

A Study on the Production Process and Export Challenges of the Cashew Industry

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Abstract- The cashew industry is important for agriculture, food processing, employment, rural development, and export earnings. India is one of the top producers and exporters of cashew kernels worldwide. This study looks at the production process of the cashew industry and the main challenges in export activities. It explains the steps involved in processing cashews, such as harvesting, cleaning, roasting, shelling, peeling, grading, drying, packaging, and quality testing. The study also discusses problems faced in exports, including transportation delays, documentation issues, quality certification, labor shortages, high raw material costs, exchange rate changes, and international competition. The research uses secondary data from books, journals, research articles, and reports. The results show that modernization, improved infrastructure, mechanization, quality control, and marketing strategies are essential to make the industry more competitive globally and ensure sustainable growth.

Keywords: Cashew Industry, Production Process, Export Challenges, Quality Control, Modernization, Sustainable Growth, Global Competitiveness

I.INTRODUCTION

The Cashew industry is an important part of the agricultural and food processing economy because of its nutritional value, commercial importance, and export potential. Cashew, scientifically known as *Anacardium occidentale*, was introduced to India by the Portuguese through Goa. Initially, it was cultivated mainly for soil conservation and prevention of erosion. Later, its commercial importance increased, and India became one of the leading producers and exporters of cashew kernels.

Cashew nuts are rich in protein, healthy fats, vitamins, minerals, and antioxidants. Due to increasing health awareness, global demand for cashew products has grown rapidly. In India, Karnataka, Kerala, Goa, Maharashtra, and Andhra Pradesh are major centers

for cashew cultivation and processing. The production process of cashew includes harvesting, cleaning, roasting, shelling, peeling, grading, drying, packaging, and quality testing. Each stage is important because the quality of kernels determines export value and market acceptance. Despite strong growth potential, the industry faces several challenges such as labour shortage, transportation delays, documentation issues, exchange rate fluctuations, and international competition. Even with these problems, the cashew industry continues to contribute significantly to employment generation, export earnings, and rural development.

II.OBJECTIVES OF THE STUDY

- To study the production process of the cashew industry.
- To analyze the problems faced in export operations.

III.NEED FOR THE STUDY

The Cashew industry is an important source of employment and export earnings in India. Although India is one of the leading exporters of cashew kernels, the industry faces several production and export-related challenges. Understanding these issues is important for improving productivity, maintaining quality standards, and increasing international competitiveness. Therefore, this study focuses on the production process and export challenges of the cashew industry.

IV.REVIEW OF LITERATURE

Oliveira et al. (2020) Oliveira et al. explained the global importance of the cashew industry and highlighted the economic value of cashew products. The study showed that cashew farming supports small farmers and contributes to sustainable growth.

Vellingiri and Thiyagarajan (2007) The study focused on the production process and growth of the Indian cashew industry. It explained various stages involved in cashew processing such as roasting, shelling, peeling, grading, and packaging. The study also stated that Indian cashew kernels are well known for their quality and taste in international markets.

Patil (2020), Patil explained export challenges such as shortage of raw cashew nuts, high production costs, and international competition.

V.RESEARCH METHODOLOGY

The study is descriptive in nature and focuses on understanding the production process and identifying operational challenges in the cashew industries.

Secondary Data

It is based on secondary data collected from journals, research articles, websites, and published literature related to the cashew industry.

VI.PRODUCTION PROCESS OF THE CASHEW INDUSTRY

1. Harvesting of Cashew Apples

The production process of cashew begins with the harvesting of mature cashew apples from cashew trees. Farmers carefully collect fully ripened apples to ensure better quality of cashew kernels. Proper harvesting is important because immature or damaged nuts may reduce the quality and market value of the final product.

2. Separation of Cashew Nuts from Apples

After harvesting, the cashew nut attached to the bottom of the cashew apple is separated manually or mechanically. The nuts are collected carefully to avoid breakage and damage. The cashew apples are sometimes used for preparing juice, syrup, or animal feed.

3. Collection and Transportation

The separated raw cashew nuts are collected and transported from farms to processing factories or export units. During transportation, proper storage

conditions are maintained to protect the nuts from moisture, fungal infection, and spoilage.

4. Cleaning and Sorting

In the processing unit, raw cashew nuts are cleaned thoroughly to remove dust, stones, and other impurities. After cleaning, the nuts are sorted according to size, weight, and quality. Damaged or poor-quality nuts are removed to maintain production standards.

5. Roasting or Steaming

The cleaned nuts are roasted or steamed to soften the hard outer shell. This process makes shell removal easier and reduces the risk of kernel breakage during processing. Roasting also helps in removing toxic shell oil present in raw cashew shells.

6. Shelling Process

After roasting or steaming, the outer shell of the cashew nut is removed carefully using manual or mechanical methods. This stage is very important because improper shelling may damage the kernel and reduce its market value.

7. Drying and Peeling

The kernels obtained after shelling are dried to reduce moisture content. After drying, the thin brown skin covering the kernel is removed through a peeling process. Peeling improves the appearance and quality of the kernels.

8. Grading of Cashew Kernels

The peeled kernels are graded based on size, colour, shape, and quality. White whole kernels generally receive higher grades and better prices in international markets. Grading helps exporters meet customer requirements and export standards.

9. Final Drying Process

The graded kernels undergo final drying to maintain the required moisture level for storage and export. Proper drying increases shelf life and prevents spoilage during transportation.

10. Packaging

The processed kernels are packed in vacuum-sealed or moisture-proof containers to maintain freshness and quality. Packaging protects the kernels from contamination, moisture, and damage during storage and export operations.

11. Quality Testing and Inspection

Before export, cashew kernels are tested for food safety, hygiene, moisture level, and international quality standards. Exporters must ensure compliance with importing country regulations and certification requirements to avoid rejection in foreign markets.

VII.PROBLEMS FACED IN CASHEW EXPORT OPERATIONS

1. Quality Certification Problems

Cashew exporters must comply with strict international quality and food safety standards. Obtaining certifications such as HACCP, ISO, and other export approvals involves high cost and lengthy procedures. Failure to meet these standards may lead to rejection of export consignments.

2. Logistics and Transportation Problems

Transportation delays, poor infrastructure, and port congestion create major difficulties in export operations. High freight charges and shipping delays increase export costs and affect timely delivery of goods to international buyers.

3. Documentation and Customs Clearance Delays

Export operations require several documents such as commercial invoices, shipping bills, bills of lading, certificates of origin, and customs declarations. Errors or delays in documentation may slow down customs clearance and increase operational expenses.

4. Currency Fluctuation Risk

Frequent changes in foreign exchange rates affect the profitability of exporters. A sudden fall in the value of foreign currency payments may reduce export earnings and create financial uncertainty for cashew exporters.

5. International Competition

India faces strong competition from countries such as Vietnam and several African nations in the global

cashew market. Competitor countries often supply cashew kernels at lower prices, making it difficult for Indian exporters to maintain market share.

6. Fluctuation in Global Demand

International demand for cashew products changes due to economic conditions, consumer preferences, and global market trends. Reduced demand in importing countries may decrease export orders and affect production planning.

7. High Cost of Raw Cashew Nuts

Many processing industries depend on imported raw cashew nuts due to insufficient domestic supply. Rising prices of raw materials increase production costs and reduce profit margins for exporters.

8. Labour Shortage and Rising Wages

The cashew processing industry is labour-intensive and requires skilled workers for shelling, peeling, and grading activities. Labour shortages and increasing wage rates affect productivity and increase operational costs.

9. Government Regulations and Export Policies

Frequent changes in export-import regulations, customs duties, and taxation policies create uncertainty for exporters. Compliance with different international trade regulations also increases administrative burden.

10. Storage and Preservation Problems

Improper storage facilities may lead to moisture damage, fungal infection, and deterioration in kernel quality. Maintaining proper storage conditions is essential to preserve export quality and reduce losses.

VIII.DISCUSSION

The study shows that the cashew industry follows a proper and systematic production process to maintain the quality of cashew kernels. Important stages such as harvesting, roasting, shelling, peeling, grading, drying, packaging, and quality testing help in producing good quality products for export. Proper processing methods and quality control improve the value and market demand of cashew kernels. The study also shows that the cashew export industry faces

several problems such as transportation delays, documentation issues, labour shortage, high raw material cost, currency fluctuation, and international competition. These problems affect export performance and profitability.

Overall, the study explains that modernization, better infrastructure, quality control, and proper export management are important for improving production efficiency and increasing the global competitiveness of the cashew industry.

IX.FINDINGS OF THE STUDY

- The study found that the cashew industry is an important source of employment and export earnings in India.
- It was found that the production process of cashew includes important stages such as harvesting, roasting, shelling, peeling, grading, drying, packaging, and quality testing.
- The study identified that proper processing and quality control help improve the quality and export value of cashew kernels.
- It was observed that labour shortage and rising production costs affect the efficiency of cashew processing industries.
- The study found that transportation delays, documentation problems, and customs clearance issues create difficulties in export operations.
- The study identified strong international competition and fluctuation in global demand as major export challenges faced by the cashew industry.

X.SUGGESTIONS

- The cashew industry should use modern machinery to improve production efficiency and reduce labour problems.
- Proper quality control and hygienic processing should be maintained to improve the quality of cashew kernels.
- Cashew processing units should maintain proper storage and packaging facilities to avoid damage during export.
- Exporters should use effective marketing strategies and focus on value-added products to increase export performance.

XI.CONCLUSION

The Cashew industry is an important contributor to employment, rural development, and export earnings. The study shows that every stage of cashew processing plays an important role in maintaining product quality and export value. However, the industry faces several export challenges such as transportation problems, quality certification issues, labour shortage, and international competition. Despite these challenges, the future of the cashew industry remains promising because of increasing global demand for healthy food products. Modernization, mechanization, quality assurance, better infrastructure, and effective marketing strategies are necessary for improving international competitiveness and long-term sustainability.

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