



# Study on Issues and Challenges involved in the Export of Cashew and its products with reference to Fernandes Brothers Mangaluru

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## Abstract

The purpose of this research is to study the issues and challenges which are involved in the export of cashew and its products with reference to Fernandes Brothers, Mangaluru. Cashew is one of the most important dollar earning crops of the country. In the beginning cashew was mainly considered as a crop for afforestation. As it can adapt to varied agro climatic conditions, it has become a crop of high economy and commercial value. The cultivation and marketing of cashew nut involve a considerable amount of manpower and hence play a vital role in the economic activities in India. However, in recent years the owners of the cashew nut growers are unable to obtain optimum yield and return. The coastal states of India are the main cashew producers. Though the production flourishes both in domestic and foreign trade, the problems associated with its cultivation, domestic and export marketing do not permit the growers to reap optimum return and traders do not get reasonable profit. In India, large numbers of middlemen are involved in domestic and export marketing of cashew nut. Further in the recent past, the export price of cashew nut is widely fluctuated due to changes in foreign market. The quantity of export of cashew kernel had registered a growth of 5.71% per annum. This was made possible both due to increased export to countries of import and changes in composition of India's cashew kernel exports to various destinations. The Indian Cashew industry provides employment to more than 5 lakh people both directly and indirectly, particularly in the rural areas and it thus plays a very vital role in the economy. Today nuts constitute an important part of diet in several countries of the world. In Indian cashew processing factories, over 95% of the workers are women. The total export earnings from export of cashew kernel and cashew nut shell liquid has increased

from 447.80 crores in 1990–91 to 4390.68 crores in 2011–12. India is facing tough competition from Vietnam and Brazil in the exports of Cashew Kernels.

**Keywords:** export, cashew, raw materials, exchange rate fluctuations, infrastructure, domestic trade, foreign trade

### **Introduction:**

Fundamental changes have taken place in the pattern of international trade since the end of the Second World War. The period 1950-80 witnessed a revival of world trade, especially among the industrialised countries. This was facilitated by the economic reconstruction following the two World Wars and reduction in transportation costs. Another important factor contributing to trade expansion was the multilateral initiative under GATT that enabled dismantling of trade barriers and non-tariff barriers among the industrialised countries imposed during the inter-war period. The move towards currency convertibility on current account transactions by leading industrial powers which began in the late 1950s further facilitated growth in international trade.

Exports have become an important indicator of the country's economic performance. Exports are the goods and services produced in one country and purchased by the citizens of another country. Exports are one of the oldest forms of economic transfer and occur on a large scale between nations that have fewer restrictions on trade, such as tariffs. India's foreign trade is regulated by the Foreign Trade (Development and Regulation) Act, 1992 which replaced the Import and Export (Control) Act, 1947. The Act of 1992 empowers the Central Government to formulate and announce from time to time the export and import policy and to amend it in like manner.

The two decades after Independence, i.e. from 1947 to closing years of 1960s, India's export growth was very low. To a certain extent this was attributable to the lack of coherent domestic policies since even in traditional exports India's share in world exports declined. However, this was not a period of rapid growth in exports from developing countries and India's export growth rate was comparable to that of other developing countries. A series of measures were initiated with the object of stepping up exports. These included the following:

- Export promotion council were set up for cotton textiles, silk and rayon, engineering goods, chemicals, tobacco, spices, cashew, leather, plastics, sports goods, and mica.
- Establishment of the Exports Risks Insurance Corporation.
- Assignment of the duties of Export Promotion Councils to Commodity Boards for tea, coffee and coir.
- Increased facility for publicity, fairs, exhibitions etc.
- Removal of export controls and quota restrictions.

- Abolition of most export duties.
- Refund of excise duties.
- Special import licences for raw materials for exports.
- Development of trading relations with USSR and countries in Eastern Europe.

Export growth after 1971 was much more impressive and India's exports grew nearly as rapidly as those of the countries classified as fast growing exporters of manufactures. One further feature of the growth in exports over this later period was the diversification in terms of commodities and foreign markets. Both external and domestic factors have posed a challenge to export growth such as the global trade slowdown from 2008-09 onwards, exchange rate fluctuations and non-tariff barriers imposed by India's trading partners and the loss of competitiveness in many product areas.

The inherent limitations of manufacturing in India, the lack of diversity and focused efforts on services exports, the under achievement of the potential of SEZs, high transaction costs, high cost of trade finance and infrastructural bottlenecks are the domestic challenges to be overcome. The heavy dependence on imports of essential commodities including crude oils, fertilizers and electronics has kept India's trade deficit at a high level. The exporter is one of the important constituents of the foreign trade. He is a person who engages himself in selling the goods abroad. A person who arranges for the sale of goods in the overseas market is known as the exporter.

### **Statement of the Problem:**

There is an opportunity to conduct project in this area on the issues and challenges such as:

- Shortage of raw cashew nuts;
- Exchange rate fluctuations;
- Infrastructures;
- Competitions; and
- Financial problems; which are faced in the export of cashew and its products with reference to 'Fernandes Brothers' Mangaluru.

### **Need of the Study:**

The need of this study is to know the issues and challenges such as Shortage of raw cashew nuts, Exchange rate fluctuations, Infrastructures, Competitions and Financial problems along with the procedure of export of cashew and its products. This study is conducted on 'Fernandes Brothers' Mangaluru.

### **Objectives of the Study:**

The main objective of the study is to analyse the issues and challenges faced in the export of cashew and its products with reference to 'Fernandes Brothers' Mangaluru. The other objectives are as follows:

- To analyse the shortage of raw materials in the supply of raw cashew nuts.
- To analyse the issues of exchange rate fluctuations.
- To analyse the infrastructures in the export of cashews relating to Indian scenario.
- To analyse the competition faced by Fernandes Brothers in the export of cashews.
- To analyse the financial problems faced by Fernandes Brothers in the export of cashews.
- To study the Indian cashew industry and export performance of cashew.
- To examine the problems faced by cashew exporters from India with reference to 'Fernandes Brothers' Mangaluru.
- To offer suggestion to overcome difficulties and to enhance growth of the cashew industry based on the study.

### **Hypothesis:**

H<sub>1</sub>: There is no significant increase in the export from Fernandes Brothers of cashew over the years.

H<sub>2</sub>: There is no significant increase in the import into Fernandes Brothers of cashew over the years.

### **Scope of the Study:**

I have chosen study of the issues and challenges involved in the export of cashew and its products. For this study I have chosen 'Fernandes Brothers' Mangaluru. Scope in this area of study is high as we get to know the issues, challenges and problems faced in the export of cashew and other cashew products. It includes the problems faced by the exporters of cashew.

### **Methodology of the Study:**

There are two main sources or methodology of data collection. They are

- **Primary data:** Primary data is used in research originally obtained through the direct efforts of the researcher through surveys, interviews and direct observation. Primary data is more costly to obtain than secondary data.
- **Secondary data:** Secondary data refers to data that was collected by someone other than the user. Common sources of secondary data include censuses, information collected by government departments, organisational records and data that was originally collected for other research purposes. Secondary data is collected through published sources which are current and more relevant to the research project.

The data for the study on the issues and challenges involved in the export of cashew and its products is taken through secondary method of data collection. Secondary data is research that is widely available and obtained from another party which will influence the analysis. The secondary data will be collected from library books, business journals, newspaper articles, and from 'Fernandes Brothers' Mangaluru.

### **Sample Unit:**

The study is conducted on the issues, challenges and various problems faced by the exporters of cashew and its products in 'Fernandes Brothers' Kulshekar, Mangaluru.

### **Social Relevance and Contribution of the Study:**

The study is helpful to the society to know and understand the various issues and challenges the exporters of cashew face. This study gives special reference to the export of cashew and its products with reference to 'Fernandes Brothers' Mangaluru.

### **Limitations of the Study:**

Some of the main drawbacks of the study are as follows:

- The study is constrained to limited time.
- The costs involved in the study are high as there is no income earned.
- Lack of information regarding the study.
- The study is time consuming.
- The main purpose of the study is to analyse the issues and challenges in the export of cashew and its products. The information received may not be sufficient.
- Suggestions offered are limited to one export house, which does not reflect other companies working operation.

### **Literature Review:**

India ranks first in the world in area utilized for cashew production and it is the third largest consumer. India continued to be the largest producer of raw cashew nuts in the world. India is the largest producer, processor, exporter and consumer of cashew in the world. It accounts for 44.58 and 57.25% of the world production and exports respectively. Cashew is a major foreign exchange earner for India.

There was a positive growth in production of cashewnut in India. The establishment cost of cashew plantations and the extent of input use and cost of cultivation of cashewnut are high in Dakshina Kannada. The reasons for high costs in Dakshina Kannada are the high use of inputs and high wage rates, Markov Chain analysis revealed that USA, Australia and Netherlands were stable importers of Indian cashew kernels. USA, Japan and Korea were the stable and loyal markets for Indian Cashew Nut Shell Liquid.

### **Export:**

1. **Balagopal, T. A. S. (1986)** has reported that exports have become an important indicator of the country's economic performance. Exports are the goods and services produced in one country and

purchased by the citizens of another country. Exports are one of the oldest forms of economic transfer and occur on a large scale between nations that have fewer restrictions on trade, such as tariffs. India's foreign trade is regulated by the Foreign Trade (Development and Regulation) Act, 1992 which replaced the Import and Export (Control) Act, 1947. The Act of 1992 empowers the Central Government to formulate and announce from time to time the export and import policy and to amend it in like manner.

2. **Wali, B. M. Kalkundrikar. A. B. (1997)** has reported that the two decades after Independence, i.e. from 1947 to closing years of 1960s, India's export growth was very low. To a certain extent this was attributable to the lack of coherent domestic policies since even in traditional exports India's share in world exports declined. However, this was not a period of rapid growth in exports from developing countries and India's export growth rate was comparable to that of other developing countries. A series of measures were initiated with the object of stepping up exports.

### History of Cashew:

3. **The Cashew Export Promotion Council of India (CEPCI)** summarized that four centuries ago, the Portuguese came sailing down the Indian coasts and brought with them the tree nut Cashew. It spread as a popular crop to other parts of India. Cashew cultivation now covers a total area of 0.70 million hectares of land, producing over 0.40 million metric tonne of raw cashew nuts annually. Cashew tree is a short, stocky, low-spreading, evergreen tropical tree. It flowers once a year, between the months of November and January. The fruit ripens fully within 2 months. India is the largest producer, processor and exporter of cashews in the world. The raw cashew nuts collected from the growing areas are moved to the factories for processing. It is ensured that the raw nuts are thoroughly cleaned and are free from all foreign matter before they are taken for processing.

4. **James, (1981)** reported that cashew is botanically known as *Anacardium Occidentale* (family Anacardiaceae) is a native of Brazil. It was brought to India by the Portuguese about 400 years ago to prevent soil erosion. Cashew processing had a humble beginning towards the second decade of the twentieth century and had a phenomenal growth by the middle of the century. The practice in vogue before the 1920s was to procure raw nuts from local markets, dry them, pack them in bags and distribute them to people who processed the nuts in their houses on a small scale basis. The method of roasting adopted in this cottage processing was primitive and crude, viz., pan roasting.

5. **Balasubramanian and Singh, (2002)** reported that cashew nuts are grown in semi-arid, sub-tropical regions of Africa, Latin America and South and South-East Asia. In 2000, the total global area under cashew cultivation was around 4 million hectares, while the estimated average productivity was around 510 kg per hectare and total annual raw nut production was 1.8 million tonnes.

6. **AadithyaMattoo, Robert M Stern, Gianni Zanini, (2010)** evaluated that India's exports of textiles and clothing have been projected to be US\$ 64.41 billion by the end of the 12<sup>th</sup> Five Year Plan, that is March 2017. The textile industry accounts for 12% share of the country's total export basket. India is major exporting country as far as textile sector is concerned and not dependent on import. Majority of import takes



place for re-export or special requirement. In global exports of clothing India ranked as the 4<sup>th</sup> largest exporter as per WTO data-2013, with China, Italy and Bangladesh occupying first three slots.

7. **VibhaMathur, (2015)** reported that in spite of various constraints, India's share in the world exports increased from 0.70% in 2000 to 1.70% in 2013 (January – September). According to the WTO, in merchandise trade, India was the 19<sup>th</sup> largest exporter of 1.70% and the 12<sup>th</sup> largest exporter with a share of 2.50% in 2013. In commercial services, India was the 6<sup>th</sup> largest exporter in the world with a share of 3.20% and the 9<sup>th</sup> largest importer with a share of 2.80%.

## Profile of the Study Area

### Introduction of the Organisation:

Fernandes Brothers is one of the leading exporters of Cashews in India. The head office of the company is located near KEB substation Maroli Kulshekar Mangaluru. The company does not have any other branches. Fernandes Brothers is also an Export House recognized by Ministry of Commerce, Government of India. Fernandes Brothers began its humble journey in the year 1946. It is one of the most ancient cashew factories in South India with the latest equipment.

The Managing Partners are Mr Walter D'souza and Ms Leela D'souza. Mr Walter D'souza took over the organization in the year 1986. The main objective of Mr Walter D'souza was to set a benchmark in the Cashew Industry in terms of Quality and Service by strict adherence to business etiquettes and values. At Fernandes Brothers, the most innovative practices blend with a tradition of Quality and Performance to offer the best Cashews.

**Table 3.4: Basic Information of the company:**

Nature of Business	Manufacturer/ Exporter/ Supplier
Managing Partners	Walter D'souza and Ms Leela D'souza
Annual Turnover	Up to ₹. 50 Lakh
Year Established	1945
Location	KEB substation Maroli Kulshekar Mangaluru, Karnataka, India
Telephone Number	0824-2211098
Email Address	fernandesbrothers@gmail.com
Website	www.fernandesbrothers.com
Number of workers employed	150 workers
Achievements of the company	Excellence in CNSL Export - 2017 Largest Exporter into Bahrain - 2018

Fernandes Brothers is one of largest manufacturers of Cashew Kernels, Cashew Shell Liquid and Cashew allied products. There are 150 workers employed in the company. The company has certain important achievements to its honour. They are:

- Excellence in CNSL Export - 2017
- Largest Exporter into Bahrain – 2018

The firm has been involved in exports since last few decades and there has been a steady growth seen in exports in both Cashew Kernels as well as Cashew Nut Shell Liquid. The future plans of the company include continued expansion in India and very strong efforts in targeting the cashew industries in Asia, Europe, Africa and North America. With the technical edge and continuous innovation, the products are among the best which are currently available and there is anticipation of a strong business growth in the near future.

The firm serves essence of Indian taste and manufactures wide variety of Quality Cashews. Today it is recognized as prime name amongst the leading Indian Exporters. Having the best of the resources indulged in procuring quality oriented cashew kernels, the processing goes through stages like Roasting, Cutting, Hot Chambers, Peeling, Grading and Packing. Cashew Kernels are graded into hite/scorched wholes, pieces, splits, butts etcetera depending on the shape, size & colour of the kernel.

**Table 3.5: Grading of cashews:**

White Wholes	Scorched Wholes	Pieces
W - 180	SW - 180	B (Butts)
W - 210	SW - 210	S (Splits)
W - 240	SW - 240	LWP (Large White Pieces)
W - 320	SW - 320	SWP (Small White Pieces)
W - 450	SW - 450	BB (Baby Bits), SB
W - 500	SW - 500	SS (Scorched Splits) (Scorched Butts)
SSW(Scorched Wholes Seconds)		SP (Scorched Pieces)
DW (Dessert Wholes)		DP (Dessert Pieces)
SPS (Scorched Pieces Seconds)		SSP (Scorched Small Pieces)

### **Cashew Nut Processing at Fernandes Brothers:**

The raw cashew nut processing sector has seen many technological interventions and breakthrough in the various processing stages. In earlier days, cashew processing was mainly manual as it was a work of the artisan whose art of processing was the key to realize maximum value from the raw material. Primarily, the following three factors are driving mechanization and automation trend in cashew processing.



1. Availability and affordability of quality manpower with increasing education and aspiration levels of rural people and better job prospects in urban areas.
2. As the markets develop, there is an increasing emphasis on adherence to stringent quality control standards and food safety norms from customers.
3. Health and safety issues related with the labour involved in the cashew processing and environmental concerns (pollution).

**Figure 3.5: Cashew processing flow diagram – manual processing**

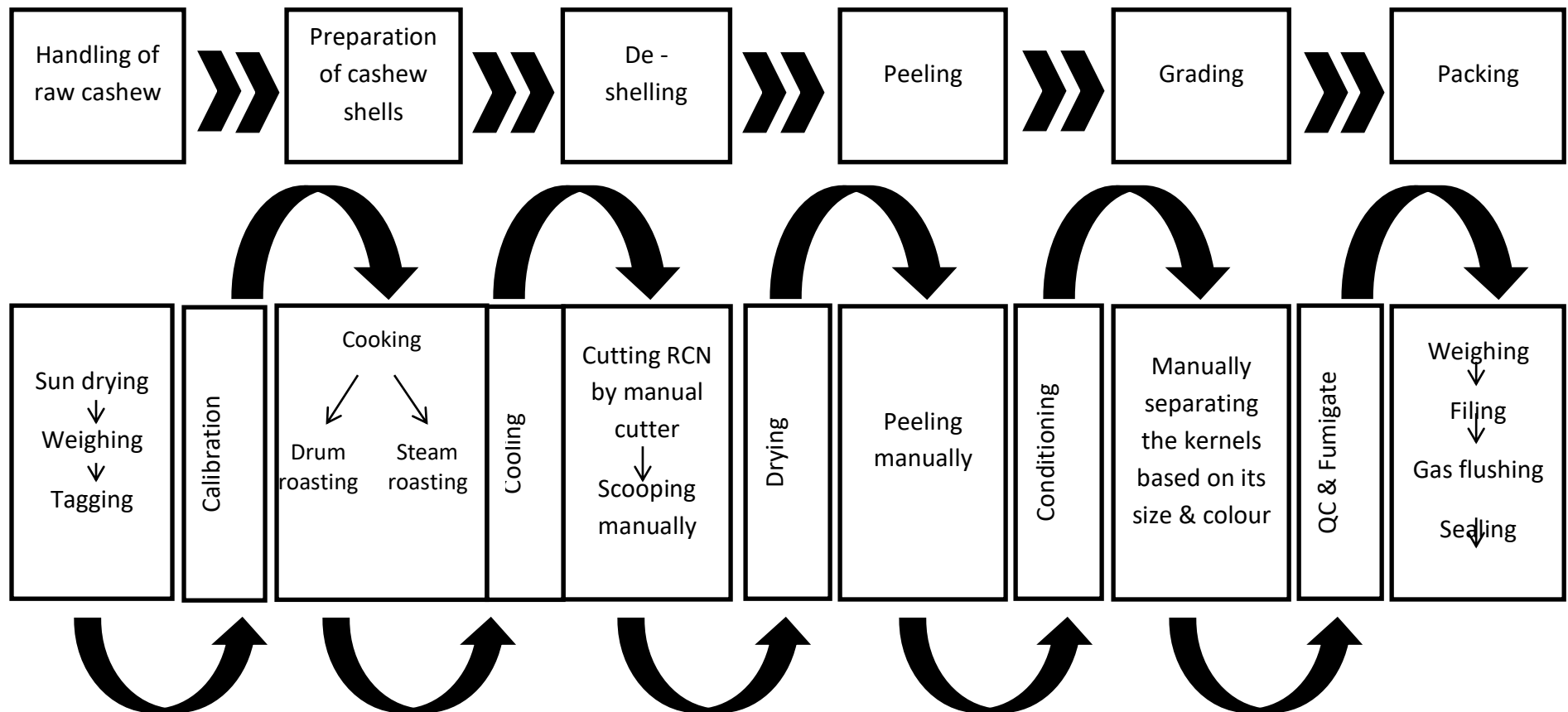
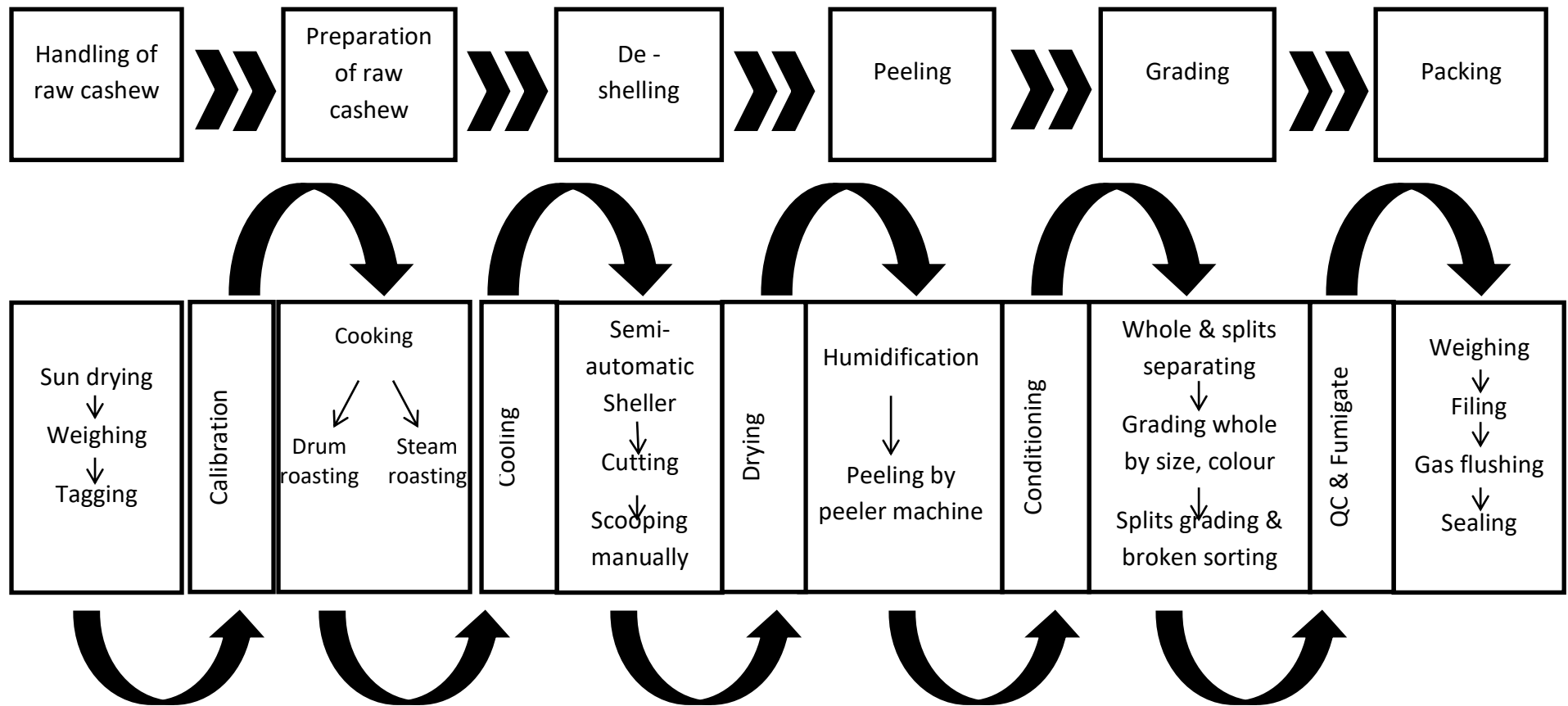


Figure 3.6: Cashew processing flow diagram – mechanical processing



## Results and Discussion:

India's cashew export was stagnant or declined for the last few years. India consumes about 2 lakh tons of cashew nuts. The domestic market has been improved. Another reality is mechanization started in this industry also which is bringing down the processing cost. Cashew kernels is consumed all over the world as a premium snack and nowadays more used as a preferred ingredient due to its excellent flavour and unique texture in large array of foods like sweets , dates, ice-creams and so on. It can be dry or oil roasted, salted, coated with chocolate, spices, honey etcetera.

Due to the wrong harvesting technique and aging of cashew tree adversely affect the domestic production. Now India's domestic production is around 7 lakh tonnes while their processing capacity is about 14 lakh tonnes. Hence India has to depend on imported raw cashew nut for more than half of the requirement. Four tonnes of raw cashew nut need to be processed for producing one tonne of cashew kernels. India mainly imports raw cashew nuts from African countries like Ivory Coast, Guinea Bissau, Tanzania, Indonesia, Ghana, Nigeria and Mozambique.

### Hypothesis and Its Results

**HYPOTHESIS 1: There is no significant increase in the export from Fernandes Brothers of cashew over the years.**

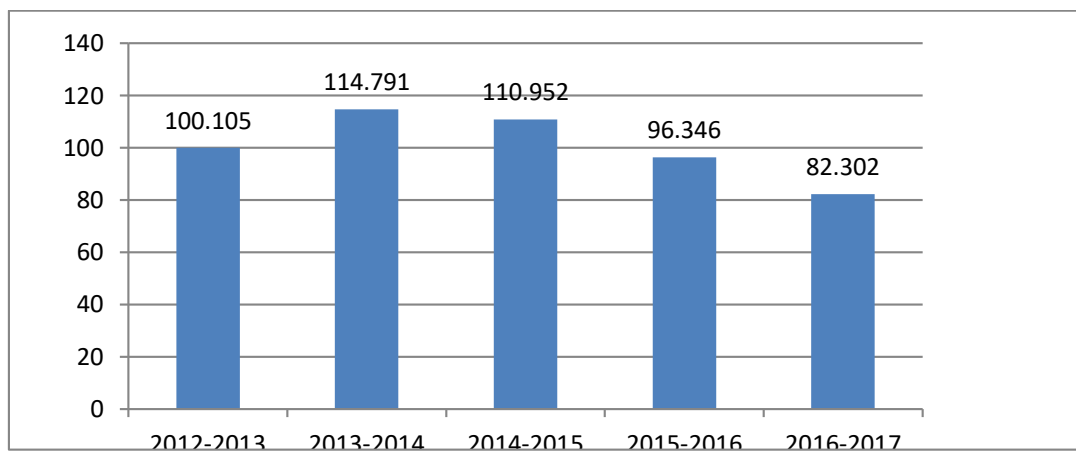
#### Export of Cashew Kernels From Fernandes Brothers

**Table 4.1: Exports of Cashew Kernels from Fernandes Brothers during the last five financial years were:**

Year	Quantity (MT)	Value (₹.Crs)
2012-2013	100.105	4.05
2013-2014	114.791	5.06
2014-2015	110.952	5.43
2015-2016	96.346	4.95
2016-2017	82.302	5.17

Source: Fernandes Brothers

**Figure 4.1: Exports of Cashew Kernels from Fernandes Brothers during the last five financial years**



### Interpretation:

The above table shows the export related information for the following years 2012 to 2017. The table shows that in the year 2012-13 the quantity exported is 100.105 MT, in the year 2013-14 the quantity exported is 114.791 MT, in the year 2014-15 the quantity exported is 110.952 MT, in the year 2015-16 the quantity exported is 96.346 MT and in the year 2016-17 the quantity exported is 82.302 MT. From the table it is understood that there has been an increase in the quantity of cashew exported from the year 2012-13 to 2013-14. But from the year 2013-14 to 2016-17 there has been a decrease in the quantity of cashew exported. So it is proved that there is no significant increase in the quantity of cashew exported, so we accept the null hypothesis.

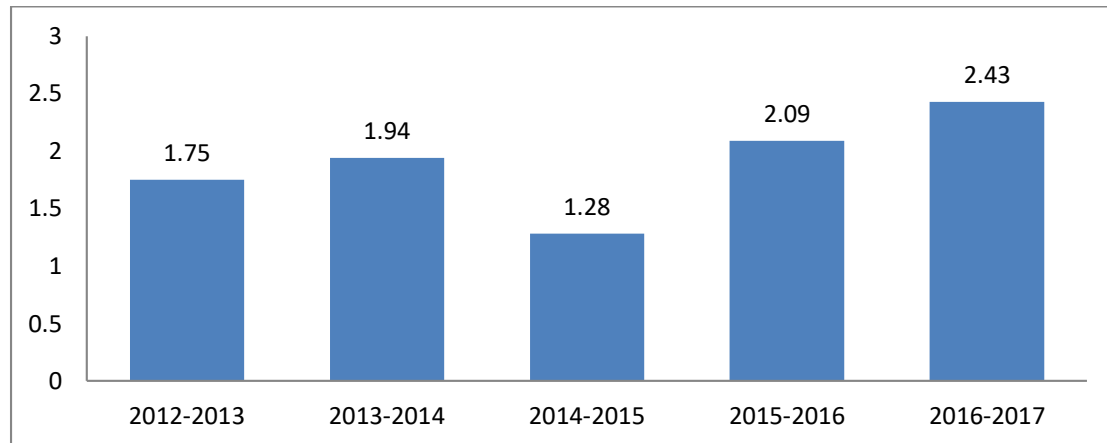
### Export of Roasted And Salted Cashew Kernels From Fernandes Brothers

**Table 4.2: Exports of roasted and salted cashew kernels from Fernandes Brothers for the last five financial years are given below:**

Year	Quantity (MT)	Value (₹.Crs)
2012-2013	1.75	6.07
2013-2014	1.94	7.52
2014-2015	1.28	5.21
2015-2016	2.09	9.71
2016-2017	2.43	13.92

Source: Fernandes Brothers

**Figure 4.2: Exports of roasted and salted cashew kernels from Fernandes Brothers for the last five financial years**



### Interpretation:

The above table shows the export related information of roasted and salted cashew kernels from Fernandes Brothers for the following years 2012 to 2017. The table shows that in the year 2012-13 the quantity exported is 1.75 MT, in the year 2013-14 the quantity exported is 1.94 MT, in the year 2014-15 the quantity exported is 1.28 MT, in the year 2015-16 the quantity exported is 2.09 MT and in the year 2016-17 the quantity exported is 2.43 MT. From the table it is understood that there has been an increase in the quantity of cashew exported from the year 2012-13 to 2013-14. But in the year 2014-15 there has been a decrease in the quantity of roasted and salted cashew kernels exported. Then from the year 2015-16 to 2016-17 there has been an increase in the export of roasted and salted cashew kernels.

**HYPOTHESIS 2: There is no significant increase in the import into Fernandes Brothers of cashew over the years.**

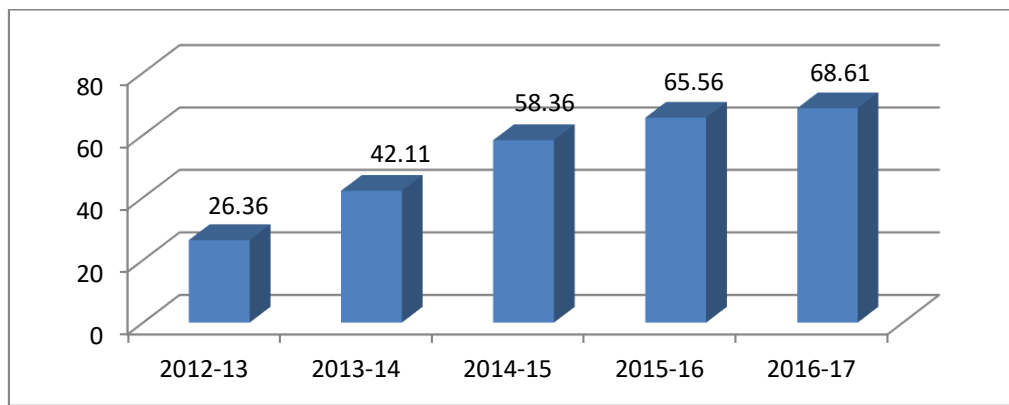
### Import of Raw Cashew Nuts Into Fernandes Brothers

**Table 4.3: Imports of raw cashew nuts into Fernandes Brothers for the last five financial years are given below:**

Year	Quantity(MT)	Value (₹.Crs)
2012-13	26.36	10.215
2013-14	42.11	10.379
2014-15	58.36	3.021
2015-16	65.56	13.95
2016-17	68.61	19.304

Source: Fernandes Brothers



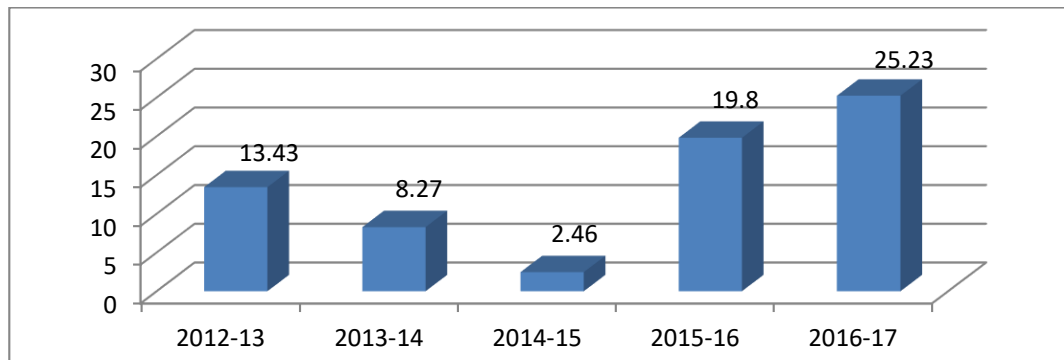
**Figure 4.3: Imports of raw cashew nuts into Fernandes Brothers for the last five financial years****Interpretation:**

The above table shows the import related information for the years from 2012 to 2017. The table shows that in the year 2012-13 the quantity imported is 26.36 MT, in the year 2013-14 the quantity imported is 42.11 MT, in the year 2014-15 the quantity imported is 58.36 MT, in the year 2015-16 the quantity imported is 65.56 MT and in the year 2016-17 the quantity imported is 68.61 MT. From the table it is understood that there has been an increase in the quantity of cashew imported from the year 2012 to 2017. So it is proved that there is a significant increase in the quantity of cashew imported, so we accept the alternative hypothesis.

**Import of Whole Cashew Kernels Into Fernandes Brothers****Table 4.4: Imports of whole cashew kernels into Fernandes Brothers for the last five financial years are given below:**

Year	Quantity(MT)	Value (₹.Crs)
2012-13	13.43	2.807
2013-14	8.27	2.852
2014-15	2.46	1.124
2015-16	19.80	8.353
2016-17	25.23	11.103

Source: Fernandes Brothers

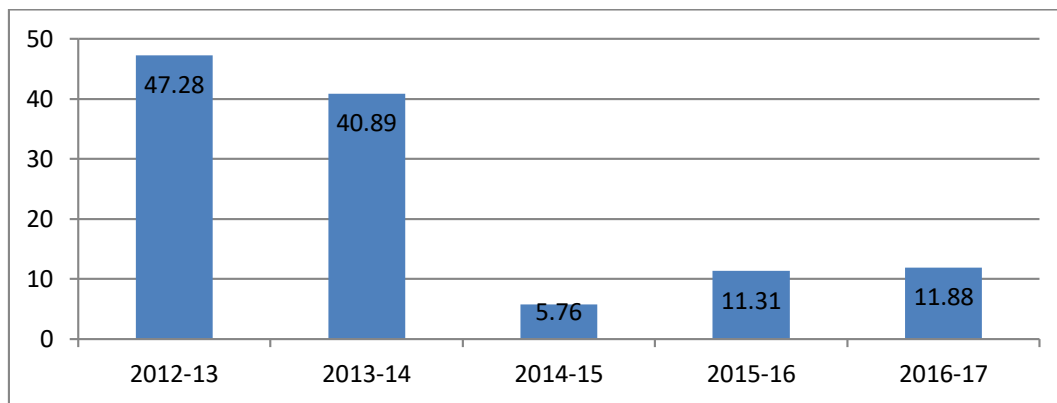
**Figure 4.4: Imports of whole cashew kernels into Fernandes Brothers for the last five financial years****Interpretation:**

The above table shows the import related information of whole cashew kernels for the following years 2012 to 2017. The table shows that in the year 2012-13 the quantity imported is 13.43 MT, in the year 2013-14 the quantity imported is 8.27 MT, in the year 2014-15 the quantity imported is 2.46 MT, in the year 2015-16 the quantity imported is 19.8 MT and in the year 2016-17 the quantity imported is 25.23 MT. From the table it is understood that there has been a decrease in the quantity of whole cashew kernels imported from the year 2012-13 to 2014-15. But from the year 2015-16 to 2016-17 there has been an increase in the quantity of whole cashew kernels imported.

**Import of Broken Cashew Kernels Into Fernandes Brothers****Table 4.5: Imports of broken cashew kernels into Fernandes Brothers for the last five financial years are given below:**

Year	Quantity(MT)	Value (₹.Crs)
2012-13	47.28	7.315
2013-14	40.89	7.430
2014-15	5.76	1.627
2015-16	11.31	5.458
2016-17	11.88	7.340

Source: Fernandes Brothers

**Figure 4.5: Imports of broken cashew kernels into Fernandes Brothers for the last five financial years****Interpretation:**

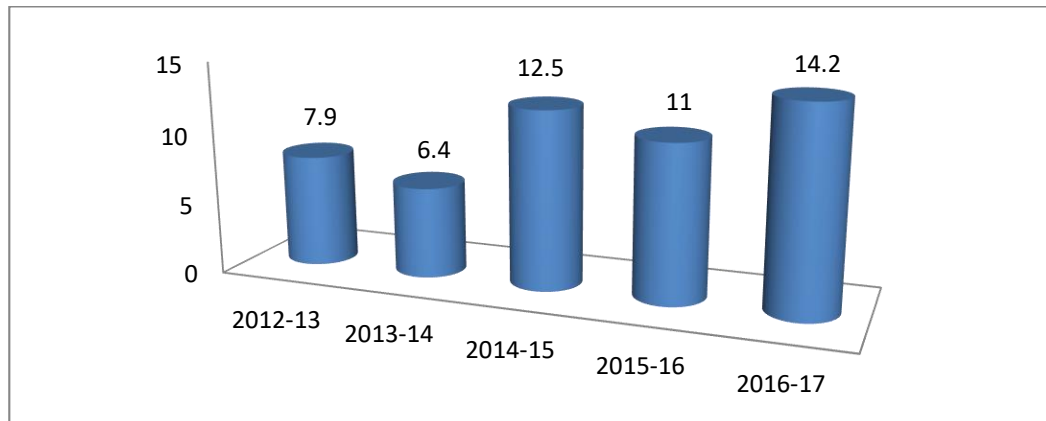
The above table shows the import related information of broken cashew kernels for the following years 2012 to 2017. The table shows that in the year 2012-13 the quantity imported is 47.28 MT, in the year 2013-14 the quantity imported is 40.89 MT, in the year 2014-15 the quantity imported is 5.76 MT, in the year 2015-16 the quantity imported is 11.31 MT and in the year 2016-17 the quantity imported is 11.88 MT. From the table it is understood that there has been a decrease in the quantity of broken cashew kernels imported from the year 2012-13 to 2013-14 and in the year 2014-15 there has been a drastic decline in the import of whole cashew kernels. But from the year 2015-16 to 2016-17 there has been an increase in the quantity of broken cashew kernels imported.

**Import of Cashew Kernels Other Than Whole And Broken Cashew Kernels Into Fernandes Brothers****Table 4.6: Imports of cashew kernels other than whole and broken cashew kernels into Fernandes Brothers for the last five financial years are given below:**

Year	Quantity(MT)	Value (₹.Crs)
2012-13	7.9	0.095
2013-14	6.4	0.099
2014-15	12.5	0.271
2015-16	11.00	0.140
2016-17	14.2	0.864

Source: Fernandes Brothers

**Figure 4.6: Imports of cashew kernels other than whole and broken cashew kernels into Fernandes Brothers for the last five financial years**



**Interpretation:**

The above table shows the import related information of cashew kernels other than whole and broken for the following years 2012 to 2017. The table shows that in the year 2012-13 the quantity imported is 7.9 MT, in the year 2013-14 the quantity imported is 6.4 MT, in the year 2014-15 the quantity imported is 12.5 MT, in the year 2015-16 the quantity imported is 11 MT and in the year 2016-17 the quantity imported is 14.2 MT. From the table it is understood that there has been a decrease in the quantity of cashew kernels other than whole and broken imported from the year 2012-13 to 2013-14 and in the year 2014-15 there has been an increase in the import of cashew kernels other than whole and broken. But in the year 2015-16 there has been a decrease in the quantity of cashew kernels other than whole and broken imported and in the year 2016-17 the import of cashew kernels other than whole and broken has increased.

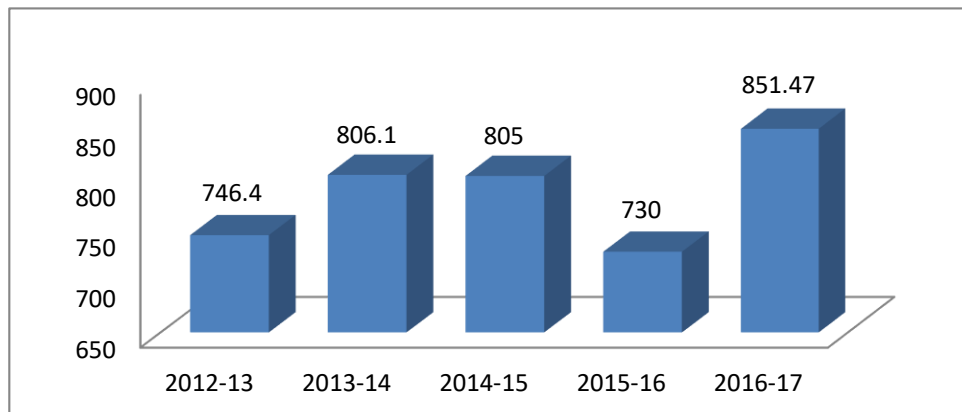
**Raw Cashew Used From Domestic Production In Fernandes Brothers From Specific Areas In Karnataka**

**Table 4.7: Raw cashew used from domestic production in Fernandes Brothers from specific areas in Karnataka for five financial years are given below:**

Year	Area (hectare)	Production (MT)
2012-13	1218.80	746.40
2013-14	1241.10	806.10
2014-15	1247.10	805.00
2015-16	1258.60	730.00
2016-17	1267.10	851.47

Source: Fernandes Brothers

**Figure 4.7: Raw cashew used from domestic production in Fernandes Brothers from specific areas in Karnataka for five financial years**



### Interpretation:

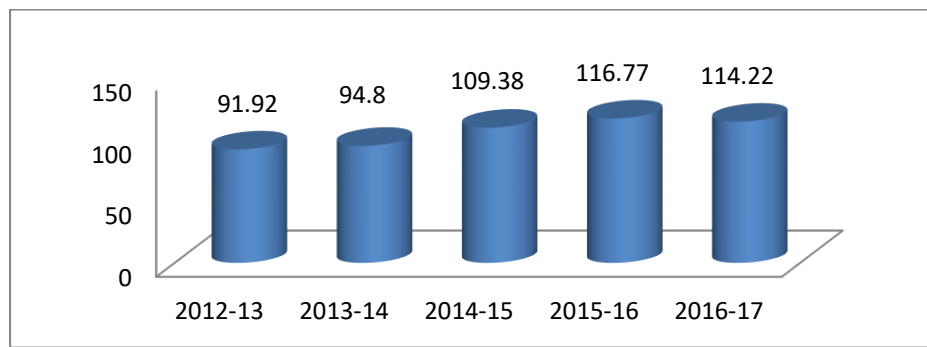
The above table shows the raw cashew nut used from the domestic production from specific areas in Karnataka used at Fernandes Brothers related information of raw cashew for the following years 2012 to 2017. The table shows that in the year 2012-13 the quantity produced is 746.4 MT, in the year 2013-14 the quantity produced is 806.1 MT, in the year 2014-15 the quantity produced is 805 MT, in the year 2015-16 the quantity produced is 730 MT and in the year 2016-17 the quantity produced is 851.47 MT. From the table it is understood that there has been an increase in the quantity of raw cashew nut used from the domestic production from specific areas in Karnataka used at Fernandes Brothers from the year 2012-13 to 2013-14 and from the year 2014-15 to 2015-16 there has been a decline in the raw cashew nut used from the domestic production from specific areas in Karnataka used at Fernandes Brothers. But in the year 2016-17 there has been an increase in the raw cashew nut used from the domestic production from specific areas in Karnataka used at Fernandes Brothers.

### Export of Cashew Nut Shell Liquid from Fernandes Brothers

**Table 4.8: Export of cashew nut shell liquid from Fernandes Brothers for five financial years is given below:**

Year	Quantity (MT)	Value (₹.Crs)
2012-13	91.92	2.984
2013-14	94.80	3.861
2014-15	109.38	5.581
2015-16	116.77	5.759
2016-17	114.22	44.00

Source: Fernandes Brothers

**Figure 4.8: Export of cashew nut shell liquid from Fernandes Brothers for five financial years****Interpretation:**

The above table shows the export related information of cashew nut shell liquid from Fernandes Brothers for the following years 2012 to 2017. The table shows that in the year 2012-13 the quantity produced is 91.92 MT, in the year 2013-14 the quantity produced is 94.8 MT, in the year 2014-15 the quantity produced is 109.38 MT, in the year 2015-16 the quantity produced is 116.77 MT and in the year 2016-17 the quantity produced is 114.22 MT. From the table it is understood that there has been an increase in the quantity of export of cashew nut shell liquid from Fernandes Brothers from the year 2012-13 to 2015-16 and from the year 2014-15 to 2015-16 there has been a slight decline in the export of cashew nut shell liquid from Fernandes Brothers.

**Findings of Study:**

- ❖ From the analysis it is clear that there has been an increase in the quantity of cashew exported from the year 2012-13 to 2013-14. But from the year 2013-14 to 2016-17 there has been a decrease in the quantity of cashew exported. So it is proved that there is no significant increase in the quantity of cashew exported and the null hypothesis is accepted.
- ❖ From the analysis it is clear that there has been an increase in the quantity of cashew exported from the year 2012-13 to 2013-14. But in the year 2014-15 there has been a decrease in the quantity of roasted and salted cashew kernels exported. Then from the year 2015-16 to 2016-17 there has been an increase in the export of roasted and salted cashew kernels.
- ❖ From the analysis it is clear that there has been an increase in the quantity of cashew imported from the year 2012 to 2017. So it is proved that there is a significant increase in the quantity of cashew imported and the alternative hypothesis is accepted.
- ❖ From the analysis it is clear that there has been a decrease in the quantity of whole cashew kernels imported from the year 2012-13 to 2014-15. But from the year 2015-16 to 2016-17 there has been an increase in the quantity of whole cashew kernels imported.
- ❖ From the analysis it is clear that there has been a decrease in the quantity of broken cashew kernels imported from the year 2012-13 to 2013-14 and in the year 2014-15 there has been a drastic decline in



the import of whole cashew kernels. But from the year 2015-16 to 2016-17 there has been an increase in the quantity of broken cashew kernels imported.

- ❖ From the analysis it is clear that there has been a decrease in the quantity of cashew kernels other than whole and broken cashew kernels imported from the year 2012-13 to 2013-14 and in the year 2014-15 there has been an increase in the import of cashew kernels other than whole and broken cashew kernels. But in the year 2015-16 there has been a decrease in the quantity of cashew kernels other than whole and broken cashew kernels imported and in the year 2016-17 the import of cashew kernels other than whole and broken cashew kernels has increased.
- ❖ From the analysis it is clear that there has been an increase in the quantity of raw cashew nut used from the domestic production from specific areas in Karnataka used at Fernandes Brothers from the year 2012-13 to 2013-14 and from the year 2014-15 to 2015-16 there has been a decline in the raw cashew nut used from the domestic production from specific areas in Karnataka used at Fernandes Brothers. But in the year 2016-17 there has been an increase in the raw cashew nut used from the domestic production from specific areas in Karnataka used at Fernandes Brothers.
- ❖ From the analysis it is clear that there has been an increase in the quantity of export of cashew nut shell liquid from Fernandes Brothers from the year 2012-13 to 2015-16 and from the year 2014-15 to 2015-16 there has been a slight decline in the export of cashew nut shell liquid from Fernandes Brothers.

### **Suggestions:**

- ❖ To overcome the problem of shortage of raw materials, Fernandes Brothers should avoid importing raw cashew nuts from abroad and should motivate domestic farmers to cultivate hybrid variety of cashew trees as they can avoid importing of raw cashew nuts from abroad in future.
- ❖ Competition from other firms is inevitable therefore the company can adopt certain measures such as improving the quality of the product and having better relations with the customers in order to reduce competition from other firms.
- ❖ In order to overcome the financial problems, Fernandes Brothers should take financial assistance from their dealers and this enables them to have better relationship with their suppliers and dealers.
- ❖ The central government as well as the state government should take certain measures in the coastal regions, such as Dakshina Kannada and Udupi district, in increasing the productivity by providing fertilizers and manure in the existing plantations and go in for expansion of the area under cashew with the help of agro forestry schemes.
- ❖ The unique Goan Feni (alcoholic drink) that involves the use of cashew need to be taken up on a big scale all over the cashew producing states and not just Goa.
- ❖ The price of raw cashew nuts is going up year after year making cashew cultivation a more profitable venture. To take advantage of the favourable climate, many private investors have come forward to raise cashew plantations in different parts of the country.
- ❖ Fernandes Brothers should adopt standardized unit operations to avoid energy lose.

- ❖ Fernandes Brothers should evolve various durable resistances to pests, heat and drought with high level of bioactive compounds, having high nutrient and water use efficiency.
- ❖ Biotechnological tools must be used in the organisation for conjunction with conventional breeding to tag genes of interest for making assisted selection. Utilize the tools of bio – informatics and nanotechnology for enhancing the output.
- ❖ Fernandes Brothers should develop production system for productive use of water and nutrients.
- ❖ Canopy management system for efficient utilization of nutrients, air, water and sunlight to optimize production with resources should be adopted by Fernandes Brothers.
- ❖ There need to be a development in the production and post – harvest technologies to improve product quality and minimize the impacts on the environment
- ❖ Fernandes Brothers needs to increase the value of production by reducing variability in yield, quality, reducing crop losses and increasing marketability.
- ❖ Technological innovations have to be made in order to value chain management for reduction of losses and enhancement of quality.
- ❖ The technologies developed based on new research strategies would help in enhancing the productivity of cashew resulting in increased production and lesser dependence on import of raw cashew nuts with self-reliance on indigenous raw nuts required for processing.
- ❖ Product diversification efforts have resulted into enhanced trading of cashew products and market for cashew product as health food is attracting the consumers across globe.
- ❖ India has succeeded in developing new cultivars, production system and also large number of products which require adopting and researching together in network mode.
- ❖ There is a scope for an overall energy savings of up to 30–48% also proposed, there is scope for utilization of renewable energy sources such as solar energy and biomass gasification in this sector.

## **Conclusion:**

In the beginning cashew was mainly considered as a crop for afforestation. As it can adapt to varied agro climatic conditions, it has become a crop of high economy and commercial value. The cultivation and marketing of cashew nut involve a considerable amount of manpower and hence play a vital role in the economic activities in India.

However, in recent years the owners of the cashew nut growers are unable to obtain optimum yield and return. The coastal states of India are the main cashew producers. Though the production flourishes both in domestic and foreign trade, the problems associated with its cultivation, domestic and export marketing do not permit the growers to reap optimum return and traders do not get reasonable profit.

In India, large numbers of middlemen are involved in domestic and export marketing of cashew nut. As there is no organized domestic and export market for cashew nuts, many a time the growers are at the mercy

of unscrupulous village traders. Further in the recent past, the export price of cashew nut is widely fluctuated due to changes in foreign market.

The main objective of the study is to highlight the growth and performance of cashew nut processing and export at Fernandes Brothers. The cashew nut production in Indian states has been gradually increasing. But sometimes a negative trend and rapid declining have also been noticed over the study period because of poor crop husbandry and rampant disease spread to endemic level which causes a complete collapse in the production process.

Problems due to major pests of cashew and the supply of quality planting material require attentions of research and development departments. Massive area expansion programme and rejuvenation of old cashew orchards of seedling origin, coupled with supply of quality planting material may have the potential to alter the cashew production, processing and EXIM scenario not only these four states but also the whole country.

The policy initiatives towards promotion of cashew growers cooperatives for procurement of raw nuts, supply of inputs, credit and infrastructure, small scale processing, value addition and marketing and cashew apple processing will definitely widen the perspective of cashew growers. Market structure analysis suggests that the market does not operate in a perfectly competitive atmosphere. The major challenge to the enterprise is market price fluctuation.

The cost price of cashew nut cost of loading /offloading and cost of fixed items are important variables affecting revenue generated by cashew nut marketers in the study area. Based on this, the study recommends that cashew nut marketers should form registered trade unions through which solution could be sought to the challenges of market price fluctuation, lack of market information as well as lack of market coordination in the study area.

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