed a 47 % growth in export just before the pandemic. The findings from the study are helpful and relevant to improve the spice export sector.

## **1.3 RESEARCH QUESTIONS**

The research questions involved in the study are;

2. What is the significance of Indian spice export in international trade?
3. Which are the legal provisions related to the spice export in India?
4. How the pandemic Covid19 affected the spice export?
5. What are the legal solutions available to improve the spice export?

## **1.4 OBJECTIVES**

The objective of the research is as follows:

1. To understand the position of Spice export in India's international trade.
2. To know the current legal provisions relating to the export of spices from India.
3. To examine the impact of the pandemic Covid19 on the Indian spice export.
4. To find out the legal solutions to improve spice export from India.

## **1.5 HYPOTHESIS**

Spices are one of the essential exporting items of India. There are laws relating to exporting and rules made by the spice board of India which regulate spice export. The pandemic Covid19 has affected the exporting of India, mainly the spice export, negatively. After lockdown, the demand for spices is increasing, and we can improve the sector by modifying specific laws or introducing some policies.

## **1.6 RESEARCH METHODOLOGY**

The method used in the dissertation will be doctrinal and non-doctrinal research methodology. For this research, some relevant primary data and secondary data were collected from official websites. To complete this research work, the researcher will do an extensive and thorough study with the help of documents, reports, books and research papers. The researcher will also use research materials available in electronic databases and other general websites when they may not be available in physical format.

## **1.7 PERIOD OF STUDY**

The total period of the study is 4-5 months.

## **1.8 LIMITATIONS**

- ✓ Limited resources and reliability of resources
- ✓ The study does not include all the spices since it is practically not possible

## **1.9 CHAPTERISATION**

### **✓ CHAPTER-1: INTRODUCTION**

This chapter deals with a general introduction to the study, which includes the scope of the study, research objectives, statement of the problem, research questions, hypothesis, research methodology and limitations of the study.

### **✓ CHAPTER 2: POSITION OF SPICE EXPORT IN INDIA'S INTERNATIONAL TRADE**

In this chapter, it explains about the most important spices, their uses, spice export and the significance of spice export in India's international trade

### **✓ CHAPTER 3: LEGAL PROVISIONS RELATING TO SPICE EXPORT FROM INDIA**

This chapter deals with the general legal provisions relating to the export from India. It also describes about the spice board of India and how the rules made by the spice board affect India's spice export.

### **✓ CHAPTER 4: THE LEGAL EFFECT OF COVID19 IN INDIAN SPICE EXPORT**

This chapter discusses how the pandemic Covid19 affected the Indian spice export and the legal effect of the pandemic Covid19 in the spice export. The reason for the increase in the demand for spices after the lockdown ended. So, this chapter also studies the current situation of spice export from India.

### **✓ CHAPTER 5: CONCLUSION**

This chapter consists of the result of the study and concludes how Covid19 affected the Indian spice export. It also finds some legal solutions for the improvement of Spice export.

### **✓ CHAPTER 6: FINDINGS AND SUGGESTIONS**

In this chapter, solutions are given to improve the spice export sector. By analysing all other chapters, the findings and suggestions are made here.

## Chapter-2

# POSITION OF SPICE EXPORT IN INDIA'S INTERNATIONAL TRADE

### 2.1 LITERATURE REVIEW

1. In 2015, Reshmi Gujrati, in her article "THE ROLE OF INTERNATIONAL TRADE IN GLOBAL ECONOMY", discusses the need for international trade and the economic importance of the same. World trade has increased steadily and somewhat invisibly over the past fifty years, spurred by global policy actions. The USA has been and continues to be a significant factor in international trade.
2. In 2002, the Romain Wacziargl's paper "INDIA IN THE WORLD TRADING SYSTEM" described India's importance and position on international trade. The Liberalisation Privatisation Globalisation (LPG) model introduced in India in 1991 opened up a new trade opportunity arena to the Indian market. As a result, the nation has experienced bouts of increased growth when it has opened up to trade.
3. In 2020, the WTO's "WORLD TRADE STATISTICAL REVIEW" deals with the statistical analysis of India's international trade. Every year counted a new rise in the trade, and in the fiscal year 2018-19, India made a new high in the merchandise trade. However, from FY20 onwards, the international trade was affected by covid19, and the statistical data shows an evident slowdown of trading activities.
4. In 2014, P. Thadchaigeni and J. Weerahewa, in their paper "AN ANALYSIS OF TRENDS AND DETERMINANTS OF SPICE TRADE OF THE WORLD", studied the position of spices in world trade. It describes the composition of the spice trade of the world, the leading exporting and importing countries and the comparative benefit of exporting countries of spice. Spice is the most traded agricultural commodity. The USA is an essential spices market, responsible for importing 40% of the total spice trade.
5. In 2000, Sreekantan Thampy, in his article "SPICE TRADE AND SPICE MARKET", examined the importance of spice in international trade and Indian share on global spice export. The spice world spice market and India's export have been connected since the



16<sup>th</sup> century. Even colonization has a direct relationship with spices. He also found that the Indian spices trade's fortune depended on the rise and fall of the four significant spices, viz. pepper, chillies, ginger and turmeric.

6. In 2019, Thomas & P C Sanil, in his review of "COMPETITIVENESS IN SPICE EXPORT TRADE FROM INDIA", mainly focuses on India trade exports about its history, competitiveness, and issues faced with the export trade of the spices. Various trade barriers for various countries surround the spices. Although India is one of the leading reducers and exporters that faces various difficulties in exports, the legal framework and production and competitiveness have brought about few changes in its trade.
7. In 2003, KC John, in his article "SPICE EXPORT FROM INDIA", states that although Indian Spices export has been increasing in quantity and value and cover many countries, it depends on the exporter's ability to keep quality standards set by importing nations. Therefore, various programmes introduced to ensure the export of quality spices should go with marketing and export development strategies.
8. In 2000, Pratheeksha, in the article "THE ROLE OF SPICES BOARD IN THE PROMOTION OF EXPORT OF SPICES", discussed the role of the Spices Board in promoting the export of spices and analysed the importance of spices as a foreign exchange earner and the trend in the export of spices from India. She found that timely collection and dissemination of data relating to world production and demand of spices is essential for spices trade. For this, the market intelligence wing of the Spices Board should strengthen.
9. In 2018, Amit Baran Sharangi, in his book "INDIAN SPICES", stated the legacy, production and Spices in India, the origin, history, tradition and culture. India, through geographical distribution, has brought into account-wide accessibility of the spices in order of its production, aroma and flavour for which it is known. The spices themselves contribute even the nutritive value and qualitative value of the spices.
10. In 1996, V B Singh and Kirti Singh, in their book "SPICES", analysed various spices and their uses. India has been recognised all over the world as the abode of many spices since time immemorial. Therefore, spices can contribute a significant role in the national economy. Presently, the Government of India is giving particular emphasis to increasing exportable commodities, including spices.
11. In 2008, Cherian, in his article "INDIA'S SPICE EXPORT AND ROLE OF PEPPER", analysed the performance of India's export trade in spices. He found that India's

competitive position in the world market for pepper remained weak, owing to its higher prices. Therefore, measures are necessary to increase production, productivity and reduce export prices by reducing the cost of production to improve India's export performance in spices.

12. In 2018, A. K. Vijayan, in his paper "SMALL CARDAMOM PRODUCTION TECHNOLOGY AND FUTURE PROSPECTS", dealt with the importance of small cardamom. Small cardamom is known as the queen of spices, enjoys a unique position in the international spice market. Moreover, the excellent quality of the products can get through timely harvest and adoption of scientific postharvest operations.
13. In 2009, Dr K.N. Pushpa Kumari and S. Pramod, in their Article "HEALTH BENEFIT OF SPICES", deals with various health benefits of the different spices. Pepper, the universal spice named the "King of Spices" Black pepper, can stimulate various parts of the body such as the heart, kidneys, and stomach. It helps to improve immunity. When foods are consuming with black pepper, the body can absorb valuable vitamins and nutrients from the food much more effortlessly.
14. In 2012, Dr U S Bose, in his book "HANDBOOK OF MEDICINAL PLANTS", discusses medicinal plants, properties, and uses. It deals with spices in a different chapter and provides that the spices are part of many Ayurvedic drugs and Yunani medicine. Most of the spices have medicinal properties, and some are even useful for most dangerous diseases.
15. In 2020, Sunita Singh, in the review article "MAGICAL AYURVEDIC SPICES AND HERBS THAT CAN BOOST OUR IMMUNITY, " stated that traditional spices and herbs have started immemorial had played a vital role as immuno-boosters in Indian cuisine. Herbs and spices well know from ancient times for their medicinal properties. More than 80 spices are grown in different parts of the world, particularly in Asia. India is home to several spices that are used extensively in traditional medicine.

## 2.2 INTERNATIONAL TRADE

International trade is the transferring goods and services between nations in exchange for any monetary benefit. It is the economic transactions between States across the world. The goods traded includes both capital goods and consumer goods. Moreover, generally, the trade result represents a significant portion of GDP (Gross domestic product). The economic development of each state depends on international trade. A state cannot produce everything they need. They may either lack facility or resources, or skill. Usually, the states are dependent on each other, and there is no state in the world that we can refer to as self-sufficient. So international trade is an essential factor, not only for economic benefit but also it helps to satisfy the needs of a country and the wants of its citizens. Furthermore, it helps to access a variety of products produced by the various state. Trade is beneficial for both the buying state and the selling state in many ways, directly or indirectly.

International trade includes both exports and imports. The import helps the country access useful products worldwide and for the lowest cost whereas the help of the export in the country's economic development. Sometimes the trade is also helpful in getting into a good relationship with a foreign state which may be helpful in one way or the other. The trade consists of exports and imports, and in international trade, the trade should be between two countries. As far as the development of an economy is concerned, it needs to increase exports and reduce imports. So, the economic development of any sector also depends on the export. The exports lead to economic development but also helps in the utilisation of resources, employment generation, foreign exchange and poverty alleviation<sup>1</sup>.

As per the world trade statistical review, China is the leading exporter of merchandise goods whereas, in commercial services, the USA holds the first rank. Moreover, the USA also holds the first position in importing both merchandise goods and commercial services. In the importing chart of both goods and services, China holds the second rank. However, in export, United Kingdom is in the second position in the case of services and the USA is in the second position in goods. In merchandise exports, India only holds 18th position while exporting services India holds the eighth rank. In the importing of goods and services, India is in 10th

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<sup>1</sup> Reshmi Gujrati's "THE ROLE OF INTERNATIONAL TRADE IN GLOBAL ECONOMY", International Journal of Innovative Science, 2015.

position. India is within the top ten exporters in food and agricultural trades, while it is not in the top ten importers<sup>2</sup>. So, the food and agricultural trade is one of India's vital sectors in international trade.

## **2.3 ROLE OF INDIA IN INTERNATIONAL TRADE**

The global trade network and the developing economies are links through the trading of food and agricultural commodities. India was following a mixed economy, including the features of capitalism and socialism after Independence. As a result, the government can make interventions, encourage the exports and control the imports. However, we cannot withdraw a state completely from exports and imports. Both export and import, which constitute foreign trade, is essential for the development of the country. In 1991, a new economic policy was introduced known as globalisation liberalisation and privatisation policy in India<sup>3</sup>. It promoted more private interference in trade and also liberalised policies that helped international trade. Moreover, now the globe is considered as a single market. We can buy and sell anything from anywhere in the world.

These policies in India made a new arena in international trade. It helped more commodities reach the international market and increased the export and import of the country speedily. Now India holds a stable place in international trade with a good amount of export and import. Every year counted a new rise in the trade. In the fiscal year 2018-19, India made \$ 330 billion, which was a new high and defeated \$ 314 of the 2013-14 fiscal year in the merchandise trade. It recorded 9.06% of growth also. India imports were also grown to 10.41% at that period which amounts to \$ 514 billion<sup>4</sup>. At this stage, India's international trade reached its peak. It increased the investments at this period.

However, unfortunately, the pandemic COVID19 affected the whole international period at the end of 2019-2020. Moreover, the trade again started declining due to the lockdown imposed by different countries, including India, which affected the whole supply chain in the

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<sup>2</sup> WTO, World Trade Statistical Review

[https://www.wto.org/english/res\\_e/statis\\_e/wts2020\\_e/wts2020chapter06\\_e.pdf](https://www.wto.org/english/res_e/statis_e/wts2020_e/wts2020chapter06_e.pdf) accessed on 10 May 2021

<sup>3</sup> Romain Wacziarg's "INDIA IN THE WORLD TRADING SYSTEM", SSRN Electronic Journal, 2002.

<sup>4</sup> WTO, World Trade Statistical Review

[https://www.wto.org/english/res\\_e/statis\\_e/wts2020\\_e/wts2020chapter06\\_e.pdf](https://www.wto.org/english/res_e/statis_e/wts2020_e/wts2020chapter06_e.pdf) accessed on 10 May 2021

international trade. Export in the year 2019-2020 was \$313.36 billion. Furthermore, during the year 2020-2021, it again dipped by 7.4% to \$290.18 billion. The imports also face the same kind of decline during this period. During 2019-2020 there was an import of \$474.71, and it again dipped by 18% to \$388.92 billion. March 2020, the export was \$21.49 billion, which showed a 34% decline than that of March 2019 due to the pandemic and lockdown. However, in March 2021 the merchandise export became \$34 billion with an increase of 58.23% than that of March 2020. It is a positive sign as far as the Indian economy is concerned. There is a chance of negatively affecting the second wave of the pandemic to the economy even though there is no complete lockdown.

When we consider India's International trade, some countries mainly trade with India. The following table shows data relating to the export and import of India to various countries during the year 2018 to understand the top 10 countries with which India used to engage in the trading activity<sup>5</sup>.

#### INDIA'S MAJOR EXPORTING COUNTRIES

COUNTRY	EXPORT VALUE (In US\$ billion)	PERCENTAGE SHARE IN INDIA'S EXPORT
United States	52.4	15.88
UAE	30.1	9.13
China	16.7	5.07
Hong Kong	13	3.94
Singapore	11.5	3.51
United Kingdom	9.3	2.82
Bangladesh	9.2	2.79
Germany	8.9	2.7
Netherland	8.8	2.67
Nepal	7.7	2.35

Source: Directorate General of Foreign Trade, 2018-19

<sup>5</sup> Department of Commerce, Export import data bank <https://tradestat.commerce.gov.in/eidb/iecnttopn.asp> accessed on 12 May 2021

## INDIA'S MAJOR IMPORTING COUNTRIES

COUNTRY	IMPORT VALUE (In US\$ billion)	PERCENTAGE SHARE IN INDIA'S IMPORT
China	70.3	13.68
United States	35.5	6.92
UAE	29.7	5.79
Saudi Arabia	28.5	5.54
Iraq	22.3	4.35
Switzerland	18.1	3.52
Hong Kong	17.9	3.50
Korea	16.7	3.26
Singapore	16.3	3.17

Source: Directorate General of Foreign Trade, 2018-19<sup>6</sup>

## **2.4 SPICES**

The aromatic or pungent substances use for flavouring foods are known as spices. It also has other properties which can exploit for commercial purposes. The International Organization for Standardization (ISO) suggests no specific difference or division between condiments and spices. However, condiments are generally referring to as the properties of spices that gives flavours to food. Once upon a time, spices were considered a luxury item. Now it is treated as an essential commodity and has become an integral part of the daily diet. The most important use of Indian spice is the flavouring of food. It is also used in beverages and for meat preservation, medicinal preparations, cosmetics, perfumery, bakery goods and various other products.

Spices have an extraordinary significance, especially in India. As far as India is concerned, spices have an essential role in economic development by exporting the same. It not only helps in the economy but also very significant for good health. Usually, spices are part of our daily diet and are consumed in small amounts. Nevertheless, this small number of spices are enough for enriching our diet and increasing immunity as spices are full of minerals, vitamins and other

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<sup>6</sup> Department of Commerce, Export import data bank <https://tradestat.commerce.gov.in/eidb/iecnttopn.asp> accessed on 12 May 2021

food components. Spices like Kadanthippili, cumin, omum, coriander, fenugreek, asafoetida, turmeric, aristithipplis, black pepper, mace and tamarind are rich sources of iron. Omum, kandanthippili, cumin, asafoetida, coriander, pepper, mace, turmeric, and clove supply abundant amounts of calcium. Cumin, coriander, fenugreek, omum, chillies, garlic, nutmeg, turmeric, tamarind, mace, small cardamom and clove are considered excellent sources of phosphorus. Potassium is present in spices like turmeric, omum, coriander, cumin and fenugreek in large quantities. Some spices like cumin, omum, coriander, turmeric and fenugreek are considered good sources of sodium.

Though spices are not considering an ideal source of vitamins, some appreciable supply amounts of different vitamins. For example, mace, pepper, coriander, cumin, chillies, clove are rich sources of vitamin A(carotene). Spice like chillies, cumin, nutmeg, fenugreek, mace, coriander and omum supply abundant thiamine. Good sources of vitamin riboflavin are chillies, cumin, coriander, fenugreek, omum, garlic and small cardamom. And the vitamin niacin chillies, cumin, turmeric, omum, mace, nutmeg and pepper. Except for chillies and garlic, vitamin C is generally not found in spices or present in trace amounts. Though some spices contain a fair amount of carbohydrate, fat, and protein, they cannot consider as substitutes as they are consuming in small quantities. However, some spices are exceptions/ For example, nutmeg substitutes the oil in vegetable preparations as it is highly fatty (36.4%). In Maharashtra and Gujarat, fenugreek flour can be used in the form of (Chapati) bread and wheat flour to form a nutritious and delicious diet. Fenugreek is using as a popular ingredient of bread in Egypt and Ethiopia. Turmeric postnatal period as a nutritious drink. In north Indian, a mixture of dry fruits, herbal plant products and spices are ground and cooked in ghee and consumed by women during the postnatal period called Athogda as a source of minerals and energy for maintaining the good health of the breastfeeding mother.

Onion is used as a mixed vegetable, whereas garlic bulbs are using in chutney. Green pepper, ginger, chillies and some other spices are using for the preparation of pickles. Ginger is essential in several food products like gingerbread, confectionery gingerale and soft drinks like cordials, ginger cocktails, and carbonated drinks. Horseradish is using for the preparation of horseradish cream or sauce. A mixture of several other spices is using for the preparation of chutneys and sauce. Spice is utilising in the flavouring and seasoning of various vegetables and meat preparations. Spices are also utilising by bakeries, confectioneries and food processing and packing industries to add the desired flavour in their products. When there was no refrigerator and all, some of the spices like clove were used to preserve food items in yore days:

clove, black pepper and mustard seeds used as preservatives. Saffron and turmeric are using in different vegetable and meat preparations for their colouring properties.

Curry powder is a ground mixture of about 5 to 20 different spices. Turmeric, coriander, cumin, and chillies are the main ingredients, while ginger, black pepper, cinnamon, clove, and other spices also add in varying proportions in different blends. Curry powder is generally using for flavouring vegetable and meat preparations. Moreover, there is spice oil which uses in soft drinks, perfumes, toilet goods. Ginger oil is the essential item accounting for 69% of the total oil exports. The other spice oils are black pepper oil, celery seed oil, cardamom oil, and other spice oils. Oleoresin is extracting by the solvent extraction method and contains the spice's pungency, flavour, and aroma. Spice oleoresins are using in meat processing, food industries and food industries. Pepper oleoresin accounts for about 65% of the total oleoresin exports, followed by ginger oleoresin, capsicum oleoresin, turmeric oleoresin and other oleoresins. Non-food industries are also utilising considerable amounts of oleoresin.

Many spices such as nutmeg, vanilla, clove, pepper, cumin and celery or their oils are using in perfumery or soap making. Turmeric is using in dyeing. Turmeric, clove, fenugreek, nutmeg, and others also manufacture cosmetic goods like vanishing cream, toothpaste and hair tonic. The Kartek Cigarette industry consumes about 75% of the world exports of clove in Indonesia. Nutmeg, mint and clove employing flavouring of certain beverages and liquors. For the making of brandy and wine in most Western countries and India, uses ginger powder. According to Aryans, spices have medicinal properties and are beneficial to cure various disorders in human beings. In Unani, Homeopathy and Ayurvedic systems of medicine, most spices are using as an ingredient in medicinal drug preparations. Whole apices or in powder or extracted spice oil form are using in pharmaceutical preparations. Some of the spices are utilising for remedying various ailments and physiological disorders. Spices are also famous as folk medicine in different parts of the country.

Some spice like clove and garlic possesses potent antimicrobial and antibiotic properties that inhibit the growth of harmful bacteria in the human intestines. So, we can conclude that spices have medicinal properties and are an essential part of human health knowingly or unknowingly. Spices intensify the salivary flow and the secretion of amylase, neuraminic acid and hexosamines. They also increase the secretion of saliva, rich in ptyalin, due to spices facilities in starch digestion. They favour the cleaning of the oral cavity from food adhesion and bacteria. They may help check infection and caries and protect the mucous membrane against thermic,



mechanical, and chemical irritation. Spices possibly activate the adrenal-cortical function and fortify resistance and physical capacity. Stroke volume and frequency and blood pressure can markedly augment through spices. Spices accelerate thrombolysis. Spices like coriander, cumin and turmeric are chiefly using in veterinary medicine as remedies against various disorders in animals. The residue left after extracting spice oil can be used as good cattle feed as it is rich in protein and fat<sup>7</sup>.

## **2.5 SPICE TRADE**

Spices are one of the most traded commodities across the world. Spice trade includes both the import and export of spices from one country to another, which influences the political-economic and social development of the world. The spice trade was found its route in the ancient period itself. The main reason people from western countries started trading and later conquered various places was the desire to have spices. Once, the country, which had more colonies producing spices, was considered a matter of pride<sup>8</sup>. Almost every country globally, using spices as an integral part of their diet and spices, is spread worldwide, so there is a monopoly in it.

The principal producer and consumer of spices are India. Indonesia holds the second position in production. The other prominent spice producing nations are Brazil, Malaysia and Madagascar. The leading exporters of spices are China and India is there in the 2nd position now. The largest market of spices is the United Nations. They are also taking first place in India's importers. The USA also produces spices, but it only fulfils the 20% need of the State.

Furthermore, in the USA, the most significant spice or 40% of total spice imports, are on pepper<sup>9</sup>. Another important growing market for spice is Canada. There the production is significantly less, and almost requirement is fulfilling through import. Pepper is the essential item. Argentina is also an important market, cultivates capsicum, cumin, coriander, fennel and imports pepper, cinnamon and nutmeg. The popular spice cardamom is less used here.

Mexico produces capsicum and pimento for consumption and export, and they are importing cinnamon mainly from Srilanka. The European countries are another critical market, and they

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<sup>7</sup> V B Singh and Kirti Singh's SPICES, 1996, New Age International Publishers, Page no:5

<sup>8</sup> P Thadchaigeni and J Weerahewa's "AN ANALYSIS OF TRENDS AND DETERMINANTS OF SPICE TRADE OF THE WORLD", Research Gate, July 2014.

<sup>9</sup>Ibid.

are using more spices like India. Germany holds the second-largest position in the whole world and is the largest market in Europe. In Europe, other essential markets are UK and France. Sweden and Finland imports cardamom in a larger quantity. In terms of volume, Japan holds the third position as a market for spices.

The below table shows data regarding the leading exporters and importers of spices as per the 2019 report.

#### TOP EXPORTING AND IMPORTING COUNTRIES OF SPICES

EXPORT	RANK	IMPORT
China	1	USA
India	2	Netherlands
Netherlands	3	Germany
Germany	4	Saudi Arabia
Turkey	5	UK

Source: The Observatory of Economic Complexity, World<sup>10</sup>

## 2.6 SPICE EXPORT AND INDIA

India has been known as the homeland of spices from time immemorial. Indian spices are an essential item in international agricultural trade. Spices are a predominant export item and constitute an essential group of horticultural commodities. Moreover, it has an essential role in the national economy. Greek and Roman ship carries Indian spices, perfumes and textiles to Mesopotamia. Arabia and Egypt from a prolonged period back<sup>11</sup>. Centuries back, the Greek people found the markets of South India mainly to export spices along with other Indian goods. The Calicut port was established as the gateway to the spice land of Asia by Captain Vasco da Gama after successfully entered into that place using ship or seaway. He returned home with Indian spices, which were estimated to be sixty times more than that of the expenditure incurred<sup>12</sup>. The value of spices from the east was realised in the west during Vasco da Gama's

<sup>10</sup> The Observatory of Economic Complexity World, spices <https://oec.world/en/profile/hs92/spices> accessed on 22 May 2021

<sup>11</sup> Sreekantan Thampy's "SPICE TRADE AND SPICE MARKET", Spice India, 2000.

<sup>12</sup> Thomas and P C Sanil's COMPETITIVENESS IN SPICE EXPORT TRADE FROM INDIA: A REVIEW, Journal of Spices and Aromatic Crops, Vol.28(1), 2019.

time. During these Middle Ages, a pound of ginger was priced equivalent to the value of three sheep or half a cow. Pepper was the most valuable of spices, and a sack of pepper was said to be worth a man's life. Gama's successful voyage intensified an international power struggle for control over the spice trade. After that, three centuries of sea war were there to capture spice lands important in flavouring their dishes by Western European countries<sup>13</sup>.

India produces most of the spices from Kerala to Kashmir, about 1.8 million tons, on about 2 million hectares. It has been estimated that the value of our total production of spices is of the order of Rs. Forty-two thousand five hundred million and the export earnings are around Rs. 3000 million per annum. Indian has self-sufficiency in most of the essential spices. However, it also imports some spices like clove, nutmeg, mace and cinnamon to meet our internal demand. Kerala enjoys a unique position in spices as it leads in black pepper, small cardamom, ginger, clove, nutmeg, vanilla and cinnamon in production<sup>14</sup>.

Karnataka, Tamilnadu, Andrapradesh also have significant cultivation in tropical and some of the subtropical spices. Gujarat, Maharashtra, Rajasthan, Madhya Pradesh, Punjab, Haryana, Uttar Pradesh and Bihar are famous for seed and bulb spices like fennel coriander, cumin, fenugreek, onion and garlic. Kashmir is well-known for saffron, kalazira, celery seed, asafoetida and other temperate cultivated and wild spices. Himachal Pradesh now has considerable cultivation in both temperate and tropical spices. Orissa's share is appreciable in turmeric and ginger. Sikkim and the Darjeeling hills are well-known for big cardamom. In the northeastern states, Meghalaya, Assam and Tripura are famous for ginger and turmeric. The warmer valleys of northeastern hill states are also potential areas for black pepper and cardamom. Tejpata is there in Khasi and Jantia Hills, Garo Hills of Meghalaya, Mikir Hills, Manipur and Arunachal Pradesh on regular plantations. The chilli is a vital spice commonly grown in all states of Indian, including the northeastern region<sup>15</sup>.

India enhanced its production and raised the export quantum of spices significantly during the past few decades by increasing areas under spice cultivation and by standardisation of agro-techniques coupled with the introduction of higher-yielding cultivars from abroad<sup>16</sup>. However, there has been a sharp decline in the export of certain essential spices like black pepper and

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<sup>13</sup> K C John's "SPICE EXPORT FROM INDIA", Economic and Political Weekly, Vol. 38, No. 19, May 2003.

<sup>14</sup> Thomas and P C Sanil's COMPETITIVENESS IN SPICE EXPORT TRADE FROM INDIA: A REVIEW, Journal of Spices and Aromatic Crops, Vol.28(1), 2019.

<sup>15</sup> K C John's "SPICE EXPORT FROM INDIA", Economic and Political Weekly, Vol. 38, No. 19, May 2003.

<sup>16</sup> Pratheeksha's "THE ROLE OF SPICES BOARD IN THE PROMOTION OF EXPORT OF SPICES", Spice India, July, 2000.

small cardamom in the past few years due to the emergence of certain other exporting countries. During the last two decades, various varieties have been releasing in different apices for commercial production. Different recommendations were also there for standardising agro-technique, plant protection measures, and improvement.

The export of spices is regulating by an autonomous body known as the spice board of India. The spice board is an organisation that came within the ambit of the Ministry of Commerce and Industry, Government of India. It was established in 1987 as a commodity board by merging the Spice export promotion council and the Cardamom board. It plays a role of an international link between the Indian exporters and importers abroad<sup>17</sup>. The main objective of this organisation is the development and worldwide promotion of Indian spices. It established some regulatory framework and research work for the same<sup>18</sup>. Apart from the Spices Board, other institutions such as the Export Inspection Council (established under the Export Quality Control and Inspection Act 1963) also play a significant role in ensuring the quality of the spices exported from India.

In India, different spices are producing in different states according to the climate and other availabilities. Therefore, India's spice production and different spices produced in each state are in the table below.

NAME OF STATE	NAME OF SPICES
Kerala	Pepper, Small Cardamom, Ginger, Turmeric, Clove, Nutmeg, Mace, Cinnamon, Cassia, Vanilla, Cambodge
Tamilnadu	Pepper, Small Cardamom, Ginger, Turmeric, Chilli, Clove, Nutmeg, Mace, Cinnamon, Cassia, Vanilla, Pomegranate seed, Herbal& Exotic spices
Karnataka	Pepper, Small Cardamom, Ginger, Turmeric, Chilli, Clove, Nutmeg, Mace, Vanilla, Garlic, Kokam, Cambodge

<sup>17</sup> Spice Board of India, Constitution <https://www.indianspices.com/about-us/constitution.html> accessed on 24 May 2021

<sup>18</sup> Pratheeksha's "THE ROLE OF SPICES BOARD IN THE PROMOTION OF EXPORT OF SPICES", Spice India, July, 2000.

Andhra Pradesh	Ginger, Turmeric, Chilli, Mustard
Maharashtra	Turmeric, Chilli, Garlic, Pomegranate seed
Gujarat	Chilli, Cumin, Fennel, Fenugreek, Garlic, Dill Seed
Rajasthan	Chilli, Coriander, Cumin, Fennel, Fenugreek, Garlic, Dill Seed
Punjab	Celery, Aniseed
Himachal Pradesh	Ginger
Jammu & Kashmir	Saffron, Ajowan
Haryana	Garlic
Uttaranchal	Ginger, Chilli, Coriander, Aniseed
Uttar Pradesh	Turmeric, Chilli, Coriander, Cumin, Fennel, Fenugreek, Celery, Aniseed, Garlic, Mustard
Madhya Pradesh	Ginger, Chilli, Garlic
Chhattisgarh	Ginger, Garlic
Jharkhand	Ginger
Orissa	Ginger, Turmeric, Chilli, Garlic
Bihar	Turmeric, Garlic, Ajowan, Mustard
West Bengal	Large Cardamom, Ginger, Turmeric, Chilli
Sikkim	Large Cardamom, Ginger, Tejpat
Assam	Turmeric, Aniseed
Arunachal Pradesh	Ginger, Turmeric, Tejpat
Mizoram	Ginger
Tripura	Turmeric
Meghalaya	Ginger, Turmeric

Source: Spice Board of India<sup>19</sup>

India's spice exports are increasing each year. In the fiscal year 2018, the State exported 1.02 million tonnes valued at \$ 2.78 billion. Moreover, in the fiscal year 2019, with a 7% increase, 1.1 million tonnes were exported, valued at \$ 2.8 billion. In FY20, the spice export was worth 3.11 billion and in FY21, the spice export was worth 3.62 billion. It shows that even though

<sup>19</sup> Spice Board of India, Major spice/state wise area and production of spices  
<https://www.indianspices.com/sites/default/files/majorspicestatewise.pdf> accessed on 25 May 2021

the pandemic Covid 19 hit all trading activity during the 2020 fiscal year, there is no reduction in the demand for spices. It is exported in a higher volume which shows the need and speciality of the same. Furthermore, studies also show that one of the important reasons behind this increase is the medicinal value of spices, including immunity-boosting capacity. From April 2020 to February 2021, the spice valued at \$ 3.55 billion was exported from India, and in February 2021, spice export was valued at \$ 348.32 million.

India mainly exports spices to the US, China, Vietnam, Thailand, Bangladesh, UAE, UK, Malaysia, Sri Lanka and Indonesia<sup>20</sup>. Moreover, they are the topmost importers of spices from India during the fiscal year 2019. Furthermore, during this period, the most exported spices were pepper, cardamom, chilli, mint products, cumin and turmeric. The other essential spice products exported were spice oils and oleoresins. In FY19, the ginger, cardamom and cumin export increased until December, i.e., before the pandemic. Moreover, the ginger showed 47% growth, whereas the cardamom and cumin showed 31% and 14% growth, respectively.

## **2.7 IMPORTANT SPICES AND THEIR USES**

### **BLACK PEPPER**

Black pepper is familiar to the world as the king of spices, India's most famous great spice. It is also known as Kali Mirch. Malabar or the west coast is the native place of pepper. However, now it spread to many parts of the world. The black pepper belongs to the family Piperaceae, genus Piper and species nigrum. It is a perennial, climbing evergreen plant. The plants cling or the vine or attach themselves to a tree or support themselves by rootlets produced at the nodes. The fruit of the pepper is usually in a globular drupe, used as an essential spice in Indian dishes<sup>21</sup>.

Pepper is a tropical plant, and it prefers a warm, humid climate for commercial production. Black pepper is generally planting with the onset of the monsoon. It is invariably propagating from vine cutting, but it may be grown from seed. It stated that pepper vine growth from seed takes a long time to fruit. Adequate manuring is necessary for proper vine growth and the production of berries. Pepper vine may commence bearing berries after one year of planting,

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<sup>20</sup> Spice Board of India, Major country-wise export of total spice from India  
[https://www.indianspices.com/sites/default/files/cou172018123\\_new.pdf](https://www.indianspices.com/sites/default/files/cou172018123_new.pdf) accessed on 25 May 2021

<sup>21</sup> Sreekantan Thampy's "SPICE TRADE AND SPICE MARKET", Spice India, 2000.

but it is not advisable to allow the flower spikes early. The first harvest is allowed during the third year after planting, by which time vines should have reached the top of their support. Commercial bearing starts from the sixth year onwards. The duration of the cropping life of the pepper vine varies from 20-25 years. Those varieties which start bearing late have a longer life span. Generally, 100kg of fresh berries yields about 26-30kg of black pepper for commerce. The yield of black pepper varies in different areas depending upon several factors: climate, water availability, soil fertility, cultural practices and type or variety of pepper and age of the pepper vine. A complete bearing vine yields about one kg of dry pepper. However, individual vines recorded heavy yield up to a maximum of 3 to 5 kg of dried pepper<sup>22</sup>.

The black pepper can use for a variety of purposes. One of the principal values of pepper is its ability to enhance the seasoning of dishes. A dash of pepper is effectively helpful to adjust the flavour just before the end of cooking. Black pepper is an essential component of culinary seasoning and an essential ingredient of numerous commercial foodstuffs. It is mainly used as a preservative by meat packers, canning, pickling, backing confectionery and preparation of beverages. Oil of black pepper is a valuable adjunct in flavouring sausages, canned meats, table sauces, and certain beverages and liquors. The oil can also use in soaps and perfumes<sup>23</sup>.

The black pepper is considered a powerful remedy for various disorders and prescribed as an effective cure for dyspepsia, malaria, delirium tremens and haemorrhoids<sup>24</sup>. The pharmacological studies showed that black pepper is capable of increasing the bioavailability of certain drugs. The black pepper is also widely used in Ayurvedic medicine. It is also helpful as an insecticide against some flies. Also, studies show that the black pepper also has an immunity-boosting capacity during this pandemic. It can be used with some other spices to improve or enhance the immunity of individuals.

In the international spice trade, black pepper accounting for about 37% in volume, and it is one of the essential spices globally. India contributes 32% of the world production of black pepper. In India, on average, pepper accounts for about 50% of the quantity of whole spices exports and around 70% of the value earned through spice exports. Kerala is accountable for an average of 90% of India's pepper cultivation. The leading black pepper growing areas in Kerala are Cannanore, Kozhikode, Kottayam. Trivandrum, Ernakulam and Quilon. Almost every homestead in Kerala plants pepper along with mango, jackfruit or coconut. The other crucial

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<sup>22</sup> Cherian's "INDIA'S SPICE EXPORT AND ROLE OF PEPPER", Spice India, September 2008.

<sup>23</sup> Dr K.N. Pushpa Kumari and S. Pramod, HEALTH BENEFIT OF SPICE, 2009

<sup>24</sup> Dr. U S Bose's "HANDBOOK OF MEDICINAL PLANTS", Oxford Book Co., January 2012.

black pepper growing states are Karnataka and Tamil Nadu. On a limited scale, it is also cultivating in Maharashtra, Andrapradesh and the Andamans. Pepper cultivation was also tried in the northeastern region<sup>25</sup>.

Outside India, it is grown in Sri Lanka, Indonesia, Malaysia, Brazil, Thailand, and other tropical countries. India exported 13,540 tonnes of pepper in FY19, and it increased to 17,000 in FY20. The export of pepper became 16,300 tonnes of the value 54,445.50 lakhs during the 2020- 2021 period<sup>26</sup>.

## **SMALL CARDAMOM**

The small cardamom is the second important spice of India, which is preferred by different nations for its distinct enriching properties and is known as the queen of spices. It is a native plant of India. The small cardamom is a shade loving plant also known as lesser cardamom or Malabar cardamom. It is an indigenous spice and is mainly found in the western guards of South India. The scientific name of small cardamom is *Elettaria cardamomum* Maton. Botanically, it belongs to the family Zingiberaceae<sup>27</sup>. The plant is cross-pollinated and tall-growing one. It has seeds in globular shape and is s trilocular capsule. Each capsule contains 10-20 seeds covered with a hard seed coat in the shape of a capsule. The low temperature and high elevation or high rainfall are necessary for the cultivation is small cardamom, which is why it is mainly found in the evergreen forest of western ghats. It is generally found in the inter or mixing cropping system with coffee plantations since the favourable climate is there.

The most important use of cardamom is that it is used for flavouring food items, beverages and liquors<sup>28</sup>. It is helpful in different forms as such; as a whole, as separate seeds, ground, and oils and oleoresin. These are used for flavouring curries and in cake baking and bread making. Moreover, it is also helpful for flavouring coffee, payasam, soft drinks and ghee rice. For the preparation of perfumes and cosmetic items, cardamom is beneficial. It is even used to flavour

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<sup>25</sup> Amit Baran Sharangi's "INDIAN SPICES", Springer International Publishing AG, April 2018.

<sup>26</sup> Spice Board of India, Indian Spices, Export, Major item wise export <http://www.indianspices.com/indianspices/sites/default/files/Major%20Item%20wise%20Export%202020.pdf> accessed on 12/06/2021.

<sup>27</sup> A. K. Vijayan's "SMALL CARDAMOM PRODUCTION TECHNOLOGY AND FUTURE PERSPECTS", Spice India, 2018

<sup>28</sup> Ibid.



the medicines. The small cardamom also has some medicinal properties, and they are best for the heart and liver. They are good stimulators.

Cardamom tea is helpful to prevent dysentery, scanty urination, exhaustion due to overwork. Cardamom with honey was reported to improve eyesight, strengthen the nervous system<sup>29</sup>. Cardamom is an essential ingredient of digestive stimulants and is used in medicinal preparations for indigestion and flatulence. The new products of cardamom are cardamom cola, instant gahwa, chewing gum, biscuits and encapsulated cardamom oil<sup>30</sup>. The cardamom mainly is of two types; the small cardamom and the large cardamom. Both are spices and used for flavouring food items. However, the small cardamom is the most demanded one due to its quality and medicinal properties. The small cardamom is the one generally cultivating and most widely using. The large cardamom is a wild variety of cardamom.

The small cardamom is one of the income-generating spices because the export is more remarkable than internal use due to the demand for quality cardamom at the international level. Until 1980, India was the largest producer of cardamom. After that, Guatemala became the world's largest producer of cardamom, and the cost for production was also significantly less than India's. The other major cardamom producing countries are Thailand, Srilanka, Tanzania and Cambodia. In India, the cardamom is mainly cultivated in Kerala, Tamilnadu and Karnataka<sup>31</sup>. In this, 60% is contributed by Kerala. Since the aroma and oil content are significant, the Indian cardamom still has the demand and is exported to about 50 countries and is a primary income generator spice. India is exporting the cardamom mainly to the old USSR region, Kuwait, Qatar, Saudi Arabia and Japan. India exported 2,850 tonnes of small cardamom in FY19 and is reduced to 1,850 in FY20. However, the total value export of small cardamom was 35,625.00 lakhs in FY19, which increased to 42,537.15 in FY20 even though the quantity exported was reduced. The export of small cardamom became 6,500 tonnes of the value 1,10,675.00 lakhs during the 2020- 2021 period<sup>32</sup>.

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<sup>29</sup> Sunita Singh's "MAGICAL AYURVEDIC SPICES AND HERBS THAT CAN BOOST OUR IMMUNITY", MOJ Food Process Technols. 2020;8(3):99–102.

<sup>30</sup> Spice Board of India, Small Cardamom <https://www.indianspices.com/spice-catalog/cardamom-small-1.html> accessed on 04 May 2021

<sup>31</sup> Amit Baran Sharangi's "INDIAN SPICES", Springer International Publishing AG, April 2018.

<sup>32</sup> Spice Board of India, Indian Spices, Export, Major item wise export <http://www.indianspices.com/indianspices/sites/default/files/Major%20Item%20wise%20Export%202020.pdf> accessed on 12/06/2021.

## CHILLI

Chilli or red pepper is a leading spice in India. Among the spices consumed per head in India, dried chilli contributes a significant share. Chillies are dried ripe fruits of the genus *Capsicum* and the family *Solanaceae*. Though 20 wild species were reported, only five species are under cultivation<sup>33</sup>. This *Capsicum annum* is cultivated chiefly in India. It is herbaceous or semi-woody annual. The fruit is borne singly at nodes, variable in size, shape, colour and degree of pungency, linear, conical, or globose. The fruit is green or purplish. However, it ripening to red or orange, yellow, brown, cream or purplish, and the seed is pale yellow. Chilli needs a judicious application of manures and fertilizer since it is a long growing season crop.

There are several varieties of chilli under cultivation different in the size, shape, colour and pungency of fruits. Chillies are grown in tropical and sub-tropical areas ranging from sea level to 2000 meters altitudes in Indian conditions. However, pungent varieties or varieties suited for spices cannot be grown on higher altitudes. A warm, humid climate favours growth, while warm and dry weather enhances fruit maturity. It grows successfully in areas receiving an annual rainfall of 850-1200 mm. Chilli is a self-pollinated crop but cross-pollination also takes place to some extent.

Chilli is said to be a native of South America, and its cultivation was known to the people of Peru since prehistoric times. The introduction of chillies into India is said to be due to the Portuguese. Red pepper or chillies are cultivated mainly in tropical and subtropical countries, notably Africa, India, Japan, Mexico, Turkey and the USA. Indian chillies are having more demand and are leading exporters of Chillies in the international market. As far as India is concerned, Andrapradesh is the leading state in area and production. The chillies are grown practically all over India. The total export of chillies from India is an average of 1-2% of total production due to high domestic consumption. India faces competition from China and Pakistan, which offer chillies at low prices in the international market. Major importers of Indian chillies are the USA, Srilanka, Canada, UK, Saudi Arabia, Singapore, Malaysia and West Germany<sup>34</sup>.

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<sup>33</sup> VB Singh and Kirti Singh, SPICES, 1996, New Age International Publishers, Page No: 86

<sup>34</sup> Amit Baran Sharangi's "INDIAN SPICES", Springer International Publishing AG, April 2018.

The chief use of chillies throughout the world is spice on account of their pungency and pleasant flavour. It is used as a primary ingredient in curry powder in culinary preparations. In India, chillies are essential in vegetable, meat and pickle preparations. When chillies are with food stimulates our taste buds and thereby increases the flow of saliva, which contains the enzyme amylase, which helps in the digestion of starchy or cereal food. Capsaicin has a significant physiological action, which is helpful in many pharmaceutical preparations like linements and ointments for cold, sore throat and chest congestion<sup>35</sup>. It can include in cosmetics like prickly heat powders and skin ointments. The chillies are used as carminative, tonic and stimulants, and the extracted chillies are used in the preparation of Ginger beer and other beverages. Oleoresin, known as oleoresin capsicum, is using in pain balms, vapours and linaments<sup>36</sup>.

India exported 4,68,500 tonnes of chilli in FY19, and it increased to 4,96,000 in FY20. The export of chilli became 6,01,500 tonnes of the value 8,42,975.00 lakhs during the 2020- 2021 period<sup>37</sup>.

## **MINT AND MINT PRODUCTS**

Mint is an aromatic herb that is generally found in the northern hemisphere. The name mint comes from the Greek name minthe. It is mentioned as the symbol of hospitality and wisdom. In ancient days, the mint rubbed in footsteps and tables due to Greeks and Romans' fragrances. Then it was started using in sauces and to produce peppermint oil. Even though mint is a herb, mint oils are used to flavour food items and are considered spices. The leaves of more than 40 varieties of mint are using to prepare oils and other products used to flavour food items and other uses. The essential mint products are spearmint, peppermint and pennyroyal.

The botanical name of mint is *Mentha piperita*. Moreover, it belongs to the family Lamiaceae. The leaf of the mint is used as a spice and used to manufacture other flavouring items. The tropical climate and sunny weather with moderate rain is the suitable climate for the cultivation

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<sup>35</sup> Dr. U S Bose's "HANDBOOK OF MEDICINAL PLANTS", Oxford Book Co., January 2012.

<sup>36</sup> VB Singh and Kirti Singh, SPICES, 1996, New Age International Publishers, Page No: 87

<sup>37</sup> Spice Board of India, Indian Spices, Export, Major item wise export  
<http://www.indianspices.com/indianspices/sites/default/files/Major%20Item%20wise%20Export%202020.pdf>  
accessed on 12/06/2021.

of mint. The humus-rich soil is also helpful for good yielding since it can retain moisture content.

In mint products, spearmint and peppermint have an aromatic and fresh smell. However, the spearmint generally has a sweet and incredible flavour, whereas the peppermint has a more pungent menthol taste. The pennyroyal has a medicinal flavour with an acrid and pungent smell. The spearmint is generally used in food preparations, whereas the peppermint is used in desserts, adding fresh flavour to the ices and fruits. The fresh leaves are also using to prepare various dishes like biriyani, salad and chutney. Mint helps flavour the meat, fish, soup, sauce, stew, vinegar, tea and tobacco. The mint oil is using to produce natural menthol, and dementalized oil is for flavouring mouthwashes, toothpaste, candy, beauty products and pharmaceutical preparations. It is helpful against stomach disorders, rheumatism, ointments for headaches, cough drops and inhalations. The oil and dried plants are antiseptic, carminative, refrigerant, stimulant and diuretic<sup>38</sup>.

In India, the mint is cultivated mainly in the northern area like Uttar Pradesh, Punjab and Haryana<sup>39</sup>. As per the 2020 data, there are ten central mint exporting countries in which India is there in the top three. The mint leaves are the main exporting commodity, whereas a small amount of spearmint and peppermint are also exporting to foreign nations. India exported 21,610 tonnes of mint products in FY19, and it increased to 24,470 in FY20. The export of mint and mint products became 27,400 tonnes of the value 3,66,825.00 lakhs during the 2020-2021 period<sup>40</sup>.

## CUMIN

Cumin is one of the earliest known little spices used by humanity. It is believed to be a native of Egypt and Syria, Turkestan and the Eastern Mediterranean region. Turkey and Iran are our major competitors for cumin seeds. It is commercially cultivated in the semi-arid or arid tracts of Rajasthan and Gujarat and on a limited scale in Madhya Pradesh, Karnataka, Andhra Pradesh, Uttar Pradesh and Tamil Nadu.

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<sup>38</sup> Spice Board of India, Mint <https://www.indianspices.com/spice-catalog/mint-1.html> accessed on 9 May 2021.

<sup>39</sup> Amit Baran Sharangi's "INDIAN SPICES", Springer International Publishing AG, April 2018.

<sup>40</sup> Spice Board of India, Indian Spices, Export, Major item wise export <http://www.indianspices.com/indianspices/sites/default/files/Major%20Item%20wise%20Export%202020.pdf> accessed on 12/06/2021.

The cumin belongs to the family Umbelliferae, genus Cuminum and species cyminum. Cumin is an annual plant grown to a height of 30-45 cm and produces many branches on a stem with long divided deep green leaves. The seed has a robust heavy flavour. The Indian cumin owns excellent export potential. Its demand is ever-increasing, as can be seen from the export trends during the past few years. Its foreign exchange potential can boost by stepping up its production on scientific lines. Cumin is a tropical crop, but it prefers mild climatic conditions. The crop matures in 80-120 days depending upon variety and agroclimatic conditions. The mature plants are uprooted and stocked in the sunlight for drying. The seeds are separated manually by beating with sticks. The clean dried seeds are loading in gunny bags, and the barrier lines are using to protect against loss of aroma and flavour. A health and disease-free crop yield 6-8q/ha<sup>41</sup>.

Cumin seeds have an aromatic fragrance due to alcohol, cuminol. The seeds can be used mainly as condiments in the form of an essential ingredient in all mixed spices and curry powder for flavouring vegetables, pickles, soups, sausages, cheese, other culinary preparations, and seasoning bread cake and biscuits. It is also candied. Besides, it has medicinal properties and is used in many Ayurvedic and veterinary medicines as carminative, stomachic, astringent, and helpful against diarrhoea and dyspepsia<sup>42</sup>. The aromatic oil of cumin seeds is also advantageous for flavouring curries, liquor, cordials, and great use in perfumery industries. After extracting volatile oil, the remaining contains 17.2 % protein and 30% fat used as cattle feed.

India exported 1,80,300 tonnes of cumin in FY19, and it increased to 2,14,190 in FY20. The export of cumin became 2,99,000 tonnes of the value 4,25,310.00 lakhs during the 2020- 2021 period<sup>43</sup>.

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<sup>41</sup> Spice Board of India, Cumin <https://www.indianspices.com/spice-catalog/cumin-1.html> accessed on 9 May 2021

<sup>42</sup> Sunita Singh's "MAGICAL AYURVEDIC SPICES AND HERBS THAT CAN BOOST OUR IMMUNITY", MOJ Food Process Technols. 2020;8(3):99-102.

<sup>43</sup> Spice Board of India, Indian Spices, Export, Major item wise export <http://www.indianspices.com/indianspices/sites/default/files/Major%20Item%20wise%20Export%202020.pdf> accessed on 12/06/2021.

## TURMERIC

Turmeric is one of the essential and ancient spices of India. It is native to India or China. India is the largest exporter and producer of turmeric in the world. Turmeric (*Curcuma long L*) belongs to the family Zingiberaceae. It is a herbaceous perennial plant and possesses an underground stem or rhizome thick and rounded with short blunt fingers. Turmeric requires heavy manuring for its commercial production. Turmeric prefers a warm and humid climate. It needs a well-distributed annual rainfall of 2500-4000mm as a rainfed crop for successful production. It also needs an optimum temperature of 20-30°C for average growth and satisfactory production. The crop becomes only ready for harvesting when the leaves turn yellow and start drying up. To develop the attractive yellow colour and characterised aroma, curing fresh and newly dug out raw turmeric rhizomes is essential. Without it, turmeric lacks both. The freshly harvested rhizomes, which are well developed and free from mechanical injury and diseases, are selected for seed.

The significant states engaged in turmeric cultivation are Orissa, Andrapradesh, Maharashtra, Tamilnadu, Kerala, Assam, Bihar, West Bengal, and on a limited scale in the North Eastern his states of India. Apart from India, countries like China, Pakistan, Haiti, Jamaica, Peru, Bangladesh and Taiwan also cultivate turmeric. The significant quantity of turmeric produced in India is proper as a condiment, and only a tiny quantity is utilising in medicines and cosmetics. Turmeric is essential for most of the Asiatic countries as a food adjunct. It is helpful to flavour and colour butter, cheese, margarine, pickles, mustard, liquor, fruit drinks, cakes, table jellies and other foodstuffs.

It is one of the main ingredients of curry powder, a blend of many spices, common salt, and farinaceous matter. It is also beneficial as an appetiser and aids digestion<sup>44</sup>. Turmeric oil and oleoresin are also helpful to impart the flavour in food and perfume industries. The medicinal value of turmeric has been recognised since time immemorial in the Indian system of medicine. It is an ingredient in the preparation of medicinal oils, ointments and poultices. A decoction of turmeric is considered an excellent cooling eyewash to relieve catarrh. Turmeric is considered a carminative, tonic, blood purifier, vermicide and antiseptic<sup>45</sup>. It is beneficial to treat diabetes

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<sup>44</sup> Dr. U S Bose's "HANDBOOK OF MEDICINAL PLANTS", Oxford Book Co., January 2012.

<sup>45</sup> Sunita Singh's "MAGICAL AYURVEDIC SPICES AND HERBS THAT CAN BOOST OUR IMMUNITY", MOJ Food Process Technol. 2020;8(3):99-102.

and leprosy and relieve sore throat and the common cold. The juice of the raw rhizome can use as an anti-parasitic for many skin infections. Burnt turmeric is good as tooth powder relieves dental troubles. The essential oil turmeric is antiseptic. It is advantageous in treating gall stones and gall complaints<sup>46</sup>.

Turmeric and its preparations are traditional beauty aids for Indian women. Turmeric paste applying on the limbs and face during a bath is the perfect treatment to clear the skin and beautify the face. It has antiseptic, and healing properties are a preventive cure for the most feared malady of adolescent pimples. It is also valuable to discourage unwanted hair on feminine skin. India exported 1,33,600 tonnes of turmeric in FY19, and it increased to 1,37,650 in FY20. The export of turmeric became 1,83,000 tonnes of the value 1,67,660.00 lakhs during the 2020- 2021 period<sup>47</sup>.

## GINGER

Ginger is an essential spice, and it is native to Asia. Earlier it was only known to Europeans, Greeks and Roman through the Arabian traders. In the ninth century, it came into Germany and France and to England in the tenth century<sup>48</sup>. The scientific name of the ginger is *Zingiber officinale*. It belongs to the family Zingiberaceae. It has an underground tuberous aromatic stem known as rhizomes which are using as a spice and medicine. The ginger grows both in tropical and sub-tropical climates. For commercial production, it needs a warm and humid climate. The rhizome growth is better in acidic soil than in neutral soil. Ginger may grow along with shade-giving plants like banana, pigeon pea, tree castor, and cluster bean. Ginger matures between 7-9 months depending on the variety and is dried or cured to prepare for the market.

Due to its pleasant pungent and spicy aroma, ginger uses to manufacture food products like confectionery, curry powders, gingerbread, certain curried meats, ginger ale, table sauces, pickling and manufacturing of soft drinks<sup>49</sup>. The ginger oil obtained from dry ginger powder, primarily used as a flavouring agent in confectionery, preservation and soft drinks. Indian ginger contains about 2.5% volatile oil. Dry ginger or ginger powder is essential in

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<sup>46</sup> US Bose, HANDBOOK OF MEDICINAL PLANTS, 2012, Oxford Book Company, Page no: 234

<sup>47</sup> Spice Board of India, Indian Spices, Export, Major item wise export  
<http://www.indianspices.com/indianspices/sites/default/files/Major%20Item%20wise%20Export%202020.pdf>  
accessed on 12/06/2021.

<sup>48</sup> VB Singh and Kirti Singh, SPICES, 1996, New Age International Publishers, Page No: 58

<sup>49</sup> Amit Baran Sharangi's "INDIAN SPICES", Springer International Publishing AG, April 2018.

manufacturing ginger brandy, wine, and beer in many western countries. Ginger has basic antiseptic properties and is helpful as a carminative and stimulant. It is also advantageous in the veterinary medicine field.

The transportation of ginger rhizome is easy even in the living state to a significant distance. So, the plant is already introduced in many tropical and sub-tropical countries. The important ginger producing countries are India, Jamaica, Sierra Leone, Nigeria, Southern China, Nepal, Pakistan, Japan, Taiwan, Australia, Mauritius, Malaysia and Indonesia. OF these, Jamaica and Sierra Leone produce superior quality ginger, followed by Nigeria. In ginger supply, China is the primary competition to India in the world market. The primary buyers of Indian gingers are the middle east countries, the USA and west European countries<sup>50</sup>. However, from 1987-88 onwards, the export has decreased because the production of exportable ginger has declined. Consequently, the price has increased. There has been competition from China as well. However, now the export is being comparatively increasing till just before the pandemic. Kerala, contributing one-third of ginger production, is the leading state in the production of ginger. Meghalaya is the second leading state.

India exported 18,150 tonnes of ginger in FY19, and it increased to 60,410 in FY20. The export of ginger became 1,25,700 tonnes of the value 75,665.00 lakhs during the 2020- 2021 period<sup>51</sup>.

## **SPICE OILS AND OLEORESIN**

The spice oils and oleoresins are extracted from various spices and are not natural spices. Since the spices do not have a uniform quality, flavour, and colour, the oils and oleoresins are used to flavour various food items and for some other purposes. These oils and oleoresins are helpful in modern food industries and food making since they provide the same fragrance and have uniform flavours and high quality. Even though they are not original spices, they are extracted from the natural spices using different extraction methods and have the same uses of the spices. The spice oils and oleoresins can be made using a single spice or can also use a combination of different spices.

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<sup>50</sup> VB Singh and Kirti Singh, SPICES, 1996, New Age International Publishers, Page No: 58

<sup>51</sup> Spice Board of India, Indian Spices, Export, Major item wise export

<http://www.indianspices.com/indianspices/sites/default/files/Major%20Item%20wise%20Export%202020.pdf>  
accessed on 12/06/2021.



In most spices, the flavouring component is present in its essential oils, and these can be extracted using the steam distillation method or hydro-distillation method. Hence, they are known as spice oils or essential oils or volatile oils. The spice oils have delicacy and freshness, which is similar to the original or natural spice. Moreover, they are easier to store and preserve since having a longer shelf life. Another benefit of spice oil is that it is free of biological contaminants. Moreover, there are pollution-free, less cost techniques for making the oils.

The oleoresins are the exclusive flavouring content of spices in a concentrated form. It contains the volatile and non-volatile components of the spices that can be extracted using scientific techniques. The benefits of oleoresins over the original spices are; they do not have any physical impurities and are also free from pathogens. They are easy to use and store, only less storage space and transporting charge required. The spice oils have only the original spice's aroma, whereas the oleoresin has the complete flavour content.

For flavouring and preserving the meat, fish, vegetables, soup, sauce and baked foods, spice oils and oleoresins can be used instead of natural spices. It is helpful in the manufacturing of cosmetics like creams, soaps, lipsticks and shampoo. The toothpaste, mouth wash, perfumes and other pharmaceutical products can also be prepared using spice oils and oleoresins. India exported 12,750 tonnes of spice oils and oleoresins in FY19, and it increased to 13,000 in FY20. The export of spice oils and oleoresins became 16,450 tonnes of the value 3,30,675.00 lakhs during the 2020- 2021 period<sup>52</sup>.

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<sup>52</sup> Spice Board of India, Indian Spices, Export, Major item wise export  
<http://www.indianspices.com/indianspices/sites/default/files/Major%20Item%20wise%20Export%202020.pdf>  
accessed on 12/06/2021.

## CHAPTER - 3

# LEGAL PROVISIONS RELATING TO SPICE EXPORT FROM INDIA

### 3.1 LITERATURE REVIEW

1. In 2002 Bhalla, in the article "CRITICAL ANALYSIS OF WORLD TRADE ORGANISATION", examined the role of WTO agreements and the new rule-based trading system in pushing international trade and investment. International organisations make standards through various treaties and conventions. Most of the WTO agreements are ratified by its member nations and incorporate into their national laws.
2. In 2015 Rani and Pooja, in their paper "A STUDY OF WTO AND AGRICULTURE SECTOR IN INDIA", explained global trade that how it is well connected. What they have found regarding WTO and India is that after engaging with WTO, India has increased its domestic production and export of agricultural products, and it has helped increase the employment level of the country in the agricultural sector.
3. In 2006, Bhowmik, Debesh in his article titled "WTO AND AGREEMENT ON AGRICULTURE", expressed concerns about the consequences and implications of WTO and particularly AOA on Indian Farmers. He said these contents, like the Plant variety act of TRIPS Under WTO, might reduce the rights of the Indian farmers. There remains a gap between the rich and the developing countries in implementing WTO norms and severe inequality in their impact on society.
4. In 2011 B. Sheshagiri & G. G. Honkan written a paper named "IMPACT OF WTO ON INDIAN AGRICULTURE: PERFORMANCE AND PROSPECTS". It showed that the developed countries with high tariffs on agricultural imports from countries like India should bring down their tariff rate to improve agricultural commodity trade. Their study highly suggests a considerable scope in increasing agricultural trade between developed

and developing nations like India even without resorting to a paradigm shift to new, improved technology or policy.

5. In 2004 PK Vasudeva, in his article "UAE HEALTH STANDARDS: INDIAN MEAT BANNED", it has reflected on its citizens' safety standards, which were widely followed by the international agreement mainly dealing with exports of various products. The SPS provisions, which would mainly form the core of health standards, have been analysed.
6. In 2006 Suryanarayana, in his article "FREE TRADE AGREEMENTS AND INDIA", examined the progress and achievements made during the first year of the Indo – Singapore CECA. He found that even though the volume of trade between India and Singapore has increased, India has not finalised some of the intended CECA follow up measures.
7. In 2006 Thomas Varghese, in "INDIA'S FREE TRADE: A CRITICAL STUDY", examined the damages caused by the various FTA's signed by India. He found that the SAFTA and the ISLFTA have already resulted in the unrestricted flow of various agro-products into India. The prescribed 'Rules of origin' are generally not observed by the exporting country.
8. In 2005 Deepika MG published theses named "CHANGING TRADE SCENARIO IN AGRICULTURE AND ITS IMPLICATIONS FOR THE INDIAN ECONOMY". She wanted to express that tough trade liberalisation assumed a special significance in economic reforms in the early nineties in India. They were not directly made applicable to the agricultural sector due to their unique characteristics.
9. In 2015 Sachin N. Mehta, in his article "IMPACT OF NEW ECONOMIC POLICY ON INDIA'S FOREIGN TRADE", described the economic policy, 1991 and critically analysed its impact on the foreign trade of India. It also examines India's Exports, Imports and Total Trade trend pattern during the before and after New Economic Policy for this using time series data from 1971 to 2013.
10. In 2012 United Nations Conference on Trade and Development, in their publication "TWENTY YEARS OF INDIA'S LIBERALISATION: EXPERIENCES AND LESSONS", explains the role of liberalisation policy in various sectors of India. It also deals with the agricultural trade liberalisation policies and finds the producer-consumer balance in the same. Trade policy is a beneficial instrument in balancing producer and consumer interest over a while.

11. In Citizens' Charter of "SPICES BOARD", it described the functions of Spices Board as to develop, regulate and promote export of spices, undertake programmes and projects for the promotion of export of spices, grant certificate for export of spices, assist and encourage studies and research for the improvement of processing, quality, strive towards stabilization of prices of spice export, techniques of grading and packaging of spices, evolve suitable quality standards and introduce certification of quality through Quality Marking for spices for export, and control quality of spices for export.
12. In 2000 Pratheeksha, in the article "THE ROLE OF SPICES BOARD IN THE PROMOTION OF EXPORT OF SPICES", analysed the importance of spices as a foreign exchange earner and the trend in spice export from India. She found that timely collection and dissemination of data relating to world production and demand of spices is essential for developing the spices trade. For this, the market intelligence wing of the Spices Board should strengthen.
13. In 2004 Ms Shashi Sareen, in the paper "FOOD EXPORT CONTROL AND CERTIFICATION", expressed the importance of the export inspection council in the food industry. The safety of food materials should give paramount importance and is beneficial for both exporting and importing countries. Although many countries have not fully recognised the significance of export certification systems, these can play a vital role in the present-day scenario of rapidly expanding global trade in food.
14. In 2013 Vinay Vaish and Urmi Chudgar, in their article "LAWS GOVERNING THE FOOD INDUSTRY IN INDIA", discussed laws governing the food industries. He denoted the food industry as the "sunrise industry" and recognised the Food Safety and Standards Act as the primary Act as far as the food industry is concerned. It overrides all other food-related laws and expressly repealed eight laws in operation before the enforcement of FSSA.
15. In 2018 the guidance document published by the FSSAI, "FOOD SAFETY MANAGEMENT SYSTEM", provides food safety guidelines with respect to spices. It provides the quality standards and infrastructure needed by the spice industry. An In-house laboratory facility with competent and trained testing personnel should be available for food testing. If there is no such laboratory present, then all the regular testing shall be done through a laboratory notified by FSSAI.
16. In 2019 Krishnakumar's article titled QUALITY MANAGEMENT OF AGRICULTURAL PRODUCTS IN INDIA deals with food production and laws

related to food and food safety. After inspection, authorities ensure that the necessary facilities like equipment and laboratory are available, allowing organisations to use the AGMARK symbol.

17. In 2013 Sajith Mohan, Sheena. S.Rajan and Unnikrishnan. G, in their research work “MARKETING OF INDIAN SPICES AS A CHALLENGE IN INDIA”, identifies the insufficiency of legal provisions as the major challenge to the marketing of Indian spices. Low productivity of quality spices is the major issue faced by the spice sector. The policies which provide costly quality management systems and training of farmers are required to improve the situation.
18. In 2019 L Thomas and P C Sanil, in the review “COMPETITIVENESS IN SPICE EXPORT TRADE FROM INDIA”, considered the effect of different policies introduced by the government of India on Indian spice export. At the policy level, trade facilitation and infrastructure are often taken in the general sense and only partly deals with the specific issues related to the transaction costs and reduction of risks in the context of agricultural exports.
19. In 2019 Carolyn Fisher, in the article “A REVIEW OF REGULATIONS APPLIED TO SPICES, HERBS, AND FLAVOURINGS”, provides the areas in which legal framework is required. It states that in India, there is no positive list of fumigants under food regulations. There is no specific ban on sulfur dioxide and ethylene oxide. In India, where many spice oleoresins are produced, a regulated list of solvents that can be used for the extraction of oleoresins does not currently exist.
20. In 2018 Dr Swati Mishra and Mr Padam Bhushan, in their research paper “SPICES INDUSTRY IN INDIA: CHALLENGES & OPPORTUNITIES”, identified insufficiency of the legal framework as the most important challenge faced by the spice industry. The problematic use of pesticides, the usage of unlawful substances, nonattendance of cautious equipment provoking human prosperity hazards, the improper exchange of engineered substances, water spoiling and lack of legal framework in these areas are the major issue faced by the Indian spice industry.

### 3.2 LEGAL ASPECTS OF SPICE EXPORT

The export sector of a country depends on the trade policies taken by the government and the international treaties signed by the nation. Historically, India had a trade surplus for centuries by exporting spices, handicrafts and textiles. Moreover, no official restrictions on imports or exports were maintained<sup>53</sup>. In ancient days trade policies were adopted only for imports, and there was a fear that free trade may affect a country's economy since it affects the exporting of commodities. Not only India, but most of the countries followed a more nationalised approach till the end of World War II. Afterwards, the situation changed, and the evolution of WTO and new trading practices also affected the Indian spice trade. There were many new treaties, conventions, and international organisations that evolved to regulate international trade<sup>54</sup>. As a result of the same, some national laws regarding the same subject matter are also arising. The primary objectives are to support different trading nations and promote fair trade between nations.

Some legal protections and regulations are essential for foreign trade. For example, earlier, India did not have strong laws to protect its traditional knowledge. Then two scientists claimed a patent for the wound curing property of turmeric in the US patent office, and they gave the patent. Later on, India challenged the patent because the wound healing property of turmeric is a traditional knowledge of India and the 3rd world nations<sup>55</sup>. It was not an innovation. So, the lack of legal framework in the area of traditional knowledge leads to such a situation. When a commodity is exporting, there are more chances of abusing the same. Now there are so many laws to protect different commodities.

International organisations make international standards through treaties, conventions and national laws which protect exporting commodities, including spices. The laws are made not only to protect the spice trade but also to ensure a minimum standard for exporting spices. However, there are chances of negative effects created by these laws, which may become a challenge to the industry. This chapter discusses the essential legal framework on spice export at the international and national levels.

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<sup>53</sup> Thomas and P C Sanil's "COMPETITIVENESS IN SPICE EXPORT TRADE FROM INDIA", Journal of Spices and Aromatic Crops, Vol.28(1), 2019.

<sup>54</sup>United Nations Conference on Trade and Development's "TWENTY YEARS OF INDIA'S LIBERALISATION: EXPERIENCES AND LESSONS", United Nations Publication, ISBN 978-92-1-112852-9, 2012.

<sup>55</sup> Bhowmik and Debesh's "WTO AND AGREEMENT ON AGRICULTURE", The Journal of World Intellectual Property Rights, Vol. 2, 2006

### **3.3 SPICE EXPORT BUSINESS IN INDIA**

India is one of the world's vital spice exporters, and Indian spices are famous for their quality and flavour. India is also the world's largest consumer and producer of spices. Almost all homes in India cultivate some spices either for domestic purposes or aiming for a higher return. Spices are one of the agricultural commodities which can get a higher income from a small quantity. India's climatic condition is suitable for almost all the spices, and India exports 75 of the world's 109 spices<sup>56</sup>. There are five species of spices under the Spice Board of India domain, and almost all states of India are cultivating anyone among them. So, we can say that the spice export has a great significance in India. Even though the spice trade has a route towards the early period, now there are so many laws to regulate the spice trade absent in the early days. Moreover, there are some conditions and legal provisions to get into the business of spice export.

The spice export is a growing sector of trade. Moreover, the income from the same is continuously increasing. It is not even affected by the pandemic. The persons who can deal with the spice export business in India are spice producers, merchants, wholesale dealers, third party manufactures and supplier exporters. The persons who produce the spices on a large scale are known as spice producers or manufacturers. They are the primary producers of spices, and all others are there to complete the supply chain. The merchants are the ones who help these spices to reach the apt market. Once it reaches the right place, the wholesalers buy it and sell it to the retailers. Then retailers are the persons who supply these spices directly to the consumers for profit. Moreover, there are third party manufactures and exporters. The third-party manufacturers help the spices reach the Indian market, and supplier exporters help it reach foreign markets.

Since India is known as the paradise of spices, there are some advantages to starting a spice business. The important thing is that India's spices have more demand in the international market, and they are famous for quality and flavours. So, this credibility of Indian spices might help the business to get more opportunities. Moreover, spices are also one of the crops which is fit for Indian conditions. Another vital benefit is reduced risk. Since the spice industry is a growing sector and continuously growing for the past decades without any negative sign, it is the most reliable one. It is also notable that even the pandemic that affected the whole world

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<sup>56</sup> Athulya's "HOW TO START A SPICE EXPORT BUSINESS IN INDIA". Indian Spices, January 2021.

economy can also lead spice export of India to negative growth. The spice trade is beneficial due to the activities of the Spice Board of India. To develop the spice export in India, the spice board is focusing on trade shows and works to promote Indian spices. Spice board is also focusing on giving subsidies and other benefits to exporters of spices from India. Furthermore, the business owners may get subsidies for promoting spices through their brochures, videos, advertisement, or other marketing campaigns<sup>57</sup>.

There are some challenges to the spice sector irrespective of the benefits and growth of export. The major problem faced by the sector is the labour issue. Due to the pungent odours of spices and their prolonged exposure, the labours are facing many health issues. Thus, labours may refuse to engage in this activity, which is one of the biggest challenges the sector faces. The credibility of distributors and other mediators are another critical issue faced by the industry. These issues may also cause fear of investors for investing in this industry. For attracting foreign buyers, there should be high-quality packing and labels. The quality of the product is also essential, but it is not the single necessary thing. Other significant challenges are the expansion of small-scale business, accessibility of machines and availability of high technology. The lack of technology and high-tech machines may lead to the non-expansion of business. The small-scale business cannot expand as per the idea of the owner in such circumstances. The competition faced by the sector is another crucial challenge. India was the largest exporter of spices earlier. However, as per the statistics of 2019, China is in the 1st position. So, there are some competitions in the sector. Before starting the business, these things are to study and understanding.

The spice export is also can run by a business entity. So, there are some documents required for starting a spice export business. They are<sup>58</sup>;

- ✓ Incorporation Certificate obtained from the Registrar of Companies
- ✓ Membership of the Spice Board
- ✓ Registration certificate from spice board
- ✓ MSME registration
- ✓ Goods and Service Tax registration for tax purposes
- ✓ Import Export Code from the Director-General of Foreign Trade
- ✓ license or registration from Food Safety and Standard Authority of India

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<sup>57</sup> Spice Board of India <http://www.indianspices.com/> accessed on 04/06/2021.

<sup>58</sup> Athulya's "HOW TO START A SPICE EXPORT BUSINESS IN INDIA". Indian Spices, January 2021.



- ✓ Trademark registration to protect the brand in foreign markets
- ✓ Phytosanitary Certificate
- ✓ Bank certificate and statement
- ✓ Authorized Dealer Code from a recognised bank
- ✓ Company PAN card

Also, require BIS certification under the ISI, wherein the specification for ground spices are as follows<sup>59</sup>;

- ❖ Chili powder ISI number: 2445-1963
- ❖ Coriander powder ISI number: 2444-1963
- ❖ Curry powder ISI number: 1909-1961
- ❖ Turmeric powder ISI number: 2446-1963
- ❖ Sampling and testing of Spices ISI number: 1997-1961

The Certificate of Registration as the Exporter of Spices<sup>60</sup> (CRES) is necessary, and to obtain the same, the following documents are necessary:

1. IEC (Import- Export Code) certificate
2. DD worth INR 5,000 in favour of the Spices Board
3. memorandum of association and articles of association
4. Confidential Bank Certificate.
5. GST tax registration certification
6. PAN card
7. Application and passport size photo with white background
8. In manufacture-exporter companies, a certificate from the directorate of industries

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<sup>59</sup> Ibid

<sup>60</sup> Spices Board Registration - Certificate, Fees, Documents. <https://www.professionalutilities.com/spice-board-registration.php> accessed on 06/06/2021.

### **3.4 INTERNATIONAL LAWS RELATED TO SPICE EXPORT**

The spice trade of India has a very ancient origin. However, it flourished in recent days. The international and national legal framework helped for the same. Spice is one of the agricultural commodities. The agricultural commodity is responsible for a significant part of India's GDP and is also the most critical trading sector of India<sup>61</sup>. For India, the whole agricultural trade, including the spice trade has very important. There are so many legal provisions that affect the spice trade of India negatively or positively. It is essential to understand the law relating to the spice trade from a global perspective and how it affected India for finding out the legal challenges faced by the spice exports.

In international law, the most crucial source of the same is international agreements. Moreover, some organisations are working based on such agreements to fulfil the objectives of those agreements. In the international laws relating to spice export, the role of WTO is remarkable. The WTO is the primary international organisation that regulates trade between different nations and creates some basic agreements<sup>62</sup>. Since most of the trading nations are WTO members, it can decide the policies of international trade as a whole. There are also some free trade agreements between neighbouring countries to remove or reduce tariff or non-tariff barriers for uninterrupted trade. Some of them may influence the spice export also. Some notable conventions regulate spice export. The most important one is the International Plant Protection Convention, which protects traditional knowledge and inventions in the spice export region. Moreover, some international organisations like the bureau of international standards, which deals with the quality of exporting spices, and the international organisation of spice trade associations which deals with the global issue on the spice trade. Furthermore, the codex committee on spices and culinary herbs are there, which deals with the standard of exporting food items, including spices.

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<sup>61</sup> B. Sheshagiri and G. G. Honkan's "IMPACT OF WTO ON INDIAN AGRICULTURE: PERFORMANCE AND PROSPECTS", 2011

<sup>62</sup> Bhowmik and Debesh's "WTO AND AGREEMENT ON AGRICULTURE", The Journal of World Intellectual Property Rights, Vol. 2, 2006

### **3.4.1 WTO AGREEMENTS ON SPICE TRADE**

The World Trade Organisation (WTO) is an international organisation, now a forum for negotiating international trade agreements and monitoring and regulating the body to enforce the agreements. It was established in the year 1995, and India is a member from the very beginning. There are WTO agreements at the heart of organisation which negotiated and signed by almost all the world's trading nations. The goals are to ensure that trade flows as smoothly, predictably and freely as possible<sup>63</sup>. It stands for several simple, fundamental principles that form the foundation of the multilateral trading system. The main objective of the WTO is to convert or open trade for the benefit of all its members. The WTO representing 98 per cent of world trade, including 160 members and over 20 countries are seeking to join the WTO. To join WTO, a government has to change the economic and trade policies to satisfy WTO rules. They also negotiate the terms of introduction with the WTO membership<sup>64</sup>.

Spices are the tropical products produced and exported mainly by developing countries. However, there are some unique problems of tropical products to the developed economies. The developed countries had agreed before the closure of the Uruguay Round to reduce tariffs on them on a most-favoured-nation (MFN) basis and eliminate non-tariff measures<sup>65</sup>. The Agreement on Agriculture (AOA), Agreement on the Application of Sanitary and Phytosanitary Measures (SPS), TRIPS Agreement, Agreement on Safeguards, Agreement on Technical Barriers to Trade (TBT) and Agreement on Subsidies and Countervailing Measures (SCM) are some agreements under the WTO regime. These are impacting the spice trade and its effects directly or indirectly on the spice trade from India.

#### **AGREEMENT ON AGRICULTURE (AOA)**

During the trade negotiations in Uruguay Round, the massive subsidies given by industrialised countries to their agricultural sectors over decades had distorted the international trade in agricultural products. Subsidisation and concurred agricultural policies had led to over-production of certain items, import restrictions, and dumping on international markets<sup>66</sup>. The

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<sup>63</sup> WTO, About the organisation. [http://www.wto.org/english/thewto\\_e/thewto\\_e.htm](http://www.wto.org/english/thewto_e/thewto_e.htm) accessed on 07/06/2021.

<sup>64</sup> Ibid

<sup>65</sup> Bhalla V K's "CRITICAL ANALYSIS OF WORLD TRADE ORGANISATION", ICSI, New Delhi, Vol. 22, January 2002.

<sup>66</sup> Rani and Pooja's "A STUDY OF WTO AND AGRICULTURE SECTOR IN INDIA", International Journal of Multidisciplinary Research and Development, 2015

agreement's main objective is to establish a fair and market-oriented agricultural trading system by providing agricultural support and protection. The agreement acknowledges that developing country members have particular needs and that differential and more favourable treatment will accord. It also deals with the adverse effects of the Reform Programme on Least-Developed and Net food-importing Developing Countries<sup>67</sup>.

The critical provisions of AOA affecting spices trade are included in its clauses relating to market access, domestic support and export competition. Under the market access provision, the agreement imposes new rules regarding the use, for import-control purposes, of non-tariff border measures such as quantitative import restrictions, variable import levies, minimum import prices, discretionary import licensing, non-tariff measures maintained through State trading enterprises, and voluntary export restraints<sup>68</sup>. Under the domestic support provision, the agreement establishes a ceiling on the total domestic support that governments may provide to agricultural producers. Under the Export competition clause, the agreement has placed certain export subsidies under discipline.

As a result of this agreement, it has been estimated that tariffs on spices would come down by 52 per cent in developed countries. The MFN and GSP tariff schedules of developed country markets show higher tariffs for ground and processed spices. The progressive reduction could bring competitive advantages for spice-producing countries. However, the erosion of preference margins for developing countries will remain a significant concern. As spice cultivation is highly labour intensive, developing countries may obtain a higher share of the market by taking advantage of their low labour costs. Developing countries will also be able to continue their support programmes for reducing freight and transportation disadvantages. These programmes will give their products a competitive edge.

The effect of the AOA on the spices trade in India will be to enlarge market access, create new opportunities for growth and raise prices. Increased prices will mean higher incomes for the spice's growers (mostly small farmers), more employment in the rural areas (with or without increased wage levels) and better incomes for agricultural labour, particularly women. In general, therefore, higher prices should reduce poverty in spice growing areas. However, in India, there are only minimum subsidies for spices cultivation. The subsidies provided by

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<sup>67</sup> B. Sheshagiri and G. G. Honkan's "IMPACT OF WTO ON INDIAN AGRICULTURE: PERFORMANCE AND PROSPECTS", 2011

<sup>68</sup> Bhowmik and Debesh's "WTO AND AGREEMENT ON AGRICULTURE", The Journal of World Intellectual Property Rights, Vol. 2, 2006

Spices Board to spices cultivates only a limited amount. Thus, as per the AOA, if the existing subsidies for spices cultivation may also stop, the increase in the cost of production of spices and spices from India may not compete in the global spices market<sup>69</sup>.

## **SPS AGREEMENT**

The SPS Agreement or Application of Sanitary and Phytosanitary Measures agreement deals with the application of food safety, animal and plant health regulations<sup>70</sup>. Sanitary or phytosanitary measures are some precautions taken to protect animal or plant life or health from risks missing from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms. It includes methods of risk assessment and packaging and labelling requirements directly related to food safety. Member countries should have to accept the SPS measures of other countries if the exporting country proves to the importing country that its steps taken are sufficient to achieve the importing country's appropriate level of health protection<sup>71</sup>. The committee on sanitary and phytosanitary measures introduced a forum for monitoring the implementation of commitments and consultations and discussions on matters with potential trade impact. Disputes on SPS matters are subject to the WTO's overall dispute settlement mechanism<sup>72</sup>.

Almost all importing countries have strict food safety standards, which are enforced, either at the port of entry or at the point of sale. More and more regulations are being imposed, mainly because of pressures from consumer groups and environmental activists. The food safety standards enforced by the major importing countries mainly cover the following areas: macro-cleanliness; microbial loads; mycotoxins and aflatoxin in particular; trace metals; and pesticide residues. However, spice-producing developing countries have limited or no access to frontier technologies. With the strengthening of the patent laws in many countries, access to new products (particularly agrochemicals) that are environmentally friendly and acceptable in developed country markets will become expensive. This situation may partially offset the

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<sup>69</sup> Rani and Pooja's "A STUDY OF WTO AND AGRICULTURE SECTOR IN INDIA", International Journal of Multidisciplinary Research and Development, 2015

<sup>70</sup> United Nations, Agreement on Sanitary and Phytosanitary Measures <https://www.un.org/ldcportal/sps-agreement-the-application-of-sanitary-phytosanitary-measures/> accessed on 06/06/2021.

<sup>71</sup> CHAPTER 7 SANITARY AND PHYTOSANITARY MEASURES. <https://ustr.gov/sites/default/files/TPP-Final-Text-Sanitary-and-Phytosanitary-Measures.pdf> accessed on 06/06/2021.

<sup>72</sup> Ibid

advantages of cheap labour that spice producing developing countries enjoy today. In tune with the SPS regulations, spices trade in India has to address the following issues<sup>73</sup>;

- ✓ The use of pesticides least toxic to natural predators, minimum use of Pesticides and application when the pest has reached a critical injury level
- ✓ Phasing and timing the use of pesticides to ensure that product is least pesticide residue
- ✓ Use of selective rather than broad-spectrum pesticides and
- ✓ Avoidance of highly toxic chemicals such as BHC, DDT, aldrin and chlordane.

Some macro- cleanliness issues can be taken care of by adopting modern drying, processing, and packaging technologies. For addressing the other issues, the development of the technology has to come out of local R&D efforts based on observations and market demand.

### **TRIPS AGREEMENT**

The TRIPS agreement or Trade-Related Aspects of Intellectual Property Rights Agreement embodies the results of the first attempt under the GATT rounds of negotiations. It addresses the problems brought about by different standards for protecting IP Rights, its enforcement and the lack of a multilateral framework that deals with the international trade in counterfeit goods<sup>74</sup>. The Agreement incorporates by reference most of the substantive provisions of the Paris Convention for the Protection of Industrial Property (1967), the Berne Convention for the Protection of Literary Works (1971) and the Washington Treaty for Intellectual Property of Integrated Circuits.

Article 22 of the TRIPS enables geographical indications to be registered and protected. So, the Agreement asks members to prevent indications that mislead consumers about the geographical origin of the goods and any use constituting unfair competition. A country can convert these designations of origin into brand names for higher price realisation with appropriate legislation. Protection can also offer a certificate of specific characteristics for a spice or spice product possessing specific characteristics because of its ingredients or production methods. So, the geographical indication denotes the place of origin and some qualities or characteristics. Many spices are currently selling under trade names giving

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<sup>73</sup> P. K. Vasudeva, "UAE HEALTH STANDARDS: INDIAN MEAT BANNED", 35 Economic and Political Weekly, Aug. 05, 2000

<sup>74</sup> WTO, WTO agreements, the final Act [https://www.wto.org/english/docs\\_e/legal\\_e/ursum\\_e.htm](https://www.wto.org/english/docs_e/legal_e/ursum_e.htm) accessed on 07/06/2021.

geographical indications. Chinese cassia; Alleppey turmeric; Brazil, Lampong, Malabar and Sarawak pepper, Cochin and Jamaican ginger are examples<sup>75</sup>.

The TRIPS Agreement was and remained highly debated, with many developing countries expressing reservations about some of its provisions. The main concerns of spice-producing countries have to do with patents and sui generis protection, how farmer's privileges can safeguard without affecting plant breeder's rights. Furthermore, what value or compensation can give to indigenous knowledge systems, and what exactly are microbiological processes. Many spice-producing countries have weak patent laws and do not offer adequate sui generis protection. Therefore, they are required to amend their patent laws and introduce systems of protection suitable to their needs and in conformity with the Agreement. When there are weak laws, other countries with solid laws may take advantage<sup>76</sup>. There are so many related cases where some other countries used properties of Indian plant genetic resources. Moreover, some patent cases were arising as a result. These concerns are highly relevant to the spice industry, particularly to spices' medicinal and other properties.

#### **AGREEMENT ON SAFEGUARDS**

The Agreement on Safeguards accepts that when imports are causing or threatening to cause severe damage to domestic producers who produce similar or directly competitive products<sup>77</sup>, governments may come to the rescue of these domestic producers by applying safeguard measures. The Agreement provides for taking action for a temporary period (Article 7) based on an assessment that serious injury has caused the domestic industry. Foreign suppliers and governments whose interests may be adversely affected by the proposed safeguard actions give adequate opportunities to defend their interests. In the agricultural sector, despite the reductions in tariffs and export and domestic subsidies, agricultural producers may find difficulty adjusting to the increased import competition resulting from the reductions. Safeguard measures can restrict imports for a temporary period and provide some time to the producers to make arrangements for the competition<sup>78</sup>.

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<sup>75</sup> Bhowmik and Debesh's "WTO AND AGREEMENT ON AGRICULTURE", The Journal of World Intellectual Property Rights, Vol. 2, 2006

<sup>76</sup> Ibid

<sup>77</sup> WTO ANALYTICAL INDEX 1 ARTICLE XIX 1.

[https://www.wto.org/english/res\\_e/publications\\_e/ai17\\_e/gatt1994\\_art19\\_jur.pdf](https://www.wto.org/english/res_e/publications_e/ai17_e/gatt1994_art19_jur.pdf) accessed on 08/06/2021.

<sup>78</sup> B. Sheshagiri and G. G. Honkan's "IMPACT OF WTO ON INDIAN AGRICULTURE: PERFORMANCE AND PROSPECTS", 2011

## **AGREEMENT ON TECHNICAL BARRIERS TO TRADE (TBT)**

Most countries have regulations specifying mandatory standards for imported products. These standards are mainly adopted to protect the health and safety of their populations and their environments. The Agreement provides that such mandatory standards should not be applied in a manner that causes unnecessary trade barriers. The standards should be based on internationally agreed standards and scientific information and evidence as far as possible<sup>79</sup>. Countries are free to evolve and adopt national standards different from international standards for geographical, climatic and other reasons. However, they are obligated to publish the draft standards to enable producers in other countries to comment on them.

The TBT agreement, which all the WTO members have now signed, applies to all products, including agricultural goods, spices and food. Besides labelling and packaging, the TBT agreement covers quality requirements for fresh food products such as spices and the labelling of textiles in the agro-processing sector. The TBT agreement enjoins the countries to establish inquiry points; in India, the Bureau of Indian standards serves as an inquiry point. The other area of concern to exporting developing countries is voluntary standards<sup>80</sup>. As explained earlier, voluntary standards are often set by industries in developed country markets for their reasons. In a market segment where giant multinational companies dominate the scene, voluntary standards could have a heavier impact than mandatory standards.

## **AGREEMENT ON SUBSIDIES AND COUNTERVAILING MEASURES (SCM)**

The Agreement on SCM acknowledges that governments give subsidies to various producer groups to pursue particular policy objectives. However, the Agreement tries to restrain governments from granting subsidies that have significant trade-distorting effects. The Agreement divides subsidies into two categories; prohibited and permissible, and permissible subsidies are subdivided into two categories; actionable and non-actionable. Prohibited subsidies include export subsidies. The rule against export subsidies for industrial products applied in the past to developed countries<sup>81</sup>.

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<sup>79</sup> Rani and Pooja's "A STUDY OF WTO AND AGRICULTURE SECTOR IN INDIA", International Journal of Multidisciplinary Research and Development, 2015

<sup>80</sup> Ibid

<sup>81</sup> WTO, WTO agreements, the final Act [https://www.wto.org/english/docs\\_e/legal\\_e/ursum\\_e.htm](https://www.wto.org/english/docs_e/legal_e/ursum_e.htm) accessed on 07/06/2021.



### **3.4.2 FREE TRADE AGREEMENTS**

Free Trade is understood as the export and import of goods and services unhindered by tariff and non-tariff barriers to trade. A Free Trade Area involves eliminating tariffs on trade between the Member States, but each member maintains its national policy towards trade with third countries. An FTA between two or more countries (usually neighbouring countries) whereby they mutually agree to import and export certain specified goods and services without payment of customs duties<sup>82</sup>. The free trade agreements usually mean lower tariffs are in operation between these countries or that special quotas allow preferential access for their goods.

The removal of trade barriers through the FTAs has both consumption and production effects<sup>83</sup>. The consumption effects are on prices and consumer choice. When trade barriers come down, consumers can buy goods more cheaply. The FTA applies not just to tariffs, where the price is directly affected, but also to non-tariff barriers like customs formalities, which raise the cost of selling goods across borders. Where trade from external countries is diverted or suppressed, prices may rise if internal producers have high costs. The production effects in producers inside or outside the trading area are trade creation, trade diversion and trade suppression. There are many free trade agreements across the world. As far as India's foreign trade is concerned, the most important free trade agreements are; (i) Indo-Srilanka Free Trade Agreement (ISLFTA), (ii) Indo-Singapore Comprehensive Economic Co-operation Agreement.

#### **INDO-SRILANKA FREE TRADE AGREEMENT (ISLFTA)**

Sri Lanka was a significant export market for India from the historical period itself. Both the countries are WTO, SAFTA and Bangkok Agreement members, within the framework of which mutual preferential trade concessions extended to each other. As per the ISLFTA, which was signed on 28th December 1998, tariffs on many items would phase out within a timeframe. The ISLFTA was made operational from 1st March 2000. The FTA between India and Sri Lanka is a landmark in bilateral relations, the culmination of which would enhance trade between the two countries and expand and diversified cooperation in a range of economic spheres, including investments. The inflow of Indian raw materials on a duty-free basis would assist Sri Lankan industries in reducing costs and increasing profitability. Preferential access to Sri Lankan exports, including tea, garments and spices in the Indian market.

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<sup>82</sup> Thomas Varghese's "INDIA'S FREE TRADE: A CRITICAL STUDY", The Hindu business Line, July, 2006.

<sup>83</sup> Suryanaraya P. S's FREE TRADE AGREEMENTS AND INDIA", The Hindu, Aug, 2006.

However, after the ISLFTA was signed in India, there was a tremendous increase in spice's imports. Mainly there were black pepper and nutmeg import from Sri Lanka to India<sup>84</sup>. The duty-free import of black pepper and other spices reduces the domestic demand for the same spices in India and causes a fall in their domestic prices. As a result of ISLFTA, there has been an increase in Indo-Sri Lankan general trade, but there is no chance for further increase in Indian export of spices to Sri Lanka, as India is a big market and Sri Lanka is a small market for spices<sup>85</sup>. However, the ISLFTA has helped India's spice oils and oleoresin industry to get cheap spices, incredibly light berries of nutmeg and black pepper through the duty-free import of spices from Sri Lanka.

### **INDO-SINGAPORE COMPREHENSIVE ECONOMIC CO-OPERATION AGREEMENT**

The comprehensive Economic Co-operation Agreement (CECA) signed by India and Singapore and a treaty for mutual legal assistance in criminal matters on 29th June 2005. It is an integrated package comprising of;

1. A Free Trade Agreement, which includes trade in goods, investment and services,
2. A bilateral agreement on protection, co-operation and investment promotion,
3. It is a Double Taxation Avoidance Agreement, an improved version of the old one,
4. It opens the sky for charter flights and can know as a liberal Air Services Agreement,
5. A work programme for economic co-operation covering areas outlined in the Joint Study Report, including, among other things, the creation of the India and Singapore Fund, the setting up of a second India centre in Singapore and tourism co-operation.

As per the Free Trade Agreement on goods, which formed part of the CECA, import tariffs in the phased elimination list are to be eliminated in five stages, leading to zero tariffs from 1st April 2009. For the phased elimination list of 2200 items, the government has increased the level of duty concession from 25% to 50% from 1st April 2006<sup>86</sup>.

Singapore is only a city-state and not a spice producing country. However, Singapore is an important transshipment centre for several spices in the international spices trade. Pepper is the

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<sup>84</sup> Thomas Varghese's "INDIA'S FREE TRADE: A CRITICAL STUDY", The Hindu business Line, July, 2006.

<sup>85</sup> Ibid

<sup>86</sup> Suryanaraya P. S's FREE TRADE AGREEMENTS AND INDIA", The Hindu, Aug,2006.

essential spice traded from Singapore as there is no import duty or export duty on the spices trade. These spices were imported to Singapore from Malaysia, Indonesia and Vietnam<sup>87</sup>. Even though some limited quantities of black pepper and cardamom are being imported to India from other countries via Singapore port, this practice was there, even before the Indo-Singapore CECA came into force. Also, there is no significant variation in the quantum of such imports before and after the CECA pact. So, we cannot say this free trade agreement has negatively affected the Indian spice trade. Moreover, it can note that this might help India's export spices.

### 3.4.3 INTERNATIONAL PLANT PROTECTION CONVENTION

The IPPC is the intergovernmental treaty having 180 countries as signatories known as International Plant Protection Convention. Its objective is to protect the world's plant resources from spreading and introducing pests and promoting safe trade<sup>88</sup>. The International Standards for Phytosanitary Measures (ISPMs) were introduced by this convention as its primary tool to achieve its goals, making it the only global standard-setting organisation for plant health<sup>89</sup>. It provides an international framework for plant protection. The IPPC allows countries to analyse risks to their national plant resources and use scientific measures to protect the wild and cultivated plants. Moreover, protect the plant resources from pests and diseases, the IPPC helps<sup>90</sup>:

- protect farmers from economically destructive pest and disease
- Protect the environment from species diversity loss
- safeguard ecosystems from pest encroachment and loss of viability
- protect consumers and industries from the costs of pest control.

The IPPC provides information regarding import and export requirements, pest status, and regulated pest lists provide by each member country. Developing countries receive technical assistance for implementing the convention if needed. The plants and plant products moving in international trade is the primary focus of IPPC. The convention also covers biological

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<sup>87</sup> Ibid

<sup>88</sup> Overview - International Plant Protection Convention. <https://www.ippc.int/en/about/overview/> accessed on 04/06/2021.

<sup>89</sup> Ibid

<sup>90</sup> International Plant Protection Convention - IPPC |Policy .... <http://www.fao.org/policy-support/mechanisms/mechanisms-details/en/c/428539/> accesses on 06/06/2021.

control organisms, research materials, containment facilities, germplasm banks, and anything that act as a vector to spread plant pests. For example, vessels, containers, vehicles, packaging materials, soil, and machinery<sup>91</sup>. So, this convention provides support to developing countries to improve the efficiency and effectiveness of their National Plant Protection Organizations (NPPOs). Moreover, it also helps to participate in the regional plant protection organisations to help them realise the benefits of safe trade<sup>92</sup>.

### **3.4.4 BUREAU OF INTERNATIONAL STANDARDS**

Bureau of International Standards (BIS) is an internationally recognised non-government autonomous accreditation board. It has its own Memorandum of Association and Rules & Regulations, and the main objective of the bureau of international standards is to promote quality standards.

BIS aims to promote, encourage awareness, environmental responsibility, quality control, and help to improve certification management issues within the public domain, commerce or industry. The organisation gives importance to impartiality carrying the management system certification activities and manage conflict of interest. The BIS ensures the objectivity of its management system certification activities. The mission of BIS is to provide credible standardisation and accreditation services to enhance economic, societal and environmental well-being and provide high-quality accreditation services to all dealing with sustainability and public safety. The main principle behind the BIS is “One Test, One Inspection, One Certification Worldwide”<sup>93</sup>.

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<sup>91</sup> What we do - International Plant Protection Convention. <https://www.ippc.int/en/what-we-do/> accessed on 04/06/2021.

<sup>92</sup> Ibid

<sup>93</sup> BIS: Bureau of International Standards. <http://bis-accreditation.co.uk/> accessed on 07/06/2021.

### **3.4.5 INTERNATIONAL ORGANIZATION OF SPICE TRADE ASSOCIATIONS**

The IOSTA or International Organization of Spice Trade Associations is the spice association that includes all the spice associations from around the world as members who would like to work together to solve any global issues relating to the spices and the spice industry. Thus, IOSTA helps maintain the spice industry's sustainability by addressing whole global issues related to spices in a single organisation. It also brings together all the persons and associations that have some interest in that industry.

International Organization of Spice Trade Associations represents the global spice industry, including local trade associations in growing regions and importing countries. This spice industry is spread all over the world and supports farmer's livelihood in developing countries<sup>94</sup>. Spices cultivate in all over the world. So, the spice industries spread worldwide, and the global spice issues are issues faced by most nations. Food safety has supreme importance to the global spice industry. This association helps educate farmers on the importance of food safety and good agricultural practices to protect the consumer and comply with regulatory requirements<sup>95</sup>.

### **3.4.6 CODEX COMMITTEE ON SPICES AND CULINARY HERBS**

Codex Alimentarius Commission (CAC) was established in the year 1963 by UN Food and Agricultural Organisation (FAO) and World Health Organisation (WHO). It is an intergovernmental body that came under the framework of joint food standards programme. It was established to ensure fair practices in the food trade and promote consumer's health. Now Codex Alimentarius Commission (CAC) has 189 codex members. It includes 188 member countries and one member organisation. The only one-member organisation is the European Union, and India became a member of the Codex Alimentarius Commission (CAC) in 1964.

In 2013, the Codex Alimentarius Commission (CAC) formed a new youngest committee known as Codex Committee on Spices and Culinary Herbs or CCSC to elaborate worldwide

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<sup>94</sup> Global Leadership | ASTA: The Voice of the U.S. Spice .... <https://www.astaspice.org/advocacy-regulatory-issues/advocacy/iosta/> accessed on 03/06/2021.

<sup>95</sup> Ibid

scientific quality standards for spices and culinary herbs Codex principles of consumer protection and fair-trade practices. India chairs this codex committee. The Spice Board of India is the secretariate of the Codex Committee on Spices and Culinary Herbs. Dr M.R. Sudharshan is the current chairman of the Committee. The essential objectives of the committee are to elaborate worldwide standards for spices and culinary herbs in the dehydrated and dried state in whole, ground, cracked or crushed form and consult, as necessary, with the other organisations in the standards fixing process to avoid duplication<sup>96</sup>. Usually, the committee meets once in 18 months. From the very beginning, the Codex Committee on Spices and Culinary Herbs successfully developed coordinated global Codex standards for spices and herbs.

The Codex Committee (CCSCH) meeting was held from 20/04/2021- 29/04/2021, known as the fifth session or CCSCH5. India was the host country. The 2019 meeting of CCSCH was also conducted in India at Trivandrum. Due to the pandemic Covid19, the committee meted through the virtual platform for the first time. The meeting was inaugurated by Ms Rita Teaotia, IAS (retd.), Chairperson, Food Safety and Standards Authority of India (FSSAI), and witnessed the highest participation with 275 participants from 65 member countries, 11 international observer's organisations and one member organisation known as European Union<sup>97</sup>. The committee finalised the quality standards of four spices and recommended the same. The four spices are cloves, oregano, basil and ginger. In this session, the committee unanimously agreed to the following four draft standards and forwarded them to the Codex Alimentarius Commission. The commission should adopt it as Codex standards. The four draft standards are dehydrated or dried forms of oregano, cloves, ginger and basil. These standards will join the other four standards once the commission adopts them. These standards are references for the world spice trade and help the member countries to align their national regulations<sup>98</sup>. They also decided to develop codex standards for turmeric and small cardamom and the first set of standards for spices that fall under the dried fruits and berries. The committee also emphasised the need to adopt the Farm to Fork approach to ensure safety and traceability throughout the entire supply chain.

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<sup>96</sup> India: Codex Committee on Spices and Culinary Herbs (CCSCH) Finalises Quality Standards for 4 More Spices." MENA Report, Albawaba (London) Ltd., May 2021.

<sup>97</sup> Ibid.

<sup>98</sup> India: Codex Committee on Spices and Culinary Herbs (CCSCH) Finalises Quality Standards for 4 More Spices." MENA Report, Albawaba (London) Ltd., May 2021.

### **3.5 INDIAN LAWS RELATED TO SPICE EXPORT**

In Indian export, agricultural commodities, especially spices, play a very significant role. The Indian spices are of good quality and flavours, which have massive demand in the international market. In addition, they are famous for the medicinal properties they possess. For maintaining the quality standard and also fair trade, some laws are essential for regulating this field. We have already discussed the international law relating to spice export. However, these international laws cannot apply in any nation. According to each agreement and convention, there should be some national laws at the international level signed by the country to fulfil its criteria. Generally, international laws prescribe a minimal law standard, whereas national law may go beyond it and give substantial criteria<sup>99</sup>. For example, in the case of quality standards, international law suggests a minimal quality which is essential. However, the Indian spices are famous for their quality, so there may be higher quality standards than international law.

The evolution of WTO and the LPG model followed by most of the countries also influenced India. Moreover, as a result of the same, India introduced a new economic policy in 1991, also known as the LPG model<sup>100</sup>. It introduced new policies of globalisation, liberalisation and privatisation. This LPG model had a significant influence on every trading activity, including the spice trade. In the case of spices, the trend is always positive from the very beginning. However, after the reform, the continuous positive increase was in a fast manner. Another most essential law regarding spices is Spice Board Act, which introduced the spice board, the primary regulatory framework dealing with exporting spices. The other critical national enactments relating to spice exports are; Export Inspection Council and Export (Quality Control and Inspection) Act, 1963 and Food Safety and Standard Act, 2006. In addition, there is the Bureau of Indian Standards which deals with the quality standards of exporting commodities. There is also one quality marking criteria for agricultural commodities called AGMARKS under the Agricultural Produce (Grading and Marking) Act of 1937. In the Indian spice export region, the Indian Institute of Spices research formed for more research of quality

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<sup>99</sup> Deepika MG's "CHANGING TRADE SCENARIO IN AGRICULTURE AND ITS IMPLICATIONS FOR THE INDIAN ECONOMY", 2005

<sup>100</sup> United Nations Conference on Trade and Development's "TWENTY YEARS OF INDIA'S LIBERALISATION: EXPERIENCES AND LESSONS", United Nations Publication, ISBN 978-92-1-112852-9, 2012.

spices which is helpful for the development of the spice sector.

### **3.5.1 TRADE POLICIES ADOPTED BY GOVERNMENT**

Trade policies adopted by the government play an important role in shaping the export sector of any commodity. Historically, India had a trade surplus for centuries by exporting spices, handicrafts and textiles, and no official restrictions on imports or exports were maintained. Though the Government of India Act 1935 gave exclusive legislative power to regulate trade, it was not used in practice. The Import and Export (Control) Act was enacted in 1947, which guided export policies until 1992, when the Foreign Trade (Development and Regulation) Act was passed. The trade policy, in general, was generally considered to be inward-looking until the 1980s. These policies were based on the fear that liberalized trade in agricultural commodities like spices could lead to a secular deterioration in terms of the trade. Since the period of economic reforms in 1991, foreign trade policies starting from the Exim Policy 1992-97 have explicitly tried to promote exports by rationalizing export procedures and documentation while liberalizing imports<sup>101</sup>. These policies had a direct impact on agricultural commodities in general and spices in particular. However, there are apprehensions that the global trade liberalization policies could restrict domestic income growth. Trade policies have continued to support the generation of exportable surplus and dismantling trade barriers. With the formation of WTO, India was obliged to reduce or discard several protective trade policies. Spices are considered sensitive products, the imports of which are monitored so that appropriate tariff measures can be taken in case of import surges. It is indicative of the domestic trade protection offered to this sector.

The spices sector also benefitted from general schemes and programmes intended for export promotion in the agricultural sector. The concept of the agri-export zone was introduced in EXIM policy 1997-2001 with the primary objective of boosting agricultural exports. Some agri-export zones were specifically designated for spice crops like ginger, turmeric, chillies and seed spices. A comprehensive approach to incentivize spice exports is seen under the Vishesh Krishi Upaj Yojana (VKUY), the Special Agricultural Produce Scheme. It was introduced in the Foreign Trade Policy 2004-2009, under which spice exporters could get duty credit

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<sup>101</sup> Deepika MG's "CHANGING TRADE SCENARIO IN AGRICULTURE AND ITS IMPLICATIONS FOR THE INDIAN ECONOMY", 2005.



equivalent to 5% of exports' free-on-board value (FOB value)<sup>102</sup>. However, the scheme excluded black pepper, chillies and cardamom. In 2006-07, VKUY was renamed Vishesh Krishi and Gram Udyog Yojana (VKGUY) (Special Village and Agriculture Industry Scheme). In the Foreign Trade Policy 2009-14, spices were excluded from the ambit of VKGUY and placed under the Focus Products Scheme (FPS), where the incentive of duty credit was only 2% for spice exporters as against 5% under the VKGUY. The Foreign Trade Policy (2015-2020) has sought to merge several export promotions schemes like FPS, Focus Market Scheme and VKGUY into a single scheme, namely, Merchandise Export Scheme from India (MEIS)<sup>103</sup>. Exported spice commodities are eligible for incentive duty credit under this scheme.

### **3.5.2 NEW ECONOMIC POLICY, 1991**

From 1947 to 1991, India followed a policy by which it promotes the exports and limits the import. Generally, a country focusing on economic development aims at increasing export and reducing imports. Moreover, there were many regulations for reducing imports, including tariff and non-tariff barriers. However, the fact is that imports are also an essential feature as far as a country is concerned. Because a country cannot produce all the products as its own, it should depend on some other country for some products. Fair competition between countries is also necessary for controlling costs, maintaining quality, and developing new products. Most of the time, the people are ignorant about this and focus on increasing export and reducing imports only. Both export and import, which constitute foreign trade, are essential for developing a country and its economy.

In 1991, a historical economic policy was introduced by P V Narasimha Rao by which the tariff barriers were reduced to increase foreign trade. It gives global exposure to the Indian economy for the 1st time. This new economic policy was introduced to implement globalisation, liberalisation and privatisation policies. So, this is also known as the LPG model. New Economic Policy refers to economic liberalisation, deregulation of markets, relaxation in the import tariffs or opening the markets for foreign and private players, and reduction of taxes to expand the economic wings of the country<sup>104</sup>. The Former Prime Minister, Manmohan Singh,

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<sup>102</sup> Thomas and P C Sanil's "COMPETITIVENESS IN SPICE EXPORT TRADE FROM INDIA", Journal of Spices and Aromatic Crops, Vol.28(1), 2019

<sup>103</sup> Thomas and P C Sanil's "COMPETITIVENESS IN SPICE EXPORT TRADE FROM INDIA", Journal of Spices and Aromatic Crops, Vol.28(1), 2019

<sup>104</sup> Sachin N. Mehta's IMPACT OF NEW ECONOMIC POLICY ON INDIA'S FOREIGN TRADE, 2015

is considered the father of the New Economic Policy (NEP) of India, introduced in 1991. The main objectives of the economic policy are;

- ✓ The main objective was to take the Indian economy into globalisation and provide a new thrust on market orientation.
- ✓ It aimed at bringing down the rate of inflation
- ✓ The higher economic growth rate was another objective and also intended to build sufficient foreign exchange reserves.
- ✓ It wanted to remove all unnecessary restrictions to achieve economic stability and convert the economy into a market economy
- ✓ It intended to permit the free flow of goods, services, capital, human resources, and technology at the international level without any unwanted restrictions.
- ✓ It also promoted privatisation in all sectors of the economy, and for achieving the same, reserved numbers of sectors for government reduced.

The liberalisation policies in India gave a gradual essential change in the economy. Agriculture is an essential sector of the Indian economy as it contributes a significant percentage to the total GDP. In the agriculture sector also so many reforms were introduced by the economic policy of 1991. Some points highlight the impacts of liberalisation on Indian agriculture. They are 1. Raising the Production of Foodgrains, 2. Increasing Trend in Horticultural Output, 3. Diversification of Agriculture, 4. Increase in Floricultural Output, 5. Agricultural Exports, 6. Food Processing, 7. Rising Productivity of Agricultural Resources and Others. India's climate, soil characteristics and other physiographic factors are appropriate to spice growth. It helps India cultivate many horticultural crops, including fruits, vegetables, spices, cashew nut, coconut, cocoa, areca nut, root and tuber crops, medicinal and aromatic plants.

The Indian agricultural sector provides food security and livelihood for more than 50% of the population. So, from independence onwards, the agricultural trade was subjected to QRs, canalisation, licenses, quotas, and high tariff rates to regulate the sector's imports and exports to safeguard the interest of domestic producers and domestic consumers<sup>105</sup>. However, this scenario has changed slowly with the initiation of new economic reform of 1991 and external

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<sup>105</sup> Deepika MG's "CHANGING TRADE SCENARIO IN AGRICULTURE AND ITS IMPLICATIONS FOR THE INDIAN ECONOMY", 2005

trade was further liberalised with the WTO Agreement on Agriculture in 1995. These changes amount to an increase in the number of imports. However, at the same time, it also removed the various restriction on exports, and some indirect incentives have been put in place. As a result, India's Export, Imports and Total Trade increased consistently before and after the new economic policy<sup>106</sup>. However, after the new economic policy, it was increased more than before the new economic policy. Thus, there was a positive effect of new economic policy on India's Exports, Imports and Total Trade. Moreover, the new economic policy helped India's spice production and export, increasing significantly.

### **3.5.3 SPICE BOARD OF INDIA**

The spice board was formulated in 1987 by combining the spice board promotion council of 1960 and the cardamom board of 1968. It was constituted on 26th February 1987 under the Spice Board of India Act, 1986. Spice board is an autonomous body and one of the five commodity boards under commerce and industry. The main objectives of the spice board are the export promotion of spices and the development of cardamom<sup>107</sup>. There are 52 scheduled spices under the board. The spice board of India made many legal frameworks to promote and regulate the export of spices. The primary one is the Spice Board of India Act, 1986. The board does not formulate this statute. It was enacted by the parliament but dealt with the board's constitution and provides the board's function, regulations, and powers. Section 3 of the Spice Board of India Act, 1986 deals with the constitution and incorporation of the spice board of India. Section 7 of the Spice Board of India Act deals with the functions of the Spice board. Section 7 reads as follows;

**Sec 7(1) The Board may:-** (i) develop, regulate and promote export of spices; (ii) Provide certificate for export of spices and register brokers (iii) Introduces projects and programmes for promotion of export of spices (iv) Helps and encourage research and studies for improvement of quality, processing, techniques of grading and packaging of spices and spice products (v) Work for the stabilisation of prices of spices for export (vi) establish suitable quality standards and provide certification of quality through "Quality Marking" for exporting

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<sup>106</sup> United Nations Conference on Trade and Development's "TWENTY YEARS OF INDIA'S LIBERALISATION: EXPERIENCES AND LESSONS", United Nations Publication, ISBN 978-92-1-112852-9, 2012.

<sup>107</sup> Pratheeksha's "THE ROLE OF SPICES BOARD IN THE PROMOTION OF EXPORT OF SPICES", Spice India, July, 2000.

spices (vii) quality control of spices for export (viii) grant licences, subject to such terms and conditions on the manufacturers of exporting spices (ix) market any spice, if it considers necessary for the promotion of export (x) give warehousing facilities in abroad for spices (xi) estimate and collect statistics with regard to spices for export and publication (xii) import any spice for sale with the previous approval of the Central Government (xiii) advise the government on matters relating to export and import of spices<sup>108</sup>.

**Sec 7(2) The Board may also:-** (i) advance co-operative efforts among cardamom growers (ii) Make sure re remunerative returns to growers of cardamom; (iii) give financial assistance for improved methods of cultivation of cardamom, for replanting cardamom and for extension of cardamom growing areas (iv) provide regulations for the sale of cardamom and stabilisation of prices of cardamom (v) give training in cardamom testing and fixing quality standards of cardamom (vi) promote the consumption of cardamom and introduce programmes for that purpose (vii) register and licence brokers of cardamom and persons engaged in the business of cardamom (viii) Ensure the marketing of cardamom; (ix) estimate and collect statistics from growers, dealers and any other persons relating to the cardamom industry and publish the data (x) ensure better working conditions and improvement of incentives for workers and (xi) undertake, help or promote the scientific, technological and economic research<sup>109</sup>.

The Spice Board of India Act also provides the exporting certificate, controlling power of central government, power to make regulations and funds and budget of the board. The spice board has the power to make new regulations with the previous consent of the parliament, and all rules and regulations under the Spice Board of India Act should lay before parliament for consent, suggestion or modification. A schedule is also there prescribing the different 52 types of spices under the ambit of the Act and also states that the Act's provisions are also applicable to any curry powders, spice oil, oleoresins, and other mixture spice content is predominant. The first statute enacted by the spice board using the power given by Spice Board Act, 1986 is that the Spice Board Rules, 1987. This statute clarifies the parent Act. It explains the provisions of the Spice Board of India Act and deals with the committee of the board, functions, and the powers of chairman and board members. It also contains the application forms for granting the certificate of registration or renewal, exporting the certificate, spice house certificate and appeals.

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<sup>108</sup> THE SPICES BOARD ACT, 1986. [https://commerce.gov.in/wp-content/uploads/2020/04/SB\\_Act\\_Rules\\_English.pdf](https://commerce.gov.in/wp-content/uploads/2020/04/SB_Act_Rules_English.pdf) accessed on 01/06/2021.

<sup>109</sup> Ibid

Afterwards, the spice board of India enacted many rules and regulations. Now the spice board of India provides all details about every spice, and there is a farmer's app that supports farmers and gives essential information. It also provides all the cultivation details, including cultivation practices, cost of cultivation and harvest calendar. The board is also conducting development programmes, including developing small cardamom and large cardamom, spice cultivation development in northeastern states, post-harvest improvement programmes, and promotion of organic farming and social security programmes.

The spice board also keeps some quality standards for exporting spices. There is a spice evaluation laboratory under the spice board to evaluate spice quality and determine whether it satisfies the quality standard prescribed by the Bureau of Indian standards and appropriate international organisations. The exporters of spices should check the mandatory sampling & testing of the export quality of spices and spice products. It can ensure by using the quality evaluation system of the spices board. Another important thing is that the spice exporters should register under the board, and the licences or certificate of the board is necessary for exporting spices or spice products. Moreover, there are many exports development programmes on the part of the spice board. The spice board provides important market centres, and an e-auction programme is also there to support the spice producers<sup>110</sup>.

### **3.5.4 EXPORT INSPECTION COUNCIL AND EXPORT (QUALITY CONTROL AND INSPECTION) ACT, 1963**

The Export (Quality control and inspection) Act was enacted in 1963 by the parliament of India. The applicability of the Act shall be the extent to the whole of India. The vital objective of the Act is to provide good quality management, assessment and other matters which are essential for improving the overseas trade of India. Section 3 of the Export (Quality Control and Inspection) Act, 1963, provides for establishing the Export Inspection Council. It is a corporative body. The essential functions of the export inspection council are<sup>111</sup>;

(i) Inspecting all the exporting commodities and take necessary measures for the enforcement of quality measures,

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<sup>110</sup> Pratheeksha's "THE ROLE OF SPICES BOARD IN THE PROMOTION OF EXPORT OF SPICES", Spice India, July, 2000.

<sup>111</sup> The Export (Quality control and inspection) Act, 1963  
<https://www.indiacode.nic.in/bitstream/123456789/1591/4/A1963-22.pdf> accessed on 08/06/2021.

- (ii) providing essential aids for quality control and inspections to the exporting agencies,
- (iii) including the experts in the field of trading of goods or commodities which are having knowledge and experience
- (iv) forming specialist committees for solving or investigate any relevant issue.

It also should follow all the orders from the central government and duty to consider all government policies. After consultation with the central government, the council declares the standard specification and quality control and inspection process, which are essential for exporting a particular commodity. If the commodity satisfies all the essential features, the central government will provide it with a certificate of approval without prohibited international trade<sup>112</sup>.

Section 4 of the Export (Quality Control and Inspection) Act, 1963, deals with the director of the inspection and quality control by the central government. He acts as the secretary, ex officio of the export inspection council, and three other ex officio members and a chairman in the council. The government of India appoints the chairman. The three ex officio members are the director of the Indian Standards Organization. They shall be the honorary advisor on standardisation to the Central Government, Director General of Commercial Intelligence and Statistics. One person shall be the Agricultural Marketing Advisor to the Central Government. Moreover, the central government also can appoint any other member to the council as they think fit<sup>113</sup>.

There is an appellate body to challenge the orders passed by the council, and it has the status of a civil court for calling of any witness or document, inspecting any records, appointing commissions and getting evidence of affidavit. If any person who got an order from the council or appellate body by using unfair or fraudulent practices shall be penalised analysing the Act's provisions. The government is empowered under the Act to enact rules for the implementation of the Act. To execute the Act's provisions, the government enacted The Export (Quality Control and Inspection) Rules, 1964. The government also enacted The Export (Quality Control and Inspection) Amendment Act, 1984, for modifying the provision of The Export (Quality Control and Inspection) Act, 1963.

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<sup>112</sup> Ms. Shashi Sareen's "FOOD EXPORT CONTROL AND CERTIFICATION", 2004.

<sup>113</sup> The Export (Quality control and inspection) Act, 1963

<https://www.indiacode.nic.in/bitstream/123456789/1591/4/A1963-22.pdf> accessed on 08/06/2021.

### **3.5.5 FOOD SAFETY AND STANDARD ACT 2006**

The Food Safety and Standards Act was enacted in the year 2006 by the parliament. Its extent to the whole of India. It is an Act to codify the laws relating to food and to formulate the Food Safety and Standards Authority of India<sup>114</sup>. The authority regulates the scientific standards food articles and to ensure the quality in their manufacture, storage, sales, distribution, and to make sure the availability of safe and quality food for human consumption and for matters connected in addition to that<sup>115</sup>. The main aim of the Act is to ensure food safety and to reduce all kinds of adulterations.

Section 4 of the Act provides for the establishment of the Food Safety and Standards Authority of India. The authority is a corporate body having its head office in Delhi. The Food Authority consists of a Chairperson and other twenty-two members, one-third of whom shall be women<sup>116</sup>. There should be seven members, one from each department from the department of agriculture, commerce, consumer affairs, food processing, health, Legislative affairs, small scale industries, and the seventh one shall be members ex officio. All seven should be not below the rank of the joint secretary to the government of India. There also need two representatives from the food industry: one from small scale industries and two representatives from consumer organisations. There also need three eminent food technologists or scientists, five members appointed by rotation every three years, two persons to represent farmer's organisations, each representing the states and union territories and one person representing retailer's organisations.

Food Safety and Standards Authority is the statutory body established under the Ministry of Health & Family Welfare, Government of India. Section 16 of the Food Safety and Standards Act deals with the duties and functions of the food authority. Some of them are<sup>117</sup>;

- ✓ Regulate the manufacture, processing, distribution, sale and import of food to ensure safe and wholesome food.

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<sup>114</sup> Vinay Vaish and Urmi Chudgar's "LAWS GOVERNING THE FOOD INDUSTRY IN INDIA", Vaish Associates, 2013.

<sup>115</sup> guidance document on "FOOD SAFETY MANAGEMENT SYSTEM", Food Safety and Standard Authority of India, 1<sup>st</sup> edition, October, 2018.

<sup>116</sup> FSSAI. <https://fssai.gov.in/cms/food-safety-and-standards-act-2006.php>

<sup>117</sup> The Ministry of Law and Justice, Food Safety and Standards Act, 2006 <https://www.rctcpgi.org/pdf/FOOD-ACT.pdf>

- ✓ Provides guidelines and standards with food articles and specifying an appropriate system for enforcing various standards notified under this Act
- ✓ Limits for the use of food additives, crop contaminants, pesticide residues and antibiotics.
- ✓ Provide scientific assistance and technical advice to the Central and State Governments in framing the policy and rules in this area
- ✓ Provide scientific and technical support to Central and State Governments to improve cooperation with international organisations.
- ✓ Contribute to the international technical standards for food

These are some essential functions of food authority. Even though it did not include the export of food, it indirectly affects the exporting food items since there is manufacturing, processing, distribution, and sales under the preview of the Act.

The food authority is responsible for the establishment of an advisory committee according to section 11 of the Act. The critical objective of the advisory committee is to advise the food authority in regulating its duties and obligations. The Advisory Committee consist of two members. Each represents agriculture, the food industry, consumers, food laboratories and relevant research bodies. All the Commissioners of Food Safety and the chairpersons of the Scientific Committee are ex officio members<sup>118</sup>. The Chief Executive Officer is also an ex officio Chairperson of the Advisory Committee.

### **3.5.6 BUREAU OF INDIAN STANDARDS (BIS)**

The Bureau of Indian Standards (BIS) Act 2016 establishes the Bureau of Indian Standards (BIS) as the National Standards Body of India<sup>119</sup>. The Act was enacted in 1986 and came into existence in December 1986. However, the Act was replaced in 2016 by a news Act and is applicable now. The objective of the Bureau of Indian Standards is to provide standardisation, marking and quality certification of goods. It helps provide safe, reliable quality goods, minimise health hazards to consumers and promote exports and imports<sup>120</sup>. Its Headquarters at New Delhi. The five Regional Offices are at Chennai (Southern), Kolkata (Eastern), Mumbai

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<sup>118</sup> Central Advisory Committee - Food Safety Helpline. <https://foodsafetyhelpline.com/central-advisory-committee/> accessed on 29/05/2021.

<sup>119</sup> Bureau of Indian Standards (BIS). <https://www.civilserviceindia.com/current-affairs/articles/bureau-of-indian-standards-bis-/184>

<sup>120</sup> BIS Act, 2016. <https://bis.gov.in/wp-content/uploads/2020/12/BIS-Act-2016.pdf> accessed on 29/05/2021.



(Western), Delhi (Central) and Chandigarh (Northern). Branch Offices (BOs) under the regional offices offer certification services to the industry and effectively link State Governments, industries, technical institutions, and consumer organisations.

The Act gives power to the union government to make the standard mark compulsory for certain notified goods, processes and articles. It helps to ensure the safety of the environment, public interest, national security, or to prevent unfair trade practices<sup>121</sup>. It allows simplified assessment schemes and conformity certificates. If some products contain the quality mark but do not fulfil the quality standard, then the authority can recall the certificate. The activities performed by the BIS include; Standards Formulation, Product Certification Scheme, Compulsory Registration Scheme, Foreign Manufacturers Certification Scheme, Hall Marking Scheme, Laboratory Services, Laboratory Recognition Scheme, Sale of Indian Standards and Consumer Affairs Activities.

The Bureau of Indian standards can fix the quality standards, and it can only be renewed or reviewed after five years. There are 30 standards found in the Bureau of Indian Standards related to spices and condiments, which shall help mark quality and loosen the trade barriers among the nations. There is compulsory certification of those products, which can impact the health and safety of consumers at large. Spices Board actively interacts with BIS to fix the standards for other spices and upgrade existing ones. Moreover, BIS has prescribed quality standards for 16 spices, spice powders, concentrates and oleoresins.

### **3.5.7 AGMARK**

AGMARK is a certification mark used to certify agricultural products in India known as Agriculture Certification Mark. Its objective is to assure specific standards approved by the Directorate of Marketing and Inspection is present in the product. The Marketing and Inspection directorate is the office attached to the Department of Agriculture, Cooperation and Farmers Welfare. It comes under the Ministry of Agricultural & Farmers Welfare, which is part of the Government of India<sup>122</sup>. The AGMARK Head Office at Faridabad (Haryana) was established under the Agricultural Produce (Grading and Marking) Act of 1937 (and amended

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<sup>121</sup> BIS Act, 2016. <https://bis.gov.in/wp-content/uploads/2020/12/BIS-Act-2016.pdf> accessed on 29/05/2021.

<sup>122</sup>AGMARKScheme<https://dmi.gov.in/Documents/Final%20Text%20Matter%20related%20to%20QC%20Section.pdf> accessed on 28/05/2021.

in 1986)<sup>123</sup>. The AGMARK standards now cover quality guidelines for 224 different commodities. The objectives of the AGMARK scheme are:

1. To assure pre-tested quality & purity for the consumers.
2. To assist the producers of good quality products in having better revenues.
3. To have a high sale of products in the market with better composition and quality.
4. To avoid the practice of adulteration in the market.

AGMARK standards include Spices grading and marketing rules for spices like compound asafoetida, curry powder, mace, mixed masala powder, nutmeg, poppy seeds and saffron. After inspection and ensuring that the necessary facilities like equipment and laboratory are available, the authorities allow them to use the AGMARK symbol, ensuring quality standards<sup>124</sup>.

### **3.5.8 INDIAN INSTITUTE OF SPICES RESEARCH**

The Indian Institute of Spices Research or IISR is a constituent body of the Indian Council of Agricultural Research or ICAR. It is a central Institute devoted to research on spices and located in Kozhikode or Calicut. It was established in 1976 as a Regional Station of the Central Plantation Crops Research Institute or CPCRI at Kasaragod engaged in research on spices<sup>125</sup>. A National Research Centre for Spices was developed in 1986 with its headquarters at Kozhikode, Kerala. It is established by merging the erstwhile Regional Station of CPCRI at Kozhikode and Cardamom Research Centre at Appangala in Karnataka and realising Spices Research's importance in India. This Research Centre upgraded to Indian Institute of Spices Research on 1st July 1995<sup>126</sup>.

The Indian Institute of Spice Research conducts both internal funded and externally funded research. Its research includes;

- ✓ Collect, evaluate and conserve the various spices

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<sup>123</sup> Ibid

<sup>124</sup> Krishnakumar's Quality Management of Agricultural Products in India, 2019 [https://www.researchgate.net/publication/330533732\\_Quality\\_Management\\_of\\_Agricultural\\_Products\\_in\\_India](https://www.researchgate.net/publication/330533732_Quality_Management_of_Agricultural_Products_in_India) accessed on 29/05/2021.

<sup>125</sup> ICAR-Indian Institute of Spices Research. <https://spices.icar.gov.in/> accessed on 07/06/2021.

<sup>126</sup> Ibid

- ✓ Development of high yield varieties of spices
- ✓ Development of high quality or high resistance varieties of spices
- ✓ Provides propagation methods helping the large-scale production
- ✓ Find out new technologies for large-scale production
- ✓ Practical techniques for disease prevention and harvesting

### **3.6 IMPACT AND CHALLENGES ON THE SPICE EXPORT**

Both international and national legal frameworks affected the spice trade positively or negatively. Most of the laws making are for the benefit of the sector and the country's economic growth. However, some of them may cause some drawbacks to the spice export. So, there are some challenges faces by the spice trade due to these legal provisions, including the difficulties caused by quality standards. Even though the quality standards are made for the benefit, the different quality standards followed by different countries, the cost and time required to satisfy the quality standards remain a challenge. There are also have some areas where there is not sufficient law is available. For example, the law is not sufficient to prevent the use of toxic substances and control the risk on price<sup>127</sup>. The impact of the different legal provisions on the spice export and the need for new provisions and policies are discussed under the head.

#### **IMPACT OF THE WTO AGREEMENTS ON SPICE EXPORT**

The WTO holds a remarkable place in the international trade and spices export since most trading nations are members. One of the significant agreements which directly affect the international export of spices is Agreement on Agriculture. It enlarged the market access and opportunities of the spice export sector. As spice cultivation is highly labour intensive, developing countries may obtain a higher share of the market by taking advantage of their low labour costs. Developing countries will also be able to continue their support programmes for reducing freight and transportation disadvantages. It will give their products a competitive edge<sup>128</sup>. However, at the same time, since the Indian quality spices are costly for production and AOA subsidies were stopped, it became tough for the Indian producers to compete with

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<sup>127</sup> Thomas and P C Sanil's "COMPETITIVENESS IN SPICE EXPORT TRADE FROM INDIA", Journal of Spices and Aromatic Crops, Vol.28(1), 2019.

<sup>128</sup> Rani and Pooja's "A STUDY OF WTO AND AGRICULTURE SECTOR IN INDIA", International Journal of Multidisciplinary Research and Development, 2015

other countries. Now also there were competitions from many countries and India ranked Second from the earlier first position. The MFN and GSP tariff schedules of developed country markets show higher tariffs for ground and processed spices and spices in containers for retail sale. The progressive reduction could bring competitive advantages for spice-producing countries. However, the erosion of preference margins for developing countries will remain a significant concern<sup>129</sup>.

Another important agreement is the agreement on the Application of Sanitary and Phytosanitary Measures (SPS), which gives food safety standards. Since the spices are also part of food crops, it is binding on it. The treaty applies some limitations on pesticides and other chemicals used in food crops and even prohibits some among them. It included most of the common pesticides used in developing countries like India. So as far as developing nations are concerned, they face a considerable challenge to get quality pesticides or other techniques. It may be costly, and availability is also a problem. The subsequent agreement is the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), intended to protect the intellectual property rights of spices in markets outside our nation for the spice export sector. However, if the market nation does not party to this treaty, then the safety of our intellectual property rights is still in question. The TRIPS provides a minimum standard of protection to the exported spices in outside markets among member countries. However, the most crucial challenge is that if our nation's laws are not as strong as that of other markets of Indian spices, then there are chances of misusing the same. In the past, innovation through reverse engineering provided an essential source of technology to developing countries, particularly SMEs. This source is not available under a stricter IPR regime.

There are agreements on safeguards that allow nations to impose import suspension for a short period as a safety measure. However, if our market nations take such a measure, the spice export may be in trouble. The agreement on SCM tries to remove the export subsidies, which may negatively affect the export of spices. Labelling standards (e.g., including nutrition labelling standards), packaging standards (the use of biodegradable packaging material) fall under the TBT Agreement<sup>130</sup>. These standards are becoming increasingly crucial to success in the export trade. Environmental considerations have drastically altered packaging regulations in many countries. These create new problems for exporting countries at a low level of

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<sup>129</sup> Bhalla V K's "CRITICAL ANALYSIS OF WORLD TRADE ORGANISATION", ICSI, New Delhi, Vol. 22, January 2002.

<sup>130</sup> B. Sheshagiri and G. G. Honkan's "IMPACT OF WTO ON INDIAN AGRICULTURE: PERFORMANCE AND PROSPECTS", 2011.

technology, as they may have to import most of their packaging materials. There may have different voluntary standards for a different country, which may cause more cost for the spice export.

As a result of the Agreements, all the quantitative restrictions are to be abolished, and non-tariff measures were replaced by tariff measures during the implementation period. However, there are specific protection provisions in the form of safety triggers, customs duties and anti-dumping clauses and countervailing duty rights available to India. As subsidies are reduced, the use of environmental unfriendly agrochemicals is discontinued, and the cost of cultivation rises, the prices of spices in the international market are likely to move upward gradually. Thus, under the WTO regime, no one can manage price movements. Developing countries are also expected to export more crushed and ground spices. However, the control of microbial loads will be a significant factor for success in that trade. The spice-producing countries will need to adopt more scientific post-harvest and processing technology and practices to take advantage of the market access opportunities<sup>131</sup>. However, on account of market access, if more spice items are allowed to be imported to India, the domestic prices of spices here may nearly collapse. It would adversely affect a considerable number of workers, most ostensibly the rural female workers and a very significant proportion of income and thereby the entire agricultural economy of India. With the shift from plastics to biodegradable packaging material, India needs to do more research on packaging materials for spices.

Thus, the spice industry of India needs to make a detailed analysis of the WTO provisions on safeguards, special safeguards, domestic and export subsidies, countervailing duties, anti-dumping and severe injury to carry out spices trade under the new world trade order. With the reduction in domestic subsidies provided for in AOA, production advantages may shift to more efficient countries or producers for certain spices. The production of high volume, low value, labour-intensive spice crops is likely to move to low income, labour-surplus countries. Farmers in India may also start looking at alternative crops, which will give them better returns. The spice production map of the world and that of India may therefore change in the next few years.

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<sup>131</sup> Bhalla V K's "CRITICAL ANALYSIS OF WORLD TRADE ORGANISATION", ICSI, New Delhi, Vol. 22, January 2002.

## **IMPACT OF FREE TRADE AGREEMENTS ON SPICE EXPORT**

Some free trade agreements between nations intended to remove trade barriers and promote no tariff or a lesser tariff. As far as the export of spices is considered, it is beneficial since there is no more import duty. After the ISLFTA was signed, there was a tremendous increase in the import of spices, especially black pepper and nutmeg, from Sri Lanka to India. It caused a fall in domestic price, and there was no chance to export spices to Sri Lanka since it was a smaller market of spices compared to India. However, the ISLFTA has helped the spice oils and oleoresin industry of Kerala to get cheap spices, especially light berries of black pepper and nutmeg, through the duty-free import of spices from Sri Lanka<sup>132</sup>. In the Indo-Singapore comprehensive Economic Cooperation agreement, importing cheap spices to India increased, affecting the internal trade. Singapore is not a spice producing country but a trade centre of spices. As there is no import duty or export duty on spices trade, these spices are imported to Singapore from countries like Malaysia, Indonesia and Vietnam and then re-exported to several trading centres, including India. This region increased competition for the exporting sector of India.

## **POLICY FRAMEWORKS AND SPICE EXPORT**

At the policy level, trade facilitation and infrastructure are often taken in the general sense and only partly address the particular issues related to the transaction costs and reduction of risks in the context of agricultural exports. The invisible infrastructural facilitation, such as easy documentation, customs procedures, and fair regulatory regimes specific to the export commodities, are required to enhance trade from developing countries. In India, the economic policy of 1991 helped increase India's international trade by removing various restrictions<sup>133</sup>. Since imports increased, it affected the domestic market. However, the policy was a positive sign towards the international export of spices from India. Afterwards, there were many

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<sup>132</sup> Thomas Varghese's "INDIA'S FREE TRADE: A CRITICAL STUDY", The Hindu business Line, July, 2006.

<sup>133</sup> Deepika MG's "CHANGING TRADE SCENARIO IN AGRICULTURE AND ITS IMPLICATIONS FOR THE INDIAN ECONOMY", 2005

policies introduced to promote spice export. The spice board conducts various programmes to promote and market Indian quality spices.

The spice board also adopted policies to improve the quality of spices and increasing production. However, the spice board can adopt more policies to train the existing farmers and familiarise various schemes under the board<sup>134</sup>. The quality and price assurance can also provide by the spice board. The government can also adopt some policies which promote the exporting of spices. The government policies may help the spice industry find more markets and provide a sufficient quantity of spices.

### **SPICE BOARD ON SPICE EXPORT**

As far as the spice trade is concerned, the spice board is the most important organisation, which provides many programmes to increase export. The major challenge in this scenario is the registration and its procedure for exporters, without which international trade is not possible. Another challenge is the unawareness of people about the board or its programmes. The quality standards imposed by the spice board are also a challenge for the exporters. Under the Spice Board, all registered spice exporters, who regularly submit their quarterly returns, are eligible to avail assistance under the Export Development Scheme, subject to the scheme guidelines<sup>135</sup>. However, the spice board is not directly getting into farmers and their problems. There are chances to cheat the farmers by the exporting companies. There is no legal provision that set a fixed minimum price for the farmers.

The spice parks established by Spices Board, providing advanced infrastructure facilities for quality improvement, grading, packing, and warehousing, is one such scheme to enhance the quality and safety of spices from India<sup>136</sup>. However, the charges for quality improvement, grading and packing are an extra burden to the farmers and exporters. The quality standards are changing, costly and time-consuming. Most of the time, it is unaware to the farmers. That is why India is unable to supply a sufficient quantity of quality spices. The spice board can introduce new policies to improve this situation.

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<sup>134</sup> Pratheeksha's "THE ROLE OF SPICES BOARD IN THE PROMOTION OF EXPORT OF SPICES", Spice India, July, 2000.

<sup>135</sup> Pratheelsha's "THE ROLE OF SPICES BOARD IN THE PROMOTION OF EXPORT OF SPICES", Export Promotion Council, Vol-3, Issue 3.

<sup>136</sup> Citizen's Charter of "SPICE BOARD", [Spices Board \(indianspices.com\)](http://Spices Board (indianspices.com)) accessed on 17<sup>th</sup> August 2021.

## **VARIOUS STANDARDS ON SPICE EXPORT**

There is the Bureau of International Standards which prescribes quality standards of the goods exported. Here the challenge is to maintain the quality and to do the procedure for getting the quality certificate. Moreover, the Codex Committee on Spices and Culinary Herbs prescribes quality standards of spices and the Export Inspection Council, which also provides the quality of exporting products. The Food Safety and Standards Authority provides a quality standard of food crops produced or consumed, and it will also affect the spices since it is a food crop produced in India. There are also AGMARK and Bureau of Indian standards, which provides quality standards to spices. So, different quality standards under different Acts are major challenging factors to the spice export sector<sup>137</sup>. The people may not be aware of these quality standards or may not know how to fulfil them. The different nations may adopt different quality standards for importing spices. So, if different markets of India do so, then it will be too complex for the farmers to identify and costly to satisfy the different quality standards.

In India, the legal provision providing a codified standard of quality of spices is lacking. The different legal provisions under different authorities are confusing. The spice board also provides data on spice export qualities to different nations. However, it is changing according to the national policies of each nation. So, it is difficult for the farmers to decide on quality standards, and it is costly to keep high-quality standards.

## **QUALITY EVALUATION AND SPICE EXPORT**

The exporting of spices to most of the countries require mandatory pre-shipment testing by the spice board. The spice laboratory is becoming an international centre of excellence in the analysis of spices<sup>138</sup>. The examination in the laboratory is helpful to ensure that the spices exported are in conformity with the specifications laid down by the appropriate international organisation and food regulations of the destination countries. However, there are only limited quality evaluation laboratories are available. So, the evaluation is time-consuming and costly. If the spices cannot be evaluated on time, there are chances to decay, and then they could not

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<sup>137</sup> Thomas and P C Sanil's "COMPETITIVENESS IN SPICE EXPORT TRADE FROM INDIA", Journal of Spices and Aromatic Crops, Vol.28(1), 2019.

<sup>138</sup> Guidance Document on "FOOD SAFETY MANAGEMENT SYSTEM", Spices, Food Safety and Standard Authority of India, 1<sup>st</sup> edition, October, 2018.



export since the spices are perishable commodities. The different importing countries prescribe different quality standards and evaluation strategies, and it is also changing. This inconsistency is a challenge to the spice exporting sector.

## **CONTAMINATION OF SPICES**

Contamination of spices with pathogenic bacteria frequently occurs partly because of growing conditions, sanitation, environmental, and hygiene practices among harvest workers and lack of good agricultural and manufacturing practices in some developing countries. Bacterial loads on untreated spices can be high, resulting in food safety and spoilage risks to fresh and processed foods. A recent FDA study found that most spice importers into the United States decontaminate their spices because most bulk spice shipments undergo a pathogen reduction treatment following entry to the United States. Moreover, before releasing for retail sale, as recommended in industry guidance by the American Spice Trade Association. Treatment methods include fumigation, irradiation, and vacuum-assisted steam used to remove microbial contamination. In India, there is no positive list of fumigants under food regulations. The Central Insecticides Board and Registration under the government of India place methyl bromide and aluminium phosphide in their restricted list. However, there is no specific ban on sulfuryl chloride and ethylene oxide<sup>139</sup>.

In India, where many spice oleoresins are produced, a regulated list of solvents that can be used to extract oleoresins does not currently exist. However, the Indian Food Authority has recently come out with a regulation draft on processing aids wherein the solvents for the extraction of oleoresins, along with the residual limits, are specified. There are thousands of chemicals with flavouring properties, so most countries have relied on a few expert committees to provide the safety evaluations needed to put together a list of approved flavourings. The FEMA expert panel was set up as an independent scientific panel by the U.S. flavour industry to help the FDA in evaluating flavours.

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<sup>139</sup> Carolyn Fisher's "A REVIEW OF REGULATIONS APPLIED TO SPICES, HERBS, AND FLAVORINGS", Journal of AOAC International Vol-102, No-2, 2019

## **USE OF PESTICIDES AND UNLAWFUL SUBSTANCES**

The Indian spice industry has increased a more sensible future starting late, especially in Maximum Residue Limit (MRL) and Integrated Pest Management (IPM) consistence focused on the passage grandstand<sup>140</sup>. However, there are still much to be done. One of the critical issues impacting viability in the fragment fuses the excess use of agrochemicals, which has an environmental and social impact. The contaminants, pesticide developments and toxins remained fundamental issues. The troubles concerning these include the problematic use of unlawful substances, pesticides, improper exchange of engineered substances, nonattendance of cautious equipment provoking human prosperity hazards, and water spoiling. The mishandling of agrochemicals prompts high development levels, hence provoking the expulsion of things and high costs for shippers. Moreover, improving farmer occupations is a vital issue in the cultivating division, including spices.

There are some legal provisions that restrict certain pesticides and substances. The international standards of spice export and the internal standards imposed by some importing markets also restrict the use of specific components during the cultivation and processing<sup>141</sup>. However, these substances are still available in India, and some are the most commonly used ones. So, it is challenging to avoid the use of certain unlawful substances, including pesticides. There must need an essential legal framework in the area to prevent the use of dangerous substances. It will be helpful to avoid huge losses and attain food safety.

## **MARKETING DIFFICULTIES**

In India, the exporting promotions of spices are mainly dealt with by the Spice board. The spice board organises some programmes for marketing Indian quality spices. However, the main issue faced by the spice industry of India is low productivity. In the Indian spice industry, poor product quality at the farm level is another problem hindering practical price realisation by the producer. The insufficiency of legal provisions, inadequate surplus for exports, and insufficient quantities of quality spices also affect the marketing of spices. The marketing programmes are

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<sup>140</sup> Dr Swati Mishra and Mr Padam Bhushan's "SPICE INDUSTRY IN INDIA: CHALLENGES & OPPURTUNITIES", International Journal for Research in Law and Management, Vol-4, Issue-6, 2018

<sup>141</sup> Dr Swati Mishra and Mr Padam Bhushan's "SPICE INDUSTRY IN INDIA: CHALLENGES & OPPURTUNITIES", International Journal for Research in Law and Management, Vol-4, Issue-6, 2018

insufficient and to adopt a policy for marketing of spices needs the capacity to supply according to the demand. So, on the one hand, they have to deal with hundreds of small-scale farmers who want a reasonable price for the product. On the other hand, exporters should comply with quality requirements while delivering the product<sup>142</sup>. It requires costly quality management systems and the training of farmers. Sufficient legal provisions can improve the quality of the product, and training can be given by introducing new policies.

## **COMPETITIVENESS**

The concept of competitiveness measures a country's advantage or disadvantage in selling the products in the international markets. Typically, export competitiveness is linked to or measured in terms of export growth and shares of export markets. Competitiveness in spice exports increased relate to the impact of trade liberalization policies implemented in the Indian economy. Price instability at the international level can affect the trade patterns and benefits from trade along the value chain, with rising prices affecting importing countries and the falling prices adversely affecting producers and exporting countries. The cost of production and productivity levels of the commodity can significantly influence the competitiveness of a country. Productivity enhancements in land and labour inputs could positively influence competitive advantage in spice export trade<sup>143</sup>.

All these components which determine the competitiveness, including the price, cost, productivity and export surplus, are controlled and improved through various legal frameworks and policies. So, the competitiveness of a country is directly affected by the laws and policies. In India, the policies taken in favour of exports help increase the competitiveness of the country. However, the lack of a legal framework to ensure price and increase productivity are challenges to competitiveness<sup>144</sup>. Indian quality spices have great demand worldwide. The availability of quality spices should be enhanced through various policies to improve the competitiveness of spices.

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<sup>142</sup> Sajith Mohan, Sheena. S.Rajan and Unnikrishnan. G's "MARKETING OF INDIAN SPICES AS A CHALLENGE IN INDIA", International Journal of Business and Management Invention, Volume 2, 2013.

<sup>143</sup> Thomas and P C Sanil's "COMPETITIVENESS IN SPICE EXPORT TRADE FROM INDIA", Journal of Spices and Aromatic Crops, Vol.28(1), 2019.

<sup>144</sup> Ibid

## Chapter - 4

# THE LEGAL EFFECT OF COVID19 ON INDIAN SPICE EXPORT

### 4.1 LITERATURE REVIEW

1. In 2020 Muhammad Adnan Shereen, Suliman Khan & Abeer Kazmi wrote an article on “COVID-19 INFECTION: ORIGIN, AND CHARACTERISTICS OF HUMAN CORONAVIRUSES”. It states that the COVID19 is a pathogenic viral infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It is highly transmittable, which emerged in Wuhan, China, and spread worldwide.
2. In 2020 M Z M Nomani and Madiha Tahreem, in their article “CONSTITUTIONALITY AND LEGALITY OF CORONA VIRUS (COVID-19) IN INDIA”, discusses the legal effect of the pandemic and legal solutions to prevent its spread. The preventive strategy of the COVID-19 is the disaster management measure under Sections 6 and 10 of the Disaster Management Act, 2005. Moreover, Sections 38 and 72 of the Act justifies the nationwide lockdown.
3. In 2021 Pepita Barlow, Martin McKee and David Stuckler, in their article “COVID-19 AND THE COLLAPSE OF GLOBAL TRADE”, stated that the COVID-19 pandemic is a health crisis. Still, its effect extended to many aspects of the international order, including international trade. The global merchandise trade recorded its largest-ever one-period decline in the second quarter of 2020.
4. In 2020 Organisation for the Economic Co-operation and Development, in their document “COVID19 AND INTERNATIONAL TRADE: ISSUES AND ACTIONS”, stated that trade is essential to saving lives and livelihoods. However, in the context of the economic stress from COVID19, it is necessary to avoid an upsurge of the current trade tensions.

5. In 2021 Kazunobu Hayakawa and Hiroshi Mukunoki, in the article “THE IMPACT OF COVID-19 ON INTERNATIONAL TRADE: EVIDENCE FROM THE FIRST SHOCK”, investigates the effect of COVID19 on exporting and importing countries. In exporting countries, the COVID19 damage manifested as a reduction in the scale of production scale and the export supply in that country.
6. In 2020 Santosh Gupta and Ashwini Chandak’s research paper “IMPACT OF COVID19 ON SPICE SECTOR IN INDIA: SITUATIONAL ANALYSIS” analysed the different places, cultivation of spices and the problems faced by farmers in the COVID19 scenario. There are harvesting, post-harvesting, sales, marketing, processing and exporting issues due to the pandemic and lockdown.
7. In 2021 Devi Priya B and Thyagarajan M, in their paper “AN INVESTIGATION ON PRODUCTION AND PRODUCTIVITY EXPORT PERFORMANCE OF SIGNIFICANT SPICES IN THE COUNTRY INDIA”, analysed the quantitative data of spice trade with the economic situations. During FY21, the Indian export of spices witnessed 30% of volume growth, 23% in rupee, 17% in the dollar and attained a new record.
8. In 2021 Namita Ashish Singh, Pradeep Kumar and Jyoti, in their research article “SPICES AND HERBS: POTENTIAL ANTIVIRAL PREVENTIVES AND IMMUNITY BOOSTERS DURING COVID-19”, studied the antiviral properties of spices and herbs. The antiviral qualities of spices and herbs, mainly ginger, curcumin, black pepper, cinnamon, clove, neem, garlic, basil, are used during COVID19 highlighted in this.
9. In 2020 Dr Luxita Sharma, in the article “IMMUNOMODULATORY EFFECT AND SUPPORTIVE ROLE OF SPICES IN MANAGEMENT OF COVID- 19”, described various researches and experiments about the antiviral properties of spices. It states that fresh ginger is effective against the Human Respiratory Syncytial Virus. Cumin oil has an immune-modulatory effect, and turmeric is effective against diseases spreading viruses like Zika, H1N1 H5N1, hepatitis B, hepatitis C and HIV.
10. In 2021 Hema Yadav, in the article “IMPACT OF COVID19 ON AGRICULTURAL MARKETING IN INDIA”, deals with the demand for spices after the lockdown period and broken supply chain. The agricultural marketing system needs to respond to match

supply with demand and regenerate the operational viability of markets and processing units as the pandemic unfolds.

11. In 2020 Arvind Kumar, in his article “COVID-19: ECONOMIC IMPLICATIONS AND TRADE POLICY RESPONSES”, describes various trade policies adopted by nations during the pandemic period to develop the economy. The different WTO members are trying to give transparency regarding trade matters using the protective measures related to trade in the context of the pandemic.
12. In 2020 Anirudh Shingal, in his paper “RESPONDING TO THE COVID-19 CRISIS: POLICY PRIORITIES FOR INDIA”, discussed different policy frameworks, including waiving specific regulations already adopted by the Indian government and the remaining measures that can take to increase trade and develop the economy. India extended the foreign trade policy for one year and provided some relaxation in the banking, logistics, and customs fields. Some critical policies and regulations are under consideration.
13. In 2020 the Food and Agricultural Organisation of the United Nations and World Health Organisation, in their interim guidance "COVID19 AND FOOD SAFETY: GUIDANCE FOR FOOD, BUSINESSES," gave specific guidelines by the food businesses to ensure the safety of food during the pandemic period. It provides the food chain's need for integrity and that adequate and safe food supplies are available for consumers.
14. In 2021 the department of commerce, in their ANNUAL REPORT 2020-21, provided the export promotion methods and regulations for improving the spice sector adopted by the authorities. It evaluated the export of spices and new initiatives of spice board. The Board has launched or partnering some collaborative projects traceability, sustainability, bio-diversity and certification to enhance the export of spices.

## 4.2 COVID19 PANDEMIC

In the year 2019, the COVID19 or Corona Virus Disease outbreak started. It mainly causes a respiratory illness with a start flue like symptoms and is caused by a new strain of coronavirus. The disease also has effects like loss of smell and taste, pneumonia, respiratory illness, and shortness of breath, leading to organ failure and ultimately death<sup>145</sup>. It was first reported in Wuhan in China and spread all over the world. COVID19 was reported as a pandemic by WHO on 11<sup>th</sup> March 2020. Researches are conducted on the immunity of a person and the attack of the virus. It found that the primary defence against the disease is the body immune system<sup>146</sup>. Much research is there on strengthening immunity. Typically, immunity can be attained through a healthy diet, but it requires time. Many researchers also found that the spices play a crucial role in the same, and spices' immunity-boosting capacity is very relevant in this context. Now world nations are in a hurry to find out vaccines for the virus. So many vaccines introduced, and some are still in progress. However, there are also reports that the virus affects people who already take the vaccine. Now, multiple variants of the SARS-CoV-2 coronavirus are different from the version first detected in China.

In India, the 1st COVID19 case was reported on 27<sup>th</sup> January 2020, in the Thrissur district of Kerala state. Then the cases continuously raised, and on 22<sup>nd</sup> March, the central government proclaimed the national lockdown using the provisions under Disaster Management Act, 2005<sup>147</sup>. The constitutionality and legality of COVID19 and Lockdown in India result from quarantine enforcement provisions as per the Indian Penal Code, 1860, Constitution of India, 1950, Epidemic Diseases Act, 1897 and the Disaster Management Act, 2005<sup>148</sup>. Then it started affecting all the social and economic activities of the country, including international trade. Then after the 1st wave, life came to normal with a mask and some other restrictions. Most of the nations restarted their economic activities and started positive growth. However, then the 2nd wave of the virus was affected, and again restriction took place, including the closure of boundaries of some nations. India is also affected by the second wave, and again there were

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<sup>145</sup> Dr Luxita Sharma's "IMMUNOMODULATORY EFFECT AND SUPPORTIVE ROLE OF TRADITIONAL HERBS, SPICES AND NUTRIENTS IN MANAGEMENT OF COVID- 19", Journal of immunology research, 2020.

<sup>146</sup> Muhammad Adnan Shereen, Suliman Khan & Abeer Kazmi's "COVID-19 INFECTION: ORIGIN, AND CHARACTERISTICS OF HUMAN CORONAVIRUSES", Journal of Advanced Research, April 2020.

<sup>147</sup> Muhammad Adnan Shereen, Suliman Khan & Abeer Kazmi's "COVID-19 INFECTION: ORIGIN, AND CHARACTERISTICS OF HUMAN CORONAVIRUSES", Journal of Advanced Research, April 2020.

<sup>148</sup> M.Z.M. Nomani and Madiha Tahreem's "CONSTITUTIONALITY AND LEGALITY OF CORONA VIRUS (COVID-19) IN INDIA", International Journal on Emerging Technologies, 2020.

lockdowns in different states. Our country introduced three vaccines: co vaccine developed by the Bharat biotech, covishield developed by serum institute of India and sputnik vaccine developed by the Gamaleya Research Institute of Epidemiology and Microbiology. The vaccination process is still ongoing. Nevertheless, India is still facing the issue of affecting the virus even after taking the vaccine and fearing the third wave.

### **4.3 COVID19 PANDEMIC AND TRADE**

The covid19 is a health crisis, and it does not have anything to do with trade. However, the actual effect of covid19 extended to the social, political and economic crisis of the whole world. Most countries imposed some restrictions on businesses and people, including lockdowns and banned foreigners to prevent the spread of disease. These restrictions affected trade, especially international trade and whole global trade<sup>149</sup>. Most of the people's income and livelihood was affected by the spread of disease and lockdown restrictions. The restrictions and low income resulted in reducing both the demand and supply of every commodity. There was also a reduction in the presence of workers, including the labours, truck drivers and port workers. Mainly it affected the transportation and shipment of commodities. Apart from that, the lockdown restrictions like reduced flights, marine transport and other restrictions on that field resulted in the delay in transportation, rise in freight price and even the destruction of perishable goods. There were also restrictions from various countries to foreign vessels and flights. Instead of this, there were restrictions inside the nation itself which reduced production and internal trade. Heiland and Ulltveit-Moe (2020) have reported that the decrease in container ship's departure was 29% compared to 2019 in the first week of April 2020<sup>150</sup>.

Since both the production and consumption bounced back, the total world trade and global economy were disrupted by the pandemic covid19, so the very nature of pandemic has nothing to do with world trade. However, the measures and policies imposed by different countries to control the spread affected the world trade and global economy<sup>151</sup>. The various nations are gradually recovering from the effect of the covid19 pandemic in economic activities from the

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<sup>149</sup> Pepita Barlow, Martin McKee and David Stuckler's "COVID-19 AND THE COLLAPSE OF GLOBAL TRADE", Lancet Planet Health, 2021.

<sup>150</sup> Organisation for the Economic Co-operation and Development's "COVID19 AND INTERNATIONAL TRADE: ISSUES AND ACTIONS", Tackling Coronavirus, OECD, 2020.

<sup>151</sup> Pepita Barlow, Martin McKee and David Stuckler's "COVID-19 AND THE COLLAPSE OF GLOBAL TRADE", Lancet Planet Health, 2021.



third quarter of 2020. As per the WTO October 2020 estimates, world merchandise trade expects a 9.2 percentage decline in 2020 and assumes a 7.2 per cent rise in 2021. The trade decline in Asia of (-) 4.5 per cent for exports and (-) 4.4 per cent for imports in 2020 will be smaller than in other regions<sup>152</sup>. However, now different nations are again under threat of the 2nd and third waves of the pandemic, and this may again affect the world trade and the global economy in a negative way.

#### **4.4 COVID19 AND EXPORTING COUNTRIES**

The covid19 resulted in lockdowns, social distancing and restrictions, including travel restrictions. It affected all kinds of works due to various reasons, and some workers are unable to get into the workplace because of travel restrictions. Some workers were parents forced to be with their children to look after them and stopped working due to the school closure. Some workers are affected by the disease, and some have even died. Some workers are affected by some other diseases due to the stress and other factors imposed by the pandemic. It negatively affected the production of products, supply chain and reduced elasticity in price. The ports and terminals are closed, or the price increased and resulted in transportation restrictions due to the lockdown. So, as a whole, the scale of production and export supply decreased and was damaged by covid19. The other important thing is the demand from importing countries. Since the lockdown and restrictions affected the employment of many people, they have no income to buy the desired products. So, the demand only focused on essential commodities like food and medicines. The demand for non-essential commodities like machines and other things reduced during this period. The industries focus on non-essential commodities affected more than the essential commodities during this period due to the difference in demand. So, the pandemic led to a situation where the demand for essential commodities is high. However, the exporters are may not be able to supply that much quantity and demand for non-essential commodities decreases than the actual quantity supplied<sup>153</sup>.

The trade cost between various countries also increased during this period. Moreover, the supply chain was too much affected. However, the use of telecommunication devices helped

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<sup>152</sup> Department of Commerce's "ANNUAL REPORT 2020-21", Global Economic and Trade Situation

<sup>153</sup> Kazunobu Hayakawa and Hiroshi Mukunoki, in the article "THE IMPACT OF COVID-19 ON INTERNATIONAL TRADE: EVIDENCE FROM THE FIRST SHOCK", Journal of The Japanese and International Economies, 2021.

the industries to reduce supply shocks<sup>154</sup>. Furthermore, many countries maintained their economic activities through this means. Even though it could not eliminate the destruction caused by the pandemic and lockdown, but reduced the same. The industries or organisations that can use the telecommunication system are more sustained than those that are not. Most of the workers in every industry can work from their home if there are enough facilities. So, in total, we can say that the industries that are manufacturing essential commodities and having facilities to use the telecommunication devices are less affected by the pandemic, which affected whole world trade than the others.

## **4.5 COVID19 PANDEMIC AND SPICE SECTOR OF INDIA**

India produces many spices, and farmers on a small scale do 98% of the spice production. The harvest of different spices continues throughout the whole year, but January to March is the peak time as far as spice harvesting is concerned. Since the lockdown was only introduced on 25th march 2020 by the central government, most of the spices were harvested before that time. However, some farmers harvested the spices after that time and suffered some losses due to the non-availability of labours. Moreover, post-harvesting activities to the spices maintain the quality and avoid contamination, including drying, cleaning, and packing with due care. Due to the lockdown and resulted non-availability of labours, shortage of new gunny bags, non-availability of perfect space for storage and shortage of agricultural equipment, the post-harvesting activities were affected. These shortages significantly impacted the spices like chilli, cumin, coriander and other spices. It also affected the quality of the exporting products. It changed the texture and colour of spices which led to poor quality, and the value was also reduced. According to Mr Dinesh Malik, Azad Agro, due to the shortage of proper space and gunny bags for drying and storing, most farmers in Kota and surrounding regions have suffered losses in coriander crops. The resulted in poor quality of spices which may lead to 30- 40% lesser price realisation in the market<sup>155</sup>.

The Guntur area of Andrapradesh and the Khammam area of Telangana is the essential producers of chilli. Moreover, they have completed almost 50% harvesting of chilli before the

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<sup>154</sup> Organisation for the Economic Co-operation and Development's "COVID19 AND INTERNATIONAL TRADE: ISSUES AND ACTIONS", Tackling Coronavirus, OECD, 2020.

<sup>155</sup> Santosh Gupta and Ashwini Chandak's "IMPACT OF COVID19 ON SPICE SECTOR IN INDIA: SITUATIONAL ANALYSIS", Impact of Covid19 on Indian Agriculture,2020

lockdown. The rest harvested after that, and the farmers suffered losses harvested during the lockdown period due to the shortage of labourers and post-harvesting activities. As far as cumin production is concerned, the leading producers are the Barmer area of Rajasthan. Here most of the harvesting and post-harvesting activities are done after the introduction of lockdown. The farmers in this region found so many issues such as timely harvesting, availability of labours and shortage of gunny bags<sup>156</sup>. The coriander sector faced a vital problem relating to the space for storing and drying coriander. In Rajasthan, the farmers were forced to store the coriander in an open field or empty fertiliser bags or used gunny bags. As a result, the spice's quality was affected, and there are chances for chemical contamination. The small-scale farmers are mainly faced with all those issues. The large-scale farmers have enough storage space, and other things can also be arranged by them far better than the small-scale farmers.

While considering the sales and marketing of spices, there are Agriculture Produce Marketing Committee known as APMC or Mandi and the Backward integration (BI) programs or agents for helping in trading activities. The mandis are the regulated market through which the majority of the spices are traded in India. The BI programs are generally locating in spice producing regions conducted by the spice processors or exporters to buy the spices directly from farmers. During the lockdown period, the mandi markets were closed and also, the local traders or agents were not able to reach the farmers because of the movement restrictions. As a result, the farmers suffered losses, and they could not sell spices on time. In the case of chilli, the farmers sold 50% of chilli before lockdown. The remaining 15-20% can only sell, the 60-70% stored to the maximum capacity of cold storage, and the rest is with the farmers and cannot do anything. In the case of coriander, 70-75% kept with farmers and could not do anything. In some places, the farmers were forced to sell the spices for a minimal amount to the traders<sup>157</sup>.

The spices operation units were also closed during the lockdown in most of the places. These places are essential for the value addition of spices by different processes. The lockdown negatively affected these activities. There was also less demand in domestic and export markets during the lockdown time, which resulted in the over the storage of processed spices in processing units. The pandemic and lockdown reduced demand for every product, and also it became challenging to export products due to the broken supply chain. There was a restriction in export destination places like USA, UK and other countries also. During the lockdown

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<sup>156</sup> Hema Yadav's "IMPACT OF COVID19 ON AGRICULTURAL MARKETING IN INDIA", Ecociate, March 2021.

<sup>157</sup> Hema Yadav's "IMPACT OF COVID19 ON AGRICULTURAL MARKETING IN INDIA", Ecociate, March 2021.

period, the export of Indian spices stopped due to India's broken logistic supply chain and destination countries. The logistic operation was very limited in India and some other countries. It adversely affected spice supply. There was a complete lockdown in UAE, European countries and trade to these countries almost completely stopped. The closure of testing laboratories caused a delay in testing spices and their quality. According to the American Spice Trade Association (ASTA), India provides 20% of the entire supply of spices to the US. The entire supply market in India still has the opportunity, as no new product is entering the market. So, there is no change in export to the US<sup>158</sup>.

So, the spice sector is very adversely affected by the pandemic covid19 during lockdown due to the various restrictions inflicted by the Indian government and the restrictions from other nations. Every chain of spice sector is affected, and the supply chain almost stopped. However, after the first wave, lockdown restrictions were relaxed and economic activities restarted. The production, value addition and supply chain started working. The demand for most of the products was reduced because the lockdown adversely affected the livelihood of most of the world. Only a reduced quantity of trade happened during FY20, and the world witnessed a global economic slowdown. The export of Indian products was also declined by -5.1%. The spice trade was affected during the lockdown, but the demand for Indian quality spices increased after the lockdown. The spice industry witnessed a 10% growth in value export from India during FY20. Moreover, during FY21, the Indian export of spices witnessed 30% of volume growth, 23% in rupee, 17% in the dollar and attained a new record.

Now the second wave of the COVID19 is affecting India. However, there is no national lockdown this time, and there were fewer restrictions in most countries than during the 1st wave. Some countries were free from covid19, some almost completed their vaccination, and already completed second and third waves in some countries. However, there are state-wise restrictions in India that may affect the production, value addition and supply chain of spices. Moreover, there are countries that restricted India due to the high rate of cases. So, during the restricting period, there may arise some decline in spice export also. However, now the restrictions are again removing, and the economic activities are increasing their speed. As far as Indian spices are concerned, it is a good intimation that the demand for Indian quality spices is expected to help retain its export pace. The official data of export during the 2nd wave is not yet published. However, there are having reformative actions and measures prescribed by

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<sup>158</sup> Santosh Gupta and Ashwini Chandak's "IMPACT OF COVID19 ON SPICE SECTOR IN INDIA: SITUATIONAL ANALYSIS", Impact of Covid19 on Indian Agriculture,2020

authorities like the Spice Board of India. Some programmes are also conducting for recovery of the sector, retaining the demand and increasing export.

However, despite the pandemic, all the above-said issues, and the recession in the global economy, India's spice trade continued its upward trend during the 2020-2021 fiscal year. During April-August 2020, a total of 5,70,000 tons of spices and spice products valued at Rs.10001.61 Crore (US\$ 1326.03 million) has exported from the country as against at 4,94,120 tons valued Rs. at 8858.07 Crore (US\$ 1270.77 million) in April-August 2019, registering an increase of 15% in volume, 13% in rupee terms of value and 4% in dollar terms<sup>159</sup>. The major items exported from the country are chilli, turmeric, ginger, cumin and mint products. During 2020-21 (April-August), the major destinations for Indian spices are the USA, China, Thailand, UAE, Malaysia, UK, Indonesia, Germany, Srilanka, Netherlands, Japan, Singapore, Bangladesh and France.

## **4.6 IMMUNITY-BOOSTING CAPACITY OF SPICE AND COVID19**

The pandemic and lockdown decreased the demand for almost all the products. There are various reasons for the same, like the loss of livelihood and lockdown restriction. However, the demand for Indian quality spices increased and continuously increased even though it is adversely affected by lockdown and restrictions. The researches show that the main reason behind this increase is the immunity-boosting capacity of the spices<sup>160</sup>. The body's immunity system is considered the first-line defence against covid19, and there were many types of research conducted to prove the same.

The spices are having many medicinal properties, including antiviral properties<sup>161</sup>. Ginger tea can heal the symptoms of the common cold. Moreover, ginger also has antiviral properties and is used in treating respiratory issues due to plant compounds, and the researchers already proved it<sup>162</sup>. Ginger contains Gingerol with other sulphur-containing compounds like allicin,

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<sup>159</sup> Devi Priya B, Thyagarajan M's AN INVESTIGATION ON PRODUCTION AND PRODUCTIVITY EXPORT PERFORMANCE OF SIGNIFICANT SPICES IN THE COUNTRY INDIA, Indian Journal of Science and Technology, 2021.

<sup>160</sup> Namita Ashish Singh, Pradeep Kumar and Jyoti's "SPICES AND HERBS: POTENTIAL ANTIVIRAL PREVENTIVES AND IMMUNITY BOOSTERS DURING COVID-19", Wiley, January 2021.

<sup>161</sup> Ibid.

<sup>162</sup> Dr Luxita Sharma's "IMMUNOMODULATORY EFFECT AND SUPPORTIVE ROLE OF SPICES IN MANAGEMENT OF COVID- 19", Creative Commons, 2020.

alliin, and ajoene. Moreover, it contains enzymes like allinase, peroxidase, and myrosinase. These compounds help in increasing antioxidant activity. It helps in healing viral infection by using superoxide dismutase and glutathione peroxidase. A study showed that using the hot water extract of fresh ginger effectively fights Human Respiratory Syncytial Virus (HSRV). It blocks the viral attachment on the airway epithelium<sup>163</sup>.

Cumin also has antiviral properties. Cumin is beneficial to heal the digestive, circulatory and immune systems in our bodies<sup>164</sup>. From studies, it has been found that oral treatment with cumin had an immunomodulatory effect. The modulation sees this effect of T lymphocytes, both CD4 and CD8 cells, along with Th1 cytokines. The effect saw in both standard and immune-suppressed subjects<sup>165</sup>. Turmeric contains proteins, carbohydrates, oil, fat, curcuminoids with moisture and minerals. The curcumin modulates the body's immunity system by modulating the dendritic cells, B and T lymphocytes and macrophages. Monoacetyl curcumin and curcumin helps in fighting against H1N1 influenza infections, H5N1 (highly pathogenic avian influenza) virus, hepatitis B, hepatitis C, HIV/AIDS, zika, chikungunya, and dengue virus infections<sup>166</sup>. Curcumin helps enhance immunity by T helper-1 mediated immune responses, and it can do by inhibiting T helper 1. Fortunately, various studies have resulted in findings suggesting the use of curcumin as a supplement for lowering the acute-phase proteins responsible for suppressing innate immunity<sup>167</sup>.

In 2017 Priya and Saravana evaluated the antiviral property of Piper nigrum chloroform and methanolic extracts against vesicular stomatitis virus, which is an enteric virus and human parainfluenza virus on human cell lines. The higher content of alkaloids shows that the antiviral activity of Piper nigrum is higher in chloroform extract. In 2020, a docking-based study reported that the bioactive compounds from black pepper such as piperdardiine and piperanine are considerably active against COVID-19, which can be further used for its treatment.

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<sup>163</sup> Ibid

<sup>164</sup> Aruna K and Sivaramakrishnan VM's "ANTICARCINOGENIC EFFECTS OF SOME INDIAN PLANT PRODUCTS", Food Chem Toxicol. 1992;30(11):953-956. doi:10.1016/0278-6915(92)90180-s

<sup>165</sup> Rathore SS's "POTENTIAL HEALTH BENEFITS OF MAJOR SEED SPICES" [iss.ind.in/pdf/2013volume/1.pdf](http://iss.ind.in/pdf/2013volume/1.pdf): 2013.

<sup>166</sup> H. Gupta, M and Bhargava's "POTENTIAL USE OF TURMERIC IN COVID-19", Clinical and Experimental Dermatology, 2020. <https://doi.org/10.1111/ced.14357> accessed on 14th June 2021.

<sup>167</sup> Michele Catanzaro, Emanuela Corsini and Cristina Lanni's "IMMUNOMODULATORS INSPIRED BY NATURE: A REVIEW ON CURCUMIN AND ECHINACEA", Molecules, 2018.

## 4.7 COVID19: TRADE AND PROTECTIVE MEASURES

The covid crisis affected the international trade of every country in one way or the other. So, most of the countries brought some protective measures to recover the situation. The covid crisis has not changed trade law, but it restricted people from trading using various reasons. Now the world is ready to waive any law to regain its trading activities. The different WTO members are trying to give transparency regarding trade matters using the protective measures related to trade in the context of the pandemic. Moreover, some of the measures aim to protect the agricultural sector, which includes the spice sector. The WTO provides a report which includes the regulations made by different countries in the context of the covid19 pandemic<sup>168</sup>.

On considering the report, most of the countries made temporary measures to revive the economy. The measures taken by each country is different according to the situation in that particular country. The date of implementation and period of activity is also different. The measures mainly include eliminating export tariffs, and duties of certain products includes help to export more products and free trade of medical equipment. Some measures eliminate or reduce the import tariff and duties of certain products like food and medical equipment. This import reduction helps a country to get more products at a reduced cost that is more affordable. The sanitiser and mask-like pieces of equipment also provide this exemption in some countries. There was the elimination of VAT and other national taxes also. Some countries provided waivers in the rule regarding exporting and importing licenses<sup>169</sup>. These measures all are for a particular period especially made in the context of covid crisis. The expiry date of some regulations is already over.

There was a Temporary elimination of import tariffs on certain medical supplies, equipment and protective garments in the UK, which was effective from 27th March 2020, and expired on 31st December 2020. China took nine facilitation measures regarding three categories of agricultural administrative approval: license renewal, simplification of the approval procedure, and optimisation of the approval process from 12th February 2020<sup>170</sup>. India introduced an amendment to the export policy of personal protective equipment, pharmaceutical products, mask, Sanitisers, ventilators, including any Artificial Respiratory Apparatus or Oxygen

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<sup>168</sup> Arvind Kumar's "COVID-19: ECONOMIC IMPLICATIONS AND TRADE POLICY RESPONSES", Engineering Export Promotion Council of India (EEPC India), 2020.

<sup>169</sup> Organisation for the Economic Co-operation and Development's "COVID19 AND INTERNATIONAL TRADE: ISSUES AND ACTIONS", Tackling Coronavirus, OECD, 2020.

<sup>170</sup> Arvind Kumar's "COVID-19: ECONOMIC IMPLICATIONS AND TRADE POLICY RESPONSES", Engineering Export Promotion Council of India (EEPC India), 2020.

Therapy or any other Breathing Appliances and other products. It also introduced an amendment to the import policies of iron, steel, some medical and surgical instruments and apparatus. In the case of medical equipment, there was relaxation in health cess. There was also a restriction in the export of diagnostic kits, pharmaceutical products, masks and personal protection equipment. The covid related safety equipment was set free from import tariffs, and some more temporary changes were also introduced. Irrespective of these export-import policy changes, most countries also implement other regulations and programmes to revive the economy and promote trade activities.

In India, regarding the trade policy, India extended the foreign trade policy for one year and export obligation period under Advance Authorisation and EPCG for six months. They also provide automatic revalidation to all duty-free authorisations to enable the industry to import inputs at the right price and announced an amnesty Scheme for old Advance, EPCG and EOUs for regularisation of default by payment of only Customs duty without interest and penalty to lessen the burden on industry<sup>171</sup>. RBI extended the remittance period from 9 months to 15 months in the banking sector, looking into the liquidity challenges and slow consumer spending and extended exemption from caution listing of exporters from 31.3.2020 to 30.9.2020. They also instructed banks not to ask exporters to pay for exceeding the limit of Rupee depreciation if the limit in foreign exchange remains within the granted value. There is no detention or demurrage Charge by the Shipping Lines from 22nd March-14th April 2020 in the logistics. Ministry of Home declared “transportation” as Essential Services, including transportation of exports and imports goods<sup>172</sup>. There is a waiver of late fee for Bill of Entry regarding IGM filed between 21st March-14th April, if BOE filed by 17th April 2020, in custom department. Some recommendations are also under consideration include 50 percentage subsidies on Airfreight to enable companies to airlift goods to cut down the transit times, clearance of all exports benefits to exporters immediately, including IGST/GST and the complete restoration of the supply chain.

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<sup>171</sup> Anirudh Shingal’s “RESPONDING TO THE COVID-19 CRISIS: POLICY PRIORITIES FOR INDIA”, Engineering Export Promotion Council of India (EEPC India), 2020.

<sup>172</sup> Federation of Indian Export Organisation No. FIEO/DG&CEO/2020-21 issued on April 2020.



## **4.8 COVID19 AND FOOD SAFETY GUIDANCE FOR FOOD BUSINESSES**

In the context of the pandemic covid19, the various nations and people fear the safety of food. So, the Food and Agricultural Organisation of the United Nations and World Health Organisation issued guidelines to be followed by the food businesses to ensure food safety<sup>173</sup>. The guidelines were issued on 07th April of 2020, applicable in India from August, through a circular issued by the spice board<sup>174</sup>. It is improbable that people can affect covid19 from food or food packaging objects. Covid19 is a respiratory illness, and the reported transmission route is through person-to-person contact and direct contact with respiratory droplets generated from the coughs or sneezes of an affected person. However, it is possible that if someone infected directly touches an object or contaminated surface, and some other non-infected person also touches the same object or surface, then touches own eyes, mouth or nose. Then there are chances to get the infection. So, the food industry needs to ensure personal hygiene measures and reinforce refresher training on food hygiene principles crucial to reducing or eliminating the risk of food packaging materials and food surfaces become contaminated with the virus.

The guidance provides that the persons working in the food industry, especially those who directly contact food making or packing, should be aware of covid symptoms. If any person has any symptoms, then they should stay at home. There should be a safe and hygienic working environment for the workers. The person directly contacted with food and packing material should advise wearing a PPE kit and masks. The guidance also mentions some hygienic measures and management of workers to avoid disease spread. The employer should provide sufficient disposable gloves to employees, which helps in reducing direct contact. Gloves should be mandatorily used and should change in intervals. The workers were also expected to wash their hands with soap in every glove change. As far as possible, there should be physical distancing within the industry. If any employee is affected by the disease, then all possible places where the employee has direct contact should be sanitised. All employees who are in direct contact should observe quarantine. The drivers should also be aware of the covid guidelines for transporting and delivering products and should not leave the vehicle during the process. The retail food shop and open food display in retail premises are also expected to

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<sup>173</sup> Organisation for the Economic Co-operation and Development's "COVID19 AND INTERNATIONAL TRADE: ISSUES AND ACTIONS", Tackling Coronavirus, OECD, 2020.

<sup>174</sup> Spice Board Circular No: 11/2020 issued on 10th August 2020 <http://www.indianspices.com/trade/trade-notifications/archive.html>.

follow all covid protocols and furnish a hygienic environment. Some practical measures which can follow for the same are giving through the guideline. For these purposes, the canteen staff are also considered food workers. Even though the covid is not expected to spread through food, the industry should follow the guidance<sup>175</sup>.

#### **4.9 PROTECTIVE MEASURES IN SPICE SECTOR: INDIA**

In the covid19 scenario, most countries took so many protective measures and waiver the regulations to revive the economy. India also followed this path to increase trade, economic activities and to compete with other nations. These protective measures are reflected in all fields of trade, including spice export. In spice export, there are regulatory authorities, and the spice board is the most important one. Spices board took some initiative, waiver and other programmes to promote the export and protect exporters from the adverse effect of covid19. On 26th March 2020, the spice board introduced a new circular that waives some provisions to make the international export of spices less complex<sup>176</sup>.

The exporters of spices are having difficulties due to the pandemic and lockdown, including the functioning of quality evaluation laboratories of India's spice board. In India, the pre-shipment sampling, testing and stuffing of export consignment of certain spices are mandatory for the exporting purpose. So, the spice exporters were in trouble, and now the spice board decided to waive the conditions temporarily. The decisions taken by the spice board on 26<sup>th</sup> March 2020 regarding this matter are,

- ❖ Wherever the importing countries do not mandate production of Spices Board Analytical Reports at the port of discharge of the export consignment of spices and spice products from India, such consignments are temporarily exempted from the mandatory sampling and stuffing requirements stipulated by Spice Board.
- ❖ However, the existing mandatory pre-shipment sampling, testing, stuffing and health certificate requirements shall continue to apply to the export consignments of spices and spice products to the European Union countries.

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<sup>175</sup> The World Health Organisation and Food and Agricultural Organisation's COVID19 AND FOOD SAFETY: GUIDANCE FOR FOOD BUSINESSES, 2020.

<sup>176</sup> Anirudh Shingal's "RESPONDING TO THE COVID-19 CRISIS: POLICY PRIORITIES FOR INDIA", Engineering Export Promotion Council of India (EEPC India), 2020.

- ❖ Notwithstanding the above temporary exemption, the exporters advised ensuring adequate internal measures to meet the quality and safety requirements of the importing countries<sup>177</sup>.

However, there are some concerns from the importing countries regarding the effective management of food safety risks and prevention of food contamination, particularly during the pandemic<sup>178</sup>. In these circumstances, the spice board on 10th August 2020 advised the exporters of spices and spice products to ensure the food safety guidelines issued by the Food and Agricultural Organisation of the United Nations (FAO) and World Health Organisation (WHO). The notification also states that it is essential to ensure the safety of spices supplied from India<sup>179</sup>.

The spice board also published some numbers for the spices export-related grievances, which will benefit the exporters. It provides the details regarding customs clearance officers during the covid crisis period. The spice board also appointed an officer as nodal officer for handling covid19 public grievances. These kinds of information help the exporters to simplify the procedure of export in this pandemic scenario. The European Union also waived some conditions for the benefit of its exporting partners. During this covid19 scenario, it is not easy to show the original paper certificate in the border post of the European Union. So, to facilitate international trade, the European Union recommends using the TRACES platform to allow sanitary and phytosanitary certifications of animals, plants, and their products exported to the EU. If the exporting country cannot use this platform, then the scanned copies of original certificates are also accepted. However, it should send as an electronic message by the competent authority of the domestic country. Moreover, the original certificate is sending when technically feasible and once restrictions are over.

India was under lockdown from 23rd March onwards. The Ministry of Home Affairs imposes the lockdown on exercising its power under the Disaster Management Act, 2005. This lockdown almost wholly restricted all kinds of activities across the nation to control the spreading of the pandemic. However, the authorities should ensure that the lockdown does not affect the supply of essential commodities. The Ministry of Home Affairs issues notification

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<sup>177</sup> Spice board, Notifications No. SRD-SS/03/0002/2019 <http://indianspices.com/notification1042020.html> accessed on 18/06/2021.

<sup>178</sup> Kazunobu Hayakawa and Hiroshi Mukunoki, in the article “THE IMPACT OF COVID-19 ON INTERNATIONAL TRADE: EVIDENCE FROM THE FIRST SHOCK”, Journal of The Japanese and International Economies, 2021.

<sup>179</sup> Spice Board Circular No: 11/2020 issued on 10<sup>th</sup> August 2020 <http://www.indianspices.com/trade/trade-notifications/archive.html>.

regarding what activities are to be allowed. On 11th April 2020, the Ministry of Home Affairs issued a new notification that allowed the working of some industries and other activities following all the covid19 guidelines. Then the Ministry of commerce and industries issued a notification that allowed the free movement of vehicles and the workforce required to do the permitted activities. Moreover, all activities related to agriculture, including production, distribution and sales of agrochemicals, are permitted with this order.

#### **EXISTING AND NEW MEASURES FOR THE PROTECTION OF THE SPICE SECTOR DURING 2020-21 (APRIL-OCTOBER) <sup>180</sup>**

- ✓ The scheme viz. "Integrated Scheme for the Export Promotion and Quality Improvement of Spices & Research and Development of Cardamom" approved under the Medium-Term Framework (MTF) Plan (2017-18 to 2019-20) is being continued during the year 2020-21<sup>181</sup>.
- ✓ The COVID-19 situation has necessitated a shift in focus from physical events to online events. Accordingly, the Board has conducted online Buyer Seller Meets (BSMs), training/awareness programmes, and webinars for farmers and other industry stakeholders.
- ✓ During the current year, six such BSMs have organised to date large cardamom, nutmeg, ginger, pepper, turmeric focussing Northeastern region, Kerala, Tamil Nadu and Odisha, and provided a virtual platform for building direct linkages. Another BSM for saffron was organised on 25th November 2020 in association with State Agri Dept, J&K. The total number of 17 BSM's scheduled for the current year, including five numbers for the Northeastern Region.
- ✓ Applications for covering 406 ha for replanting/rejuvenation of cardamom small and 530 ha for replanting large cardamom are being collected and processed for payment of subsidy to the farmers.
- ✓ For assisting the farmers in mechanising post-harvest operations to improve the quality, the Board has collected 339 types of equipment viz. Turmeric polisher, Turmeric boiler, pepper thresher, seed spice thresher and mint distillation units for subsidy payment.
- ✓ Spices Board has established and maintaining eight crop-specific Spices Parks in major production/ market centres to empower the stakeholders of the spice industry, especially the farming community, by providing the same infrastructure and processing

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<sup>180</sup> Department of commerce ANNUAL REPORT 2020-21 accessed on 18/06/2021.

<sup>181</sup> Circular, spice board <http://www.indianspices.com/trade/trade-notifications.html> accessed on 15/06/2021.

facilities. The Board has established Spices Parks at Chhindwara & Guna in Madhya Pradesh; Puttady in Kerala; Jodhpur & Kota in Rajasthan; Guntur in Andhra Pradesh; Sivaganga in Tamil Nadu and Rae Bareilly in Uttar Pradesh.

- ✓ The seven Quality Evaluation Laboratories of the Board at Cochin, Mumbai, Delhi, Chennai, Guntur, Tuticorin and Kandla continued providing analytical services and mandatory testing and certification of export consignments of select spices during the year. The establishment of the Quality Evaluation Lab at Kolkata has been completed. During April-October 2020, the Quality Evaluation Laboratories analysed 32,400 parameters, including Aflatoxin, Illegal dyes, Pesticide residues and Salmonella of spice samples.
- ✓ During the current financial year (April-October), a total number of 1122 Certificate of Registration as Exporter of Spices and 33 Cardamom Dealer Licenses were issued.
- ✓ Board has issued 1362 Health certificates and 8312 analytical reports to the exporters during April-October 2020.
- ✓ The Board has launched/ partnering the following collaborative projects traceability, sustainability, bio-diversity and certification to enhance the export of spices.
- ✓ Jointly launched and partnered with the National Sustainable Spice Programme in association with industry.
- ✓ The board launched a project partly funded by Standards and Trade Development Facility (STDF) for Spices in association with FAO to address SPS issues and strengthen the spices value chain covering four significant spices.
- ✓ Sponsored and launched a project titled 'Doubling of exports of spices in line with AEP and increasing farmer's income by INDGAP Certification' in collaboration with QCI covering five spices.
- ✓ To give special attention to the Indian Chilli industry's various issues and support farmers for export-oriented production of chilli, Spices Board has constituted a 'Chilli Task Force Committee' in September 2020. It was under the chairmanship of Shri G V L Narasimha Rao, Hon'ble MP and Member, Spices Board. The Committee will examine relevant issues affecting the chilli sector and give recommendations for effectively tapping the real commercial prospects of chilli both in domestic and international markets<sup>182</sup>.

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<sup>182</sup> Department of commerce ANNUAL REPORT 2020-21 accessed on 18/06/2021.

## 4.10 IMPACT ON SPICE EXPORT

When considering both the covid 19 pandemic and spice export, the pandemic negatively affected the spice sector at the time of lockdown. The destruction in the supply chain, restrictions on movement, lack of availability of labours, equipment, and other things including the storing space is the reason for the same. The farmers suffered many losses during this period. The spices were unable to harvest due to the shortage of workers. The harvested spices cannot sell, and they decayed due to the perishable nature and lack of storage facilities. There was a shortage of availability of mandis, and exporters forced the farmers to sell spices for a significantly less amount<sup>183</sup>. The exporters also faced many problems due to the restrictions imposed on movement by the government and regulations of foreign importing countries. All the trading activities are affected by the restrictions and the pandemic. Most of the sectors were struggling to recover after lockdown. However, the demand for Indian quality spices increased once the lockdown ended. The studies showed that covid19 infection is less in persons with immunity and the spices have immunity-boosting capacity<sup>184</sup>. Even though the spice trade is affected during the lockdown period, the sector recovered afterwards and showed a hike. In FY 2021, the spices created a new record for exports. Nevertheless still, there are restrictions on the pandemic and competition from other countries are in existence.

Since the pandemic affected whole trading activities negatively, most nations introduced new regulations to deal with the pandemic. Most of them are waiver in the rules of exporting and restrictions in importing. Some other new initiatives also introduced a speedy recovery. The exporting importing regulations focus on the covid related products like masks, sanitiser and other medicinal products. However, some countries also focused on food items. India also made so many temporary regulations, some are already exhausted, and some are still there. As far as spice export is concerned, food safety guidance for a food business is issued on 7th April 2020 by the Food and Agricultural Organisation of the United Nations and World Health Organisation. It provides some guidelines to be followed by the food industries while making and selling food items in this pandemic scenario<sup>185</sup>. It is also applicable to the spice industry

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<sup>183</sup> Santosh Gupta and Ashwini Chandak's "IMPACT OF COVID19 ON SPICE SECTOR IN INDIA: SITUATIONAL ANALYSIS", Impact of Covid19 on Indian Agriculture,2020

<sup>184</sup> Dr Luxita Sharma's "IMMUNOMODULATORY EFFECT AND SUPPORTIVE ROLE OF SPICES IN MANAGEMENT OF COVID- 19", Creative Commons, 2020.

<sup>185</sup> The World Health Organisation and Food and Agricultural Organisation's COVID19 AND FOOD SAFETY: GUIDANCE FOR FOOD BUSINESSES, 2020.

by a notification issued by the spice board of India. It is an extra burden to the spice exporters. However, it is essential to follow at the same time in the pandemic scenario.

There are some other regulations from the spice board to better the sector during the pandemic and after. The most important one is the waiver in the analytical report, which examines the quality of spices done by the laboratories closed during the pandemic. If the importing country does not mandate, then spices are exempted from the mandatory sampling and stuffing requirements stipulated by the Spice Board for a temporary period in the context of the pandemic<sup>186</sup>. The spice board also appointed officers to clear the doubts of exporters and the public. They also decided to continue with some existing schemes and do all their duties, including the buyer-seller meeting. However, the meeting was held online mode. The spice board launched new schemes and projects in collaboration with other entities. They formed new projects to address SPS issues, strengthen the spices value chain covering four significant spices, and double the spices' exports in line with AEP and increase farmer's income. The spice board also constituted a chilli task force committee to give special attention to chilli in the context of the pandemic and the losses suffered by farmers<sup>187</sup>.

So, in the context of the pandemic, the spice board and the government made specific regulations to protect the spice sector. However, it is still a question of whether these measures are helpful or enough. In the pandemic scenario, all supply chain components, including the farmers and traders, are suffering. Most of the farmers are uneducated and may not know the spice board or the new regulations. Most of the farmers are already affected by the lockdown and suffered damages for which no one is responsible. The industry is not yet getting any assurance regarding the export or sale of their commodity. More space and equipment are necessary to save and preserve spices in these kinds of situations. The small-scale farmers force to depend on exporters. Just like chillies, all other spices are also in need of special attention. Since the demand is rising, the ability to increase supply and the measures taken by authorities in this area is still significantly less. The production of quality spices requires a high cost, and then if it is unable to sell, the farmers may focus on some other crops or jobs. So, in this situation, more and more protective measures are necessary to use the opportunity and recover from the effect of the pandemic in the spice sector.

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<sup>186</sup> Spice board circular no 19/2020 issued on 31<sup>st</sup> December 2020  
[http://www.indianspices.com/sites/default/files/PDFsam\\_merge-compressed.pdf](http://www.indianspices.com/sites/default/files/PDFsam_merge-compressed.pdf).

<sup>187</sup> Department of commerce ANNUAL REPORT 2020-21 accessed on 18/06/2021.

## Chapter - 5

# CONCLUSION

### 5.1 SUMMARY

The topic of study is IMPACT AND LEGAL EFFECT OF COVID19 PANDEMIC ON INDIAN SPICE EXPORT. International trade has a great significance in the economic development and GDP of a nation. The international trade between developing and developed countries is mainly linked through agricultural commodities, and spices are the most traded agricultural commodity. India is one of the leading exporters, producers and consumers of spices. Now the COVID19 pandemic negatively affected the whole international trade and economy of nations. However, spices are commodities for which demand increased after easing the strict restrictions and lockdown of various countries. This study aims to recognise the legal effect of the pandemic and resulted in restrictions on India's spice export, and the impact of the same on the spice sector of India. The main objective is that by understanding the present situation, find a way to develop the spice industry by utilising the opportunities. This study includes; the evolution of spice export, the essential spices and their uses, the present situation in the spice sector, the legal provisions relating to India's spice export, how the pandemic affected the spice sector, demand & immunity-boosting properties of spices and current legal provisions & regulations which imposed to overcome the restrictions. In addition, the spices chilli, cardamom, mint products, cumin, pepper, spice oils, oleoresin and turmeric, which contribute to 80% of total earnings from spice export, are taken for study. Moreover, ginger was also included since it showed 47% export growth in FY19.

India is holding the 18th position in merchandise export and the 10th position in imports. Food and agricultural export are an important sector of India, and the country is one of the top ten exporters. During 2018-19, India's international trade was at its peak and created a new record. However, at the end of FY20, the country affected pandemic and economic activities restricted with all other activities during the lockdown. This negatively affected international trade, and in FY21, the nation recorded a 7.4% decline in total international trade. Nevertheless, in the case of spice exportation, it increased even in the pandemic period. In FY21, the country exported spices worth 3.62 billion and created a new record. India is known as the Spiceland of the world, and its trading started from the colonisation period itself. Even the European countries started colonising different Asian countries, including India is mainly for getting more spices. The most-traded spices are chilli, cardamom, mint products, cumin, turmeric,



ginger, pepper, spice oils and oleoresins. During FY21, each of the export of the said items valued more than Rs. 50000lakhs. Also, these items are having medicinal properties even though spices are mainly used for flavouring food items.

In the third chapter, the legal provisions related to spice export are studied. There are many WTO agreements and some free trade agreements at the international level, which deals with spice export. For example, the Agreement on Agriculture (AOA), Agreement on the Application of Sanitary and Phytosanitary Measures (SPS), TRIPS Agreement, Agreement on Safeguards, Agreement on Technical Barriers to Trade (TBT) and Agreement on Subsidies and Countervailing Measures (SCM) are some agreements under the WTO regime. In addition, the bureau of international standards and the codex committee on spices and culinary herbs deals with the quality and standards of commodities to be exported, including the spices. Moreover, the international organisation of spice trade associations deals with the global issue on the spice trade. These conventions, treaties, and organisations help the various nations to enact domestic laws and codify different nation's standards.

Based on the international laws, India also enacted so many enactments, including the Spice Board of Indian Act, The Export (Quality control and inspection) Act, Food Safety and Standards Act, Bureau of Indian Standards (BIS) Act and Agricultural Produce (Grading and Marking) Act. Indian Institute of Spices Research deals with the research on spices and the LPG model introduced in 1991, which opened the world market to India. Under the spice board of India Act, 1986, the spice board was established, directly dealing with laws, regulations and other programmes regarding exporting spices. The main objectives of the spice board are the export promotion of spices and the development of cardamom. Moreover, it is the most crucial regulatory board as far as the spice sector is concerned. Then there is the export inspection council under the Export (Quality control and inspection) Act, 1963, which inspects all exporting commodities and enforce all the quality measures. The Food Safety and Standards Authority is established under the Food Safety and Standards Act to ensure food safety and reduce adulterations. Moreover, there is the Bureau of Indian Standards, which prescribes the quality standards. Under the Agricultural Produce (Grading and Marking) Act, 1937, created AGMARK is a certification mark of an agricultural commodity that assures the quality standard.

During the pandemic period, the restrictions affected the whole international trade and the world economy. As per the WTO October 2020 estimates, world merchandise trade expects a

9.2 percentage decline in 2020 and assumes a 7.2 per cent rise in 2021. In India, the lockdown was introduced from 25th March onwards, and it affected the whole domestic and international trade, including the spice export. The lockdown and restrictions broke the whole supply chain. There was a lack of workers, types of equipment, storing space and other facilities. The spread of disease and travel restrictions also slow down the movement of economic activities. The spice cultivating farmers also faced difficulties due to the perishable nature of spices. However, after the lockdown, when the economy started reviving, spices are getting more demand. The studies show that the spices have an immunity-boosting capacity, and consuming the same is beneficial during this pandemic. So, the demand for spices increased while demand for most of the commodities reduced.

Many nations introduce some protective measures to revive the economy in which some are beneficial for the spice industry, and some are not. Most of them are either restriction on import/export or relaxations on import/export. The food and agricultural organisation and the world health organisation introduced some safety guidelines for food safety during the pandemic period. India also introduced some protective measures in all fields of trade, including the spice sector. The Indian government takes some general protective measures by relaxing the banking, logistics and other sectors. In the spice sector, mainly the spice board introduced some new regulations to protect the spice sector. They waived some compulsory components like analytical reports. Also, the food safety guideline made applicable in India. They conducted all meetings and other programmes through online mode, and a new quality evaluation lab was established in Kolkata. A new initiative was introduced to the doubling of spices and gave special attention to chilli.

There were protective measures to revive the economy in the whole world and the spice sector of India. The demand for spices also keeps on increasing due to the immunity-boosting capacity of spices. However, the losses suffered by farmers at the time of lockdown and the fear is still there. Some farmers are also in fear of debt. Moreover, there were no measures taken to avoid the reasons behind losses, including lack of storing space and gunny bags. The food safety guidelines are also leading to increasing the cost of production. There were no measures taken to use the opportunity of new demand. Moreover, most of the farmers are even unaware of the spice board's existing measures, programmes, and policies. So, even though they took some measures to revive the industry, there is still a lot to do. The spice sector can improve by providing some basic arrangements and infrastructure.

## 5.2 CONCLUSION

In India, spices are the essential agricultural commodity, and spice exporting has a great significance in India's foreign trade. The spice industry is a growing sector for India, and it is developing from time to time. Even though the industry faces challenges, the demand for Indian quality spices was increasing simultaneously. There were legal frameworks at the international and national levels to regulate the spice industry. The spice board is having a predominant role in law-making and decision-making in the spice sector. The study aimed to understand the existing legal provisions and find out the areas in which legal assistance is necessary to revive the economy and develop the spice sector during the pandemic. Most of the international agreements are in favour of developed countries. It is difficult for developing countries to satisfy the international quality standards and different quality standards are confusing. In India, quality evaluation laboratories are limited, time-consuming and costly. The contamination of spices and the use of pesticides are other significant concerns of the Indian spice industry. The laws in this area are not sufficient, and there is also the usage of unlawful substances. In spice export, China is the primary competition for India. There were also competitions from Germany, Netherlands, Brazil, Indonesia and Turkey. The lack of a legal framework to ensure price and increase productivity are the crucial competitiveness challenges.

The Indian quality spices have great demand worldwide, and the demand increased during the pandemic due to the immunity-boosting capacity of spices. The COVID19 pandemic affected the whole international trade, including the spice export of India. The farmers have suffered damage and loss due to the restrictions. Now there are many protective measures introduced at international and national levels to revive the economy. However, India is unable to supply spices as per the demand. The farmers already suffered financial losses and do not have enough money for further investment. The lack of availability of facilities and broken supply chain also affected the quality of spices and became unsuitable for exporting. So, it is essential to have policy changes and legal frameworks in these areas to improve the spice sector and export the spices as per the demand. The spice board introduced the chilli task force committee to give special attention to chilli in the pandemic situation, and it is helpful for farmers and the spice export industry. Such initiatives are essential to improve the production and export of all highly demanded spices.

## Chapter – 6

# FINDINGS AND SUGGESTIONS

### 6.1 FINDINGS

- Spice is the most traded agricultural commodity. It is beneficial for flavouring food items and is famous for its medicinal properties. Spices have an immunity-boosting capacity, and some are also having antiviral properties.
- During the pandemic period, all the trading activities were restricted, and demand for almost all the commodities decreased. The spice exports are also affected by these physical restrictions, but the demand for spices increased afterwards.
- In the fiscal year 2021, India exported spices worth 3.62 billion and created a new record. Moreover, the export value of every spice item that was studied was more than 50000Lakhs.
- The physical restrictions, including the lockdown, broke down the supply chain, and it affected all harvesting, post-harvest activities, including the exporting of spices.
- Due to the perishable nature of spices and lack of facilities, equipment including the facility for storage of spices, most of the spices harvested during this period lost their qualities to export. The farmers suffered losses due to this.
- China is the primary competition for India in the spice export field. There were also competitions from Germany, Netherlands, Brazil, Indonesia and Turkey.
- There were many laws in the area of spice before the pandemic itself. There are both international standards and Indian standards, which gives quality standards to the spices.
- There are different quality standards available for exporting items, food items, agricultural items and exclusively for spices. They all regulate the quality of spices that are exporting. Even though they are similar, these different quality standards may lead to confusion among farmers.
- Sometimes, the unawareness of farmers, misused by the exporters. Moreover, most of the time, the farmers are not getting sufficient profit, and sometimes they end up in debt.

- The contamination of spices and the use of pesticides reduces the quality of spices, and they become unsuitable for exporting. There are no sufficient regulations to prevent the unwanted use of chemicals, and most of the time, farmers are unknown about this fact.
- The lack of knowledge of farmers and implementation problems, the use of unlawful substances is in practice. It is dangerous to the public and food safety norms.
- The insufficient quantity of spices and inadequate surplus for export are challenging to both the marketing and competitiveness of spices in the world market.
- There are WTO agreements that eased the international trade of spices. Most of the agreements helped India as a significant exporter. At the same time, some lead to competition between states.
- There is also a spice board that exclusively deals with the exporting of spices. It provides quality standards and organises many programmes to promote exports and helps the farmers in exporting process. It is also responsible for giving the licence for exporting.
- In the pandemic period, many nations introduced new regulations by waiving the exporting and importing rules. Some were beneficial for spice export. However, some were affected negatively.
- The demand for Indian quality spices increased due to the immunity-boosting capacity, but farmers' debt and losses during the lockdown period have not yet found any remedy.
- There was a temporary waiver in India's logistic and banking sectors, which is helpful for the exporting of spices.
- The spice board also introduced new regulations and initiatives in support of spice export. As far as the spice board is concerned, spice export is the prime concern.
- The spice board conducted some online programmes, and it provided all details online during the pandemic. However, the fact is that most of the farmers are unaware of using online facilities.
- The board established spice parks and seven Quality Evaluation Laboratories. However, the quality evaluation laboratories are still limited in number, and also, they are costly and time-consuming.
- They also entered into some new projects for addressing the SPS issues, Doubling the spice export and increasing farmer's income.
- Chilli Task Force Committee created by the board, aimed at giving special attention to chillies.

- For assisting the farmers, the board collected some agricultural equipment and distributed it for subsidy payment as an arrangement during the pandemic.
- So, the protective measures were minimal. It only provided some temporary adjustments and forgot to utilise the increase in demand for spices in the international market.

## **6.2 SUGGESTIONS**

The government policies and legal framework in the area of spice exports are helpful to enhance the exporting of spices from India. However, they are not sufficient. The spices exported from India does not satisfy the demand from the world market. Implementing legal changes that help to produce more spices and policies to reduce the legal barriers, including the complex procedures, are essential. Some suggestions which can be implemented through government policies or legal frameworks are given below;

### **POLICY CHANGES**

#### **✓ Financial Assistance to the Farmers**

The most critical policy framework essential to help the farmers and exporters of spices is financial assistance. The government may adopt policies favouring small-scale farmers who mainly produce the spices to provide them with subsidies or loans or any other kind of financial assistance. Due to the covid19, farmers suffered huge losses, and some have no extra money to take the risk of culturing spices again. In such a condition, the government can provide some policy framework to help the farmers. They can provide some loans to the spice farmers whose spices were damaged due to the restrictions and insufficient money for further farming activities. Now the supply of spices to the world market is less as compared to demand. So, the financial assistance will help to increase the production of spices in quantity as well as quality. The policy will also help the covid19 affected spice industry to improve production and trade.

#### **✓ Production of Spices in Unused Land of Government**

The government may produce the needed quantity of spices directly utilising the government owned land by introducing a new scheme. Since the world market is demanding more Indian quality spices, the supply should be increased. Most of the spice producing farmers are small scale farmers, and they have small plots with small amounts

for investment. The government can adopt a policy with the help of the spice board to produce the spices in the unused government land. The spices can be cultivated in government land and hired land with the help of farmers, and it will give financial benefit for both the spice board and farmers. Even the Green Highway Policy can be utilised for this purpose. The spice board can utilise the money for the improvement of the sector and promotion of spices.

#### ✓ Units for Collection, Processing and Exporting of Spices

The government may adopt new policies for unifying the processing and exporting of spices. The spice industry is mainly depending on small-scale spice producing farmers. The small-scale farmers generally have small plots, and it is difficult for them to process or export the spices on their own. So, they are forced to sell the spices for small amounts to the exporters. However, at the lockdown, the exporters did not purchase any spices, and the farmers suffered losses. So, the government may adopt an alternative method to collect the spices, process and export them to different countries. Such a policy may be helpful for the farmers in terms of assurance and to get the exact value for their product. The policy may also be helpful for the government as it provides an extra income that may be used for the development of the spice industry and may also help to provide employment. This policy can be implemented with the help of the spice board.

#### ✓ Simplify Procedure for Obtaining Exporting Licence

The licence from the spice board is necessary for exporting spices. However, in some circumstances like the pandemic where it is impossible to take all the formalities, the spice board can make some regulations to prevent farmers' losses. They can waive licencing conditions and allow farmers to export spices directly, or the spice board itself can act as an exporting agency or a trader. The policy framework is necessary for this area to simplify the procedure for obtaining the licence. The procedure can be digitalised, and unnecessary formalities can be avoided.

#### ✓ Codify the Quality Standards

Maintaining the quality of Indian spices is very necessary to compete with other spices in the international market. However, now, there are many quality standards available for spices. The spices can be regulated by quality standards for spices, agricultural commodities, exporting items and food items. There are also international standards as well as national standards. Even though it is similar or in conformity, different quality standards may confuse the farmers and the exporters. So, the government must take

necessary policy changes to codify these quality standards and communicate with all the people related to this industry. The quality standard should be adequate for exporting to various countries. Moreover, at the same time, it should not be an extra burden on farmers. So, there should be a new legal framework to codify the quality standards. Furthermore, sufficient training and support should be given through a sufficient policy framework. It is also essential to notify all the changing quality standards to farmers as early as possible.

#### ✓ Quality Management System

The government should adopt a new policy to enhance quality management. Now there is only a limited number of quality evaluation laboratories available. They are time-consuming and costly. The farmers are forced to pay a massive amount for this purpose, and if the quality standard is not satisfied, then the process is a complete waste. So, there should be some mechanism to train the farmers to produce the spices with prescribed quality. The government should also arrange facilities to check the quality standards either freely or for a lesser cost. The construction of more quality evaluation laboratories is also beneficial. A new quality management system with these facilities can increase productivity and supply of spices to the international market.

#### ✓ Arrangement of Storage Facilities

The government should introduce a new policy to arrange enough facilities for the storage of spices before export. The government can implement this through a scheme under the spice board. Since the farmers do not have enough storage facilities, the spices were damaged, and massive amounts were lost during the pandemic. If the spice board can arrange storing facilities whenever necessary or delay in export, it will be helpful for the farmers. The unscientific storage may decline the quality of spices, and it will become unsuitable for exporting.

#### ✓ Availability of Equipment

Lack of equipment and other facilities are another reason behind the damage to spices and loss to farmers. The spice board can initiate a new scheme with the help of governmental policy to arrange the equipment for the farmers. There was such an initiative by the spice board during the pandemic period. However, it was limited, and most of the farmers not benefited. So, if the board can arrange these facilities daily or whenever necessary, the farmers can work without fear. Moreover, the government can arrange the most modern equipment to help to attain the prescribed quality standard.



### ✓ Support Farmers and Revive the Supply Chain

The supply chain was broken entirely during the lockdown. It is essential to revive it into the old condition. There may arise some hurdle to revive it, and the spice board can help in that process. The government may be able to introduce new policies favouring the industry, which will help the reformation of the supply chain in terms of financial or any other means. Sufficient training for the farmers is also helpful to support the sector. Most of the farmers are unaware of modern technologies. A policy to give training can prevent contamination and help to produce more quality spices.

### ✓ Utilise the Emerging Opportunity of Demand

Now after easing the restrictions, the demand for Indian quality spices increased in the international market. It is essential to utilise this new opportunity wisely. The spice exporters from India should be able to provide the quantity as demanded by the international market. For this purpose, the spice board should arrange facilities to forecast the international community's demand and communicate to the farmers and exporters. The Indian policies should be changed to produce and export more spices. The governmental policies favouring the spice industry are essential to utilise the new demand and for the development of the sector.

### ✓ Enhance the Promotion and Marketing of Spices

Promoting spices is one of the critical functions and statutory duties of the spice board. Moreover, the spice board is conducting many programmes for the same purpose. However, there should be more advertising programmes projecting the immunity-boosting capacity of spices that can help in increasing demand for Indian quality spices. The government's policies can be changed to include the marketing of spices following the new emerging trend.

### ✓ Schemes to Familiarise the Spice Board to Farmers

It is also essential to familiarise the spice board, the fundamental functional unit in exporting to the farmers. Some farmers are not aware of the spice board or its programmes for helping spice exporters and farmers. Policies changes are essential which will promote the conducting of more programmes which helps to familiarise the spice board to farmers. It will also help to communicate all details of the spice industry and spice export to farmers.

### ✓ Forecast and Communicate the Demand

The farmers should be aware of the estimated demand, the spices that cannot supply according to the demand, the estimated price of spices, and the scientific details about spice cultivation. The spice board was already publishing all details on their official website so that anyone can look into it. However, some farmers do not seem aware of spice boards or are not familiar with browsing. So, the spice board can arrange a policy framework to monitor the availability of information among farmers.

## **LEGAL CHANGES**

### ✓ Prevent Exploitation of Farmers

Most of the time, the big exporters exploit illiterate farmers and force farmers to sell their products for a lesser price. Providing well awareness about the price of spices and demand to the farmers can reduce this. Moreover, there should be sufficient punishment for those who are taking unfair advantage. A legal framework is necessary to fix a minimum price for the spices, and it should be changed according to the time, situation and price on the world market.

### ✓ Widen the Objectives of Spice Board

The spice board is only focusing on the exporting of spices. If the board took broader objectives and more initiatives for increasing cultivation, it would benefit the Indian export of spices. Moreover, the spice board or any other authority constituted under or new statutory authority can collect the spices and arrange facilities for post-harvesting activities. These initiatives help to improve the quality of spices and are helpful for small-scale farmers. So, an amendment is necessary to the Spice Board Act to widen the objectives.

### ✓ Check and Provide Sufficient Facilities

The lack of equipment and non-availability of modern equipment is one of the significant issues faced by the spice industry. The lockdown shows how the lack of equipment and storage facilities is affecting the quality of spices. So, a legal framework is necessary to ensure the availability of facilities in every region. If any facility lacks, it should be communicated with the particular authority, and sufficient arrangements should be made.

### ✓ Codifying Quality Standards

Since different legal provisions regarding the quality of exporting spices are confusing and different countries accept different quality standards, there is essential to have a uniform quality standard for exporting spices. Besides the introduction of a new policy, the legal framework is also essential to satisfy this need. The quality standard must be the one that is acceptable to all importing countries, and it should not be an extra burden or costly for farmers.

### ✓ Prevent Contamination of Spices

In India, there is no positive list of fumigants under food regulations. The Central Insecticides Board and Registration under the government of India place methyl bromide and aluminium phosphide in their restricted list. However, there is no specific ban on sulfuryl chloride and ethylene oxide. So, it is essential to have specific legal provisions to prevent contamination. The fumigants and chemicals which can be used and which should be restricted are to be defined. Like the USA, the spice markets of India do not accept contaminated spices, so it is essential to have a legal framework in this area.

### ✓ Use of Pesticides and Unlawful Substances

It is essential to have a legal framework to regulate the use of pesticides and unlawful substances. In the case of pesticides, there is necessary to have laws to prohibit dangerous pesticides and the pesticides banned by the market countries. In India, unlawful substances and banned pesticides are used widely. It will reduce the quality of spices and also not good for health. So, it is essential to list out the pesticides and other substances that can be used to cultivate spices and which cannot be used. Moreover, it is necessary to prevent the unlawful use of substances by implementing the existing laws and introducing new provisions or improving the existing ones.

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## **INTERNATIONAL INSTRUMENTS**

- ❖ Agreement on Agriculture
- ❖ Agreement on Safeguards
- ❖ Agreement on Subsidies and Countervailing Measures
- ❖ Agreement on Technical Barriers to Trade
- ❖ Agreement on the Application of Sanitary and Phytosanitary Measures
- ❖ Agreement on Trade Related Aspects of Intellectual Property Rights
- ❖ Indo-Singapore Comprehensive Economic Co-Operation Agreement
- ❖ Indo-Srilanka Free Trade Agreement
- ❖ International Plant Protection Convention

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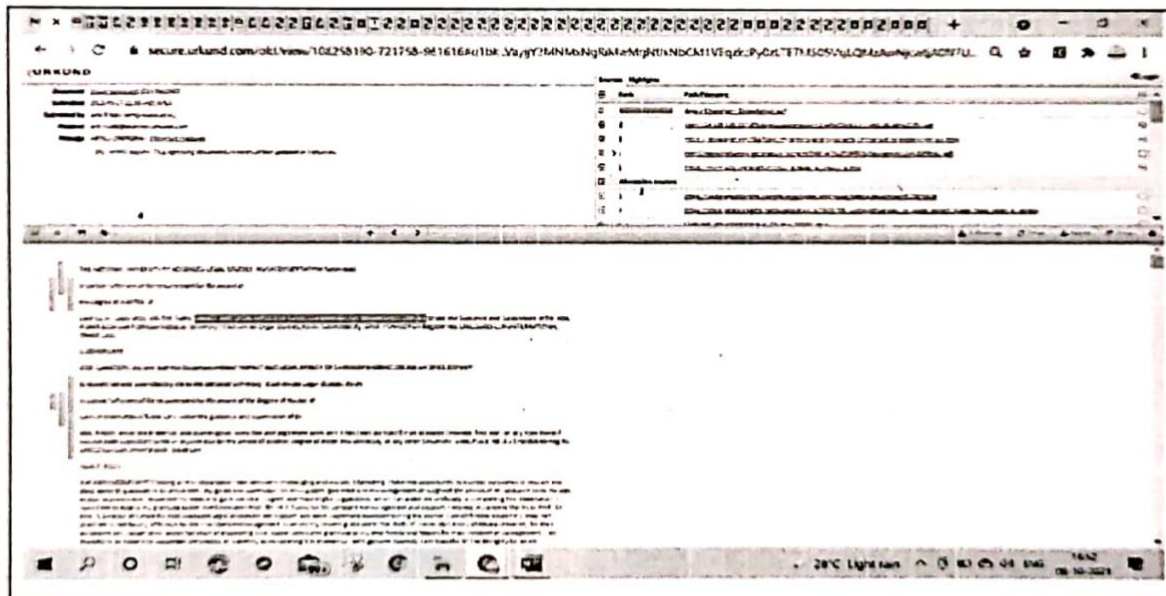
## APPENDIX


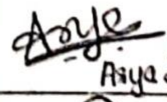
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