

Czech University of Life Sciences Prague
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Diploma Thesis
Spices and Herbs export from India
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CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

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Business Administration

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Spices and herbs export from India

Objectives of thesis

The Objectives of the thesis:

1. To find out the growth in spice export in India
2. To assess the market opportunities of major spices export to EU and USA
3. To determine the export competitiveness of major spices between India and other top exporting countries.
4. To suggest whether the EU or the USA will be a better destination for the future export of spices.

Methodology

In the present study, the analysis was carried out to find out the export

performance of five major spices which are pepper, cardamom, ginger, turmeric, and chilies at a macro level. Time trend and forecasting methods are used to find out the growth in the export, the potential in the different markets and the scope of future export of spices. The secondary data pertaining to area, production, yield, export quantity, export value, export unit value, consumption and import of spices were gathered from the various publications of Spices Board, Ministry of Commerce, Government of India, FAO-STAT, COMTRADE.

The proposed extent of the thesis

60 – 80 pages

Keywords

Spices Export from India, Potential spice market in EU, Major Spices grown in India,

Recommended information sources

Davies, K. (2016) Understanding European Union Law, New York:Routledge

Chatfield, Ch. (2003) The Analysis of Time Series An Introduction, New York: CRC Press

Sharangi, A. (2018) Indian Spices: The Legacy, Production and Processing of India's Treasured Export, Mohanpur:Springer International Publishing

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Declaration

I declare that I have worked on my diploma thesis titled "Spices and Herbs export from India" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on 29.3.2019

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Spices and Herbs export from India

Abstract

This thesis examines the majorly spices grown in India and its export to two big economies the European Union and the United States of America. Five major spices were selected based on having a significant number in production and export from India. A calculation was made to find out how much spices are being produced per hectare. The spices were Black Pepper, Cardamom small, Turmeric, Ginger and Chillies.

For all the five spices an analysis was made. Fluctuations in the trend of export were examined and explained. It was highlighted how the choices of people are shifting towards use of different spices in both the EU and the USA. A growth in the trend of spices and herbs usage has been seen in the thesis over the decade resulting in increase of export from India. It was estimated that the growth in the import of spices will continue in the upcoming years.

A comparison was performed between both the European Union and the United States of America in terms of tariffs and import quantity. It was found that in terms of single nation United States of America imports more spices from India as compared to any single country in Europe however considering the European Union including all countries within, it leads the race for import of spices. It was found that the tariffs on spices import in the European Union are less than the tariffs in the United States of America. Therefore, I came out with the result that the European Union carries greater potential for exporting spices from India.

Keywords: Spices Export from India, EU Spice market, Tariffs, Import, Trade

Koření a bylinky export z Indie

Abstrakt

Tato práce zkoumá převážně koření pěstované v Indii a její export do dvou velkých ekonomik Evropské unie a Spojených států amerických. Pět hlavních spiců bylo vybráno na základě významného počtu ve výrobě a vývozu z Indie. Byl proveden výpočet, aby se zjistilo, kolik koření se vyrábí na hektar. Koření byla černá paprika, malý kardamom, kurkuma, zázvor a chilli.

Pro všech pět koření byla provedena analýza. Byly zkoumány a vysvětlovány fluktuace trendu vývozu. Bylo zdůrazněno, jak se volby lidí přesouvají k používání různých koření v EU i USA. Růst trendu užívání koření a bylin byl pozorován v diplomové práci v průběhu desetiletí, které se znovu projevilo ve zvýšení vývozu z Indie. Odhaduje se, že v příštích letech bude růst dovozu koření pokračovat.

Bylo provedeno srovnání mezi Evropskou unií a Spojenými státy americkými, pokud jde o sazby a dovozní množství. Bylo zjištěno, že pokud jde o jednotný stát, Spojené státy americké dovážejí více koření z Indie jako ve srovnání s jakoukoli jednotlivou zemí v Evropě, avšak vzhledem k tomu, že Evropská unie zahrnuje všechny země uvnitř, vede závod o dovoz koření. Bylo zjištěno, že sazby na dovoz koření v Evropské unii jsou nižší než sazby ve Spojených státech amerických. Proto jsem vyšel s výsledkem, že Evropská unie má větší potenciál pro vyvážení koření z Indie

Klíčová slova: Koření Vývoz z Indie, EU Spice trhu, Tarify, Import, Obchod

Table of content

1	Introduction	12
2	Objectives and Methodology	14
2.1	Objectives.....	14
2.2	Methodology	14
3	Literature Review	16
3.1	The economy of India	16
3.1.1	Import and export of products	17
3.1.2	Foreign Direct Investment	17
3.1.3	Government initiatives to increase Foreign Direct Investment (FDI)	18
3.2	EU and its trade relationship with India.....	19
3.2.1	Institution	19
3.2.2	Council of the European Union	20
3.2.3	European Commission	21
3.2.4	European Parliament.....	21
3.2.5	European Council	23
3.2.6	The European Court of Justice.....	23
3.3	Free Trade Negotiation	24
3.3.1	Trade and Investment between India and the EU	25
3.3.2	European Spices and Herbs market	27
3.3.3	Tariffs on Spices and Herbs in Europe	27
3.4	Trade relationship between India and the USA	29
3.4.1	General trade, Foreign Trade and investment between India and US	31
3.4.2	General tariffs on imports	32
3.4.3	The Spice Market in the United States of America	33
3.4.4	The American Spice Trade Association (ASTA)	34
3.4.5	Tariffs on Spices in the United States of America.....	35
4	Practical Part	36
4.1	Overview of Indian Spice Market	36
4.1.1	Spice Cultivation and Production	38
4.1.2	Major Spice crops in World Trade	41
4.1.3	Export of Spices from India to different countries and regions.....	42
4.2	Major items of spices and their exports from India	45
	Results and Discussion	60

4.3	Potential Export possibilities to EU	60
4.3.1	Consumption of Spices	66
4.3.2	Performance of spices in EU market in recent years and forecast.....	69
5	Conclusion.....	71
6	References	73
7	Appendix	Error! Bookmark not defined.

List of pictures

Picture 1: EU institutional structure

Picture 2: Number of MEPs in each political group

Picture 3: Investment of the EU in India, 2018

Picture 4: Over view of the USA in general,2018

Picture 5: Current President of the USA,2018

Picture 6: Structure of ASTA

Picture 7: The crop cultivation time calendar

Picture 8: Black pepper

Picture 9: Cardamom

Picture 10: Chillies

Picture 11: Ginger

Picture 12: Turmeric

Picture 13: Change in flow of rate for spices

Picture 14: Average price of spices in EU spice market

Picture 15: Categories of spices consumers

List of tables

Table 1: FDI investment in India,2018

Table 2: Tariffs on Spices import in the EU,2018

Table 3: The U.S Tariff Rates

Table 4: Spices producing areas in India

Table 5: Spice wise area cultivation

Table 6: Spice wise production

Table 7: World's Export of Major Spices (2014-2017)

Table 8 Zone wise exports of Indian spices during (2016-17)

Table 9: Commodity wise export of spices (Quantity)

Table 10: Commodity wise export of spices (Value)

Table 11 : Average production of Black Pepper

Table 12: Country wise Export of Indian Pepper in different years

Table 13 : Average rate of Cardamom

Table 14: Country wise Export of Cardamom

Table 15: Average production of Chili

Table 16 :Country wise Export of Chilli

Table 17 : Average production of Ginger per Hectare

Table 18: Country wise Export of Ginger

Table 19 : Average production of Turmeric per Hectare

Table 20: Country wise Export of Turmeric

List of Graphs

Graph 1: EU trade balance with India

Graph 2: Trade and Foreign trade investment

Graph 3: Export of pepper and it's trend

Graph:4 Export of cardamom and it's trend

Graph 5: Trend in export of Chilli

Graph 6: Trend in export of Ginger

Graph 7: Trend in export of Turmeric

Graph 8: Demand of Spices and herbs in the EU market

Graph 9: Price trend in Spices and herbs in the EU market

Graph 10: The chart below shows the sales of organic food in 2016:

Graph 11: Imports of grounded and crushed spices and herbs

List of abbreviations

GPS General Scheme of Preferences

EU European Union

GDP Gross Domestic Product

USA United States of America

WTO World Trade Organisation

ASTA American Spice Trade Association

FDI Foreign Direct Investment

FAO Food and Agriculture Organization of the United Nations

1 Introduction

This diploma thesis will mainly illustrate the bilateral trade between India and two large economies European Union and the United States of America. I will come up with a possible analysis of exports of spices and the potential market in the European Union and the United States of America. I came up with an interest in bilateral trade to analyse what products and services imported and exported can increase the welfare of consumers living in these parts of the world.

International trade between different countries is a significant factor in helping the living standards of a state to grow. It enables consumers to enjoy a greater variety of goods and provide them employment. International trade has been in trend since the earliest civilizations, but in recent years international trade has become very important which profoundly impacts the GDP of a country which is hugely dependent on export and import activities. Trading globally offers consumers and nations the opportunity to enter into new markets and make them aware of the new products. Pretty much every sort of item can be found in the international market: food, clothes, herbs, spices, automotive parts, oil, precious stones, wine, water, etc. Trade among different countries occurs due to the mutual understanding and agreements. Both countries gain profit during trading.

International trade is always regulated by several trading barriers such as tariffs, customer duties, export duties, import duties, prohibition, etc. Trade agreements are one of the best ways to overcome the obstacles to trade. With time, International trade has expanded, and negotiations have become more complex; however, in the last few decades, it has inclined towards the free and more liberal way of working.

India is a steady-based economic country. The original composition of its population is 80 percent Hindu but besides home to one of the world's most significant Muslim communities. Prime Minister Narendra Modi, leader of the Bharatiya Janata Party, who come to office in 2014 and is credited with reviving India's external policies. India's diverse economy envelops customary town cultivating, present-day farming, crafted works, an extensive variety of current ventures, and many other services. India has the advantage of a vast English-speaking population to end up with a noteworthy exporter of data technology service, business services, and programming specialists.

India-EU bilateral relations date to the mid-1960s with India being among the first nations to build up discretionary relations with the European Economic Community in 1962. It celebrated the Golden Jubilee in 2013. A Cooperation Agreement marked in 1994 took the two-sided relationship excluding trade and economic participation. The Cooperation Agreement together with the Joint Political Statement signed in 1993, opened the path for yearly pastoral gatherings and a broad political discourse. A multi-layered institutional design of collaboration has since been made, managed by the India-EU Summit since 2000. The first India-EU Summit occurred in Lisbon on 28 June 2000 and denoted a watershed in the advancement of the relationship. From that point forward, fourteen two-sided Summits have been yearly held.

The US is India's second-biggest trading accomplice, and India is its ninth biggest trading accomplice. In 2017, the US sent out \$25.7 billion worth of products to India and imported \$48.6 billion worth of Indian products and services. The main things imported from India are data technology services, materials, hardware, jewels and precious stones, synthetic substances, tea, etc. Main American products imported by India can be considered as an airship, PC equipment, and medical tools.

2 Objectives and Methodology

Objectives

To research the consumption of spices and the changes in the eating habits over the last few years in the European Union and the United States of America. and to find out how the changes in the tariffs can affect the supply and demand of the spices.

The thesis will also focus on the potential market for Spices and Herbs which are largely produced in India and can be exported to both the regions. This research will also focus to find out which of the one destination will be a better choice over the other to export the spices in future.

Q1: What is the trend in the export of Spices from India?

Q2: To find out whether the European Union has a better market potential for Indian Spices of the Unites States of America?

Methodology

The Diploma thesis consists of two parts, theoretical and practical. The theoretical part is concentrated on understanding specialized literature about the European Union and it's trade relation with India. Furthermore, the tariffs imposed on the products exported to the EU. The co-operation between the two big economies their investment strategies. Following the same pattern, the relation between the USA and India, their trade and tariff barriers.

The practical part contains the overview of the Indian Spice market. The growth in last 10 years in the field of Spice export. The major spices produced in the country and its largest importers. The spotlight is on the time series pattern, how the country has increased the volume and value of its spice export all over the world. Then the focus is made on the European Union, how the change in the eating habits of the people lead to evolve a potential market within the continent.

During the research, the compound growth rate is calculated to find out the annual growth rate in the production and cultivation of the spices in India. The formal used for CAGR is $Y = a b^t$ in which $Y = \text{area/production/productivity}$, a is constant, b is the regression co-efficient and t is the time variable. To solve the equation above Log is taken on both the side

transforming the equation to $\log Y = \log a + t \log b$. The CAGR% was calculated using the formula $\text{CAGR}\% = (\text{antilog of } b-1) \times 100$. (Devi and Jadav,2018)

The thesis will focus of five major spices which are Black Pepper, Cardamom, Turmeric, Chillies, Ginger. The reason behind choosing these 5 spices is that these are majorly grown in India and are the most widely used spices amongst the hundreds of different spices which India produces.

Global unit price is calculated for the selected time period and the price in the retail market is also being compared. The time trend analysis has been performed to forecast the import and consumption of the spices in the future.

The thesis will use data from various government online resources like Euro stats, Comtrade, Ministry of Industry and Commerce, India, Spice Board of India, books published authors like Davies, Chatfield, Sharangi. For own calculation of the unit price for the past years, an annual average exchange rate was used from Indian Rupees to US dollars.

3 Literature Review

The economy of India

India has a quarterly GDP of \$422 per capita, not precisely the same period of \$426 a year ago. India's total national output was 1.9 percent compared to the previous quarter in the second quarter of 2018. The year-on-year GDP change was 8%, 5%-10% more than the 7.5% recorded in the 2018 central quarter. In the second quarter of 2018, the GDP figure was \$474,560 million, leaving India placed sixth in the quarterly GDP positioning of the 50 nations we distribute. The most vulnerable and fastest growing sectors of Indian economy are services trade, hotels, transport and communication; financing, insurance and real estate. (World Bank, trading economics,2018)

During the period of 2012-2015 a gradual increase was seen and by the end of 2015 the country became the second fastest growing economy on the planet. There was a little decline seen in the following 2 consecutive years however in the year 2018 a growth can easily be seen and by the last quarter, the country finished at 7.44%. Experts forecast that the GDP will show a gradual and steady growth for the next five year if the country keeps on making the progress in the same manner. (Statista,2018)

Unemployment remains a major concern among the country's population. In the ountry, the unemployment rate is measured by the number of people actively looking for a job as a percentage of labour force. Unemployment rate in India increased to 6.10% in the year of 2018 as compared to 3.52% which was in the year of 2017. Taking an average of last 3 decades the rate of unemployment in India has an average of 4.12% from the year 1983 until 2018. The year 1983 is taken into accounts here for a reason because the country saw all time high employment in the year 1983 however an all-time low percentage was noted in the year of 2014. In the G20 countries, South Africa has the maximum unemployment however Singapore with the least. India stands on the 9th position out of 20 for employment rankings. (Trading economics,2018)

3.1.1 **Import and export of products**

Export

India has one of the planet's most substantial jewellery cutting and cleaning ventures and various valuable stones. The business is exceptionally located sending out, and a wealth of specific work supports it. India, with a free horticultural economy, is sending out \$7.75B of rice. In the years to come, the assembly division in India has been in an upward direction, and cars represent \$5.82B of the total export of the nation. Refined Petroleum is the main export of India at \$53.9B. While India's crude oil generation is low, the nation's refining limit is expansive, trading refined oil to oil the countries which produce oil, such as Saudi Arabia and the UAE, and European nations Packages Medicaments are sold at an estimation of \$12.1B while gems represents \$11.8B of the total estimate of exports. (World Atlas. 11, 2018)

Import

At \$31.1B and \$17.5B, gold and precious stones are transported individually to fuel the diamond and decorative industry of the nation. In India over 90 percent of the world's precious stone is cut and evaluated due to work-friendliness and skill. Oil Gas and Coal Briquettes are transported individually in India for an estimated \$17.7B and \$15.4B. India has no significant oil fields and relies on imported unrefined oil to enhance abnormal oil refinery skills. In this way, unrefined petroleum is the \$122B principle introduced from a portion of the world's biggest oil producers. (World Atlas. 11, 2018)

3.1.2 **Foreign Direct Investment**

Apart from being an important role to drive the economy of the country, the foreign direct invest (FDI) is a critical source of non-debt resource of finance for the development of the economy of India. Foreign companies investing in India for taking the advantage of low wages, special investment privileges like tax exemption and many more. For a nation where foreign companies start investing, it means that the nation is on the right path to achieve technical benefits and generating employment. (IBEF,2018). The total FDI investments in India from April-December of 2018 came up by US\$ 33.49 billion, showing that the government's efforts of improving the flexibility of doing business and providing

exemption in FDI rules is proving beneficial. (Department of promotion of industry and trade,2018) In October 2018, VMware which is one of the biggest software company in United states of America announced that the company will invest US\$ 2 billion in India till the end of 2023. Walmart acquired 77% stakes of one of the largest E-commerce website of India costing US\$16 billion. The biggest German household products retailer IKEA announced it's planning to invest up to US\$612 million to set up stores and experience centres. (IBEF,2018).

Table 1: FDI investment in India,2018

Financial Year 2018-19 (April-March)		Amount of FDI Equity inflows	
		(In Rs. Crore)	(In US\$ mn)
1.	April, 2018	35,104	5,348
2.	May, 2018	30,479	4,513
3.	June, 2018	19,597	2,891
4.	July, 2018	19,025	2,770
5.	August, 2018	17,441	2,508
6.	September, 2018	33,472	4,635
7.	October, 2018	34,595	4,698
8.	November, 2018	12,495	1,739
9.	December, 2018	31,056	4,391
2018-19 (form April, 2018 to December, 2018) #		233,263	33,492
2017-18 (form April, 2017 to December, 2017) #		231,457	35,941

Source: Reserve Bank of India,2018

3.1.3 Government initiatives to increase Foreign Direct Investment (FDI)

As of February 2019, the govt. of India is functioning on a road map to attain its target of US\$ 100 billion price of FDI inflows. The Government of India released the Draft National E-Commerce Policy which inspires FDI within the market model of e-commerce. In addition to that, it states that the FDI policy for e-commerce sector has been developed to ensure a fair play for every competitor in this business. Government of India is about to take into account 100 per cent FDI in Insurance intermediaries in India to administer a push to the sector and increasing the amount of funds. In December 2018, the Government of India revised all the rules associated with the e-commerce. As per the new rules a complete 100% FDI will be allowed within the the e-commerce sector. Also, sales of any mer-

chant through an e-commerce marketplace organization or its cluster firms are restricted to twenty five per cent of the whole sales of such merchant. In September 2018, the Government of India released the National Digital Communications Policy, 2018 which will help the FDI inflows in the telecommunications sector to increase by US\$ 100 billion by 2022. In the first month of 2018, Government of India allowed foreign airlines to invest in Indian airline up to 49 per cent with the approval of the government. The investment should not be more than 49% directly or indirectly. No government approval will be needed for FDI to a complete limit of 100 per cent in market of real estate brokerage. The Government of India is discussing with shareholders to further ease foreign direct investment (FDI) in the sector of defence in the similar way of 49% and 51% in order to give a boost to the Make in India initiative and to generate employment. (India brand equity foundation,2018)

EU and its trade relationship with India

The European Union (EU) is a financial and political association comprising of twenty-seven-nations which make common strategies in a few regions. The EU was framed in 1993 with the marking of the Treaty on the European Union, which is otherwise called the Maastricht Treaty. However, it was gone before by different European associations which led to the improvement of the EU. The EU speaks to the most recent and best thoughts in a progression of endeavours to keep Europe bound together. The administration of the EU is formed by the European Parliament and the European Council in which the part states are spoken to and the Council of the EU.

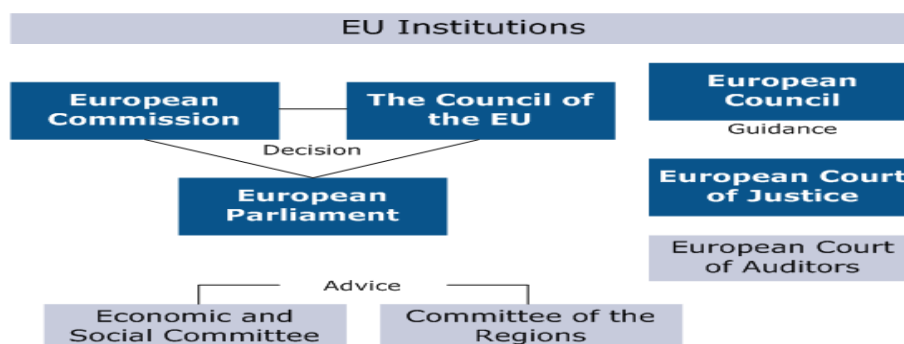
(ECB, 2018)

3.1.4 EU Institutions

The institutional association of the European Union is distinctive and unique concerning the organizations of its 28 Member States. There is not one president, or any European head administrator, and an individual European government in control.

The structure of the EU's institution:

Picture 1: EU institutional structure



Source: ECB, 2018

3.1.5 Council of the European Union

Role: Deciding on policies and adopting legislation

Members: One minister from each Member State

Location: Brussels and Luxembourg

The European Council was made in 1974 as a casual gathering for exchange between heads of state or legislature of the EU part states. It before long built up a job as the body in charge of fixing EU objectives and needs. Under the Treaty of Maastricht in 1992, the European Council gained a formal status and job - to give the catalyst and general political rules for the EU. In 2009, after the progressions presented by the Lisbon Treaty, the European Council ended up one of the 7 EU organizations. (Concilium.europa.eu,2018)

The Council is an essential EU decision-maker. It negotiates and adopts legislative acts in most cases together with the European Parliament through the ordinary legislative procedure, also known as 'co-decision.' Co-decision is used for policy areas where the EU has exclusive or shared competence with the member states. In these cases, the Council legislates from proposals submitted by the European Commission. (Davies, 2016)

3.1.6 European Commission

Role: Executive branch of EU that proposes laws, policies agreements and promotion

Members: One from each Member State

Location: Brussels

The Commission is the politically independent institution that represents and upholds the interests of the EU as a whole. In many areas it is the driving force within the EU's institutional system: it proposes legislation, policies, and programmes of action and is responsible for implementing the decisions of the European Parliament and the Council.

The European Commission has four main roles:

1. to propose legislation to Parliament and the Council;
2. to manage and implement EU policies and the budget;
3. to enforce European law (jointly with the Court of Justice);
4. to represent the Union around the world.

(European youth parliament, 2018)

3.1.7 European Parliament

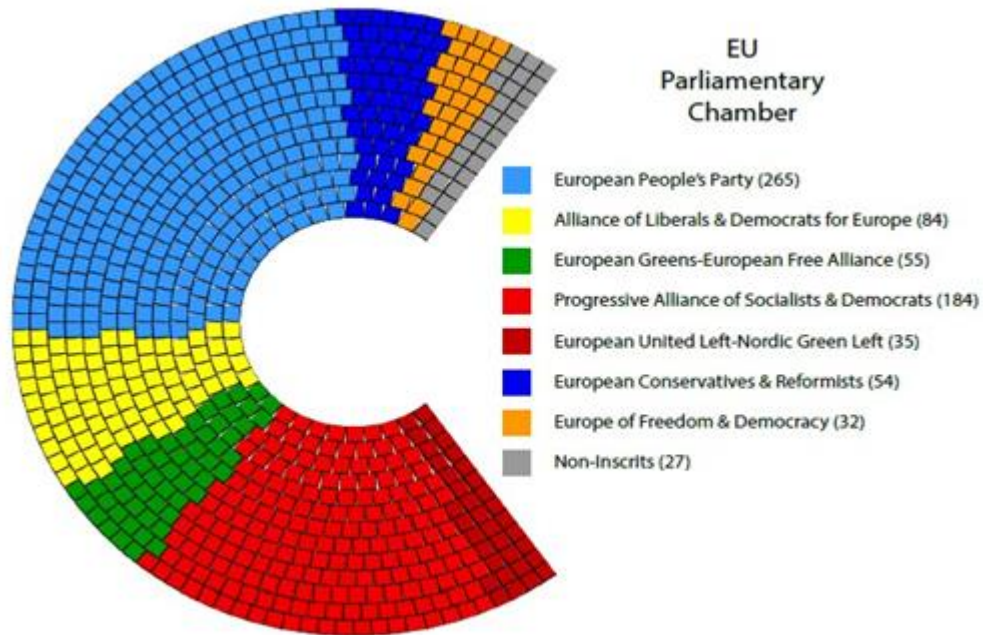
Role: Directly elected legislative arm of the EU

Members: 751 Members of the European Parliament

Location: Strasbourg, Brussels, and Luxembourg

Members of the European Parliament are directly elected by EU citizens to represent their interests. Elections are held every five years and all EU citizens over 18 years old (16 in Austria) some 375 million are entitled to vote. The Parliament has 751 MEPs from all 27 Member States. (Euro Parliament, 2018)

Picture 2: Number of MEPs in each political group



Source: europarl.eu, 2018

The Parliament has three main roles:

1. It shares with the Council the power to legislate — to pass laws. The fact that it is a directly elected body helps guarantee the democratic legitimacy of European law. (europarl,2018)
2. It exercises democratic supervision over all EU institutions, and in particular the Commission. It has the power to approve or reject the nomination of the President of the Commission and Commissioners, and the right to censure the Commission as a whole. (Euro Parliament,2018)
3. It shares authority with the Council over the EU budget and can, therefore, influence EU spending. At the end of the budget procedure, it adopts or rejects the budget in its entirety. (Euro Parliament,2018)

3.1.8 European Council

Role: Defines political direction and priorities

Members: Heads of State or Government from each Member State, the President of the European Council and the President of the European Commission

Location: Brussels

The European Council brings together the EU's top political leaders, i.e., Prime Ministers and Presidents along with its President and the President of the Commission. They meet at least four times a year to give the EU as a whole general political direction and priorities. The High Representative of the Union for Foreign Affairs and Security Policy also takes part in the meetings. (European Council,2018)

As a summit meeting of the Heads of State or Government of all the EU countries, the European Council represents the highest level of political cooperation between the Member States. At their meetings, the leaders decide by consensus on the overall direction and priorities of the Union and provide the necessary impetus for its development. (European Council,2018)

3.1.9 The European Court of Justice

Role: To give legal judgments on cases brought before it

Court of Justice: One Judge from each EU Member State; eight Advocates-General

General Court: One Judge from each EU Member State

Civil Service Tribunal: Seven Judges

Location: Luxembourg

The Court of Justice of the European Union (the Court) ensures that EU legislation is interpreted and applied in the same way in each Member State. In other words, it is always identical for all parties and in all circumstances. To this end, the Court checks the legality of the actions of the EU institutions, ensures the Member States comply with their obligations and interprets EU law at the request of national courts. The Court has the power to settle legal disputes between the Member States, EU institutions, businesses, and individuals. (CURIA,2018)

To cope with the many thousands of cases it receives, it is divided into two main bodies: the Court of Justice, which deals with requests for preliminary rulings from national courts, specific actions for annulment and appeals, and the General Court, which rules on all actions for annulment, brought by private individuals and companies and some such actions brought by the Member States.(CURIA,2018)

EU – India Free Trade Negotiation

Arrangements for a far-reaching Free Trade Agreement (FTA) between the EU and India were propelled in 2007 and suspended in 2013 because of a gap in the dimension of desire between the EU and India. The EU stays focused on progressing in the direction of a goal-oriented, far-reaching and offset agreement FTA with India that reacts to each side's fundamental advantages and is a success win. (India European Trade Commission Policy, 2018)

On November 2018 the European commission and the high-ranking representatives of the Foreign affair an Security policy conducted a meet joint communication meeting to set up again the EU's vision to develop a strategy which can strengthen the ties and cooperation between both India and EU. The EU's main objective is to indulge into trade and business activities which are sound, transparent, open for everyone, no discrimination with predictable monitored business environment for the companies of Europe. The EU wants to ensure that the investments of the EU companies are protected, and the intellectual properties are enforced. The EU is willing to enhance market access for the EU companies especially for SMEs which require removing of existing barriers and prevention of tariffs to work successfully.

The EU also want to use all the available channels to make sure there is a fair access to the market and the prediction can easily be made for investment. The EU and India also looking forward to pay complete respect to the multilateral obligations under the World Trade Organization and all the other related organizations. (Joint communication to the EU Parliament and the council,2018)

3.1.10 Trade and Investment between India and the EU

The EU is India's biggest trading partner, representing €85 billion worth of trade products in 2017 or 13.1% of total Indian trade, way in front of China (11.4%) and the USA (9.5%). India is the EU's ninth biggest trading partner, representing 2.3% of EU's all out trade, entirely behind the USA (16.9%) and China (15.3%). (India - Trade - European Commission Policy, 2018. (EU-India Fact sheet,2018)

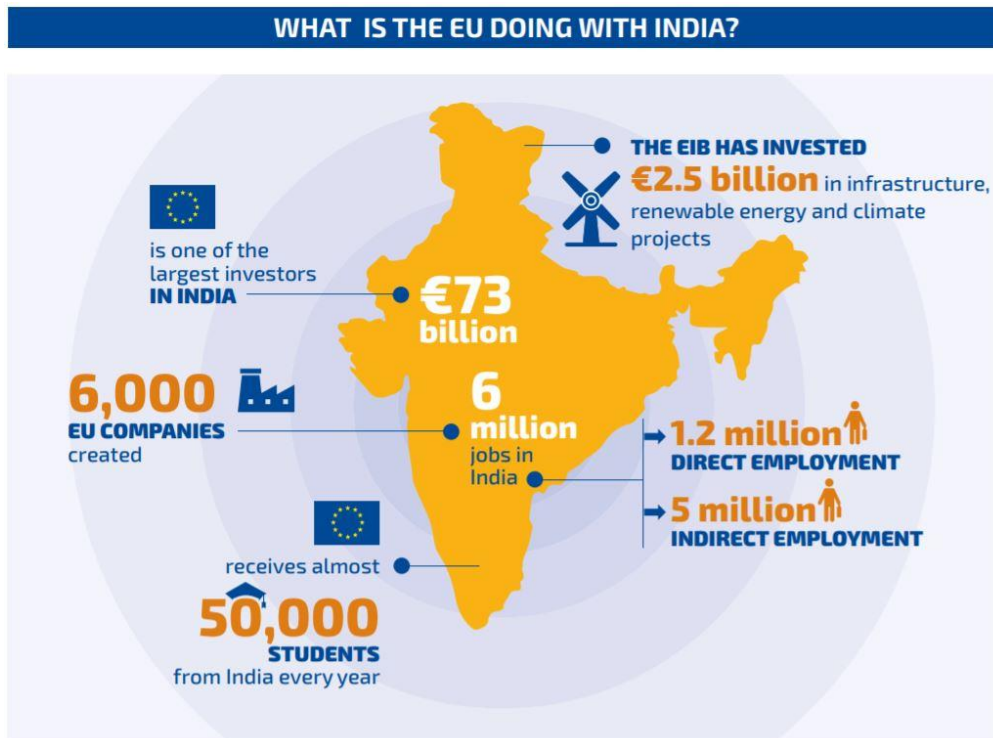
Trade in goods between the EU and India has increased by two times in last 10 years. Trade in services between the EU and India increased from €23 billion in 2010 to €29 billion in 2016. India is now the 4th largest carrier exporter to the EU and the 6th most prominent vacation spot for EU offerings exports. India is now the 4th biggest service exporter to the EU and the sixth largest destination for EU services exports.

The EU's part in foreign direct investment inflows to India dramatically increased from 8% to 18% in the most recent decade, making the EU the primary outside financial investor in India. EU's foreign direct investment stocks in India added up to €73 billion in 2016, which is a critical, yet well path underneath as compared to the EU foreign investment stocks in China (€178 billion). (EU-India Fact sheet, 2018)

Approximately 6,000 EU companies are present in India, providing almost 1.7 million jobs and indirectly 5 million jobs in a wide range of sectors. Indian companies have invested over €50 billion in Europe considering 2000. (EU-India Fact sheet, 2018)

The graph below (Graph 1) shows the goods trade between the EU and India. During the period of 2006-2012, the EU was on the positive side of the trade balance however passing the year of 2012, India took over the trade game putting the EU in trade deficit. A gradual fluctuation and can be seen however till the end of 2016, India seems to be better off in terms of trade. The trade deficit remain 1.6 negative for the European Union.

Picture 3: Investment of the EU in India, 2018



Source: European Commission - Press release, 2018

Graph 1: EU trade balance with India



Source: Eurostat, 2016

3.1.11 European Spices and Herbs market

The intensity of buyers in Europe has customarily been substantial, yet with expanding worldwide shortages and high costs, the power balance is gradually moving to suppliers in nations of the origin. High costs and developing need will draw in new suppliers after some time. It is expected that the European market for most spices and herbs will keep on developing. Accordingly, the European market will keep on giving chances to suppliers that can meet the high prerequisites for quality and sustenance security. (Center for Business information, CBI,2018).

The level of rivalry is commonly high for uniform, full items with low included value, for example, the market for spices and herbs. In the top end of the market, there is more room for product differentiation. (Center for Business information, CBI,2018).

The attention is less on cost and more on quality, taste, color, and sustainability. This portion, for the most part, gives amazing chances to small and medium-sized ventures that can fulfill the strict needs on this market. For processed items, (for example, crushed, ground, mixed and bundled flavors, and herbs), there is much challenge from European processors and significant processors from expansive providing nations (for instance, Vietnam). (Center for Business information, CBI,2018).

As per the records from the Indian Spice board, a total of 61562 Metric Tons of spices were exported to EU countries in 2017-2018 costing more than 2 Million Euros. The major importing countries were the United Kingdom, Germany, Netherlands, France, and Spain. (Spice board of India, 2018)

3.1.12 Tariffs on Spices and Herbs in Europe

In January 2014, significant changes were made to the European Union's Generalized System of Preferences (GSP). One pertinent part of the spices and herbs market is that spices from China and Brazil will not again get an advantage of individual import taxes. (Generalized Scheme of Preferences (GSP), CBI EU 2018)

For some whole spices and herbs, the import tax for all nations stays at 0%. For some items, this measure will not affect. For whole sweet pepper, vanilla, cloves, and cove leaves, import duties are presently higher for China and Brazil than for developing nations. This additionally applies to crushed/ground pepper, capsicums, vanilla, cloves, saffron, curry, and thyme. For these items, the duty relies upon whether China and Brazil are providers. India is considered one of the fastest developing nations will get a critical profit by this change. It can help the trade to increase by numerous folds in the forthcoming years. (Centre for Business Information,2018)

It is also important to see that it can sometimes be difficult for European buyers to switch. They generally have specific requirements for taste, quality, and food safety that only a few suppliers can meet. The new changes in import taxes can give suppliers who compete with China and Brazil an advantage. (Centre for Business information, CBI,2018).

Table 2: Tariffs on Spices import in the EU,2018

Heading	Article	Unit of Quantity	General
0904	Pepper	Free	Free
0904.12.00	Pepper Crushed or ground.	Free	Free
0910	Ginger	Free	Free
0910.12.00	Ginger Crushed or ground	Free	Free
0910	Turmeric	Free	Free
0910.12.00	Turmeric crushed or ground	Free	Free
0906	Cinnamon	Free	Free
0906.20.00	Cinnamon crushed or ground	Free	Free
0908	Cardamom	Free	Free

Source: European commission, 2018

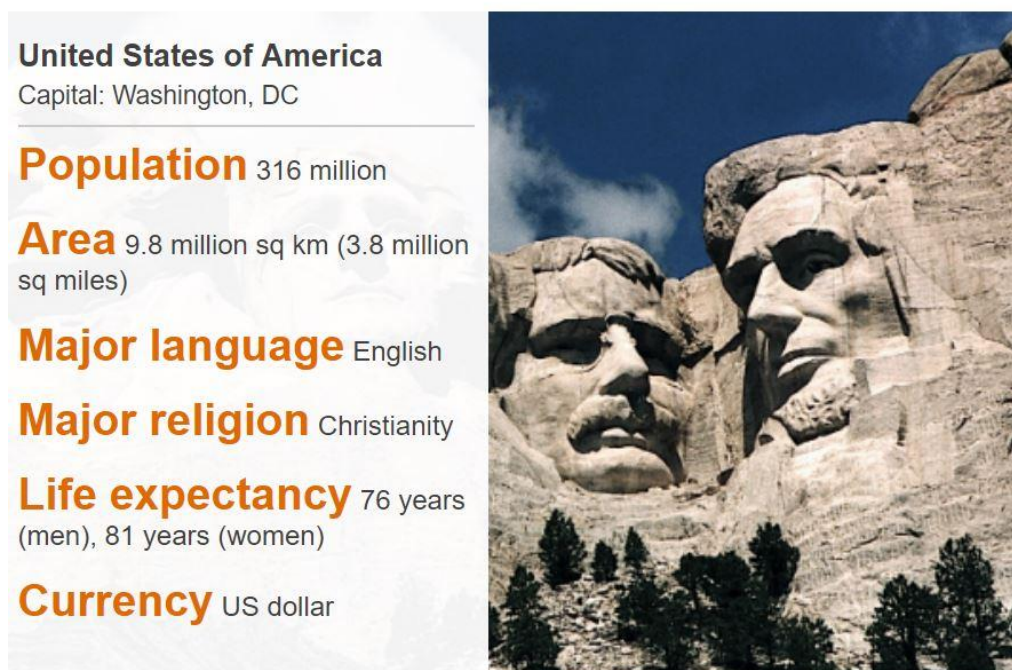
The table above shows the tariffs on spice in EU. It seems the EU allows a free entry to the spices to it's shores. It is significant that the tariff on even the ground or crushed spice is null however that's not the same case on many of the other countries. For example, in USA, in some cases the tariff on ground or crushed spices differs in contrast to the whole spices.

Trade relationship between India and the USA

The US Overview

The USA is the world's most influential financial and military power, with worldwide interests and an unmatched global reach. America's GDP represents near a fourth of the world aggregate, and its military spending plan is figured to be nearly as much as whatever remains of the world's barrier spending set up together.

Picture 4: Over view of the USA in general,2018



Source: WHO countries, USA 2018

Republican candidate Donald Trump crushed Democratic candidate Hillary Clinton to win the polls in the 2016 race. Mr. Trump's triumph was one of the greatest surprises in US political history, perplexing the supposition surveys and putting a conclusion to eight years of Democratic control of the White House.

Picture 5: Current President of the USA,2018



Source: Mandel Ngan,2018

A billionaire businessman, television star, Mr. Trump crusaded on a pledge to "make America great again." He introduced himself as an agent of progress who would get employment back to the US, tear up negative trade deals, and control unlawful movement.

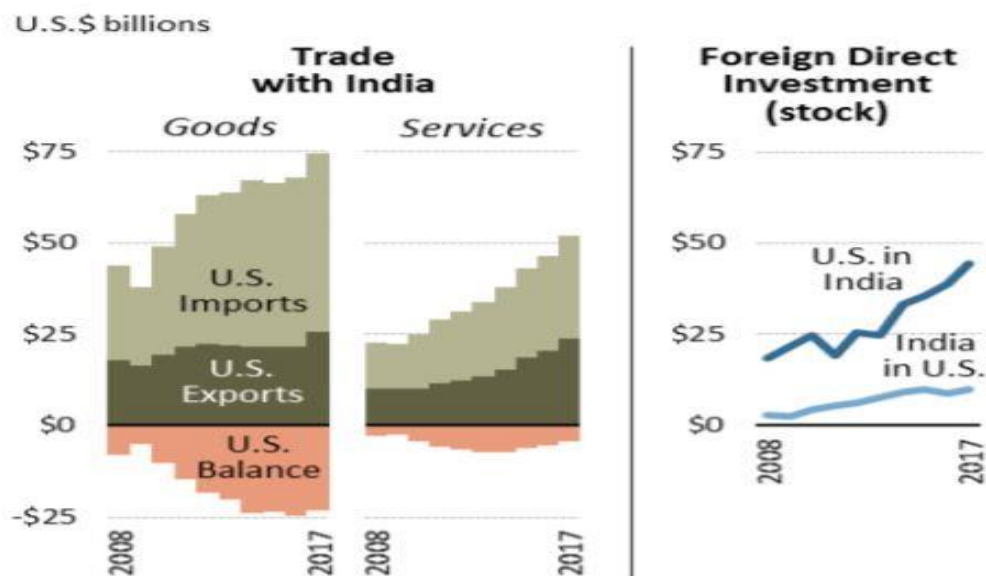
During the election campaign Donald Trump came up with positive remarks towards India and a lot of Indian Americans supported him. He claimed India to be one of the biggest emerging market and economy however on the other side blamed India for charging high tariffs on the US imports along with China and many other partner countries. Donald trump also said India is taking a lot of American jobs to its shores causing huge damage to the employment sector of his country.

In the month of March 2019 Donald Trump said that his administration is planning to end the preferential treatment for India and its export to the United states of America. The US Generalized System of Preference program also known as GSP provides free duty-free entry into the United States of America for over 3000 products from more than 100 countries. India is the largest beneficiary of this program with a trade done of \$5.7 Billion in the year of 2017 in this program. As an average India gets a benefit of almost \$190 million every year. (Office of the United States Trade Representative,2018)

3.1.13 General trade, Foreign Trade and investment between India and US

The United States and India see each other as vital partners to propel common interests regionally and universally. Two-sided trade in products and services is about 2% of U.S. world trade yet tripled in value in the time between 2005 and 2017, coming to \$126 billion. The trade relationship is increasingly weighty for India, for whom the United States was its second-biggest export market (16% share) after the European Union (EU, 17%), and third most significant source of imports (6%) after China (17%) and the EU (10%) in 2017. Numerous spectators accept two-sided business ties that could be progressively broad if trade and investment barriers were discussed. Bilateral trade erosions exist on various fronts. However, the opposite sides are attempting to fix issues. (Office of the United States Trade Representative,2018)

Graph 2: Trade and Foreign trade investment graph



Source: Bureau of Economic Analysis (BEA) data, 2018.

U.S. foreign direct investment reached \$44.5 billion by the end of 2017, a 15.1% increase was seen as compared to the year 2016. U.S. direct investment in India is mainly invested in professional, scientific, and technical services, manufacturing, and wholesale trade. India's FDI in the United States was \$9.8 billion by the end of 2017 and it went up to 11.5% as compared to the year 2016. India's direct investment is mainly invested in professional,

scientific, and technical services, manufacturing, and depository institutions of U.S. Sales of services in India by majority U.S.-owned affiliates were \$24.5 billion in 2015 (latest data available), while sales of services in the United States by majority India-owned firms were \$14.7 billion. (Office of the United States Trade Representative,2018)

3.1.14 **General tariffs on imports**

Two-sided tensions have moved toward becoming uplifted over the U.S. On June 1, 2018, the United States started applying 25% steel and 10% aluminium duties under Section 232 of the Tariff Expansion Act of 1962. The tax hikes ask to all nations; India did not get an underlying exemption like some trading accomplices, nor the arrangement of an elective amount plan. (Congressional Research Service. Oct 2018)

India provided 2.6% (\$761 million) of U.S. steel and 2.2% (\$382 million) of U.S. aluminium in 2017. It informed the World Trade Organization (WTO) of its arrangements to strike back against the United States with taxes on \$1.4 billion of U.S. products (e.g., nuts, apples, steel, and bikes), however, has conceded applying the duties till November 2, 2018, with expectations of mutual goals. India additionally filed a WTO grievance against the U.S. tariff increases and joined related complaints lodged with the aid of other WTO members (Congressional Research Service. Oct 2018)

In September, India announces plans to raise tariffs on products like some valuable stones, steel, and electronics from all nations to check imports to help its devaluing rupee. This pursues an example of duty climbs by India as of late, (for example, on mobile phones and solar panel boards), just as longstanding U.S. worries over India's duty routine. India generally has high standard duty rates, particularly in farming, and can raise its connected rates to bound rates without abusing its WTO responsibilities, causing vulnerability for U.S. exporters. (Congressional Research Service. Oct 2018)

Generalized System of Preferences (GSP). In April, the United States propelled an audit of India's qualification for GSP, a U.S. program that allows duty-free tariff treatment to certain U.S. imports from qualified creating nations to help their financial advancement. The audit concerns India's consistency with the GSP "Market access" basis and further-

more identifies with the U.S. restorative and dairy industry showcase get to petitions. Proceeded GSP qualification is the best need for India, GSP's best receivers. GSP represented 12% (\$5.6 billion) of U.S. goods imports from India in 2017. (Congressional Research Service. Oct 2018)

3.1.15 The Spice Market in the United States of America

The US domestic market is not traditionally a producing market for herbs or spices. Apart from the climate which is not in favor of production, labor shortages and agricultural infrastructure are also barriers to the growth of this industry in the US. On both a volume and price premise, the United States is the world's most prominent spices merchant and customer, with the two imports and utilization on an uptrend from the last ten years.

While the United States imports more than 40 separate spices, seven of these (vanilla beans, highly contrasting pepper, capsicums, sesame seed, cinnamon, mustard, and oregano) represent more than 75 percent of the total yearly estimation of spice imports. While the United States imports spices from more than 50 nations, 5 of these nations (Indonesia, Mexico, India, Canada, and China) routinely represent one-portion of the yearly value of spice imports. (United States Department of agriculture,2018)

Even though the European and Asian customers are the most pervasive shoppers of spices, US consumers have as of late built up an expanding enthusiasm for new fascinating flavours and fiery tastes. This change in US inclinations has empowered an expansion in the interest for peppers and for hot sauces, the last of which has developed by 150% since 2000. (Passport Report, Euromonitor,2018).

An expansion in migration from Latin America (from the most parts of Mexico) and Asia has altogether added to this pattern. Interest because of movement and the commonality with various societies and their foods is another factor that has added to the US change in preferences. Access to internet shopping is a moderately new dominant factor in support of this pattern. (Passport Report, Euromonitor, 2018).

The United States produces almost 40 percent of its yearly spice needs, with imports providing the rest of it. Developing domestic production comprises of capsicum peppers, mustard seed, dried out onion and garlic, and herbs. U.S. spice trades have additionally

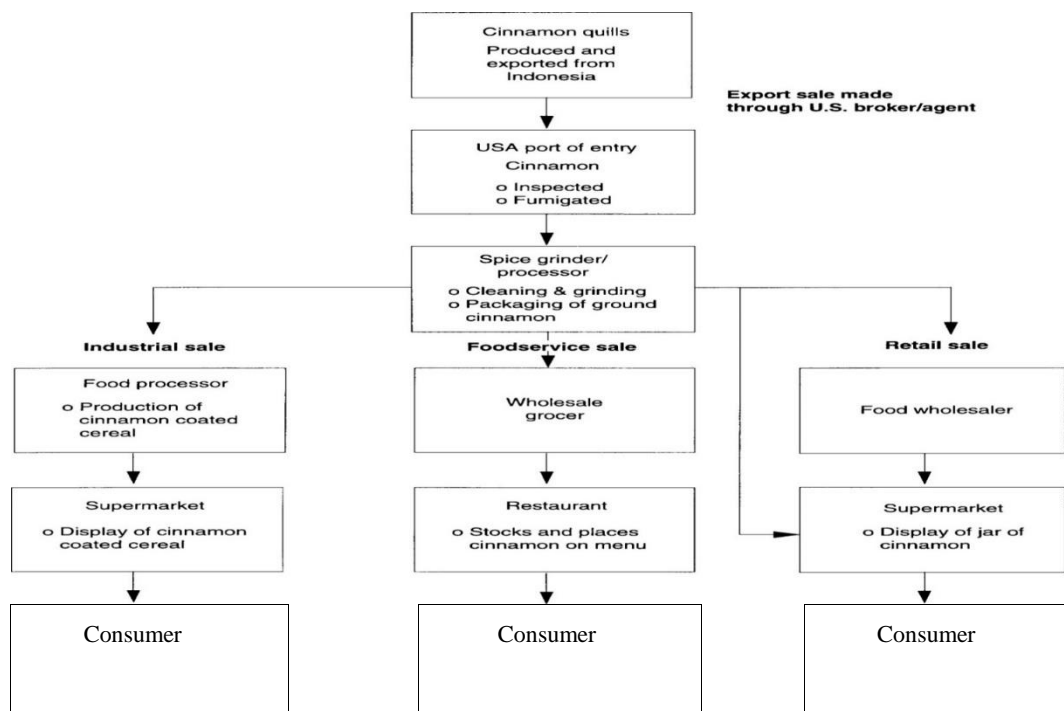
been extending in the recent years, driven by dehydrated garlic and onion. Rising residential utilization of spices reflects developing Hispanic and Asian populations, a pattern toward the utilization of spices to adjust for less salt and lower fat levels in food, and the increased popularity of ethnic cuisine from Asia and Latin America. (United States Department of agriculture,2018)

3.1.16 The American Spice Trade Association (ASTA)

The American Spice Trade Association is an exchange affiliation that regulates the U.S. Spice industry. It was established in 1907 and represented the interests of roughly 175 individuals including organizations that grow, dry, and process spices. ASTA's individuals incorporate U.S.- based specialists, representatives and merchants, and organizations based outside of the U.S that produce spices and ship them to the U.S and different organizations related to the U.S spice industry. ASTA individuals manufacture and market most spices sold in the U.S. at retail and to food processors. (ASTA,2018)

The picture below shows that ASTA manages the import of spices in the US market.

Picture 6: Structure of ASTA



Source: (United States Department of Agriculture,2018)

3.1.17 Tariffs on Spices in the United States of America

As per the Harmonized Tariff Schedule of the United States (2019), most of the spices are tax-free to import. It is taking into account the dominant spices imported to U.S.A like Black pepper, Cardamom, Turmeric, Chilies, Ginger, Cinnamon, Cumin seeds. Most of them remain tax-free; however, some are bound with tariffs depending on where it is grounded, powdered or whole grain. For Black pepper, the duty remains 0% however if the chili is crushed or ground then there is a tariff of 2¢/kg. Cardamom remains tax-free whether it is whole or in the form of powdered. Ginger and Turmeric falls in the same category when it comes to tariffs. There is a tariff of 11c/kg if the spice is grounded or powdered; however, it remains tax-free if imported in whole seed form. (Source: U.S Department of Agriculture Foreign Agricultural Service, 2018)

Table 3: The U.S Tariff Rates

Heading	Article	Unit of Quantity	General
0904	Pepper	Free	Free
0904.12.00	Pepper Crushed or ground.	Free	2¢/kg
0910	Ginger	Free	Free
0910.12.00	Ginger Crushed or ground	Free	11c/kg
0910	Turmeric	Free	Free
0910.12.00	Turmeric crushed or ground	Free	11c/kg
0906	Cinnamon	Free	Free
0906.20.00	Cinnamon crushed or ground	Free	11c/kg
0908	Cardamom	Free	Free

Sources: Tariff Schedule of the United States, 2018

The table above shows the general tariffs on the main spices in US market. In the table we can observe that there is no tariff on the whole spices being imported to the country however there is a tariff if the spice is in powdered form or grounded. The tariff is quite low however when a huge quantity of spice is imported it affects the price of the spice in retail market.

4 Practical Part

Overview of Indian Spice Market

India is one of the world's largest economies, with China, the EU, and the US, concerning purchasing power. It is one of the fastest-growing large economies, with annual GDP growth rates of around 7%, and cruising to reach \$US 7.8 trillion economy mark by 2030. It is an essential player in global economic governance. In 2017, the EU was India's first trading partner, while India was the EU's ninth largest trading partner. (Europe council, 2018)

The country is modernizing and has set a goal to reduce poverty and spread the benefits of economic growth. Looking towards the needs of the middle class, giving a boost to the production capacity and productivity via domestic and foreign investments and exchange of technologies. Modernizing its agriculture sector and digitalizing its economy towards which the country is focusing the most. (Europe council, 2018)

India now produces more than 3.2 million tons of different categories of spices worth around 4 billion US dollars. Amid 2017-18, India sent out 1,028,060 tons of Spices and products related to spices which were esteemed at around Rs 17,929.55 crore (US\$ 2,781.46 million). The export business developed by 8% as far as volume and 6% as far as value (US dollars). As far as focused exports, the genuine accomplishment is 100% as far as size and 105% in dollar terms of significant worth. USA is the best export destination for Indian spices pursued by Vietnam, China, UAE, and Malaysia. Chili is India's best spice exported as per value pursued by mint items, spice oils, and oleoresins, cumin and turmeric. The country also accounts for around 48 percent of the export volume and 43 percent of the export value (2017-18) of the world spice trade. (India Brand Equity Foundation, 2018)

In India, different states are known for different spices. They are produced in all the states and union territories. Andhra Pradesh is known for ginger, turmeric, chili and mustard, Gujarat for cumin, dill seeds, fenugreek, fennel, and garlic. Himachal Pradesh for ginger, Haryana is known for garlic, Karnataka for pepper, cardamom (small), ginger, chili, turmeric and garlic, Orissa for ginger, chili, turmeric, and garlic. Kerala is known for pepper,

ginger, cardamom (small), turmeric, nutmeg and mace, clove, vanilla, cinnamon, and casia. The majority of Indian species production is undertaken in minimal holdings, often on hilly tracts of land. It is estimated that 2.5 to 3.0 million smallholders cultivate one or more spices either for self-consumption or for sale. (Spice board of India,2018)

Table 4: Spices producing areas in India (Spice Board of India, 2018)

State	Spice
Andhra Pradesh	Chilli, Ginger, Mustard, Turmeric
Arunachal Pradesh	Ginger, Tejpata, Turmeric
Assam	Aniseed, Turmeric
Bihar	Ajovan, Garlic, mustard, Turmeric
Gujarat	Chilli, Cumin, Dill seed, Fennel, Fenugreek, Garlic
Haryana	Garlic
Himachal Pradesh	Ginger
Jammu and Kashmir	Ajwan, saffron
Karnataka	Cardamom (small), Chilli, clove, Garlic, Ginger, kokum, Nutmeg and mace, pepper, Turmeric, Vanilla
Kerala	Cardamom (small), Cinnamon and Cassia, clove, Ginger, Nutmeg &Mace, Pepper, Turmeric, Vanilla, and Cambodge.
Madhya Pradesh	Chilli, Garlic, Ginger
Maharashtra	Chilli, Garlic, Pomegranate seed, Turmeric
Meghalaya	Ginger, Turmeric
Mizoram	Ginger
Orissa	Chilli, Garlic, Ginger, Turmeric
Punjab	Aniseed, celery
Rajasthan	Chilli, Cumin, Coriander, Dill seed fennel, Fenugreek, Garlic
Sikkim	Cardamom (large), Ginger, Tejpat

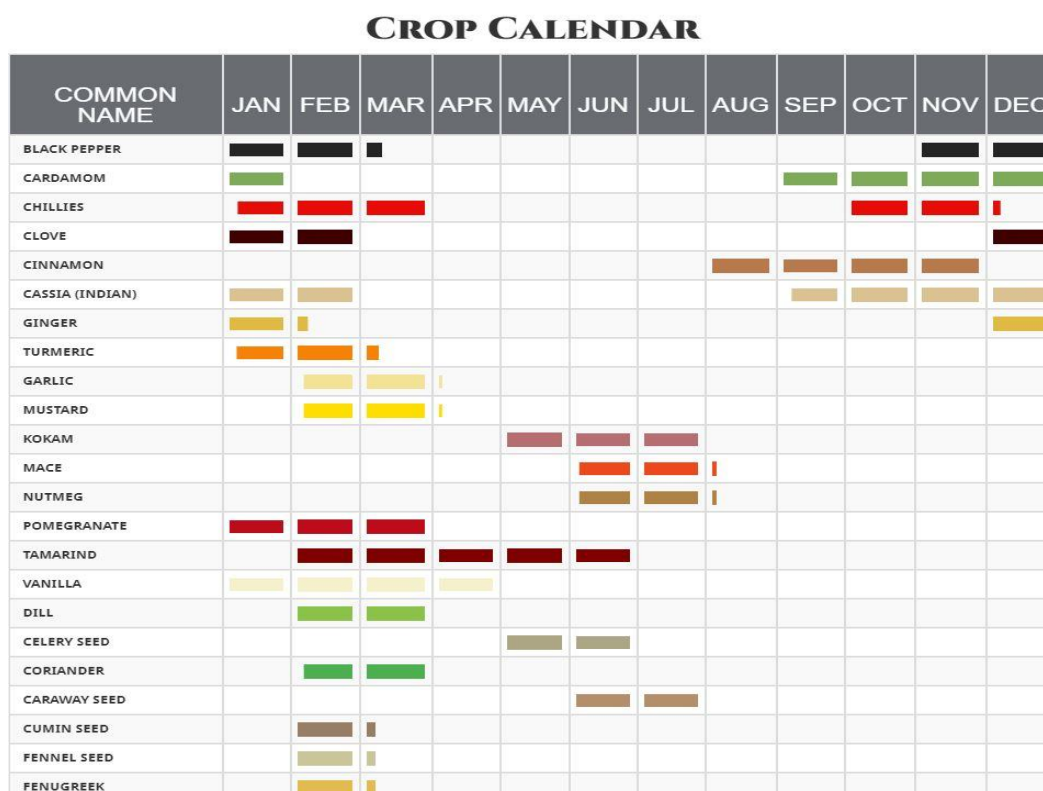
Source: Spice Board of India, 2018

The table above shows the major states and their role in production of spices in India. The top spices producing states include Kerala, Andhra Pradesh, Gujarat, Karnataka, Rajasthan and Assam. Out of all the spice growing states, Kerala tops the chart in terms of production of spices (Spice Board of India,2018). Out of twenty-nine states, 19 states are known for growing major spice which indicates that the production in India is really huge. India stands on the top rankings all over the world for producing Ginger, Turmeric and Chili Pepper. (Spice Board of India, 2018)

Spice Cultivation and Production

During 2016-17 India cultivated spices in 3,529,200 hectares and produced 7,077,300 MT's and out of it India has exported 947,790 MT's (13%) of spices and earned 17,664.60 crores (€219 Million). India is that the largest producer and exporter of spices of the 109 varieties listed by the International Standard Organisation (ISO), because the country created and exports concerning seventy-five types of spices in its different regions. Along with India alternative vital spices producing countries are Guatemala for Cardamom, China for Ginger and Capsicum annum longum, Islamic Republic of Pakistan for Turmeric, Turkey for Cumin, Indonesia for Vanilla, Nutmeg, Cinnamon, and cloves and Madagascar for vanilla, china for Cinnamon, Madagascar for cloves, Islamic Republic of Iran and Spain for Saffron, Vietnam for pepper.

Picture 7: The crop cultivation time calendar



Sources: FAO, 2018

Table 5: SPICE WISE AREA OF CULTIVATION 2007-2017 (IN HECTARES)											
Spices	2007 -08	2008 - 09	2009 - 10	2010 - 11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	CAGR
Pepper	198956	181299	198986	183780	201381	122500	122400	123900	131790	131230	-0.05
Cardamom(Small)	69300	71170	71110	71012	71285	69870	69970	69970	70080	69357	0.00
Cardamom(Large)	30039	27034	27034	26984	26460	26060	26060	26387	26387	26617	-0.01
Chilli	836831	802896	809699	716428	793921	787530	791930	766620	742950	830770	0.00
Ginger	123708	143861	142089	167432	125374	134430	138200	153100	156910	164850	0.03
Turmeric	178021	195076	187535	232022	251824	194330	207570	178470	183480	193395	0.01
Coriander	457605	537327	530789	474250	362148	531070	516070	604090	624780	662345	0.04
Cumin	477936	527132	517133	625087	843401	593980	690080	701560	808230	760130	0.05
Fennel	89894	74149	53497	81890	92446	99610	94070	46760	76000	74660	-0.02
Fenugreek	55520	74512	71985	94760	96304	93110	90500	124710	227960	218430	0.16
Ajwan	35635	26148	20628	27257	45693	39690	39260	24010	26600	24230	-0.04
Tamarind	55707	54281	44186	56530	52788	58300	58720	54120	47660	49020	-0.01
Clove	2188	2172	2081	2195	2100	2060	2060	2380	2340	2350	0.01
Nutmeg	15132	16400	16001	17760	18407	18730	19690	21110	22360	23080	0.05
Cinnamon	171	186	150	187	163	277	277	277	320	320	0.07
Grand total including others	2875848	2948558	2899887	3043583	3541804	3172468	3145610	3192640	3457000	3529200	0.02

Source: Spice Board of India, 2017

Table 6: SPICE WISE PRODUCTION OF FROM 2007-08 to 2016-17 (IN MT)											
Spices	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	CAGR
Pepper	50000	50000	50000	48000	43000	65000	37000	70000	48500	57000	0.01
Cardamom(Small)	9450	11000	10075	10380	15000	14000	16000	18000	23890	17990	0.07
Cardamom(Large)	4920	4300	4180	3918	3860	4145	4465	4850	5315	5572	0.01
Chilli	1370853	1381531	1470352	1299191	1448215	1378400	1376400	1621480	1497440	1872010	0.04
Ginger	775439	831607	708256	937043	924417	669350	683160	795820	1025110	1081430	0.04
Turmeric	884306	894590	927912	1268280	1398862	986690	1092630	846250	967060	1051160	0.02
Coriander	286414	471515	501485	372366	428687	503240	496240	546800	572990	609350	0.09
Cumin	264860	283000	303943	403744	462645	394330	445030	372290	503260	485480	0.07
Celery	4239	5329	5248	4609	5271	5510	5510	5510	5510	5510	0.03
Fennel	136984	114277	83576	125710	144112	142940	135930	78570	129350	124610	-0.01
Fenugreek	70155	97533	88979	127850	121775	112870	110530	134100	248350	220160	0.14
Ajwan	20641	18301	8950	19327	28050	26620	26610	17180	16010	13820	-0.04
Garlic	1096459	1003758	975404	1085740	898438	1260210	1221380	1424860	1603500	1271220	0.02
Tamarind	187914	194087	125524	203936	182089	189980	191750	200390	190780	190700	0.00
Clove	872	1002	764	963	1035	1060	1060	1260	1200	1220	0.04
Nutmeg	11326	11362	11271	12088	12138	12730	13210	14400	15170	15460	0.04
Cinnamon	347	363	30	36	37	50	50	50	70	70	-0.16
Grand including others total	5195762	5387092	5286552	5933126	6324920	5801114	5833870	6169900	6901780	7075500	0.03
GRAND TOTAL IN MLN TONNES	5.20	5.39	5.29	5.93	6.32	5.80	5.83	6.17	6.9	7.08	0.03

Source: Spice Board of India, 2017

The tables above shows the total cultivation and the production of the spices during the period of 2007-2017. It can be seen that in some years there is a decline in the area of cultivation for some of the spices like pepper, cardamom large, tamarind. However, observing the production of the spices there is an incline in many of the spices. The reason behind increase in the production is assumed to be better farming techniques, good weather, new methods of cultivation however the decline in the area of cultivation could be the lack of interest in farming, less profit margin whilst selling the yielded crops

4.1.1 Major Spice crops in World Trade

In terms of the value of world trade, pepper, cardamom, ginger, turmeric, capsicum/chilli, cinnamon nutmeg/mace, cloves, all spices/ pimento and vanilla are the most essential spices crops from tropical regions and cumin, coriander, sesame seeds, mustard, sage, bay, oregano thyme, and mint are the spices crops from the non-tropical areas.

Table 7: World's Export of Major Spices (2014-2017) (Q: MT, V: US Dollars)

Commodities & HS Code	2014	2015	2016	2017	Average price
Pepper 090411	Q: 238571537 V: 422896471	Q:286516091 V:106370986	Q: 275004232 V:1598609900	Q:290479260 V:1878327173	3.08
Cardamom 090830	Q: 42701859 V: 101765486	Q: 40831659 V:441937094	Q: 41556267 V:434299176	Q:6222407 V: 69485003	22.11
Chilli/Capsicum 090420	Q: 407115244 V: 590549363	Q:374253759 V:971442329	Q:931491962 V:1305306568	Q:383079319 V: 547846914	3.08
Ginger 091010	Q: 316176859 V: 299734137	Q:452448277 V:650808184	Q:551439391 V:658710591	Q:55468380 V: 151031832	4.29
Turmeric 091030	Q: 64646480 V: 50922289	Q:142303152 V:196926972	Q:108047002 V:238405788	Q:108961429 V: 142199718	3.31
Coriander 090920	Q:92571212 V:51646068	Q: 11076869 V:154275610	Q:117631560 V:137269596	Q:65569002 V: 53348290	.81
Cumin 90930	Q: 92120907 V: 105208186	Q: 80924038 V:207143494	Q: 7870173 V:233009544	Q:112298287 V: 288104412	2.5
Nutmeg 090810	Q:18533439 V: 81150285	Q: 19715390 V:128741893	Q: 22934395 V:243155973	Q:4760067 V: 49429721	10
Mace 090820	Q:9519203 V:38150469	Q:4759808 V:5207510	Q: 4602163 V:68630863	Q:418257 V: 5383019	12
Curry 091050	Q: 9297951 V: 31198602	Q: 2917362* V: 4172886	NA	Q: 17876 V: 68440	3
Other Spices	Q: 130294546 V: 230636235	Q:128823625 V:430289952	Q:211206734 V:523077614	Q:227492001 V:523812138	2.3

Source: UN COMTRADE Statistics 2018, DGCI 2018

Note: Q: Quantity, V: Value, Average price - own calculation

The table above shows the total export in the world market of the major spices. It shows its quantity and value in the world market. It can be seen that Mace has the highest price per kilogram in the global market followed by Nutmeg and Cardamoms. As per my own calculation average price of each unit per one kilogram is added in the last row. A great increase in the price and the value of Turmeric and Black pepper can be seen over the past 10 years in the table however there is a fall in the value and the quantity of other spice in the world market.

4.1.2 Export of Spices from India to different countries and regions

India exports spices and spice products to over 150 countries (2017-18). USA, China, UAE, Malaysia, Saudi Arabia, UK, Germany, Singapore, Sri Lanka & Pakistan are the top ten destinations of Indian spices and spices products during 2017-18. At the time of the formation of WTO, the USA, Russia, UAE, Japan, the UK, Germany, Canada, Saudi Arabia, Singapore, and the Netherlands were the principal importers of spices and spice products from India. Their imports at that time were 56.5 percent of the total Indian spice export. (Spice board of India, 2018)

Table 8 Zone wise exports of Indian spices during 2016-17 (value in Rs hundred thousands)

ZONE	Value in Rs hundred thousands	Percentage
EAST ASIA	752470	43
USA	333600	19
EUROPEAN UNION	242420	14
WEST ASIA	221494	13
LATIN AMERICA	54554	3
NORTH AFRICAN ZONE	40344	2
AFRICA	40562	2
AUST.&OCEANIC ZONE	26512	2
CIS COUNTRIES	15360	1
REST OF EUROPE	11303	1
EAST EUROPE	4767	0
OTHERS	258	0
TOTAL(INCL.OTHERS)	1766461	100

Source: Spice Board statistics data, 2017

Table 9: Commodity wise export of spices from India to globally 2007-2017 (Quantity MT)											
ITEM	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	CAGR
PEPPER	35,000	25,250	19,750	18,850	26,700	15,363	21,250	21,450	28,100	17,600	-0.07
CARDAMOM(S)	500	750	1,975	1,175	4,650	2,372	3,600	3,795	5,500	3,850	0.25
CARDAMOM(L)	1,325	1,875	1,000	775	935	1,217	1,110	665	600	780	-0.06
CHILLI	2,09,000	1,88,000	2,04,000	2,40,000	2,41,000	3,01,000	3,12,500	3,47,000	3,47,500	4,00,250	0.07
GINGER	6,700	5,000	5,500	15,750	21,550	22,207	23,300	40,400	24,800	24,950	0.16
TURMERIC	49,250	52,500	50,750	49,250	79,500	88,513	77,500	86,000	88,500	1,16,500	0.10
CORIANDER	26,000	30,200	47,250	40,500	28,100	35,902	45,750	46,000	40,100	30,300	0.02
CUMIN	28,000	52,550	49,750	32,500	45,500	85,602	1,21,500	1,55,500	97,790	1,19,000	0.17
CELERY	2,900	3,650	5,000	3,750	3,650	5,171	5,600	5,650	5,310	6,250	0.09
FENNEL	5,250	8,675	6,800	7,250	8,100	13,811	17,300	11,650	15,320	35,150	0.24
FENUGREEK	11,100	20,750	21,000	18,500	21,800	29,622	35,575	23,100	33,330	34,680	0.13
OTHER SEEDS (1)	8,850	17,500	15,500	12,500	13,050	18,442	27,800	28,250	23,880	18,100	0.08
GARLIC	675	760	10,750	17,300	2,200	22,872	25,650	21,610	23,085	32,200	0.54
NUTMEG & MACE	1,300	2,155	3,275	2,100	3,620	3,231	4,450	4,475	4,050	5,070	0.16
OTHER SPICES (2)	30,450	31,805	32,600	25,250	35,900	34,298	34,700	36,500	43,955	40,210	0.03
CURRY POWDER/PASTE	11,500	13,250	14,300	15,250	17,000	17,436	23,750	24,650	26,550	28,500	0.11
MINT PRODUCTS (3)	21,100	20,500	19,000	17,450	14,750	20,039	24,500	25,750	23,250	22,300	0.01
SPICE OILS & OLEORESINS	6,600	6,850	6,750	7,600	7,265	9,515	11,415	11,475	11,635	12,100	0.07
TOTAL	4,44,250	4,70,520	5,02,750	5,25,750	5,75,270	7,26,613	8,17,250	8,93,920	8,43,255	9,47,790	0.09

Source: Spices Board India 2018

Table 10: Commodity wise export of spices from globally 2007-2017 (Value in Rs. One hundred thousands)

ITEM	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	CAGR
PEPPER	51950.00	41373.50	31392.50	38318.50	87,813.45	63,810.29	94,002.34	1,20,842.16	1,73,041.50	1,14,312.50	0.09
CARDAMOM(S)	2475.00	4726.50	16570.25	13216.25	36,322.28	21,215.04	28,380.88	32,346.75	44,982.75	42,150.00	0.37
CARDAMOM(L)	1500.00	2280.75	1788.60	4462.90	6,830.00	6,254.59	7,961.15	8,403.90	7,550.70	8,265.50	0.21
CHILLI	109750.00	108095.00	129172.80	153554.00	2,14,408.00	2,38,060.90	2,72,227.20	3,51,710.00	3,99,743.97	5,07,075.00	0.19
GINGER	2800.00	3482.50	4675.00	12131.25	20,420.02	18,725.14	25,614.27	33,133.00	27,595.56	25,705.00	0.28
TURMERIC	15700.00	24857.75	38123.00	70285.15	73,434.40	55,487.70	66,675.85	74,435.00	92,165.00	1,24,189.00	0.26
CORIANDER	11025.00	20378.75	22585.50	16663.25	16,401.85	20,182.59	37,185.65	49,812.50	42,680.50	29,207.50	0.11
CUMIN	29150.00	54400.00	54824.50	39597.75	64,442.05	1,15,306.61	1,60,006.00	1,83,820.00	1,53,113.00	1,96,320.00	0.24
CELERY	1325.00	2333.00	2662.50	2585.90	2,340.05	2,977.26	3,661.48	4,302.10	5,328.24	6,246.00	0.19
FENNEL	2850.00	4315.00	5623.60	6588.25	7,209.20	10,466.12	16,001.42	13,165.50	17,239.60	30,875.50	0.30
FENUGREEK	3300.00	7175.25	6972.00	6548.10	7,275.20	10,488.12	13,378.37	13,947.63	23,380.70	18,276.50	0.21
OTHER SEEDS (1)	3125.00	6498.50	5890.00	5558.05	5,881.25	11,178.60	15,425.65	16,512.50	16,205.75	15,455.00	0.19
GARLIC	400.00	350.25	3042.25	6977.30	1,415.70	6,868.14	8,387.05	8,183.00	15,959.00	30,711.50	0.62
NUTMEG & MACE	2875.00	6074.75	9186.50	9776.80	24,097.51	22,591.87	26,285.62	26,797.50	20,928.25	23,641.65	0.26
OTHER SPICES (2)	12,975.00	17,339.00	19,481.00	16,015.30	32,033.00	30,209.03	41,846.80	44,915.00	58,348.50	50,595.00	0.16
CURRY POWDER/PASTE	11100.00	16375.00	18918.50	21050.50	25,208.25	27,515.66	40,132.03	47,626.00	53,174.50	59,910.00	0.21
MINT PRODUCTS (3)	128050.00	142025.00	118972.00	169679.00	2,22,372.00	3,94,049.95	3,43,042.20	2,68,925.00	2,58,130.47	2,52,750.00	0.08
SPICE OILS & OLEORESINS	56300.00	72050.00	70875.00	91062.45	1,30,438.28	1,55,888.19	1,73,324.85	1,91,090.00	2,14,255.00	2,30,775.00	0.17
TOTAL	443550.00	530025.50	556050.00	684070.70	9,78,342.48	12,11,275.80	13,73,539.26	14,89,967.53	1623822.99	17,66,460.65	0.17

Source: Spices board statistics, 2018

Table 9 shows the export of the spices in metric tonnes according to each product globally from India between the years 2007 and 2017. The export percentage in the table shows good signs of growth. Garlic shows the best growth in the export if compared with the previous years, the growth rate for Garlic is 54%. Cardamom growth is also substantial accounting 25% as compared to the previous years. Fennel growth is a little behind by 1%, it stays on 24% growth. Followed by Fenugreek is 13%, Ginger is 16% and chilly is 7%.

Table 10 is showing the export of the spices in terms of value in Indian Rs between the years 2007 and 2017. India is earning the maximum foreign exchange through chillies, turmeric and seed spices. It can be seen that export earnings through garlic is on the positive side of 62% percent CARG, followed by cardamom is 37%, 28% is Ginger, 26% is Turmeric, 30% is Fennel, Cumin is 24%. India has earned a great foreign exchange through all spices during 2014-15, 2015-16 and 2016-17.

Major items of spices and their exports from India

Pepper (*Piper nigrum*)

Black pepper or 'Kalimirsch' is the most important spice in the world and also in India. It is considered as 'King of Spices' as the volume of international trade is the highest among all the known spices. Till 1960-61 more than 50 percent of India's export earning was from pepper alone. It is mostly found in hot and moist parts of Southern India, notably in Kerala. Kerala apart contributes 96 percentages of the total pepper production in India. It is one of the most ancient crops cultivated in India and has probably originated in the hills of South Western Ghats of India extending from North Karnataka to Kanyakumari. Pepper is also grown in Vietnam, Indonesia, Sri Lanka, Malaysia, Thailand, Brazil.

Picture 7: Black pepper



Source: www.ingredientsnetwork.com

Table 11 : Average production of Black Pepper per Hectare

Years	2013-14	2014-15	2015-16	2016-17
Area	37000	70000	48500	57000
Production	122400	123900	131790	131230
Average Per/hec	0.302288	0.564972	0.36801	0.434352

Source: Table 9 and 10, own calculation

The table above shows the average production of black pepper from each hectare. It can be seen that the production is fluctuating every year. India is the second largest exporter of black pepper after Vietnam. (CBI,2018)

Table 12: Country wise Export of Indian Pepper in different years
(Quantity in tonnes and value in US Dollars)

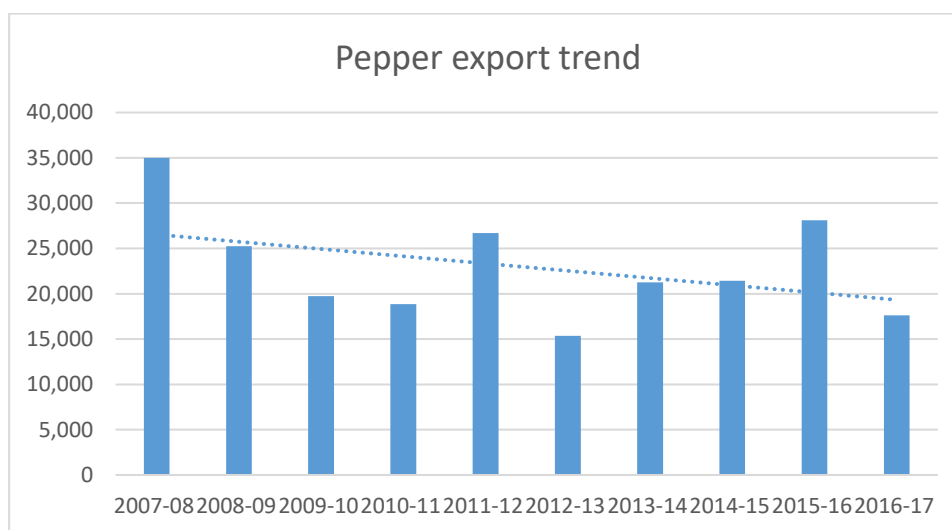
Countries	1995-96	2000-01	2010-11	2016-17	US\$/Kg
USA	Q: 7740.1	Q: 10850.88	Q: 6596.3	Q: 6920.95	2.05
	V: 5408.73	V: 18840.82	V: 5368.5	V: 13883.41	
Canada	Q: 1478.7	Q: 1238.7	Q: 1064.4	Q: 1065.56	1.98
	V: 1159.12	V: 2188.87	V: 801.7	V: 2111.25	
UK	Q: 1068.8	Q: 1163.87	Q: 1977.5	Q: 1476.97	2.21
	V: 811.86	V: 2288.19	V: 1769.1	V: 3273.56	
Italy	Q: 2171.6	Q: 1079.8	Q: 797.8	Q: 899.94	2.00
	V: 1745	V: 1971.68	V: 617.5	V: 1807.05	
Germany	Q: 1089.1	Q: 679.23	Q: 1346.5	Q: 715.36	1.76
	V: 947.66	V: 1359.81	V: 1649.3	V: 133.37	
Russia	Q: 3317.8	Q: 665.36	Q: 80.6	Q: 141.9	1.98
	V: 2798.35	V: 1235.11	V: 55.4	V: 281.21	
Poland	Q: 1290	Q: 136.35	Q: 21.2	Q: 314.86	2.11
	V: 1038.49	V: 201.81	V: 305	V: 666.71	
Others	Q: 8087.7	Q: 6016.11	Q: 5478.7	Q: 7314.54	2.04
	V: 5720.63	V: 9995.28	V: 4802.8	V: 14961.94	
Total	Q:26243.8	Q: 21830.3	Q: 17363.00	Q: 18850.08	2.03
	V: 19629.84	V: 38081.57	V: 15094.8	V: 38318.5	

Note: Q: Quantity, V: Value Sources: Spice board of India,2018

The table above shows the export of Black pepper to different countries. The average price of the Spice is calculated using the average US dollar exchange rate for the year

2016-2017. The price seems to be less if compared to the global average price calculated in table 7. It shows that the prices of the spices in India are low and more countries are looking towards India to fulfil their need of spices. It can be seen that the USA is the biggest importer of the spices however there are two countries from the EU which has significant number in terms of export which are U.K and Germany.

Graph 3: Export of pepper and it's trend



Source: Prepared in excel using the data from table no. 9

A decline in the export trend can be seen in the graph however as per the table 9 the production of this spice has increased during last 10 years. Comparing the amount of pepper imported in the year of 2007-08 it was 35000 MT however it slashed almost by half in the year of 2016-2017. There are many other countries coming into the competition and at the moment Vietnam is the biggest exporter of Black Pepper around the world. (CBI,2018)

Cardamom Small

Cardamom small is often considered as the 'Queen of spices' because of its delightful aroma and taste. It is the dried ripe fruit. It is a perennial, herbaceous, rhizomatous plant. From the nature of panicles, there are initially three native varieties of green cardamom plants. Malabar (Nadan /Native), is a native variety of Kerala. Mysore, as the name suggests, it is a native variety of Karnataka. Vazhuka- It is a naturally occurring hybrid between Malabar and Mysore varieties. Indian Cardamom is traded in the international markets in different grades. Alleppey Green Extra Bold (AGEB), 'Alleppey Green Bold (AGB) and Aleppy Green Superior' (AGS) are names that show immediate interest worldwide. Cardamom oil is a precious ingredient in meal preparations, perfumery, fitness ingredients medicines, and beverages. (Spices Board 2018).

Picture: 7 Cardamom small



Source: www.bulgarianspices.com, 2018

Table 13 : Average rate of Cardamom production per Hectare

Years	2013-14	2014-15	2015-16	2016-17
Area	69970	69970	70080	69357
Production	16000	18000	23890	17990
Average Pro/hect	0.228669	0.257253	0.340896	0.259383

Source: Table 9 and 10, own calculation

The table shows the average production of Cardamom from one hectare. Till end of the year 2016 there was an increase in the growth was seen however a decline can be seen in the year 2016-2017. Saudi Arabia is the biggest import of the Cardamom from India. (CBI,2018)

Table 14: Country wise Export of Cardamom in different years (Quantity in tonnes and value in US Dollars)

Countries	1995-96	2000-01	2010-11	2016-17	US\$/Kg
Saudi Arabia	Q: 187.5	Q: 496.1	Q: 511.2	Q: 723.5	16
	V: 599.07	V: 3329.79	V: 1676.1	V: 8155.96	
Japan	Q: 227.9	Q: 267.54	Q: 225.4	Q: 226.26	17
	V: 448.40	V: 1587.08	V: 584.	V: 376.52	
South Africa	Q: 7.7	Q: 120.82	Q: 8.00	Q: 61.61	15
	V: 15.66	V: 689.88	V: 32.5	V: 641.73	
Kuwait	Q: 35.8	Q: 84.02	Q: 10	Q: 101.96	19
	V: 83.82	V: 506.88	Q: 27.1	V: 1109.6	
UK	Q: 3.1	Q: 25.82	Q: 19.7	Q: 18.3	21
	V: 9.30	V: 128.18	V: 93.2	V: 238.14	
Malaysia	Q: 20.8	Q: 16.61	Q: 34.7	Q: 20.79	13
	V: 33.16	V: 64	V: 96.6	V: 229.06	

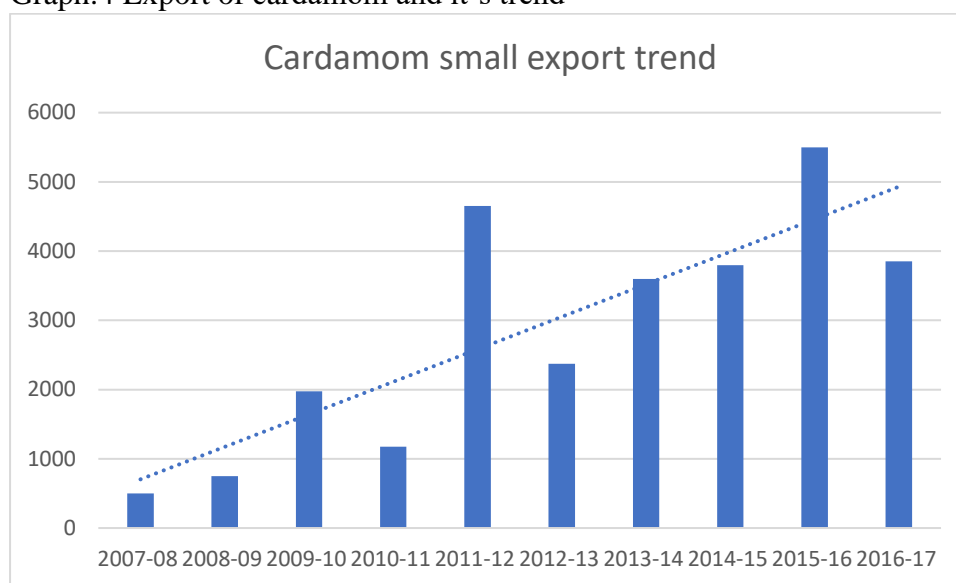
Sources: Spice Statistics 2017

Note: Q: Quantity V:Value, Average price own calculation

The average price of the cardamom can be seen almost similar to the global price of the cardamom in the international market. Saudi Arabia is one of the biggest importer of cardamom. This spice is usually an expensive in trading, the price can not be seen less than 10USD/Kg in the table.. The retail price of spice is around 15-17USD/Kg. (Amazon,2018).

The overall export of this spice around the world was 500 MT in the year of 2007-08 however by the end of 2017, 3850 MT ton of Cardamom was exported.(Source: Table 10)

Graph:4 Export of cardamom and it's trend



Source: Created in excel using the data from table number 9

A great increase in the trend of export for cardamom can be seen in the graph. The export was low in the year of 2007-08 however a steep growth can be seen in the export of the spice. Cardamom is exported to Saudi Arabia the most followed by South Africa, Japan and Kuwait. The graph also indicated that there has always been fluctuations in the export However the trend line shows increasing signs.

Chilies

Chilli is also called Red Pepper or Capsicum. It is the dried ripe fruit of the genus Capsicum. Capsicum annum is an annual sub-shrub, the plants of which are borne singly and fruits typically pendant, which supply red peppers, cayenne, paprika and chilies, and sweet pepper (bell pepper) a mild form with large inflated fruits(Spices Board, 2018).

Columbus, on his discovery of the 'New World', did not find the spices of the Orient as he has hoped, but he did find Capsicum or Chillies, which is America's most important contribution to the spices.

Picture 8: Chillies



Source: Amazon.com,2018

Table 15: Average production of Chili per Hectare

Years	2013-14	2014-15	2015-16	2016-17
Area	791930	766620	742950	830770
Production	1376400	1621480	1497440	1872010
Average Per/hec	1.7	2.1	2.01	2.2

Source: Table 9 and 10, own calculation

The table above shows average production of chilli per hectare. An increase in the production can be seen in last 4 years. The area for cultivation is also on the inclining side.

Table 16 Country wise Export of Chilli in different years (Quantity in tonnes and value in US Dollars)

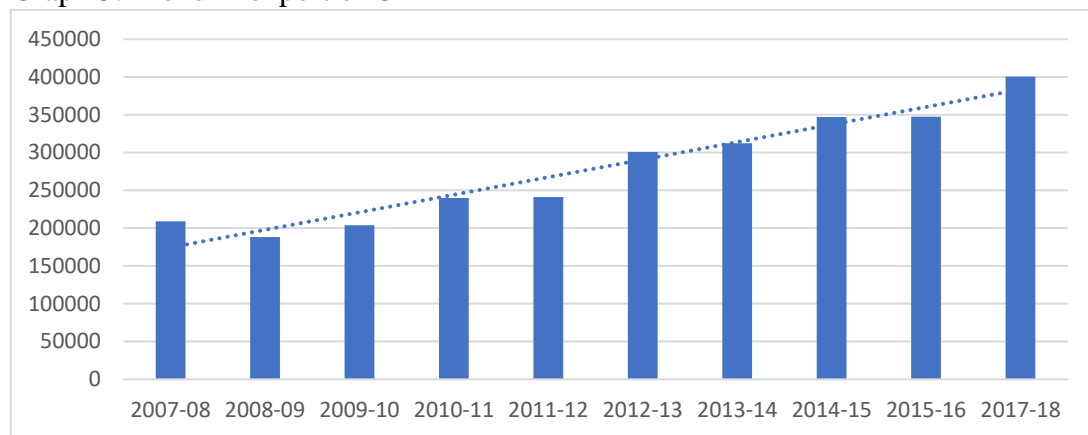
Countries	1995-96	2000-01	2010-11	2016-17	Average
Sri Lanka	Q: 9049.8	Q: 20749.7	Q: 27582.2	Q: 34072.2	2.78
	V: 3096.83	V: 6182.23	V: 7482.2	V: 19728.61	
USA	Q: 7667	Q:13332.34	Q: 16579.7	Q: 17362.49	3.08
	V: 3359.15	V: 6822.21	V: 8592.00	V: 13801.24	
UAE	Q: 10732.8	Q: 3843.23	Q: 8737	Q: 20702.72	2.80
	V: 3396.8	V: 958.5	V: 2272.5	V: 8478.70	
Pakistan	Q: 3908.8	Q: 3484.13	NA	Q: 25712.02	3.10
	V: 752.47	V: 869.13	NA	V: 13491.59	
Malaysia	Q: 2152.7	Q: 2290.19	Q: 26804.4	Q: 48248.35	2.55
	V: 805.32	V: 738.59	V: 8955.9	V: 35641.96	
Bangla- desh	Q: 10863.4	Q: 1080.5	Q: 670.7	Q: 32741.61	2.76
	V: 3348.69	V: 334.17	V: 166.00	V: 18207.91	
Singapore	Q: 3886.5	Q: 962.05	Q: 1593.7	Q: 1744.9	2.65
	V: 1426.8	v: 362.79	V: 557.6	V: 1350.55	
Others	Q: 7904.4	Q:16705.55	Q: 31206.5	Q: 59415.75	2.87
	V: 3360.11	V: 6705.08	V: 12274.3	V: 42853.4	

Note: Q: Quantity V: Value, Source: Spice board of India 2018

The table above shows the export of the spice chili to the different regions. There has been a quick and huge growth in the export of India chili. Both the cultivation and production has been increased over the last 10 years.

In the year 2007, the export was 209000 MT however by the end of 2017 this number got almost twice reaching over 400000 MT.

Graph 5: Trend in export of Chilli



Source: Table 9

The graph shows an inclination in the export of chili export. The export is gradual and looks like it will keep on growing in the coming years. The export is crossing the mark of 40,000. In the year of 2017, India surpassed all the previous years in terms of exporting globally (Spice Board of India,2018). Chilli can be seen in continued demand over the last 10 years and the growth is likely follow the same pattern.

Ginger

Ginger is the dried underground stem of the herbaceous tropical plant. The complete plant is refreshingly aromatic, and the underground rhizome, raw or processed is valued as a spice. It is a slender perennial herb, 30-50 cm tall with palmately branched rhizome beginning leafy shoots (Spices Board, 2018). It is a tropical plant with the center of origin in India and Malaysia. Now it is widely cultivated in India, Jamaica, Sierra Leone, Nigeria, Malaysia, Southern China, and Japan.

Picture 9: Ginger



Source: Senseofpurpose.org

Ginger has been used for many years, both too spicy foods and to smooth the digestive system. It is reputed to alleviate symptoms of motion sickness, make a tingling broth and refreshing tea; helps improve circulation and create a beautiful potted plant. Fresh ginger, dry ginger powder, oleoresin and oil used in food processing. It is indispensable in the manufacture of gingerbread, confectionary, ginger ale, curry powders, certain curried meats, table saucers, in pickling and the production of certain cordials, ginger cocktail, carbonated drinks, liquors, etc. (Spices Board 2018).

Table 17 : Average production of Ginger per Hectare

Years	2013-14	2014-15	2015-16	2016-17
Area	18200	153100	156910	164850
Production	683160	795820	1025110	1081430
Average Per/hec	4.9	5.1	6.5	6.5

Source: Table 9 and 10, own calculation, Production: Metric Tonnes

The table above shows the average production of Ginger per hectare. Not e even a little decline in production and cultivation area for Ginger is visible.

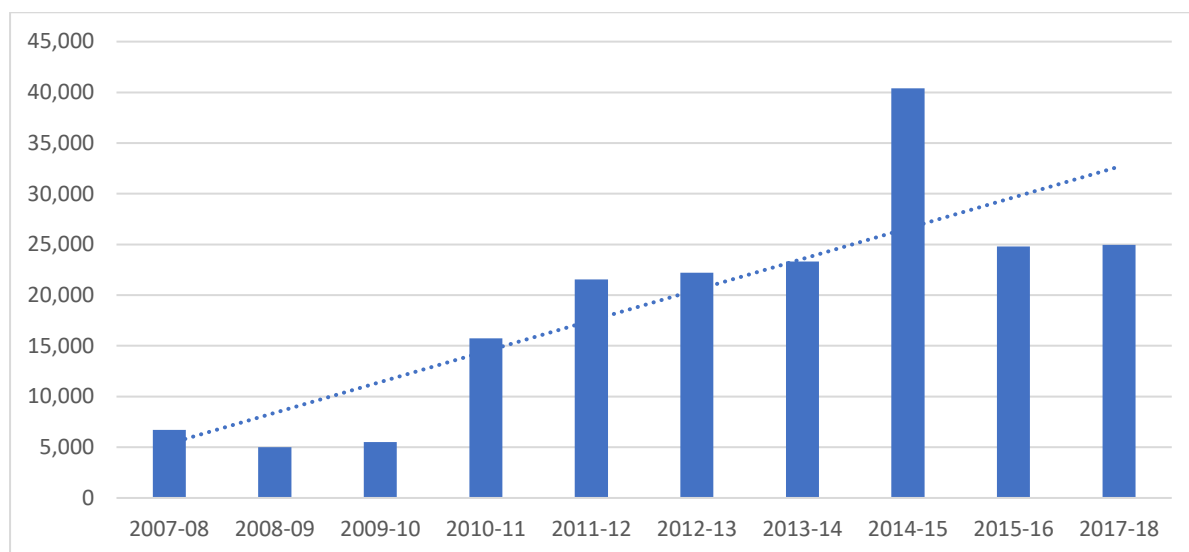
Table 18: Country wise Export of Ginger in different years (Quantity in tons and value in US Dollars)

Countries	1995-96	2000-01	2010-11	2016-17	Average
Saudi Arabia	Q: 1031.6	Q: 819.83	Q: 626.5	Q: 741.78	3.78
	V: 731.13	V: 556.16	V: 581.1	V: 1378.42	
USA	Q: 355	Q: 409.74	Q: 588.3	Q: 991.28	4.29
	V: 196.57	V: 265.52	V: 592.7	V: 1726.24	
Yemen	Q: 681.3	Q: 303.66	Q: 207.7	Q: 350.70	4.10
	V: 448.00	V: 206.69	V: 210.2	V: 661.26	
UAE	Q: 262.7	Q: 272.65	Q: 43.6	Q: 434.16	4.05
	V: 136.64	V: 184.32	V: 46.9	V: 478.77	
Morocco	Q: 378.8	Q: 242.5	Q: 82.0	Q: 750.89	3.98
	V: 234.39	V: 180.01	V: 74.0	V: 1331.64	
Bangladesh	Q: 6795.6	Q: 1343.77	Q: 5341.5	Q: 8275.38	3.77
	V: 598.6	V: 151.27	V: 601.3	V: 1735.22	
Pakistan	Q: 8072.1	Q: 1890.2	NA	NA	NA
	V: 985.3	V: 297.4	NA	NA	

Note: Q: Quantity V: Value, Source: SBI 2018

The table above shows the export of Ginger internationally. A slight dip can be seen in the export a swift increase in the value of the spice can be observed. The average global price of Ginger is \$2.7. The export price in the table can be seen less than \$2. The table shows India is providing huge supply with better price.

Graph 6: Trend in export of Ginger



Source: Table 9

An increase in the trend of ginger export can be seen in the time trend graph above. The recent 2 years have not been very promising as the great of 2014-2015 however as the per the trend line, it does not show a decline anywhere for the upcoming years.

Turmeric

Turmeric is boiled, dried, cleaned and polished rhizomes, of *Curcuma longa*. The plant is a herbaceous perennial 60- 90 cm high with shot stem tufted leaf. It is a native Indian spice. Apart from India, it is grown in Pakistan, Malaysia, Myanmar, Vietnam, Thailand, Philippines, Japan Korea, China, Sri Lanka, Nepal, Malagasy, Caribbean Island, and in Central America. In India, it is grown in the states of Andhra Pradesh, Maharashtra, Orissa, Tamil Nadu, Karnataka and Kerala (Spices Board, 2018)

Turmeric is used to flavor and color foodstuff. It is the main ingredient in curry powder. Turmeric oleoresin is used in brain pickles and to some extent in mayonnaise and relish formulation, nonalcoholic beverages, gelatine, butter, cheese, etc. The color curcumin extracted from turmeric is used as a colorant (Spice Board 2018).

Turmeric is usually used as a dye in the textile industry. It is used in the preparation of oil for medical purposes, ointments, and poultice. It is a stomachic, carminative tonic, blood purifier, and an antiseptic. It is used in cosmetics. The aqueous extracts have bio-pesticidal properties (Spices Board, 2018).

Picture 9: Turmeric



Source: Mothernaturenetwork,2018

Table 19 : Average production of Turmeric per Hectare

Years	2013-14	2014-15	2015-16	2016-17
Area	207570	178470	183480	193395
Production	1092630	846250	967060	1051160
Average Pro/hect	5.2	4.7	5.2	5.4

Source: Table 9 and 10, own calculation

Turmeric shows a stability in its production. Both the area and production can be seen with a positive sign which means there is a constant increase in the demand and the supply also in the export market and consumption among the people.

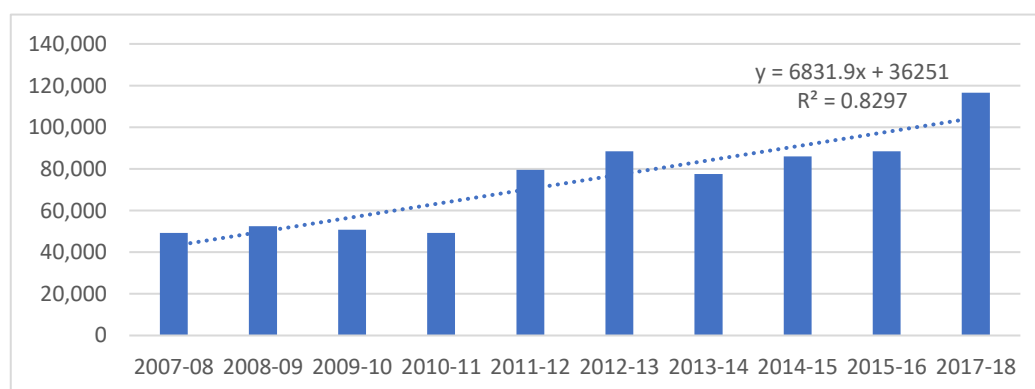
Table 20: Country wise Export of Turmeric from 1995-96 to 2017-18 (Q: tonnes; V: US Dollars)

Countries	1995-96	2000-01	2010-11	2016-17	Average
USA	Q: 2228.2	Q: 2583.72	Q: 2634.5	Q: 2664.02	3.31
	V: 684.84	V: 1195.01	V: 1425.1	V: 3916.33	
UK	Q: 1719.4	Q: 1837.88	Q: 2771.8	Q: 2091.29	3.47
	V: 348.63	V: 626.18	V: 1076.3	V: 3060.82	
Sri Lanka	Q: 1911.2	Q: 3100.85	Q: 3396.3	Q: 1913.67	3.12
	V: 229035	V: 568.37	V: 546.3	V: 1933.38	
South Africa	Q: 1239.8	Q: 1540	Q: 2070.8	Q: 1891.67	2.99
	V: 209.34	V: 414.05	V: 716.8	V: 2907.78	
Nether land	Q: 356.5	Q: 1100.5	Q: 1629.8	Q: 1509.53	3.21
	V: 172.85	V: 361.41	V: 613.9	V: 2500.64	
Japan	Q: 1761.4	Q: 3026.78	Q: 2608.3	Q: 3066.03	3.42
	V: 313.22	V: 901.98	V: 1126.5	V: 5799.29	
Iran	Q: 3314	Q: 2970.6	Q: 1447.3	Q: 2563.43	3.05
	V: 490.32	V: 627.58	V: 373.6	V: 3724.07	

Note: Q: Quantity, V: Value Source: SBI,2018

The USA was the biggest importer of Turmeric with over 2500 tonnes of spice imported by the end of 2017. As per the quantity, there has been a slow but steady increase over the past 10 years however the change in the price is significant. If we take a look at the value change in the year 2016-17, there has been a great jump. It can be assumed that the demand in the market is increasing which is impacting the value of the spice.

Graph 7: Trend in export of Turmeric



Source: Table 9 and 10- A similar trend can be seen in the export of turmeric as we have seen in most of the spices above. The production has crossed over 100,000MT mark which was 88,430 MT a decade ago.

Results and Discussion

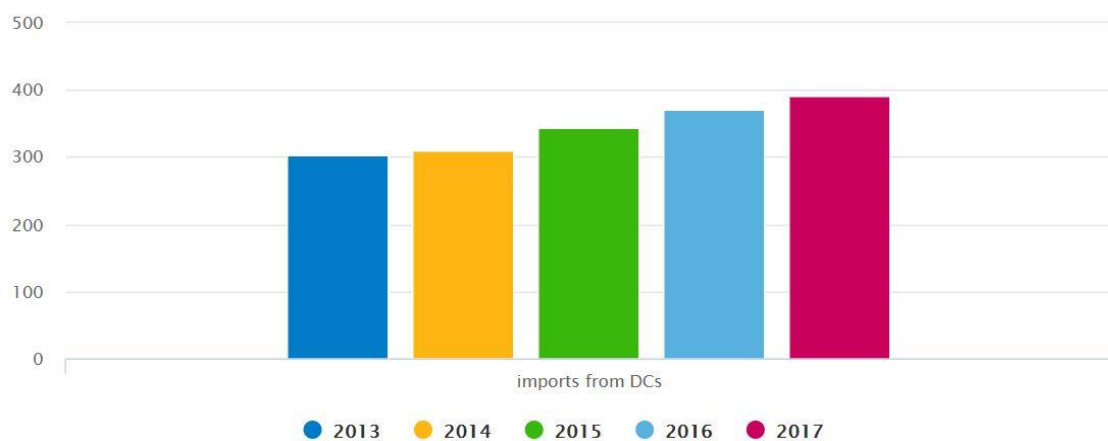
Potential Export possibilities to EU

The European demand for spices and herbs shows signs of growth. This is due to developments such as healthy living, interest in new tastes, comfort, and sustainability. Thanks to excessive demand, leading to increased costs and a sense of scarcity, European customers are always looking for new suppliers. One can also get opportunities in smaller or niche markets focusing on selected varieties, high quality. However, you need to fulfil the strict requirements for quality, food safety, and traceability to enter the European market. (CBI, Ministry of Foreign Affairs, 2018)

Demand perpetually growing

Imports of spices and herbs in the European market from developing nations have grown extensively in the latest years, by way of 6.6% yearly between 2013 and 2017 (see Figure 1). The international spices market is predicted to expand by means of 5.1% between 2017 and 2021.

Graph 8: Demand of Spices and herbs in the EU market

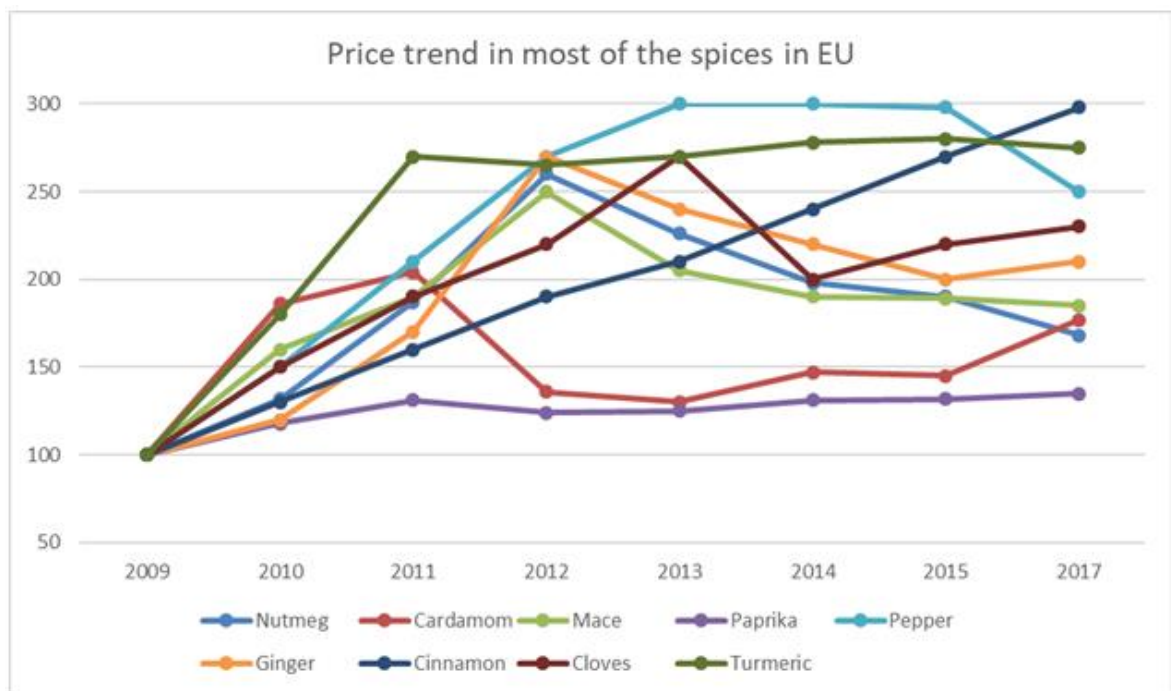


Sources: Eurostat, 2018

Strict supply results in high prices for most spices

The price trend in the global market for spices and herbs has shown an incline. The hike is mainly due to growing demand, while production fails to keep pace. The figure below illustrates the overall rise between 2009 and 2017.

Graph 9: Price trend in Spices and herbs in the EU market



Source: Eurostat, 2018

Industry experts assume expenditures to stay excessive or continue to rise. Nevertheless, European demand is looking for further growth. Spices and herbs are minor however quintessential ingredients that contribute little to the whole price of the food in which they are used. The demand is distinctly unaffected via fee changes.

The figure below (Picture 10) gives an idea how the price of spices fluctuates from the origin country to the country of export. The actual prices might differ based on various factors such as (Source: CBI,2018): The origin of the country, Current and forecasted harvest situation, Quality of the material, Level of demand

Picture 10: Change in flow of rate for spices



Source: CBI,2018

The table below gives an idea what usually is the retail price of some of the mixed packed spices in the retail market.

Picture 11: Average price of spices in EU spice market

Product	Brand	Place of Pacing	Price per 100gm	Price per 1 Kg
Black Pepper	TRS	India	€2.2	€22
Cardamom	TRS	India	€3.16	€31
Ginger	TRS	India	€1.72	€17.2
Chili	TRS	India	€1.56	€15.6
Turmeric	TRS	India	€1.40	€14

Sources: littleindia.cz,2018

The growing popularity of Ethnic food

Ethnic flavours and meals continue to appear in top food trends. In Europe, this is in most cases due to the ever-increasing multicultural population as well as the truth that Europeans are more fascinated in amazing cuisines. Spices are becoming popular: the consumption of turmeric and coriander seeds is a specific result of this trend. Turmeric is more and more consumed because of the style and due to the fact of its fitness benefits. Coriander seeds are often utilized in new varieties of uses, like in smoothies. What is fascinating about these spices, is that they are famous in Asian cooking as nicely as in the Middle East. (CBI,2018)

At this moment, the following tastes are in particular popular:

- Chinese (pepper, ginger, anise)
- Indian meals (curry, chilies, cardamom, coriander)
- Flavours of Thai food (cassia, cinnamon, cloves, nutmeg)
- Vietnamese delicacies (ginger, chilies, fennel, pepper)
- Mexican food (chilies, cumin, oregano, coriander).

The ongoing search for new tastes by way of cooking, food producers and consumers will make sure that the market for spices and herbs will proceed to grow in the future. This state of affairs is the case on western European markets as nicely as in areas such as southern and eastern Europe, the demand for ethnic food is small. (CBI,2018)

Especially the not so big food processors, retailers, and brands specialized in ethnic food that has strong forces on the developing market for ethnic food. However, larger retailers and multinationals are additionally an increasing number of activities in this market. (CBI,2018)

The size and composition of ethnic communities fluctuate strongly through the country, so opportunities will also be different. For instance, within western Europe, there are great sized variations between:

- the United Kingdom (Indian, Pakistani and Bangladeshi)
- the Netherlands (Indonesian, Turkish and Moroccan)
- Germany (Turkish, Iranian, Syrian)
- France (Moroccan, Algerian, French-speaking countries in West Africa).

It is also necessary to find out that ethnic food tastes fluctuate via region, country, and even buyer. Indian food in the United Kingdom tastes one of a kind from that in Germany and uses unique components and mixes. (CBI,2018)

Health Trend

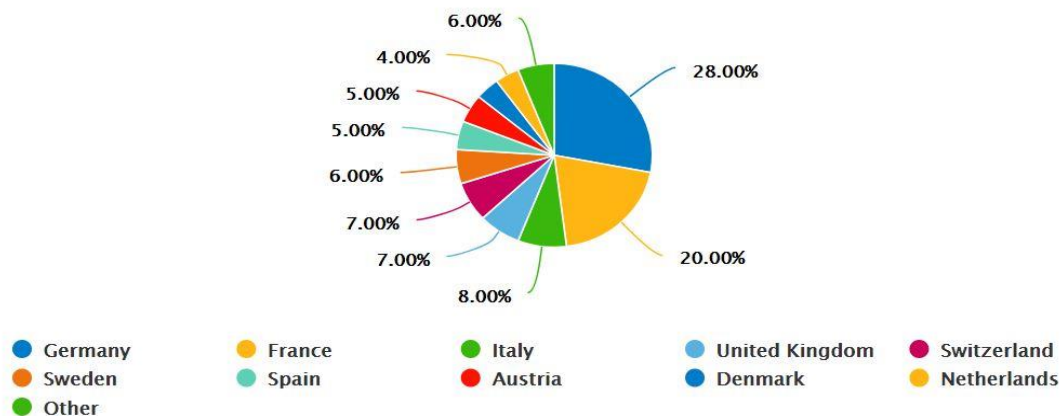
Healthy living is one of the most crucial developments in Europe. Unhealthy meals components such as salt, sugar and artificial additives, are more and more being changed by

means of herbal ingredients, such as spices and herbs. There is also a developing demand for gluten-free spices and herbs. (CBI,2018)

The organic market of spices and herbs

The organic market of spices and herbs is flourishing and is expected to continue to flourish in the future. This growth is significantly increased by consumer preference for a healthy lifestyle and its associated correlation with organic food. The second reason is the developing demand for food manufacturing companies, which use the organic label to distinguish their merchandise in an aggressive market. (CBI,2018)

Graph 10: The chart below shows the sales of organic food in 2016:



Source: FIBL and IFOAM- The world of organic agriculture,2018

The chart shows the share of organic food consumption in various EU countries. Consumption of organic food can be easily related to the sales of organic spices.

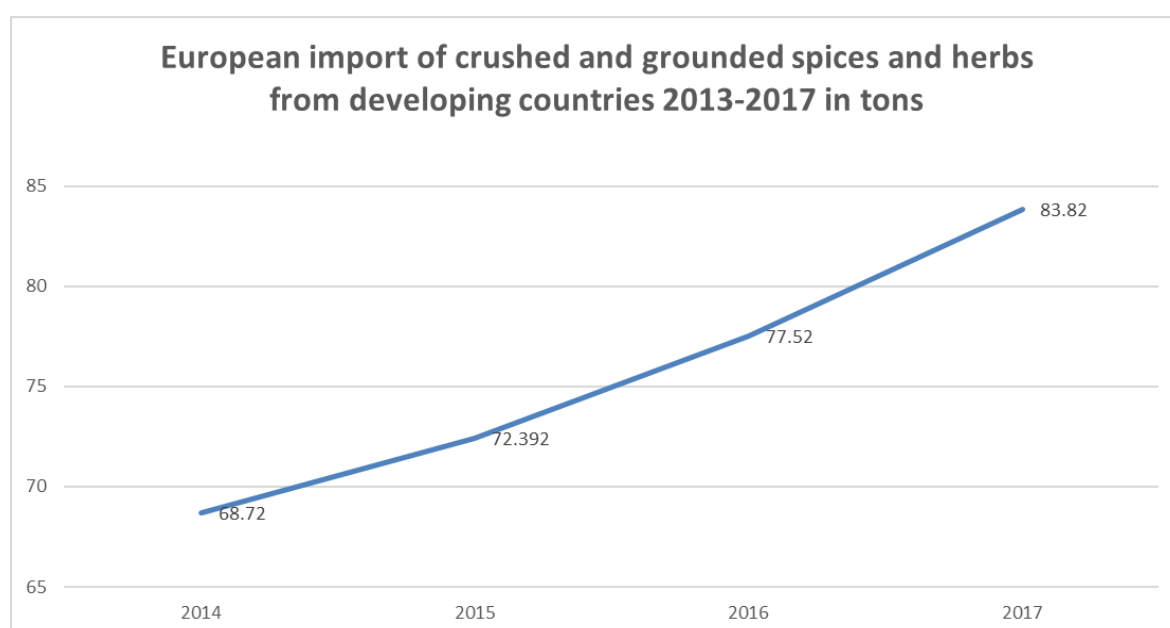
European consumers are seeking convenience

The demand for simple-to-prepare and quick-cooked meals is increasing in Europe. European consumers are spending relatively less and less time preparing meals due to their busy schedules, while the number of single households is rising. (CBI, 2018)

Easy-to-prepare and ready-cooked meals add up the demand for spices and herbs in dual ways. First, they rely on spices and herbs to retain and enhance food flavor (e.g., ready-to-use spices and herbs, seasonings and condiments). (CBI,2018)

Besides, these convenience products increase the demand for processed spices and herbs such as powdered spices and herbs, and spice and herb mixtures.

Graph 11: Imports of grounded and crushed spices and herbs



Source: Eurostat, 2018

The market of spice and herb combinations is additionally growing. In 2017, almost 11% of European imports of spice and herb mixtures were sourced directly from developing countries. Since 2013, this supply from developing nations grew yearly by 6.3%.

European buyers move closer to the countries producing spices

European buyers are moving closer to the exporters to control the supply chain better and make it more trackable and make sure that the strict European requirements are followed. This also enables them to avoid intermediaries. (CBI, 2018)

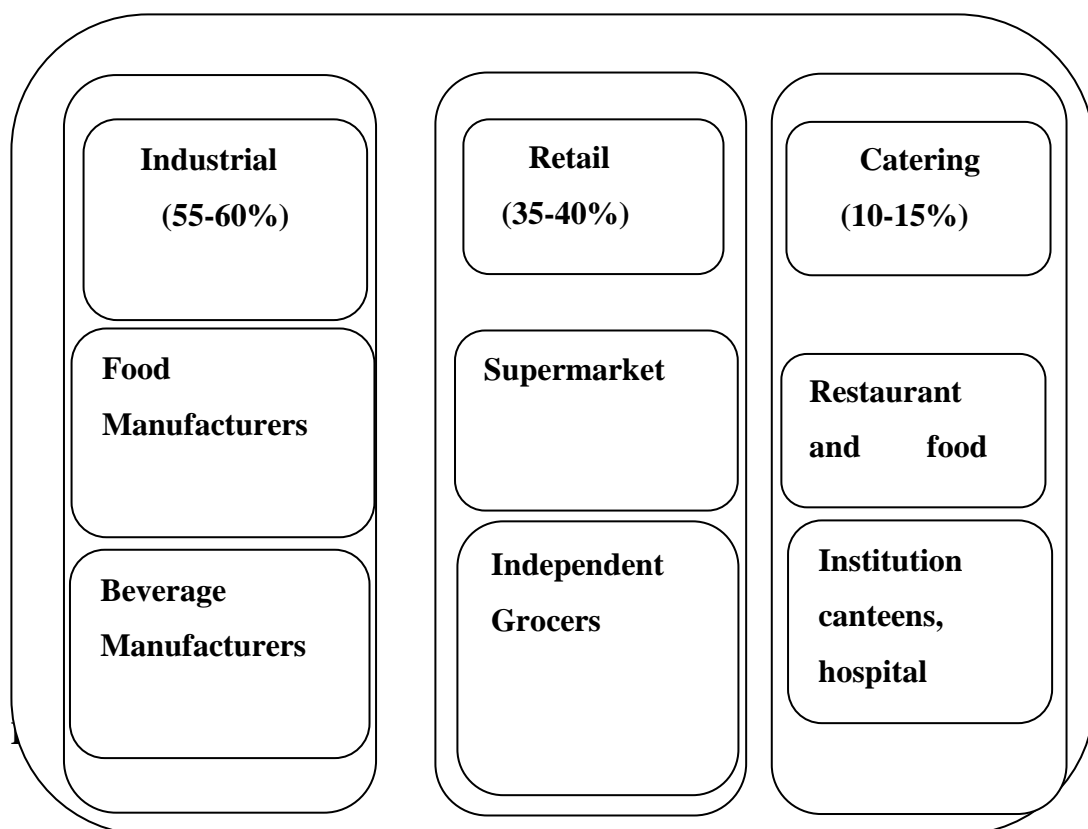
One of the reasons for buyers moving more near to origin countries is that European buyers are more willing to have a long-term and close relationships with local suppliers. This also means that buyers are becoming more willing to spend in value addition in the countries of origin. This can provide exciting and long-lasting opportunities as an exporter.

4.1.3 Consumption of Spices

The use of spices and herbs can be differentiated into three end-user segments: the industrial, the retail and the catering sector. In almost all the EU countries the industrial area consumes the most substantial proportion, equals to 55-60% of the total spices and herbs used. The retail sector uses 35-40%, and the catering sector stays between 10-15%.

(CBI Ministry of Foreign Affairs, 2018)

Picture 12: The main categories impacting the spices and herbs consumption



An apparent shift can be observed away from household use of spices and herbs to industrial use. Spices are used commonly in meat processing, fish, packed products, sauces, packed soups, bakery products and other prepared and easy to cook food. In a large number of cases, the meat industry is by far the biggest user of vast choices of spices. Other sectors, like the drinks industry, use spices like anise, badian, and juniper in alcoholic drinks and liqueurs, and use ginger in cold drinks. Ginger is also used in biscuits. Pepper and mustard are used in most delicious products and sauce. (CBI EU, 2018)

Industrial food-processing also includes spice combinations for meat industries and packers for the catering sector. Grinders and blenders tend to make better uses of mixes which are used primarily in the baking and meat-processing industries.

Retail sector

Each country has a specialty, and the appreciation of exotic meals varies strongly. Consumers in some EU countries are quite happily open to international cuisine, while others tend to prefer their food. Consumption of non-native Asian foods and their special spices is high in the United Kingdom and The Netherlands due to the presence of enormous immigrant populations; a growing number of people visit a lot of Chinese, Indian, Indonesian and Thai restaurants. The biggest EU markets are Germany, France, the United Kingdom, Spain, and Italy, due to their big population sizes. . (CBI EU, 2018)

Quality standards are very high in these nations. EU consumers are cautious of what they buy, and they often judge the product by its looks. This means that the product must look attractive, with no visible issues, and should have a beautiful color. Non-ground spices should be whole and natural to mix. (CBI Ministry of Foreign Affairs, 2018)

The spices and herbs consumers can be differentiated into four separate groups:

- Lazy diners – People who cherish a great variety of cuisines, eat a lot outside, use ready to cook food at home and who mostly work 8 hours a day. These people are usually between the ages of 16 and 40. People in this group have increased rapidly in the past few years.

- Traditional - Those who cook traditional food every day for the family, use books for recipes, watch TV food programmes, look changes in old favorites, choose branded goods and are brand concerned. There is a decline in this category of people over the last few years.
- Lazy traditional - these people are similar to those differentiated as conventional but cook when needed. The members of the family eat together very rarely, and they eat more comfortable to cook foods. This group is expected to grow.
- Exotic - This group adores cooking and doing experiments; they follow new foods and look out for new products and products in stores. These people enjoy a massive variety of food, usually combined with entertainment and nutritious. These people are usually between 30 and 39 years. Their most loved dishes are Asian (Chinese, Indian, and Thai). This group is expected to grow. (CBI Ministry of Foreign Affairs, 2018)

Catering sector

The amount of spices utilized by this food segment is minimal yet developing, mirroring the developing social pattern for widespread utilization of meals outside the home. The greater extent of working ladies (and thus twofold procuring family units), single individual families and the hesitance of individuals to invest much energy getting ready dinners at home, is for the most part factors invigorating higher utilization of meals in canteens, cheap food outlets, and eateries, likewise of takeaway meals. (CBI EU,2018)

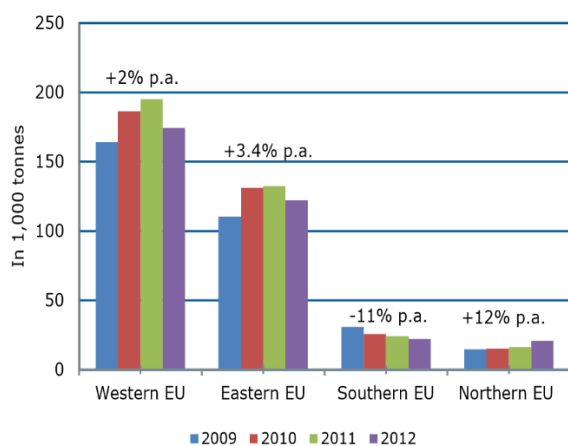
Important factors influencing the EU market for spices and herbs are:

- The trend towards internationalization and increasing consumption of ethnic foods has created an increasing interest in spices. A vast variety of spices is easily found in the consumer's home.
- The use of spices and herbs by consumers is growing, because these products are taken as entirely natural ingredients, rather than fake food.

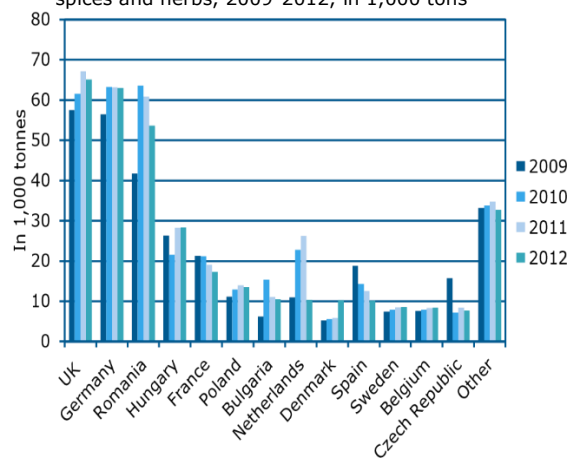
- European consumers have a sharply increased interest in a healthy lifestyle and, consequently, in the consumption of healthy eating habits. For example, green tea is becoming hugely famous.
- The organic food market is expanding. In any case, the standard retail market for natural flavours and herbs is probably going to remain moderately little until grocery store chains offer a full scope of organic spices and herbs. (CBI Ministry of Foreign Affairs, 2018).

4.1.4 Performance of spices in EU market in recent years and forecast

Graph 12: EU apparent consumption of spices & region, 2009-2012, in 1,000 tonnes



Graph 13: Apparent consumption of EU member states of herbs by spices and herbs, 2009-2012, in 1,000 tons



Source: FAOSTAT (production) and Eurostat (Export/Import), 2014

Note: The following division has been used: Western EU (Austria, Belgium, France, Germany, Ireland, Luxembourg, the Netherlands, United Kingdom), Northern EU (Denmark, Finland, Sweden), Southern EU (Croatia, Cyprus, Greece, Italy, Malta, Portugal, Spain), Eastern EU (Bulgaria, Estonia, Czech Republic, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia).

The total consumption by EU countries was 340,000 tonnes by the end of the year 2012. This consumption was increased by 2% every year between 2009 and 2011. The growth continued during the time of recession, the main reason behind it is that most of the spices and herbs are usually used very little in the final food product and they contribute a little cost to the total cost of the product. During the economic crisis time phase, the consumers did cut down their spending on food by not eating out frequently and switched to less expensive food source. This however did not affect the market of spice a lot in Europe.

Expensive spices such as vanilla and saffron did get an impact of the crisis but that too for a very little time. (Source: CBI EU,2018)

Northern and Western European buyers impose an extra bit of legal quality and strict food hygiene requirement. In both regions the demand is expected to saturate or growing with a very low pace. The demand for sustainable products is growing in these markets.

The eastern European countries such as Romania, Bulgaria and Hungary are large consumers of sweet pepper powder. The living standards in this part of Europe are steadily improving as a result of rise in incomes. This will soon lead to a growth in the demand of spice market. (CBI EU,2018)

Until 2020, growth in food and beverages is highly expected especially in the eastern EU countries where expenses on food is expected to be 30-35% higher in 2021 than it was in the year of 2000 (Source: Deloitte,2012).

In addition to that, the European population continue to use spices in drinks and food. Therefore, demand in the long run is expected to keep growing.

Sustaining in the market is expected to become a key to sell the products in the upcoming days, the buyers demand is also going to get a positive impact due to it especially in the northern and Western European markets. Entering this market can certainly be challenging however it can provide new opportunities to the business. (CREM B.B, CBI expert Freek Jan Koekoek, 2018)

5 Conclusion

In conclusion the sum of the goals and results achieved can be made. The main aim of this thesis was to determine the demand of Indian Spices in the European and American market. To be more specific, the European Union and the United States of American were chosen to research the market, tariffs, demand for Indian Spices.

The European Union has a long history of developing international relations and promoting peace and the protection of human rights through different types of agreements. Some agreements are suited for less developed countries to contribute to their economy and boost their trade with the help of reducing tariff limitations and quota restrictions against those countries. However, on the other hand the United States of America being the biggest economy on the earth having it's own rules and regulation to international trade. The country is going with a lot of fluctuations in the rules and policies due to the new administration.

The export from India has seen a tremendous growth when it comes to Spices and herbs. The government initiative to boost the economy of the country is helping the production to increase. The leniency in the taxes, ease to do a business and encouragement of Foreign direct investment is taking the country to new heights.

For all the 5 Spices Black Pepper, Ginger, Turmeric, Chilli and Cardamom on which we focused, a clear growth can be seen in most of the spices. The compound annual growth for export in Ginger, Turmeric, Chilli and Cardamom is impressive. There is a slight dip seen for Black Pepper in terms of production however a great thing can be noticed here, the compound annual growth for value shows positive signs for each of the spice which is a good sign for traders and exporters. The increase in the area of cultivation shows that there are more people coming forward to enter in the farming sector or there is a possibility that the current farmers are on the path of profit where they are investing more in farming.

To answer the research question no.1 – a clear inclination can be seen in the export of spices from India according to the data collected from various resources. The trend line shows sign of growth for every spice except Black Pepper. There is a very slight fall in the compound annual growth (-0.07%) which can not change the facts which shows the export in spices is growing with a great pace in India.

Moving ahead with the 2nd research question – before choosing any destination to export any product tariffs of the destination country are carefully researched. The European Union allows the spices to come at it's shores without any taxes on the other hand the United states of America charges a tariff on the imported spices. There is a charge on the spices which are processed which means either crushed or grounded. There is a charge of 2¢/kg on crushed or grounded black pepper, 11/kg on Ginger in the same form followed by Turmeric with the same amount. Any tariff on imported product makes the product expensive to buy, difficult to sell and reduces the margin of profit on it. Though the United States of America came out to be the biggest import of Indian spices as an individual nation however when it is compared to the European Union which is a cluster of 28 countries then the numbers for the European Union surpasses the United states of America's in terms of spices import. As per the information collected in this thesis, the EU market is still an untapped market with a lot of opportunities available. The change in the eating habits of European people, the popularity of ethnic food among them and the health trend put more weight on the European Union's side.

So I conclude, there is a high growing trend in the spices and herbs export market in India and the European Union market should be chosen over the United states of America for exporting spices

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