

# The major determinants of cashew export in Kerala

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## ABSTRACT

**Aims:** India is the world's largest cashew producer, processor, and consumer. For years, India had an unrivalled and unchallenged monopoly on cashew production, processing, and marketing around the world. Considering the promising future of the cashew export market, the study aimed to identify the major determinants of cashew export in Kerala.

**Place and Duration of the Study:** 68 cashew exporters (who have been continuously exporting the cashew for the last five years) in Kollam district of Kerala were selected randomly and the primary survey was conducted through a pre-tested structured questionnaire.

**Methods:** To find out the major determinants of cashew exports in Kerala, Kendall's Efficient and Factor analysis are used. Kendall's co-efficient measures the extent to which the number of judges agrees on their rankings of the number of determinants and also finds out the positive or negative agreement among the judgments. The factor analysis is to uncover the latent structure of a set of variables. It reduces attribute space from a large no. of variables to a smaller no. of factors and as such is a non dependent procedure.

**Results:** The study found that the quality of the product, the language and communication of the product package, the proximity of the international buyers to India, food quality standards and location where cashew is processed are the major determinants of cashew exports in Kerala.

**Conclusion:** In the cashew business, India's key strength is its growing in the international market. Thereby the quality of the product, the language and communication of the product package, the proximity of the international buyers to India, food quality standards and location where cashew is processed are the major determinants of cashew exports in Kerala. In addition to that the cashew export contribute in a better way to the growth of the country by providing gainful employment opportunities via attaining women empowerment fetching foreign exchange to the nation and protecting it as a dominant position in the international market that it used to enjoy till a decade back.

**Key Words:** Cashew, exporters, Kendall's co-efficient, Factor analysis, determinants

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## INTRODUCTION

India is the world's largest cashew producer, processor, and consumer. For years, India had an unrivalled and unchallenged monopoly on cashew production, processing, and marketing around the world. However, when more and more producing countries acquired processing know-how and entered the international market, India's premium position began to erode, and her share of the international market began to decline from 65 percent 25 years ago to 29 percent now [1]. Domestic consumption, on the other hand, had risen to such heights that she is now the world's largest consumer. However, she earned this position at the expense of her international market share. But this position she achieved was at the cost of her lowering the share in the international market. But, in order to obtain this position, she had to reduce her market share in the foreign market [2].

India was dragged into the race by its reliance on imported raw materials, underutilised processing capacity, high processing costs, and a lack of mechanisation, modernization, and innovation. Another issue confronting the processing industry is a lack of people [3]. Traditional processing methods require seven to nine man- days to process an 80 kg bag of cashews [4]. As a result, she has among of the highest processing expenses in the world. In addition, India's domestic market would face competition from other countries as other processing countries looked to tap into the growing domestic market [5]. Raw nut production in India is already hampered by competition from other crops such as rubber, spices, and so on [6]. Other cash crops provide farmers with higher profits. Another factor contributing to India's poor raw nut output growth rate is the ageing of trees and low productivity [7]. Another issue to deal with would be the ever-increasing home consumption and tremendous demand for kernels on the worldwide market [8]. Accordingly, the legal and political, socio-cultural, geographical, economic, export and import policy of the country, international trade agreements, market logistic, competitive and cost factors were taken into consideration to identify the major determinants of cashew export marketing in Kerala. During this session, the researcher discovered the major determinants of cashew export in Kerala.

## METHODOLOGY

For research, 68 cashew exporters were selected from (who have been continuously exporting the cashew for the last five years) Kollam district in Kerala. The respondents were selected through a random sampling technique. Preliminary information was collected from the exporters using pre-tested questionnaires to better understand the major determinants of cashew export in Kerala. To figure out the major determinants of cashew export Kendall's co efficient and factor analysis were employed. They are 5- high contribution, 4- good contribution, 3- average contribution, 2- less contribution, 1- unfavourable was used. The results are presented under the following nine consecutive sub heads.

### Application of the Factor analysis

Factor analysis is used to uncover the latent structure of a set of variables. It reduces attribute space from a large no. of variables to a smaller no. of factors and as such is a non dependent procedure.

### Steps in Exploratory Factor Analysis:

1. Collect data: choose relevant variables.
2. Extract initial factors (via principal component).
3. Choose number of factors to retain.
4. Choose estimation method, estimate model.
5. Rotate and interpret.
6. (a) Decide on changes need to be made ( e.g. drop items include items)  
(b) Repeat (4), (5).
7. Construct scales and use on further analysis.

### Application of the Kendall's Co-efficient of Concordance

Kendall's W, or Co-efficient of Concordance, was developed as a measure of association, with the N blocks representing N independent judges, each one assigning ranks to the same set of K applicants (Kendall and Babington – Smith, 1939). Kendall's W measures the extent to which the N judges agree on their rankings of the K applicants. Kendall's W bears a close relationship to Friedman's test; Kendall's W is a scaled version of Friedman's test Statistic:

$$W = T_F / N(K-1)$$

The scaling ensures that  $W = 1$  if there is perfect agreement among the N judges in terms of how they rank the K applicants. On the other hand, if there is perfect disagreement among the N judges  $w = 0$ . The fact that the judges don't agree implies that they don't rank the K applicants in the same order. So each applicant will fare well at the hands of some judges and poorly at the hands of others. Under perfect disagreement, each applicant will fare the same overall and will thereby produce an identical value for  $R_j$ . This common value of  $R_j$  will be  $R$ , and as a consequence,  $W = 0$ . Thus, the inferential statistical test- Kendall's W Test (Co-efficient of Concordance) was fitted to determine if there are any significant differences in the various rankings of legal, political, socio- cultural, geographical and economic and institutional factors, export & import policy of the country, international trade agreements, market logistic factors, competitive factors, cost factors in influencing the success of Kerala cashew export firms.

## ANALYSIS AND DISCUSSIONS

### Legal political factors determining export marketing of cashew in Kerala

The legal/political aspect is very important in global marketing. The international business is a subject to political decrees made by governments both in "home" and "host" countries [8]. Companies intending to establish business in overseas

destination markets need to acquire thorough knowledge on the functioning of the government, stability in international and domestic commerce policies, and embedded political philosophy in the country. As a part of analysing, the legal / political factors towards cashew export were studied. The details are presented in Table 1.

**Table 1 Legal political factors determining export marketing of cashew in Kerala**

<b>Legal political factors</b>	<b>Score</b>	<b>Mean Rank</b>
The trade agreements between India with different countries	111	1.70
Export and import duty protection imposed by the government of India	90	1.38
Government support system to promote exporters	121	1.80
<b>The export regulation and procedure in the international market</b>	<b>241</b>	<b>3.70</b>
<b>The existing export marketing supply chain</b>	<b>225</b>	<b>3.46</b>
<b>Fair trade certification of cashew</b>	<b>217</b>	<b>3.33</b>
<b>Barriers to entry</b>	<b>243</b>	<b>3.73</b>
Trade union issue	93	1.43

(Source: compiled from primary data)

Kendall's W = 0.805, Asymp. Sig. = 0.000

Null Hypothesis (H0): There is no agreement among exporters regarding factors

Alternate Hypothesis (H1): There is an agreement among exporters regarding factors

Among the legal and political factors determining the success of cashew exporters in Kerala, the barriers to entry ranked as the highest (3.73) followed by the export regulation and procedure in the international market (3.70), the existing export marketing supply chain (3.46) and fair trade certification of cashew (3.33).

There are no barriers to entry for exporting the cashew to the different parts of the world, except Pakistan, which does not permit imports directly from India.

The procedures for the export of cashew are: proforma invoice, customs packing list, country of origin, commercial invoice, shipping bill, bill of lading, payment terms, export license, warehouse receipt, and health certificate. As per Table 4.18 exporters' experience in the export of cashews has made all these procedures and regulations routine, making it simple for them to handle. According to the views of exporters, the fair trade cashew certificate is still in its infancy. The fair trade federation in the UK first identified this issue in 2006. The cashew fair trade certificate does not permit price discrimination between different grades of cashew, which would otherwise have a significant difference between the grades. Although there is not much certified organic farming or processing, only a small part of cashew production is certified. The main causes cited for the absence of fair trade certification of cashew are the lack of organically certified cashews, which vary from country to country, the difficult certification process, high certification fee, and improper organic cashew marketing. But it is beneficial to cashew exporters. Buyers require quality wise and graded cashew than a fair trade certificate. These three elements contribute to the success of cashew exports from Kerala for the aforementioned reasons.

The export and import duty protection imposed by the Government of India (1.38) ranked as the least influential factor followed by the trade union issue (1.43), trade agreements between India with different countries (1.7) and government support system to promote exporters (1.8).

Under the Mid-Term Review of Foreign Trade Policy (FTP), the Government of India increased the export and import duties of cashews from three percent to five percent for the kernel and from five percent to seven percent for salted/roasted cashews, respectively. The Standard Input Output Norms (SION) is revised to 1 kg kernel from 5.04 kg of raw cashew nuts as against earlier norms of 1 kg from 4 kg of raw cashew nut for export of Cashew Kernel, from imported raw cashew nut under Advance Authorization Scheme. This again is not practically attainable for cashew exporters. Basic Custom Duty on import of raw cashew nut has been reduced from five percent to 2.5 percent from 1<sup>st</sup> February 2018 (CEPCI, 2019). Goods and Service Tax (GST) has been reduced to five percent from 12 percent for Cashew nuts. Duty free import of raw cashew nuts is allowed under Duty Free Tariff Preference (DFTP) Scheme from Least Developed Countries (LDCs). The exporters faced labour strikes as a part of trade union issue in Cochin seaport.

The trade agreements between India with different countries were ranked the least influencing factor for the success of cashew export. From the exporter's point of view, in recent years, the consumption of cashew kernels in Korea, Japan, China, and Australia has registered a considerable increase. However, for market penetration, the major hurdle is the prevailing import duty for trading between India and Australia, China, Korea, and Japan via Vietnam. The Government of

India has Free Trade Agreement with Australia, China, Korea and Japan. Since these countries do not grow cashew, and also do not have cashew processing units, CEPCI recommends including cashew kernel as an item qualified for duty free import into these countries. Considering the large processing capacity and possible additional employment generation of the India cashew industry, CEPCI requested the Government of India to consider the inclusion of cashew kernel and allied products under Free Trade Agreements with these countries. The government has not taken any action against the request of CEPCI. During the survey, exporters opined that, in the case of China, they are not giving any import duty for products imported to India. But India has to pay the import and export duty for cashew to China.

The support from the government to promote the exporters was found as the least ranked factor for the success of cashew export. The cashew kernels were provided with a five percent Merchandise Export from India Scheme (MEIS) under the Free Trade Agreement (FTA). This scheme was introduced by the Government in 2015. Initially, the cashew kernel was provided with a two percent incentive and later it increased by three percent (shipment base) from 29<sup>th</sup> October 2015 onwards and again it increased to five percent on 5<sup>th</sup> December 2017, during the Midterm reviews of Free Trade Agreement 2015-2020. These incentives were stopped by the Government of India on December 2020, according to the WTO compliance tax. To this end, the financial year 2020-2021, Department of Commerce has announced the Remission of Duty and Taxes on Exported products (RODTEP) scheme for cashew exporters effective from 1<sup>st</sup> January 2021, which replaces MEIS. Rates and conditions for the new scheme are not yet announced. The exporters opined that competitive countries (Vietnam and Brazil) getting a high percent of export incentives for cashew export. But in India, the percent of export incentive is very less and also this incentive is only allowed for the exporters who are not using Advance Authorisation License for import and export [8]. This will turn into a dissuading factor for cashew export. From the table above it can be inferred that there is 0.805 degree of agreement among exporters with regards to legal and political factors determining the success of export marketing of cashew in Kerala, which accepted the alternate hypothesis.

**Socio - cultural factors determining the export marketing of cashew in Kerala**

Society and culture have an impact on every aspect of the overseas business of multinational companies. Although society and culture are not directly included in business operations, they indirectly appear as key elements in shaping how the business is managed, from what goods are produced, and how and through what means they will be sold, to the establishment of managerial and operational patterns and the determination of the success or failure of foreign subsidiaries. Consequently, multinational companies should be aware of predominant attitudes, values, and beliefs in each host country to which they have decided to expand their business activities. Differences in attitudes and values among management of a parent company and expatriate managers at the subsidiary level, on the one hand, and managers and employees in host countries, on the other, can contribute to serious functional problems [9].

In international trade, it is essential that companies take into account the lifestyles and culture of countries to which they are considered for export. This information can be used to determine whether a product or service would be considered essential, useful, a luxury or even undesirable in a target country. Some products and services might even be found culturally unacceptable. Research into culture and lifestyle can also identify potential problems with translation, marketing and advertising. Package colours, sizes and styles, and product functions can all require adaptation because of cultural requirements. Exporters of consumer products will be affected by a country’s culture more than exporters of industrial goods or components because consumer products must be designed to meet needs, values and beliefs. The influence of socio- cultural factors towards cashew export are analysed and presented in the Table 2.

**Table 2 Socio - cultural factors determining the export marketing of cashew in Kerala**

Socio - cultural factors	Score	Mean Rank
<b>The language and communication of the product package.</b>	<b>321</b>	<b>4.93</b>
<b>Specifications in packing (Quality, Quantity)</b>	<b>321</b>	<b>4.93</b>
<b>The religious and social compliance of the company products packaging and layout to the international customers.</b>	<b>319</b>	<b>4.90</b>

(Source: compiled from primary data)

Kendall’s W = 0.980, Asymp. Sig. = 0.000

Null Hypothesis (H0): There is no agreement among exporters regarding factors

Alternate Hypothesis (H1): There is an agreement among exporters regarding factors

The factors are among those mentioned under the socio-cultural factors that affect Kerala's export marketing of cashews. The mean rank for specifications in packing ranked 4.93, the language and communication of product package ranked 4.93, and the religious and social compliance of your company products packaging and layout to the international customers ranked 4.90 as leading success factors for cashew export marketing in Kerala.

Languages may differ by area within a country, and some countries have many official languages. There is no need for a Public Relations Officer (PRO) or translator between the buyer and seller because English is the common language spoken all over the world. The grade, quantity, net weight, gross weight, name of exporting company, and name of importing country were written on each carton or tin based on the buyers' requirements, both in English and the native language of the importing country (Arabic, Japanese, etc). Halal and Kosher certificates are necessary for Jewish individuals in Middle Eastern nations such as Dubai and Saudi Arabia (Israel). The socio-cultural factors are important and significantly affect the economic activity as well as the performance of the exporting companies like culture, language, communication, specification of the packing, and religions of the society. Now, the exporters are graduates and there is no need for an outsider for communicating between the buyer and seller [9]. Due to this reason, all these factors become the success of cashew export.

From the table above it can be inferred that there is no degree of agreement (0.980) among exporters with regards to socio-cultural factors determining the success of export marketing of cashew in Kerala, which accepted the alternate hypothesis.

**Geographical factors determining the export marketing of cashew in Kerala**

The geographical factors also affect the growth of international trade. Location of the product is grown, where it is processed, the proximity of major ports and the proximity of the international buyers affect companies by its decision to trade internationally. The influence of geographical factors towards cashew export is being analysed and presented in the Table 3.

**Table 3 Geographical factors determining the export marketing of cashew in Kerala**

Geographical factors	Score	Mean Rank
Location where cashew is grown.	240	3.69
<b>Location where cashew is processed.</b>	<b>244</b>	<b>3.75</b>
The proximity of the export firm to major ports.	239	3.67
<b>The proximity of the international buyers to India.</b>	<b>244</b>	<b>3.79</b>

(Source: compiled from primary data)

Kendall's W = 0.30, Asymp. Sig. = 0.098

Null Hypothesis (H0): There is no agreement among exporters regarding factors

Alternate Hypothesis (H1): There is an agreement among exporters regarding factors

Among the different geographic variables identified to examine the geographic determinants of export marketing of cashew in Kerala, both the proximity of the international buyers to India and the location where cashew is processed ranked high with a mean rank of 3.79 and 3.75 respectively. The exporters opined that in this digital world it is easy to establish personal contact with overseas buyers. The overseas buyer needs the cashew which is processed in Kerala, because of the drum roasting method. These methods will maintain the taste and quality of cashew kernel and also maintain the breakage and infestation level as per the CEPCI norms. This will be more attractive to the buyers. Due to these reasons, these two factors become the success of cashew export.

The exporters opined that the location where cashew is grown (3.69) and the proximity of the export firm to major ports (3.67) were ranked as the least in determining export marketing of cashew in Kerala. Importers certify the country where the cashew is grown. The factor is not given much importance for cashew export than where cashew is processed. There is no direct relation between the export firm and major ports; Cochin Seaport is a small one compared to the Colombo Sea port (major port). Only the feeder vessel (small ship) may reach the Cochin Sea port because the depth of the sea is 5.5 meter. The feeder vessel unloads the cashew at the Colombo sea port (depth is 9.5 meter), where they are collected by the mother vessel and sent to the importing countries. So, these two factors were not given much importance for the success of cashew export.

From the table above it can be inferred that there is .030 degree of agreement among exporters with regards to geographical factors determining the success of export marketing of cashew in Kerala, which accepted the alternate hypothesis.

**Economic factors determining export marketing of cashew in Kerala**

One of the major issues the exporters face is that fluctuations in the exchange rate of local currency with the currency of foreign trade currency equivalent of US\$ 1.5 trillions of different currencies are trades on a daily basis in the world market [9]. Currency risk is the most managed risk in any international trade. If the currency of the exporting country appreciates against that of the currency of transaction, the exporter starts losing which upsets his very existence in the trade. On the

other hand, the depreciation of local currency makes him more benefited. Almost all exports of cashew kernels are in US Dollars. The time of the exchange rate fluctuation has also of prime importance to the industry. Since the industry is involved in both imports of raw cashew nut and export of finished kernels both invoiced in US Dollars, a weakening Indian Rupee at the time of peak export will be advantageous to the industry and vice versa. The influence of economic factors towards cashew export are analysed and presented in the Table 4.

**Table 4 Economic factors determining export marketing of cashew in Kerala**

Economic factors	Score	Mean Rank
Fluctuations in the currency rate	66	1.01
Market Development Scheme (MDS)	171	2.63
<b>Demand and supply of the product</b>	<b>239</b>	<b>3.67</b>

(Source: compiled from primary data)

Kendall's W = 0.969, Asymp. Sig. = 0.000

Null Hypothesis (H0): There is no agreement among exporters regarding factors

Alternate Hypothesis (H1): There is an agreement among exporters regarding factors

Among the variables computed in identifying the economic factors determining cashew export marketing in Kerala, demand and supply of the product is ranked as the highest (3.67). This might be due to the fact that cashew kernels are primarily produced in India and are marketed both domestically and internationally. It is consumed as snacks and there is also a growing demand for cashew kernels from confectioneries, hotels and ice cream manufacturers. However, cashew competes with almonds, walnuts, pistachios, peanuts and other edible nuts, due to its high value.

The opinion of the cashew exporters about Market Development Scheme (MDS) was assigned a mean rank of 2.63. Marketing Development Schemes measures to stimulate and diversify the country's export trade. It provides financial assistance to individual exporters and Export Promotion Council to undertake marketing of the cashew abroad. Such expenses including travel expenses are pay back in full to the exporter. However, it takes time and is only refunded for the shortest routes. These two factors which affect the success of cashew export adversely.

The fluctuation in the currency rate was ranked as the least (1.01) factor. Currency risk is a major hurdle factor for both importers and exporters. From the perspective of exporters, they prefer taking a chance that they normally go for buying and selling at current exchange rates. The exporters were involved in the import of raw cashew nuts, they saw less risk in exporting/importing at the current rates because the losses/gains may even out in the long term. The inflation leads to reduction in exports as cashew prove more costly in international market, as in the case of any product that is exported and obviously it becomes more expensive in the market. It automatically reduces the consumption of buying country. Exporters opined that, fluctuation in the currency rate seemed to a dissuading factor for cashew export.

From the table above it can be inferred that there is 0.969 degree of agreement among exporters with regards to economic factors determining the success of export marketing of cashew in Kerala, which accepted the alternate hypothesis.

**Export and import policy factors determining export marketing of cashew in Kerala**

In the contemporary world of value chains, where the focus has shifted from nations to firms in global trade and commerce, the formulation of trade policies has become increasingly complex. The Department of Commerce and Industry has the mandate to make India a major player in global trade and assume a role of leadership in international trade organisations commensurate with India's growing importance. The Department devises commodity and country-specific strategy in the medium term and strategic plan / vision and India's Foreign Trade Policy (FTP) in the long run. It provides the basic frame work of policy and strategy for promoting exports and trade. It is periodically reviewed to adapt to the changing domestic and international scenario.

India's Foreign Trade Policy envisages helping exporters leverage benefits of GST, closely monitoring export performances, improving ease of trading across borders, increasing realisation from India's agriculture based exports and promoting exports from MSMEs and labour intensive sectors. As a consequence, state governments are now actively developing export strategies based on the strengths of their respective sectors. The government is looking to focus on promoting exports of high value added products, where India has a strong domestic manufacturing base, including agriculture, engineering goods, electronics, drugs and pharmaceuticals, and textiles [10]. Thus, significant changes and refinements are needed to make the new FTP suitable at the policy level as well as for Export - Import operations. The influence of export and import policy factors towards cashew export are analysed and presented in the Table 5.

**Table 5 Export and import policy factors determining export marketing of cashew in Kerala**

Export and import policy factors	Score	Mean Rank
<b>VAT refund on export</b>	<b>260</b>	<b>4</b>
Marketing policies	197	3.02
Standard Input Output Norms (SION)	130	2
Export incentives	130	2
Advance license / Advance Authorisation(duty free imports of raw nuts)	130	2

(Source: compiled from primary data)

Kendall's W = 0.980, Asymp. Sig. = 0.000

Null Hypothesis (H0): There is no agreement among exporters regarding factors

Alternate Hypothesis (H1): There is an agreement among exporters regarding factors

From the variables listed under the export and import policy factors determining the export marketing of Cashews in Kerala, VAT refund on export ranked high (4.00). The basic principle of foreign trade is that no duties or taxes are imposed on cashews that are exported or imported. When cashews are exported, the Value Added Tax is returned to the exporters. As a result, there is no value added tax on the exports. This factor leads to the success of cashew export.

The Standard Input Output Norms (SION), (2.00), export incentives (2.00) and Advance license (2.00) were ranked least by the respondents. The current SION is 1:5.04 as per the request of CEPCI, which again is not practically attainable for the exporters because the Indian cashew exporting industry is labour oriented; not mechanised one.

The Government of India has introduced Merchandise Exports from India Scheme (MEIS) through the Foreign Trade Policy (FTP) 2015-20 w.e.f. April 1, 2015. It seeks to promote the export of notified goods manufactured/ produced in India. MEIS is a major export promotion scheme of GOI implemented by the Ministry of Commerce and Industry. Initially, the cashew kernel was provided with a two percent incentive and later it increased by three percent (shipment base) from 29<sup>th</sup> October 2015 onwards and again it increased to five percent on 5<sup>th</sup> December 2017, during the Midterm reviews of Free Trade Agreement 2015-2020. These incentives were stopped by the Government of India from December 2020, onwards in tune with the WTO compliance tax (in 2018, the scheme was the subject of a complaint under the dispute settlement mechanism of the World Trade Organisation; the decision of the dispute panel to recommend the withdrawal of export subsidies under the scheme was appealed by India in 2019). To this end, the government has announced the Remission of Duty and Taxes on Export products (RODTEP) scheme for cashew exporters effective from January 1, 2021, which replaces MEIS. Rates and conditions for the new scheme are not yet announced. This incentive is allowed for the exporters who are not using Advance Authorisation License (AA) / Advance License scheme for import and export.

Under Advance Authorisation (AA)/ Advance License scheme, all import duties on inputs, such as Basic Customs Duty, Integrated Goods and Services Tax (IGST), cesses, anti-dumping duty etc., are out rightly exempted. When an exporter employs Advance Authorization, the cashew is imported first, and then the imported inputs are utilised for the exports. It allowed inputs to be imported without paying the basic customs charge. The license is provided as soon as the export obligation is fulfilled (the required quantity of inputs is calculated based on Standard Input Output Norms (SION)). These factors are adversely affecting the success of cashew export from Kerala.

From the table above it can be inferred that there is no degree of agreement (0.980) among exporters with regards to export and import policy factors determining the success of export marketing of cashew in Kerala, which accepted the alternate hypothesis.

#### **International trade agreement factors determining the export marketing of cashew in Kerala**

International trade is the exchange of commodities, products, services, capital between people and companies in different countries. This trade has existed for a long time, but trade has increased hugely in the past few hundred years and has a major impact on the economies of many countries (James, 2014). Political policies and other government concerns, such as the relationships between trading nations, are highly important to the growth of international trade. A politically stable nation with few policies restricting international trade will likely be able to expand its worldwide trade rapidly. Political instability, however, particularly when it leads to violence, can be a major barrier to trade growth many nations place steep tariffs on exports or imports from certain nations or industries for such reasons. While such tariffs can be used to protect fledgling industries or to place political pressure on some nations, their overall effect on international trade is often negative. One of the biggest stories of the past 20 years has been the successful integration of many developing countries into the global economy and their emergence as key players in international trade [10]. Developing countries are diverse in the quality of their political and economic institutions but there are strong reasons to believe that "better" institutions give

countries a competitive advantage and produce better trade outcomes. As part of the analysis, the factors related to international trade agreements towards cashew export were studied. The listed factors are given in Table 6.

**Table 6 International trade agreement factors determining the export marketing of cashew in Kerala**

International trade agreement factors	Score	Mean Rank
Trade restrictions	124	2.4
Trade competitions	74	1.1
<b>Food quality standards (Sanitary and Phyto sanitary)</b>	<b>255</b>	<b>3.9</b>

(Source: compiled from primary data)

Kendall's W = 0.990, Asymp. Sig. = 0.000

Null Hypothesis (H0): There is no agreement among exporters regarding factors

Alternate Hypothesis (H1): There is an agreement among exporters regarding factors

Among the variables computed in identifying the international trade agreement factors determining cashew export factors marketing in Kerala, food quality standards (3.92) ranked as higher by the respondents. Each country specifies their requirements and specifications while signing the contract. The requirements of food quality standards may vary by market to market and from country to country. The cashew exporters in Kerala hold multiple certifications from different countries. They were currently possess international food quality certificates from the Food and Drug Administration (FDA), United States Department of Agriculture (USDA), Jewish Dietary Regulations like KOSHER, Food Safety Standard Certification (FSSC), British Retail Consortium (BRC) Global Standards, International Organization for Standardization (ISO), and Food Safety and Standards Authority of India (FSSAI). The exporters maintain the food quality standards for export of cashew; it will satisfy for the overseas buyer. So this factor will become the success of cashew export.

The Sanitary and Phyto sanitary (SPS) agreement under the WTO specifies that a country can reject their import if it finds any kind of harmful impacts on their flora and fauna. During the survey it was found that the cashew exporter in Kerala doesn't find any kind of return as such. One of the main reasons for this trend is that the exporters were able to meet the safety and quality requirements of their counter parts. The trade competition (1.13) was least ranked factor in cashew export market. Exporters opined that they face tough competition from Vietnam and Brazil. Between the discussions with exporters, they said that world needs ten lakh MT cashew kernels for a year. Among that India contributes only 50,000 MT cashew kernels; but Vietnam contributes six lakh MT cashew kernels to the world's share. This poses huge competition for India; because the processing technology used by Vietnam is fully mechanised. Though it reduces the quality of cashew nut, the price would be less and form a major hurdle for Indian exporters. Majority of consuming countries consider takes into consideration the price of cashew, more than quality. Therefore they prefer Vietnam cashew over Indians. It affected the future of Indian cashew industry adversely.

From the table above it can be inferred that there is 0.990 degree of agreement among exporters with regards to international trade agreement factors determining the success of export marketing of cashew in Kerala, which accepted the alternate hypothesis.

### Market logistics factors determining export marketing of cashew in Kerala

In international trade, market logistics is very important. The logistics management starts with a customer need till its fulfillment through product supplies and, during this process of supplies; it considers all aspects of performance which include arranging the inputs, manufacturing the goods and the physical distribution of the products. It lies in the fact that it leads to ultimate consummation of the sales contract. According to the contract, delivery is essential for fulfilling the commercial and legal requirements. Similarly, better and/or timely delivery helps in getting repeat orders through creation of goodwill for the supplier. The factors regarding market logistics are given in Table 7.

**Table 7 Market logistics factors determining export marketing of cashew in Kerala**

Market logistics factors	Score	Mean Rank
<b>Image of cashew exporting companies</b>	<b>274</b>	<b>4.21</b>
<b>Up-to-date market information</b>	<b>272</b>	<b>4.18</b>
Processing technology	236	1.90
<b>Communication facility</b>	<b>304</b>	<b>4.67</b>
<b>Transportation facilities</b>	<b>265</b>	<b>4.07</b>
<b>Products handling</b>	<b>268</b>	<b>4.00</b>
<b>Warehousing</b>	<b>261</b>	<b>4.01</b>



(Source: compiled from primary data)

Kendall's W = 0.360, Asymp. Sig. = 0.000

Null Hypothesis (H0): There is no agreement among exporters regarding factors

Alternate Hypothesis (H1): There is an agreement among exporters regarding factors

From the variable given to rank market logistics determining export marketing of cashew, communication facility scored the highest (4.67) rank, followed by image of cashew exporting companies (4.21), up-to-date market information (4.18), Transportation facility (4.07), ware housing (4.01) and product handling (4.0) .

At present, the exporters directly contact their customer at any time; *via* their mail / WhatsApp /any other online modes. Export companies have a good image in the international market because; companies always maintain the good quality for cashew. Every day, exporters get up to date market information regarding cashew market from International Nut and Dried Fruit (INC). This allows exporters to learn more about cashew kernel prices, raw cashew nut prices, and so on.

Transportation seeks to move goods from points of production and sale to points of consumption in the quantities required at times needed and at a reasonable cost. The transportation system adds time and place utilities to the goods handled and thus, increase their economic value. Compared to earlier years, both domestic and international transportation is made simple with the help of logistics. The cashew kernel is a handle with care product, because of its dryness. If it not properly cared for, it will break and turn to be dust and it reduces the demand in the international market. Cashew is always taken care of by the labourers till it is transported. From the perspective of the exporters; a warehouse is solely required for the storage of imported raw cashew nuts. They go straight to the container for shipping after turning raw cashew nuts to cashew kernels. Due to these reasons, the above factor will turn to become the success factors for cashew export.

While, the processing technology in the cashew market is ranked least (1.9) importance in determining export marketing of cashew in Kerala, the Indian cashew industry always followed drum roasting technology which was more acceptable in the market for their taste and long shelf life. Earlier, India was enjoying a monopoly in the international market and she used to get a price for her product at par with her production costs. But with more and more countries entering the market with steam roasting or oil bath roasting technology, the competition that began highly reflected Indian cashew industry. Also, the processing cost which is high compared to competing countries like Vietnam and Brazil. The change in cashew processing technology which harmfully affected the exporting companies and it is a dissuading factor for cashew export.

From the table above it can be inferred that there is 0.360 degree of agreement among exporters with regards to market logistic factors determining the success of export marketing of cashew in Kerala, which accepted the alternate hypothesis.

#### **Competitive factors determining export marketing of cashew in Kerala**

In current environment, with growing interdependence between the markets and in increasing competition, it is more difficult to maintain current enterprise market position [11]. Competitiveness is a measure of the relative ability of different countries to provide different products or services. Competitiveness takes into account the efficiency, costs of employment, level of government regulation and the ease of doing business. Competitiveness affects international trade because the more competitive countries will tend to attain a higher level of global trade [11]. When entering into a contract to purchases cashew kernel from a processing country, the decision of the overseas importer is influenced by different competitive criteria. The decision to purchase from a particular country / supplier is knowingly or unknowingly influenced by such factors that are perceived by the importer based on his experience or general thinking. The influence of competitive factors towards cashew export are analysed and presented in the Table 8.

**Table 8 Competitive factors determining export marketing of cashew in Kerala**

Competitive factors	Score	Mean Rank
Pricing of the product	196	3.01
<b>Promptness in shipment</b>	<b>307</b>	<b>4.72</b>
<b>Packing of the product</b>	<b>265</b>	<b>4.07</b>
<b>Quality of the product</b>	<b>282</b>	<b>4.33</b>
<b>Rapport with suppliers</b>	<b>281</b>	<b>4.32</b>
After sales support	230	3.50
<b>Payment terms</b>	<b>278</b>	<b>4.20</b>
<b>Trade norms (Terms and Conditions of sale)</b>	<b>263</b>	<b>4.06</b>
Honouring of contractual obligations	215	3.30

(Source: compiled from primary data)

Kendall's  $W = 0.584$ , Asymp. Sig. = 0.000

Null Hypothesis (H0): There is no agreement among exporters regarding factors

Alternate Hypothesis (H1): There is an agreement among exporters regarding factors

From the variables listed under the competitive factors determining the export marketing of cashew in Kerala, promptness in shipment ranked high (4.72) followed by quality of the product (4.33), rapport with suppliers (4.32), payment terms (4.20), packing of the product (4.07) and trade norms (4.06) by the respondents.

The cashew kernels are purchased by the value adders on a forward basis on the basis of the production plan of the value added processing. Therefore if the shipments schedules are not strictly adhered to the production schedules are affected and the exporter will be made to compensate the losses.

The product quality is strictly followed as per the norms of CEPCI / AFI. Also Export Inspection Council of India (EIC), (who is responsible for enforcement of quality control and pre-shipment inspection of various commodities meant for export) is to ensure the quality and safety of products exported, in order to meet the requirements of the importing countries. This assurance is provided through either a consignment-wise inspection system or quality assurance/food safety management system-based certification.

Rapport with supplier provides an added comfort zone for the exporter. A longstanding relationship with the stakeholders in the industry and the experience and expertise of the supplier will be an added advantage in the trade. Further, this would add flexibility on the part of the supplier to support the exporter in case of any emergency or unexpected circumstances. The cost of the material and flexibility of operation depends largely on the payment terms offered by the seller. Letter of credit requires sufficient backing by a financial institution and involves additional costs. Cash against document (CAD) and Telegraphic transfer (TT) offers flexibility in operations.

By the time the cashew kernel reaches the destination after multiple handling and a quite long transit time, the retention of the original characteristics including the shape and crispiness of the kernel is gone that would find less acceptable to the value adders. The strength of the packing material, its permeability, bursting strength, purity and quantity of gases flushed etc. counts high compared to appearance.

The trade norms is mutual agreement between buyer and seller, it includes the payment relaxations, flexibility in conditions, government imposed restrictions in trade, willingness of the supplier to supply as per the requirement of the importer, furnishing of different certifications etc. Due to these reasons, the above factor will turn to become the success factor for cashew export.

Whereas, the pricing of the product (3.01), honouring the contractual obligations (3.3) and after sales support (3.50) ranked least by the respondents. In international market, the price is fixed by New York market; while in domestic market it is CEPCI. The price quoted for the cashew kernel is converted in CIF (cost, insurance and freight) landed terms is important criteria. The market is very sensitive and the competitive pricing determine the profit margins as in cashew trade.

Most of the contracts are on forward basis, the prices at the time of actual shipment may vary from the contracted rates. Some suppliers may default if the contracted rates are lower than the prevailing prices at the time of shipment. Also, certain suppliers may sell forward without ensuring the supply of materials and may try to mobilise the same at the time of shipment, which may result in non availability of materials for shipment. This will upset the production schedules of the importers and also his supply schedules.

Cashew being an agricultural product, the quality and physical parameters may change from product to product. Also there can be deviations in the specifications due to transit damages or in transit infestation. Mostly the payments are effected much before the consignment is received by the importer. In case of any defects in the material received, the importer will be at risk unless a proper after sales support extended by the seller. So these factors were considered as the dissuading factor for the success of cashew export.

From the table above it can be inferred that there is 0.584 degree of agreement among exporters with regards to market competitive factors determining the success of export marketing of cashew in Kerala, which accepted the alternate hypothesis.

### Cost factors determining export marketing of cashew in Kerala

The cost of the cashew industry showed in terms of different factors of production and processing. This would help to understand the expensive factors related to the cashew processing industry. Trade costs interact with comparative advantage to produce the pattern of specialisation and trade that observe across countries. They affect the production and consumption decisions of economic agents all around the world, including poor people in developing countries. Among cashew exporters, they reported that the imported raw nuts, access to processing technology and access to skilled labour are expensive for them [10]. The influence of cost factors on cashew export are analysed and presented in the Table 9.

**Table 9 Cost factors determining export marketing of cashew in Kerala**

Cost factors	Score	Mean Rank
<b>Cost of raw material</b>	<b>220</b>	<b>3.87</b>
Processing cost	130	2.00
<b>Packaging cost</b>	<b>220</b>	<b>3.87</b>
Freight charges / shipping charge	130	2.00
Labour cost	128	1.90
<b>Transportation cost</b>	<b>220</b>	<b>3.87</b>
<b>Port charges (Custom House Agents)</b>	<b>220</b>	<b>3.87</b>
GST	126	1.87
Import duty	126	1.87
Export duty	126	1.87

(Source: compiled from primary data)

Kendall's W = 0.785, Asymp. Sig. = 0.000

Null Hypothesis (H0): There is no agreement among exporters regarding factors

Alternate Hypothesis (H1): There is an agreement among exporters regarding factors

From the variables given to rank the cost factors for determining the success of export marketing of cashew in Kerala, the cost of raw material scored in highest (3.87) rank followed by packaging cost (3.87), transportation cost (3.87) and port charges (3.87).

The cost of raw material is varying from country to country. Among that Tanzanian cashew gets a high price of cashew because of its quality. During the survey, exporters opined that the cost of packaging is affordable for them, and without proper packaging, they will not accept it. For a transit of a 20 ft container from Kollam to Cochin sea port they charged ₹ 17,000 and to Tuticorin Sea port ₹22,000 by road. Compared to other costs like processing cost; transportation cost is reasonable for exporters. For a 20 ft container port charge ₹ 4000, this rate is fixed for all importing countries it is also an inexpensive cost for the exporters. Due to these reasons, the above factors become success of cashew export.

While, in GST in cashew export ranked least mean rank (1.87), followed by import duty (1.87), export duty (1.87), labour cost (1.90), and freight charge (2.00) and processing cost (2.00).

Five percent of GST is imposed on export and import. The GST cost is expensive for cashew exporters and it's not refunded for them. Cashew processing in Kerala is a manual work. Minimum five labourers are required to process an 80 kg bag. To process an 80 kg bag they get only 1/4<sup>th</sup> of cashew nut (i.e. from 1 kg raw cashew; 250g is cashew nut and 750 g is shell). The labour cost varies for different states and countries; in Tamil Nadu - Rs. 2000, Andhra Pradesh – Rs. 1500, and Japan Rs. 500. High labour cost is also a burden for cashew exporters.

An amount of 2.5 percent import duty is imposed by the country while importing. The exporters have been exempted from import duty that has with Advance License and imported from least developed countries.

In India, to process a bag (80kg) of raw cashew converted to cashew kernels they requires more than ₹ 24, 000; but in Vietnam, the processing cost is only ₹ 800 for an 80 kg bag. Freight charges varying depends on importing country. After 2019, the freight cost highly affected the whole exporters in Kerala; to Japan- 1000 USD, UAE – 1000 USD, Dubai – 1000 USD, Saudi Arabia – 3000 USD, USA – 12000 USD, Hong Kong - 1000 USD, Europe – 11000 USD. Freight charges are very expensive in USA and other European countries (Table 4.29). Importing countries like Saudi Arabia, Japan, Dubai, and Hong Kong impose the least charges compared to other European countries. The exporters say that escalation of freight charges is a side effect of Covid -19 pandemic. These reasons affected the cashew export and became the dissuading factors for cashew export.

From the table above it can be inferred that there is 0.785 degree of agreement among exporters with regards to cost factors determining the success of export marketing of cashew in Kerala, which accepted the alternate hypothesis.

**Table10 Factor analysis for identifying the successful factors in cashew export market**

Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Communalities
The trade agreements between India with different countries		-.265				.124
Export and import duty protection imposed by the government of India			-.321			.245
Government support system to promote exporters					.302	.225
The export regulation and procedure in the international market	<b>.545</b>					.760
The existing export marketing supply chain	<b>.501</b>					.550
Fair trade certification of cashew		.487		-.267		.398
Barriers to entry	.420		<b>.539</b>			.459
Trade union issue		-.245			.365	.445
The language and communication of the product package.		<b>.847</b>				.726
Specifications in packing (Quality, Quantity)	<b>.785</b>					.694
The religious and social compliance of the company products packaging and layout to the international customers.		.459		<b>.740</b>		.523
Location where cashew is grown.				-.567		.473
Location where cashew is processed.					<b>.738</b>	.697
The proximity of the export firm to major ports.		-.323			.238	.421
The proximity of the international buyers to India.			<b>.688</b>			.534
Fluctuations in the currency rate		-.236			.218	.437
Market Development Scheme (MDS)			.358			.431
Demand and supply of the product	<b>.735</b>					.788
VAT refund on export				<b>.827</b>		.659
Marketing policies			.498	-.444		.760
Standard Input Output Norms (SION)	-.604		-.539			.706
Export incentives	-.384	-.510				.550
Advance license / Advance Authorisation (duty free imports of raw nuts)	-.382	.465	-.475			.701
Trade restrictions				-.578		.539
Trade competitions	-.510				.473	.568
Food quality standards		.465		<b>.887</b>		.701
Image of cashew exporting companies		<b>.740</b>				.678
Up-to-date market information	-.529			<b>.618</b>		.691
Processing technology			-.765			.658

Communication facility			.647			.534
Transportation facilities		.784				.781
Products handling				.687		.726
Warehousing		.675				.661
Pricing of the product		-.598			.495	.687
Promptness in shipment				.525		.760
Packing of the product				.551		.550
Quality of the product	.897				.398	.769
Rapport with suppliers		.569				.614
After sales support	.435			-.664		.560
Payment terms		.670				.642
Trade norms (Terms and Conditions of sale)				.728		.679
Honouring of contractual obligations	-.321				.461	.568
Cost of raw material		.721		.214		.671
Processing cost			-.536			.660
Packaging cost					.645	.510
Freight charges / shipping charge		-.357			.381	.564
Labour cost			-.354		-.777	.678
Transportation cost		.798				.694
Port charges (Custom House Agents)		.673				.546
GST	-.726			.429		.735
Import duty			-.567		.473	.585
Export duty			-.539			.478

#### Factor 1 (F<sub>1</sub>)

The first factor is consisted of variables like “The export regulation and procedure in the international market (.545), the existing export marketing supply chain (.501), Specifications in packing (Quality, Quantity) (.785), Demand and supply of the product (.735). The former had the highest significant positive loadings. Hence factor one was characterised as “demand and supply factors”.

#### Factor 2 (F<sub>2</sub>)

The second factor consisted of variables like “the language and communication of the product package (.847), transportation facilities (.784), image of cashew exporting companies (.740), rapport with suppliers (.569), payment terms (.670), cost of raw material (.71), port charges (.673), warehousing (.675) had significant positive loadings. Hence factor two was characterised as “market logistics factors”.

#### Factor 3 (F<sub>3</sub>)

The third factor consisted of variables like “barriers to entry (.539), the proximity of the international buyers to India (.688), communication facilities (.647) had significant positive loadings. Hence factor three was characterised as “markets entry and exit factors”.

#### Factor 4 (F<sub>4</sub>)

The fourth factor consisted of variables like “up-to-date market information (.618), food quality standards (.887), products handling (.687), promptness in shipments (.525), packing of the product (.551), trade norms (.728) had significant positive loadings. Hence factor four was characterised as “competitive factors”.

**Factor 5 (F<sub>5</sub>)**

The fifth factor consisted of variables like “location where cashew is processed (.738), packaging cost (.645) had significant positive loadings. Hence factor five was characterised as “location of processing”.

**Factor loadings**

From the factor matrix the critical success factors of cashew export were identified and given Table 11 with factor loading.

**Table. 11 Factor loadings**

Sl.no	Variable	Statements	Factor loading
1	Demand and supply factors	Quality of the product	.897
2	Market logistics factors	The language and communication of the product package	.847
3	Market entry and exit factors	The proximity of the international buyers to India	.688
4	Competitive factors	Food quality standards	.887
5	Location of processing	Location where cashew is processed	.738

This section identified the major determinants of cashew exports in Kerala. It is found that quality of the product (.897), the language and communication of the product package (.847), the proximity of the international buyers to India (.688), food quality standards (.887) and location where cashew is processed (.738) are the major critical success factors of cashew export market. The competitive and demand factors are the highest loading factors among them.

**CONCLUSION**

Conclusively, In the cashew business, India's key strength is its growing in the international market. Thereby the quality of the product, the language and communication of the product package, the proximity of the international buyers to India, food quality standards and location where cashew is processed are the major determinants of cashew exports in Kerala. Additionally, the export of cashews contributes more to the development of the nation by creating opportunities for women to achieve economic independence, bringing in foreign currency, and preserving the nation's former position of dominance on the global market.

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