

## Spices Export from Kerala Current Trends & Opportunities Ahead

<sup>1</sup>**Ashish Bhatt**

Assistant Professor

Parul Institute of Management, India.

<sup>2</sup>**Jency Valasan**

Researcher

Parul Institute of Management, India.

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**ABSTRACT**

*Changing eating habits and lifestyle of consumers across the globe have fuelled the demand for healthy food products, which has significantly highlighted the use of natural flavors, most of which come from spices. Being the largest producer and exporter of spices, India has immense growth potential. Technological advancement and research & development are supporting the Indian spice exporters to offer high grade products to consumers globally.*

*Spices form an important part of virtually all recipes in all cultures, not only for their flavor and seasoning of foods but also for their numerous medicinal values. India produces a wide variety of spices including cardamoms, chilies, black pepper, mustard, coriander. Indian cuisine is also known for its rich taste which it derives from numerous spices. The demand of Indian spices is high in the global market due to their rich aroma, texture, and taste. India has the largest domestic market for spices in the world. The major importers of Indian spices are the US, China, Vietnam, the UAE and Malaysia. The primary spices imported from India are pepper, chili, turmeric, coriander, cumin, and fennel.*

*Growth of the spices market in India has been triggered by the establishment of quality evaluation laboratories that ensure the quality of the final product and make them world renowned. These labs stay in direct touch with the importers association of importing countries. Other factors contributing to the growth of the spices market is the infrastructural facilities provided by the Spices Board of India, and the shifting consumer interest from artificial to natural flavors. However, the market still faces a number of challenges in the form of food safety issues, and insufficiency of legal provisions, among others.*

**Introduction**

Nature has blessed mankind with so many plants, out of which man has exploited some for his benefit to make his life enjoyable. Among them spices have made our life happier. Though required in small quantities, it has manifold properties and beneficial uses. Spices once hailed as ‘gray gold’ have played an important role in the history of civilization, exploration and commerce. Spices trade is the oldest known trade to man.

It was due to spices trade that ancient commercial ties existed between India and the Middle East. There had been a flourishing trade in spices successively between the Indians and the Greeks, the Romans, the Arabs, the Portuguese, the Dutch, the French and the British throughout the period of recorded history. According to Wendy Huttan (1998), “Fragrant cloves with their woody overtones, heady sweet cardamom, pungent black pepper, the nutmeg whose complex flavors burst forth when grated, all these and other aromatic seasonings of vegetable origin were once so highly priced, that they were literally counted out grain by grain”. In recent years stiff competition has emerged between the spice producing countries. Developed countries have now put strict quality specifications on the import of spices. Though superior in quality, Indian spices are quoted at high prices in international markets because of the high cost of production and low productivity. India’s prime position in the production and export of black pepper and cardamom has now been usurped by Vietnam and Guatemala respectively.

Within India, Kerala is the spice garden. Kerala is the leading producer of black pepper popularly called the ‘King of spices’, it enjoys a pride of place among all spices produced. Kerala is also the leading producer of Cardamom renowned as the ‘Queen of spices’, it is a tiny spice that attracted the consumers in the Orient and the Occident. More than 90 per cent of the production of black pepper

and 70 per cent of the production of cardamom in the country is restricted to Kerala. But the spices trade in Kerala is now handicapped by a number of problems. Therefore, it is time for all those concerned with Indian spice industry to make earnest efforts to overcome the problems faced by the spices sector, or else our dominant position in the global spice market may be further relegated. Spices cultivation, which was once the monopoly of India has now spread to a number of other countries and the competition in spices trade, has become fierce. Though the mystery and rarity of spices have now virtually disappeared, their magical effect on food and their ability to delight the palate remain unchanged.

**Some of the Major Indian Spices are**

*Table 1:- Major Indian Spices*

<b>Asafoetida</b>	It is a resin taken from a plant and is a pungent spice.
<b>Bay leaves</b>	These are fragrant leaves with pointed ends are used in their dried form.
<b>Cardamom</b>	Cardamom has a sweet, lemony, eucalyptus flavor. It is world's second most expensive spice. It is available as a powder, dried pods, or loose seeds.
<b>Cayenne pepper</b>	It is a spice made from the seeds of plants in the capsicum family.
<b>Cinnamon</b>	It is a sweet-tasting spice, with a warm, woody aroma.
<b>Cloves</b>	It is small, dried, reddish-brown flower bud of the tropical evergreen tree of the myrtle family
<b>Tamarind</b>	It has a sour taste and very tart, citric flavor. It adds a distinctive cooling quality
<b>Cokum</b>	It has the same souring qualities as tamarind
<b>Coriander seeds</b>	This spice tastes sweet and tangy, with a slightly citrus flavor
<b>Cumin</b>	The seeds are oval with ridges, greenish-beige in color, warm, nutty aroma and a taste that is bitter
<b>Fennel</b>	It has a sweet and aniseed flavor.
<b>Mustard seeds</b>	Hot flavor is released when it is mixed with water. The seeds can be put whole into very hot oil and popped.
<b>Saffron</b>	It is the most expensive spice of all. It has a distinctively pungent, honey-like flavor and aroma.
<b>Turmeric</b>	It has a pungent, warm, earthy aroma and taste.
<b>Nutmeg and mace</b>	Mace is the fleshy lattice, covering of the nutmeg (hard nut), which is golden brown in color. Nutmeg has more robust flavor than mace, but they are otherwise very similar. They have nutty, warm and slightly sweet flavor. Nutmeg is used to add sweet and savory flavor to dishes

<b>Star Anise Seed</b>	Star anise oil is a highly fragrant oil used in cooking, perfumery, soaps, toothpastes, mouthwashes, and skin creams.
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**Uses of spices**

1. Spices are well-known appetizers or preservatives.
2. Many spices have rich medicinal properties and are used in pharmaceutical, perfumery, religious rituals, cosmetic products etc.
3. Spices are employed as adjuncts to impart flavor and aroma or pungency to food.
4. Spice extracts are used to meet new demands of food processing industry.
5. Spices are employed in food industry in the preparation of pickles, biscuits, beverages, processed meat etc.
6. Spice oils and oleoresins are employed in cosmetics, tooth paste, toilet soaps, hair oils, tobacco products etc.
7. Spices find essential application in the preparation of Indian systems of medicines, as they have medicinal, preservative or antiseptic values.
8. Spices are used to season insipid food – their aromatic qualities are useful in overcoming the odors of bad food.

**Objective of study**

1. The major objective of the study is to evaluate Export of Spices from Kerala.
2. The specific objective of the study is: “To Study the Current Export Trends of spices from Kerala and opportunities ahead”.

**Trends in the world:-**

Spices, being in the category of the high value agricultural products (HVAPs), have higher market values than the traditional cereal grains and export crops. Spices have now become an integral part of American, Continental, Arabic, Asian and Oriental cuisine. As a result of the worldwide spread of spices, no one country has been able to keep a monopoly of any particular spice.

Pepper dominates the world spice trade accounting for 30% of the spice trade in 2012 while cloves, cinnamon, nutmeg and mace, cardamoms, various other seeds, ginger and vanilla have a market share of less than 10% for each product group cardamom four per cent, ginger six per cent, turmeric eight per cent, tree spices fourteen per cent, seed spices fifteen per cent and capsicum twenty per cent. Almost all producing countries in spices are exporters also. All the leading countries of these products are developing or emerging economies except for vanilla and nutmeg and mace in which France, Germany and Netherland are within the top 3 exporters. Sri Lanka has a monopoly in Ceylon Cinnamon with 41% of world market share. Top 10 exporting countries have high concentration over geographical destinations.

The major markets in the global spice trade are the United States, the European Union, Japan, Singapore, Saudi Arabia and Malaysia. The principal supplying countries are China, India, Madagascar, Indonesia, Vietnam, Brazil, Spain, Guatemala and Sri Lanka.

**Trends in India**

India is said to be the oldest place where spices were available since time immemorial. Indian tropics have given spices like pepper, cardamom, chilli, turmeric, ginger, nutmeg, mace, basil, coriander, cassia, mustard, sea same, garlic and tamarind to the world. These spices are confined to different states. For example, black pepper is produced in Kerala, Karnataka and Tamilnadu, and the major cardamom growing states are Kerala, Karnataka, Sikkim and Tamilnadu. Turmeric is mostly confined to Andhra Pradesh and Tamilnadu. Likewise Andhra Pradesh, Maharashtra, Orissa and Tamilnadu are the major chili growing states, though chilli produced in Bihar is considered to be the most pungent.

Ginger is produced mainly in Kerala and Meghalaya, while Andhra Pradesh and Rajasthan are the major producers of coriander.

The US is the major importer followed by China, Vietnam, the UAE, Malaysia, Saudi Arabia, the UK, Germany, Singapore and Sri Lanka. In 2014-15, India exported spices worth US\$ 2.42 million.

**Export trend of spices from India:-**

*Table 2: Export trend of spices in India*

<b>Item</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
Pepper	26700	15363	21250	21450	28100
Cardamom(S)	4650	2372	3600	3795	5500
Cardamom(L)	935	1217	1110	665	600
Chilli	241000	301000	312500	347000	347500
Ginger	21550	22207	23300	40400	24800
Turmeric	79500	88513	77500	86000	88500
Coriander	28100	35902	45750	46000	40100
Cumin	45500	85602	121500	155500	98700
Celery	3650	5171	5600	5650	5800
Fennel	8100	13811	17300	11650	15320
Fenugreek	21800	29622	35575	23100	33300
Other seeds	13050	18442	27800	28250	23650
Garlic	2200	22872	25650	21610	22500
Tamarind	21395	17950	16000	13500	15350
Nutmeg & Mace	3620	3231	4450	4475	4050
Other Spices	14505	16348	18700	23000	30150
Curry powder/Paste	17000	17436	23750	24650	26550
Mint products	14750	20039	24500	25750	21150
Spices Oils& Oleoresins	7265	9515	11415	11475	11635

Source: - Spice Board Statics

Qty In Tonnes

**Export trend of spices in Kerala:-**

Historically, Kerala had contacts with the outside world, starting with the Babylonians as far back as 3000 B.C.E. Later, the Malabar Coast of Kerala witnessed the arrival of Arabs, Chinese, followed by European powers like the Portuguese, the French and the British. Most of them came for trade. And spices of Kerala invariably became the most traded commodity. Kerala is home to a variety of spices; and is also noted for producing some of the best quality when it comes to spices like cardamom and pepper. Irrespective of cultural, religious and other differences, spices occupy a special place in providing a unique flavor to the culinary specialties of Keralites. Spices still dominate the commodities trade in Kerala. Three-fourths of spice exports from India are sourced from Kerala

As of 2014-15, Kerala was the 2<sup>nd</sup> largest producer of pepper in India, after Karnataka followed by Tamil Nadu.

ITEM-WISE EXPORT OF SPICES FROM KERALA (COCHIN AND TRIVANDRUM PORTS) (QTY IN M.T)						
ITEM	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
PEPPER	16294.97	24016.94	13013.77	15858.04	16275.00	18555.00
CARDAMOM(SMALL)	794	3611	1900	1920	1798	2888
GINGER	2925	5962	3820	3239	2790	3406
TURMERIC	7190.96	10350.17	8857.40	8643.94	9309.19	11917.00
NUTMEG & MACE	1372.05	2251.76	1810.79	2295.87	2196.33	2066.00
CHILLI	19431.18	21568.42	21277.00	21136.61	22885.85	33740.00
CORIANDER	2679.07	3030.28	2472.85	2586.97	2652.43	2985.00
CUMIN	962.64	1282.48	1632.11	1531.33	1416.70	1445.00
CELERY	593.55	497.24	230.67	346.76	275.65	244.00
FENNEL	170.62	288.08	398.41	279.06	214.08	292.00
FENUGREEK	653.68	763.84	774.22	710.42	736.13	680.00
GARLIC	70.67	217.26	374.27	344.97	242.61	182.00
MINT PRODUCTS	33.18	9.43	243	243.00	15.53	47.00
SPICE OILS & OLERNES	6754	6397	7517	8809	6982	6654
CURRY POWDER/MIXTURE	6324	8098	6787	6225	7008	8067
OTHER SEED SPICES	204	263	279	193	233	301
OTHER MISCE. SPICES	7276	8465	8044	7048	6522	6607

### Literature review

(Prakash, 2008) Studied the farm crisis in Idukki district and found that labour shortage, fall in the prices of pepper; cocoa, coconut and other spices have triggered the farm crisis. He recommended that the Union Commerce Ministry should form a price control cell to regulate the prices of spices, coffee, tea rubber and coconut and curb imports.

(Thakamani, 2009) in his book ‘Organic Spices’ stated that the over use of chemicals, fertilizers and pesticides has ruined the mother earth, polluting food, drinking water and air. He suggested that organic mode of production is the only way to save ecology and environment, produce hazard- free food for the people and conserve natural resources. According to him, organic production is a commercially viable option for farmers, as organic food/products fetch a premium price at less cost of production as it avoids chemical fertilizers and pesticides.

(Leu, 2010) reported that one of the advantages of organic farming is to improve soil health and productivity by increasing organic matter (carbon) levels, particularly humus. In doing so, organic farming can remove significant amount of carbon dioxide from the atmosphere. In contrast, some forms of conventional agriculture have caused a massive decline in soil organic matter, due to oxidizing organic carbon by incorrect tillage, the over use of nitrogen fertilizers and form top soil loss through wind and water erosion. According to him, soil carbon is one of the most neglected yet most important factors in soil fertility, disease control, water efficiency and farm productivity

### Research Methodology

#### Research Design

- ❖ This is a descriptive research using survey approach.

#### Source of Data

- ❖ Primary Data was collected through online questionnaire.
- ❖ Secondary data was collected from the spices board & various previous researches.

**Sample type:** The response of this Questionnaire is based on convenience sampling

**Sample Design:** Snowball Sampling

**Sample Frame:** Directory of Spices Board

**Sample Size:** -17respondent from Kerala.

**Scope of the study**

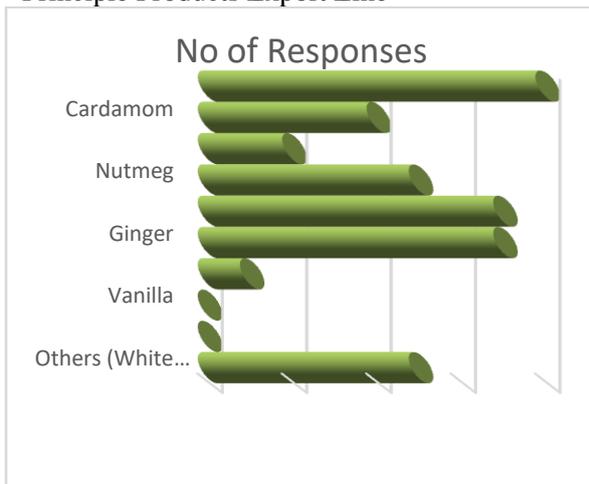
- ✓ To collect and analyze the export trends of spices in Kerala. For this purpose secondary data from the published sources is collected.
- ✓ To carry out market survey of current trends of export of Spices. Data is collected through a structured online questionnaire.

**Constraints & Limitation of Study**

- ✓ The statistical data were taken for last five years i.e. from 2010-11 to 2015-16, which may not generalize the results.
- ✓ Sample size is small as some of the exporters and traders of spices did not cooperate with the data collection.
- ✓ Some of the exporters and traders were unwilling to furnish the full details

**Data interpretation**

Principle Products Export Line



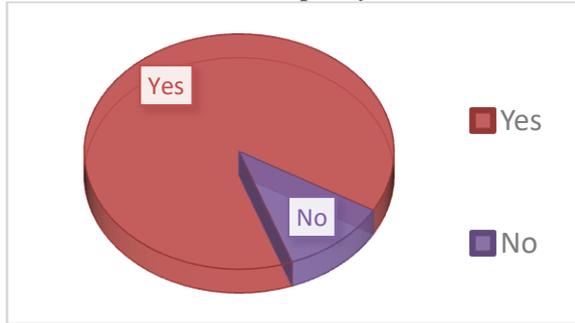
From the data it was inferred that all the exporters were exporting pepper, 87% where exporting both turmeric and ginger, 62% were exporting nutmeg, 50% were exporting cardamom, 25% were exporting clove 12% were exporting cinnamon, where as 62% were exporting other spices.

**Major Countries for Export**



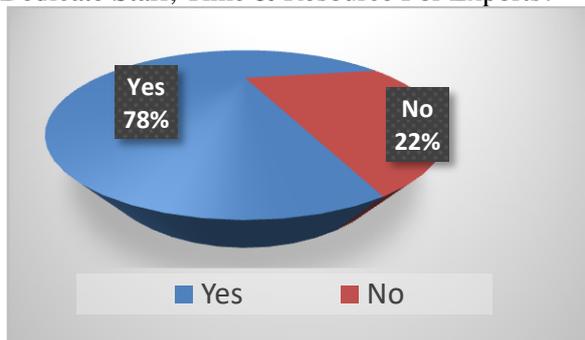
Majority of the respondents i.e.67 % exported spices to USA & UK, 50 % exported spices to Vietnam & UAE, 38 % exported spices to Germany, 25 % exported spices to China, Malaysia & Saudi Arabia, whereas 62 % of exporters exported spices to other countries like Qatar, EU, Spain, Fiji, Mexico & France.

Sufficient Production Capacity



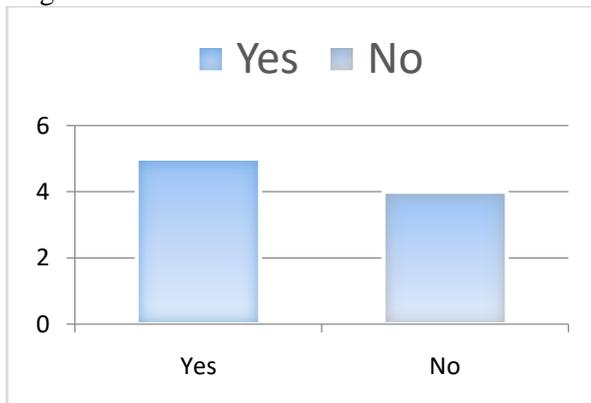
After the interpretation of the data it was found that majority respondents (i.e. 89 %) have sufficient production capacity that can be committed to export markets, while remaining 11 % don't have.

Dedicate Staff, Time & Resource For Exports?



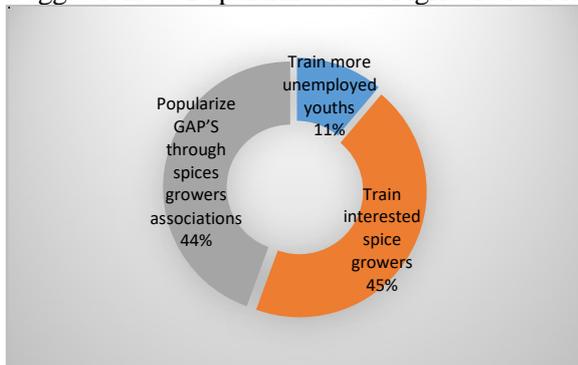
From the data it was found that majority respondents, i.e. 78 % have staff, time & resource which can be dedicated for exports, whereas 22 % of the respondents felt the inadequacy of resource and staff for exports.

Adequate Knowledge in Modifying Product Packing & Ingredients Quality To Meet Foreign Export Regulations & Cultural Preference



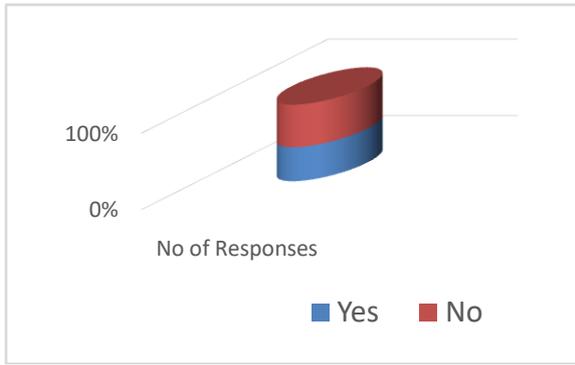
Of the total respondent 45 % lacked adequate knowledge to modify product packing & ingredients quality to meet the demands of foreign markets, the other 55 % had adequate knowledge of the foreign export regulations & cultural preference.

Suggestions to Popularize Good Agricultural Practices (Gap)



From the data it was found that majority respondents expect the government to train interested spice growers, while 44 % feel the government should popularize GAP'S through spices growers associations whereas 11 % expect the Government to train more unemployed youths.

Approached any Institutes for Agricultural Related Problems and response

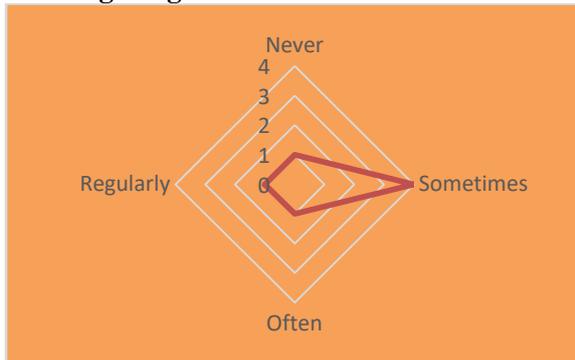


From the above data we inferred that majority of manufactures (56 %) have never approached the departments, only 50 % of those that approached Agricultural department rate their service as good and the remaining 50 % rated it as fair whereas 75 % of those that approached the spices board rate their service as fair and the remaining 25 % rated it as fair.

**The Policies That Should Be Introduced That Would Help Exporter**

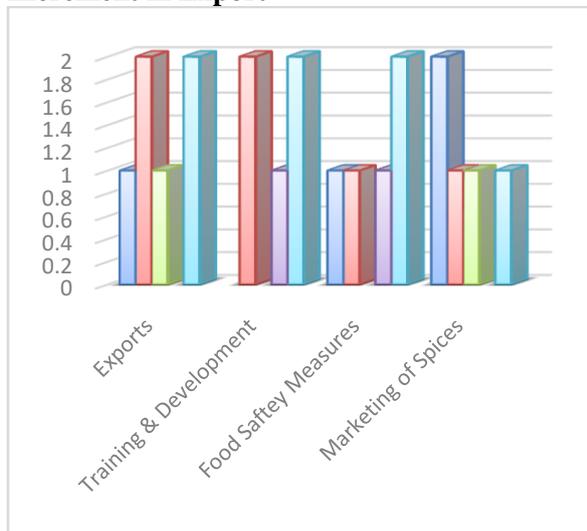
Only 33 % of respondents choose to answer this question, according to them there should be a uniform organic certification process, the government should provide more facilities for exports & the spices board should initiate more awareness drives in spice growing districts.

**Training Programme**



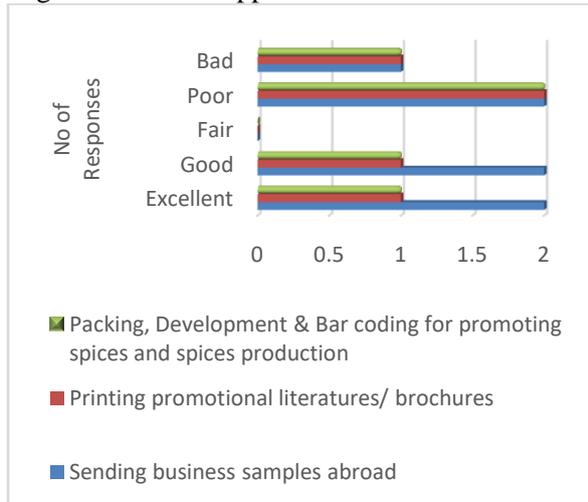
Majority respondents (i.e. 50%) do attend the training sessions occasionally whereas 12% of them attend it regularly, another 12% attend in frequently and another 12% never attend the trainings.

**Increment in Export**



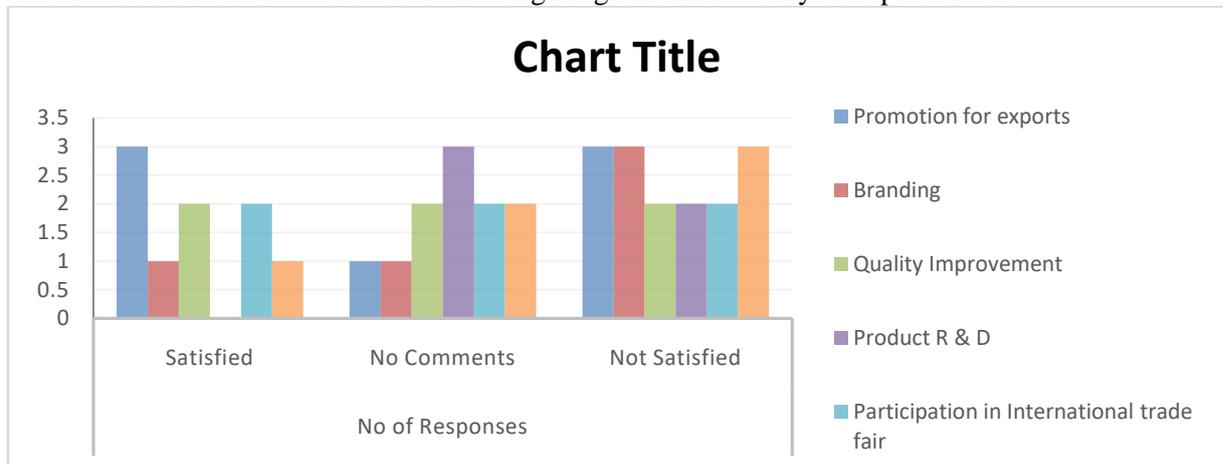
From the data it can be inferred that 25% companies exports increased by 6-15% and above 60% , other 12% companies exports increased by 0-5 & 16-15% resp. 25 % companies training and development costs increased by 6-15% and above 60% whereas 12% companies training cost increased by 30-60%. 25% companies food safety costs increased by above 60% & other 12% companies food safety costs increased by 0-15 & 30-60% resp. 25% companies marketing costs increased by 0-5 % , whereas 12% companies training cost increased by 6-30% & above 60% resp.

Registration and Support



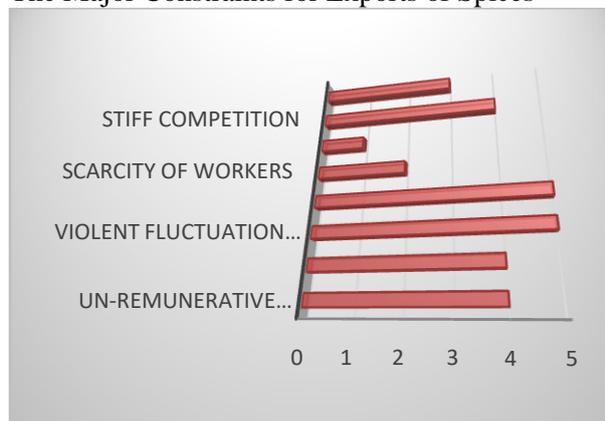
25% exporters feel the assistance they receive from the spice board for sending the business samples abroad is excellent/ good whereas another 25% feel it is poor/ bad. Majority of exporters feel that the assistance they receive from the spice board for printing the brochures is poor/ bad, whereas 12% find it satisfactory. Majority of exporters feel that the assistance for barcoding poor/ bad. How Often Do You Attend The Training Session Or Seminars Offered By The Spices Board Or Any Other Organization Dealing In Exporting Issues?

Rate Your Satisfaction towards the Following Programs Initiated By the Spices Board



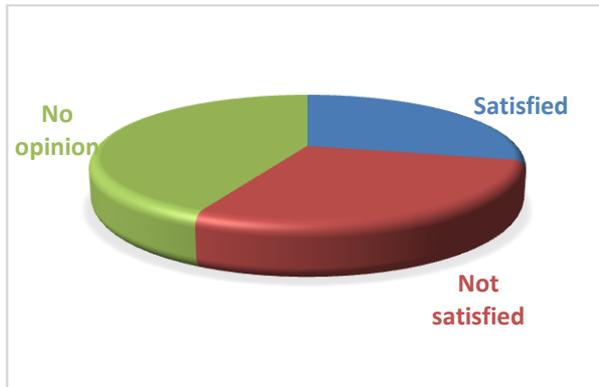
After the interpretation of the data it was found that 38% respondents were satisfied whereas another 38% was also not satisfied Promotional programmes of spices board. Majority were not satisfied by branding programmes and in assistance for purchase of brands, Majority wished not to comment the assistance in product R&D. 1/3<sup>rd</sup> of the people were satisfied, while another 1/3<sup>rd</sup> were not satisfied and the other 1/3<sup>rd</sup> choose not to comment about the Quality improvement and participation in international trade fairs.

The Major Constraints for Exports of Spices



Majority(55%) of the respondents felt violent fluctuation in prices Drought, incessant rains, diseases in plants were the major constraints, whereas 44% felt Un-remunerative selling price, High cost of production Stiff competition were also prominent constraints.

Measures (Policies) Taken By The Government Of Kerala



Of the total respondents, majority (37%) were not satisfied with the measures taken by the government whereas 25% were satisfied and other 25% choose to remain indifferent.

Policies That Should Be Introduced That Would Help Exporter

Only 25% of respondents choose to answer this question, according to them there should be policies on Labour laws, Bank financing, operational costs. They also pointed out that there is reduction in the trade promotion and policy awareness programmes that were previously conducted by the spices board. Some also pointed out the unacceptable behavior of government officials.

**Findings:-**

- ✚ From the analysis of secondary data it was found that the exports of Chillies has a constant growing trend, whereas Pepper, Turmeric, Ginger, Coriander, Cumin, Curry Powder & Seed spices have good opportunity of future growth.
- ✚ Based on the analysis of questionnaire it is inferred that USA & UAE are the top preferred exporting location.
- ✚ From the study it can be inferred that there would be a surge in exports from Kerala in coming years as majority of manufacturing companies plan to begin exporting in next 1-3 years.
- ✚ Majority of the manufacturers have adequate production capacity, staff, & resources but lack knowledge about the export regulation & preferences.
- ✚ Majority of the manufacturers have never approached the agricultural department or the spices board but they expect the government to train interested spice growers.
- ✚ Manufacturers expect the government to implement uniform organic certification process whereas exporters want government to introduce policies on labour laws & bank financing.
- ✚ Majority of the exporters are the holders of spice board certificate logo or brand registration & occasionally attend the training provided by the board, However majority of them are not satisfied with the assistance they receive from the spices board for Packing, Sending Samples, Printing literature, Barcoding etc.
- ✚ Violent fluctuation in prices, Drought, incessant rains, Diseases in plants, Un-remunerative selling price, High cost of production & Stiff competition were prominent constraints faced by exporters and manufacturers.

**5.2 Conclusion:-**

- Based on types, the spices and seasonings market is led by the pepper segment, followed by the capsicum segment. The use of pepper as a key ingredient in various cuisines, it is also used to treat fever, asthma, cough, dyspepsia, flatulence, and arthritis. This has led to an increased demand for pepper for Ayurvedic medicines. Thus it has an opportunity of future growth.
- Untapped regions have new growth opportunities, there is high growth potential in emerging markets as the market is driven by factors such as increased demand for snacks & convenience food and meat & poultry products furthermore, factors such as increasing

disposable income and rapid urbanization have also increased the demand for spices and seasonings,

- Increasing instances of unfair trade practices such as adulteration are expected to restrain the market growth. Though the prices of spices and seasonings are highly volatile and vary across different regions, the market is expected to grow at a significant rate.

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