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LIST OF ABBREVIATIONS

AAGR	Average Annual Growth Rate
APEDA	Agricultural & Processed Food Products Export Development Authority
CAGR	Compound Annual Growth Rate
CEPCI	Cashew Export Promotion Council of India
CIF	Cost, Insurance, and Freight
CNSL	Cashew Nut Shell Liquid
DA-BAR	Department of Agriculture-Bureau of Agricultural Research
DA-PRES	Department of Agriculture-Palawan Research and Experiment Station
DCCD	Directorate of Cashew and Cocoa Development
DFTP	Duty-Free Tariff Preference
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FiBL	The Research Institute of Organic Agriculture
FOB	Freight on Board
FTA	Free Trade Agreement
GAP	Good Agricultural Practice
GCC	Gulf Cooperation Council
GI	Geographical Indication
GMP	Good Manufacturing Practice
GST	Goods and Services Tax
Ha	Hectare
HACCP	Hazard Analysis and Critical Control Point
IBEF	India Brand Equity Foundation
ICAR	Indian Agricultural Research Institute

IFOAM	International Federation of Organic Agriculture Movements
ITC	International Trade Centre
JNPT	Jawaharlal Nehru Port Trust
KII	Key Informant Interview
LDC	Least Developing Country
MFN	Most Favoured Nation
Mha	Million Hectare
ML	Microbial Limits
MMT	Million Metric Tonnes
MRL	Maximum Residue Limit
NTB	Non-tariff barrier
NTCP	National Technology Commercialization Program
OTOP	One Town, One Product
RCA	Revealed Comparative
RCN	Raw Cashew Nuts
SPS	Sanitary and phytosanitary
SWOT	Strength Weakness Opportunity Threats
t	Tonnes
TE	Triennium Ending
TNAU	Tamil Nadu Agricultural University
UAE	United Arab Emirates
UK	United Kingdom
USA	United States of America
USD	United States Dollar
USDA	United States Department of Agriculture
UVP	Unit Value Price

FOREWORD

India has long been recognised as one of the leading players in the global cashew industry, with a rich legacy of production, processing, and trade. Cashew cultivation supports the livelihoods of millions of farmers (DCCD), while the processing sector, largely labour-intensive, provides vital employment to rural women. Despite these strengths, India's position in global cashew exports has witnessed increasing competition in recent years, with countries like Vietnam and Côte d'Ivoire rapidly expanding their footprint through greater processing efficiency and trade facilitation. Concurrently, African countries, which once primarily exported raw cashew nuts (RCN) to India for processing, are now heavily investing in their own domestic processing capacities. These countries have started exporting finished cashew kernels directly to global markets. This shift has created a dual challenge for India, on one hand, it is facing rising competition in key export destinations, and on the other, it is encountering greater difficulty in sourcing affordable and timely supplies of RCN. The resulting squeeze in raw material availability is weakening India's cost advantage and threatening its competitiveness in the global value chain.

This report, *Strategies to Boost Exports of Cashews from India*, is both timely and relevant. Developed under the knowledge partnership between APEDA and ICRIER, it offers an in-depth assessment of India's current export landscape and explores the critical issues facing the sector. Drawing on extensive research and broad-based stakeholder consultations, the study outlines strategic, actionable recommendations aimed at revitalizing India's competitiveness in global cashew trade.

APEDA remain committed to working closely with state government, line ministries, industry partners, academia, research institutions, and other stakeholders to unlock the full export potential of India's cashew sector. Revitalizing this industry will not only boost foreign exchange earnings but also foster inclusive rural development and create substantial employment opportunities—especially for women involved in cashew processing.

SHEKHAR AIYAR

Director & Chief Executive
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ABHISHEK DEV

Chairman
APEDA

PREFACE

Cashew, being one of the most significant plantation crops, holds a prominent place in India's agri-export portfolio. With growing global demand for high quality and value-added cashew products, there is need for well-defined strategy that addresses production challenges, ensures compliance with International standards and utilises India's natural advantage as a leading producer. To support this vision, APEDA has partnered with the Indian Council for Research on International Economic Relations (ICRIER) under a Knowledge Partnership Project. The collaboration aims to identify strategic export opportunities and address critical challenges across priority commodities, including cashew, by leveraging ICRIER's analytical expertise and APEDA's sectoral insights.

Cashew nuts (*Anacardium occidentale* L.)—often referred to as the “poor man's crop and rich man's food”, occupy a distinctive space in global trade. Known for their rich flavour and high nutritional value, cashews are a staple in health-conscious diets and a key ingredient across confectionery, bakery, plant-based dairy, and wellness product industries. India has historically played a central role in the global cashew economy, with deep-rooted traditions in both cultivation and processing. However, in recent years, India's dominance in global cashew kernel exports has eroded significantly. Between 2010 and 2024, India's global export share fell from around 25 percent to just 7 percent, while Vietnam surged ahead, commanding over 64 percent of the market in 2024. This shift is attributed to a combination of factors such as rising international competition, outdated processing technologies, fragmented value chains, stagnating domestic production, and increasing input costs. Simultaneously, several African nations, previously major suppliers of raw cashew nuts (RCNs) to India, have begun developing their own processing infrastructure and exporting directly, thereby constraining India's access to affordable raw material.

In this context, the study titled *Strategies to Boost Exports of Cashews from India* offers a timely and comprehensive analysis of the evolving trade landscape. It provides a forward-looking roadmap to revitalise India's cashew exports through a mix of structural reforms, market interventions, and institutional alignment. Grounded in rigorous research and shaped by wide-ranging stakeholder consultations, the report seeks to reposition India as a competitive player in the global cashew value chain.

The report is guided by four principal objectives:

1. To examine global and domestic trends in cashew production, consumption, and trade;
2. To map India's cashew value chain and identify critical inefficiencies;

3. To evaluate India’s export competitiveness through trade indicators such as Unit Value Price (UVP) and Revealed Comparative Advantage (RCA); and
4. To recommend actionable strategies—including policy reforms, technological modernization, branding efforts, and institutional coordination—to unlock India’s full export potential.

The findings are based on a blend of data-driven analysis and stakeholder perspectives. Consultations were conducted with processors, exporters, industry bodies, and trade experts, while global benchmarks, particularly from Vietnam and the Philippines, offered valuable insights. Although Vietnam’s progress has been propelled by mechanization and state-led infrastructure support, India’s path forward must align with its distinctive advantages: a strong domestic base, labor-intensive processing industry, and diverse agro-climatic zones.

Looking ahead, India’s cashew sector holds immense promise—not only to regain its position in global markets but also to serve as a key pillar in India’s broader agri-export strategy. With global demand rising for nutritious, plant-based foods and with renewed policy focus on high-value agricultural exports, this is a crucial opportunity to reposition Indian cashews as a flagship export commodity—anchored in innovation, investment, and inclusive growth.

AUTHORS

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Cashew cultivation spans over 37 countries globally, with Côte d'Ivoire, India, Cambodia and Vietnam as the leading producers. In the triennium ending (TE) 2023, global raw cashew nut (RCN) production stood at 4.8 million metric tonnes (MMT). Côte d'Ivoire led with 1.15 MMT (24% share), followed by India with 0.77 MMT (16%), Cambodia 0.66 MMT (13%) and Vietnam at 0.36 MMT (7%). Other notable producers include Tanzania, Benin, Philippines, Indonesia, Mozambique, Burkina Faso, and Brazil. Despite being the second-largest producer, India's average yield (0.6 t/ha) lags behind that of Cambodia (1.5 t/ha) and Vietnam (1.2 t/ha), and is significantly lower than the Philippines (6.8 t/ha), highlighting significant productivity gaps (FAO, 2024; INC, 2024).

India is also the world's largest consumer of cashew kernels, with domestic consumption growing at an average rate of 7 percent annually, reaching 3.2 lakh tonnes in 2021–22. This dual role—as both a major consumer and exporter, creates opportunities but also demands careful balancing of domestic and export priorities. To meet its processing needs, India imports nearly half of its RCN from African countries. However, the import trade is dominated by intermediaries, who often drive-up prices through hoarding, undermining the cost competitiveness of processors. Global trade of cashew kernel has almost doubled from 3.6 lakh tonnes in 2012 to 6.2 lakh tonnes in 2023, driven by rising global demand for healthy snacks. Vietnam is the largest exporter of cashew kernels, accounting for 63 percent of global exports valued at USD 2.8 billion in TE 2023. Whereas, India's share in global exports has shrunk to just 8 percent, valued at USD 0.37 billion during the same period, highlighting a sharp decline in its global standing.

One of the major factors responsible for this is that India's processing sector remains largely manual and technologically outdated. In contrast, Vietnam has fully mechanised its processing operations within a decade, gaining major cost and quality advantages. India's key export destinations include the UAE, Japan, the Netherlands, Saudi Arabia, and the USA. However, it struggles to penetrate high-value markets like Germany and South Korea, where Vietnamese kernels dominate due to lower prices, consistent quality, and better branding.

PRICE COMPETITIVENESS: India's cashew kernels face a price disadvantage, reflected in a higher Unit Value Price (UVP) in key markets like the USA and Germany. In 2023, Indian cashew kernels were priced at approximately USD 6,992 per tonne with strong competition from Vietnam, Cashews priced at USD 6,912. African producers enjoy even steeper pricing advantages: Ivory Coast kernels go for roughly USD 4,441/tonne, and Benin's for about USD 4,780/tonne. Given that African prices undercut India by around USD 2,000–2,500 per tonne. India's higher cost base risks eroding its global market share over time. The declining Revealed Comparative Advantage (RCA) from 16.6 in 2010 to 3.14 in 2023, further signals weakening global competitiveness. In addition, India's exports face several tariff and non-tariff barriers—including stringent Sanitary and

Phytosanitary (SPS) standards related to aflatoxin and food safety—which have led to repeated rejections.

KEY CHALLENGES AND OPPORTUNITIES: India’s cashew exports are facing sustained pressure from both domestic inefficiencies and intensifying global competition. While raw cashew nut (RCN) imports continue to rise, domestic production remains stagnant, pushing up processing costs. Vietnam has emerged as a formidable competitor, leveraging economies of scale, automation, and lower labour costs. African nations are also gaining ground by increasingly processing their own RCNs and restricting exports, further tightening India's access to raw materials. On the domestic front, the Indian cashew industry grapples with low farm productivity due to traditional cultivation methods, a widening gap between processing capacity and RCN availability, and slow mechanisation in processing units. Labour costs remain high due to strong unions, making operations less competitive. Regulatory issues compound these challenges, particularly Food Safety and Standards Authority of India (FSSAI) classification of raw cashews under edible norms, despite the former being unfit for direct consumption. This creates avoidable compliance barriers for imports. A SWOT analysis highlights India’s strengths such as a large processing base, skilled labour, and high domestic consumption but also warns of growing threats from rising global competition, raw material shortages and regulatory changes. Strategic investments in mechanisation, branding, value addition and supply chain modernisation are imperative for India to retain its edge in the global cashew trade.

This report proposes following strategies to boost export of cashews from India:

SHORT TERM STRATEGIES:

1. Branding, Quality Management & Marketing

- India must position its cashews as a premium global brand, spotlighting regionally GI tagged varieties such as Kollam, Vengurla, and Goan cashews.
- Strict quality management systems, aligned with international standards like Good Agricultural Practices (GAP), Good Manufacturing Practice (GMP) and Hazard Analysis and Critical Control Points (HACCP), should be enforced. All processors, especially Geographical Indication (GI) tagged ones, must undergo regular certification and hygiene audits, to maintain product consistency and counter the influx of cheaper imports.
- Global marketing must be intensified through participation in international trade fairs, trade missions, and buyer seller meets. Further, retail partnerships in target markets can promote exports from India.

2. Product Diversification: India must expand beyond conventional salted or roasted cashews into innovative flavour profiles like smoky BBQ, chili lime, honey cinnamon and value-added products like cashew butter, plant-based milk, energy balls, and spreads to cater to global health and plant-based trends. The untapped cashew apple presents a

significant opportunity. Processing into juices, jams, pectin, health supplements or novel beverages as seen in the Philippines can reduce waste and create new export streams. Similarly, byproducts such as cashew shell powder and scrapings can be converted into oil, protein powder or paste.

- 3. Tariff Negotiations & Bilateral Trade:** India faces high tariffs, such as a 40 percent duty to Iran and 5 percent to GCC countries (Saudi Arabia, UAE, Qatar, Kuwait) that restrict export competitiveness. Negotiating tariff reductions or Foreign Trade Agreements (FTAs), along with streamlined logistics and regulatory facilitation, is essential to improve market access in the Gulf region.
- 4. Supply Chain Strengthening:** India's cashew processing sector is highly fragmented, dominated by small units unable to negotiate bulk raw nut supplies, access finance, or scale operations. Formation of processing clusters or consortia can pool procurement, enable shared warehousing, and bargain better with raw nut suppliers. Also, engaging with African producing countries like Kenya, Burkina Faso, Mozambique, Benin and negotiating long term contracts will help stabilize supply and improve cost predictability.
- 5. Strengthening Organic Cashew Exports and Production:** Expanding India's organic cashew exports requires prioritizing the conversion (with a three-year conversion period for perennial plants) of conventional farms into certified organic farms, especially in high-potential states such as Goa, Odisha, Kerala, and Maharashtra. To boost visibility, "India's Organic Cashew" should be positioned globally through branding, storytelling, and participation in international events, while also leveraging retail platforms such as Amazon, Whole Foods, and Carrefour. Promoting cluster-based development and contract farming will ensure supply consistency and traceability. At the same time, certification and export of value-added organic cashew variants such as roasted, spiced, and flavoured products can unlock niche opportunities in Europe, North America, and East Asia.

MEDIUM TERM:

- 1. Plantation Expansion & Production Upgrades:** Boosting production depends on replacing low yield seedling trees with high yield grafted varieties ($\geq 4-5$ kg/tree) and investing in genetic improvement through R&D. Research must also focus on reducing aflatoxin contamination and increasing shelling/processing efficiency. Eco friendly practices, organic farming, integrated pest management, agroforestry, and solar-powered processing,) can support compliance with certification standards (USDA Organic, Fair Trade) required for accessing premium global markets attuned to premium global markets. Robust extension services, including participatory farmer training and local advisory, will accelerate adoption of improved practices and drive productivity gains.

2. Modern Processing Infrastructure & Export Hubs: Current processing units in Kerala, Tamil Nadu, Karnataka, Andhra Pradesh remains largely outdated. India must emulate Vietnam’s modern clusters (e.g. Binh Phuoc) and double daily capacity from around 30–35 tonnes to 70–80 tonnes per unit. APEDA’s financial assistance to cashew sector under the Infrastructure Development Scheme incentivizes investment in modern processing machinery such as automated shelling, grading, and colour sorting systems to boost capacity, quality, and export competitiveness. Meanwhile, state-specific export hubs such as strengthening Kerala (Kollam), Karnataka (Mangalore), Tamil Nadu (Puducherry/Kanyakumari), Andhra Pradesh (Visakhapatnam) and Maharashtra, modern processing machinery such as automated shelling, grading, and colour-sorting systems to boost capacity, quality, and export competitiveness.



INTRODUCTION

INTRODUCTION

1.1 BACKGROUND OF THE COMMODITY

The cashew tree (*Anacardium occidentale* L.) referred to as caju in Portuguese, was brought to India by Portuguese traders from Eastern Brazil between 1563 and 1570. Native to Brazil's eastern coast, this tropical crop was introduced to India for afforestation and soil conservation (DCCD, 2024). Known for its hardiness and resistance to drought, the cashew tree flourishes in poor soil conditions, providing vital environmental benefits such as combating deforestation and preventing soil erosion, which led to its nickname, "Gold Mine of Waste Land." Goa served as the entry point and the cultivation spread along the Konkan coast to Malabar and across Kerala. By the late 20th century, cashew farming expanded throughout India, evolving into a key commercial crop. Cashews have earned the moniker "poor man's crop and rich man's food" due to their widespread significance in India's agricultural and economic landscape (Prabhakaran et al., 2022).

Cashew trees are adaptable to different soil types but grow best in well-drained, fertile sandy loams. They are not suited to regions that experience waterlogging or flooding. Ideal conditions for cashew growth include tropical climates with temperatures ranging from 20°C to 30°C, high humidity, and annual rainfall between 1,000 and 2,000 mm (TNAU, 2015). The trees can be propagated by grafting, yielding nuts within 3-5 years, with peak production occurring between 7 and 10 years. The economic lifespan of cashew trees is between 20 and 30 years. In India, harvesting is a labour-intensive task, with the nuts being handpicked, dried, and processed to remove the shell. The cashew apple, which has a short shelf life, is used locally to make juices, jams, jellies, and fermented beverages such as feni. The juice from the cashew apple is rich in vitamin C, antioxidants, and minerals. Additionally, the liquid inside the cashew nut shell (cashew nut shell liquid, or CNSL) is widely used in industrial applications. This liquid contains cardol and anacardic acid is known for its polymerizing and friction-reducing properties. It is employed in various industries for producing lubricants, varnishes, cements, drugs, antioxidants, and fungicides (Global Cashew Council, 2024).

Raw cashew nuts (RCN) are produced in more than 37 countries worldwide, with the top producers being Côte d'Ivoire, India, Cambodia, Vietnam, Tanzania, Benin, the Philippines, and Indonesia, among others (TE 2023). India is the second-largest global producer of RCN, accounting for 16% of the world's total production or 4.83 million metric tonnes (MMT) in TE23. Indian cashews are known for their superior quality (DCCD, 2020), and India is also a leading processor and exporter of cashew kernels, second only to Vietnam. To meet the increasing demand from its cashew processing industry, India imports a large quantity of RCN, primarily from African countries, amid slow domestic production growth and rising local consumption.

These imported raw cashews are processed in India and exported to key markets such as the UAE, Japan, the Netherlands, and Saudi Arabia.

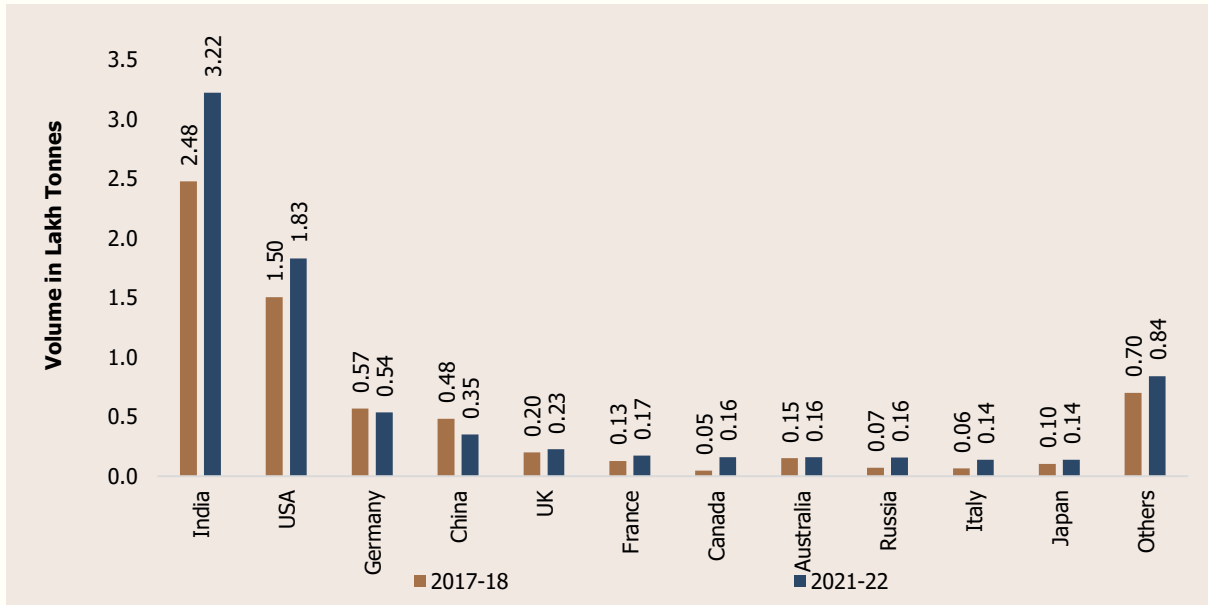
Vietnam has emerged as the world leader in cashew kernel exports, achieving this status in 8-10 years. With strong government support promoting investment in production and processing, Vietnam dominates 63% of the global cashew kernel export market, valued at USD 4.5 billion in TE 2023. In comparison, India's share has declined from 43% a decade ago to only 8% in TE 2023. This drop is concerning and underscores the need for a comprehensive analysis of the challenges facing India's cashew industry. It is important to find ways for India to regain its competitive advantage and address the increasing global competition, from Vietnam and African countries that are rapidly expanding their cashew processing capacities.

This report examines current trends and future prospects for India's cashew industry, focusing on the entire value chain from farm to global markets. It evaluates India's price competitiveness and identifies potential target markets. Drawing on these insights, the report proposes strategies to enhance India's cashew export capacity and restore its leadership in the global market.

1.2 INCREASING GLOBAL DEMAND OF CASHEWS

The demand for cashew nuts is growing globally, driven by increasing consumer awareness of their health benefits. Cashews are rich in essential nutrients, including healthy fats, proteins, vitamins, and minerals, making them a popular choice among health-conscious consumers. According to Straits Research Report, the global cashew market size was valued at USD 7.44 billion in 2023. It is expected to reach USD 11.15 billion in 2032, growing at a CAGR of 4.6% in the forecast period (2024-32). In 2021-22, world consumption of cashew kernels was 7.9 lakh tonnes with India being the largest consumer at 3.2 lakh tonnes in 2021-22. The country's cashew consumption is growing at an annual rate of 7% per annum (CMB News, 2024), followed by the USA and Germany at 1.8 and 0.5 lakh tonnes consumption in 2021-22 (**FIGURE 1.1**). The growing global and domestic demand for cashews provides India an opportunity to strengthen its position in the global market.

FIGURE 1.1: GLOBAL CONSUMPTION OF CASHEW KERNEL



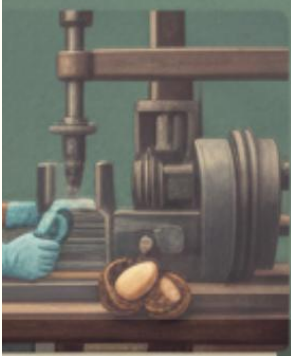
Source: Nuts & Dried Fruits Statistical Yearbook (2022-23)

Cashew comprises two prominent parts: the cashew apple and the cashew nut. Both components are nutrient-rich, offering significant benefits. The Cashew apple is a valuable source of sugars, minerals, and vitamins. Compared to other tree nuts, cashews nuts are high in iron (1.7 mg) and zinc (1.6 mg) that contributes to the normal function of the immune system (Global cashew Council, 2024 and USDA, 2015). They are also a good source of magnesium (74 mg), phosphorus (139 mg), potassium (160 mg), manganese (0.23 mg) and copper (0.62 mg) etc (Global Cashew Council, 2024) (**TABLE 1.1**). Cashews are high in monounsaturated and polyunsaturated fats and are a good source of protein (Straits Research, 2024). As per Market Research Intellect, dried cashew nuts are becoming a go-to snack choice for health-conscious individuals worldwide.

TABLE 1.1: NUTRITIONAL COMPARISON OF CASHEW WITH OTHER TREE NUTS

Based on a one-ounce portion	Almond	Brazil nut	Cashew	Hazelnut	Macadamia nut	Pecan	Pistachio	Walnut
Calories	160	190	160	180	200	200	160	190
Protein (g)	6	4	4	4	2	3	6	4
Total Fat (g)	14	19	13	17	22	20	13	19
Saturated Fat (g)	1	4.5	3	1.5	3.5	2	1.5	1.5
Polyunsaturated fat (g)	3.5	7	2	2	0.5	6	4	13p
Monounsaturated fat (g)	9	7	8	13	17	12	7	2.5
Carbohydrates (g)	6	3	9	5	4	4	8	4
Dietary Fiber (g)	4	2	1.5	2.5	2.5	2.5	3	2
Potassium (mg)	208	187	160	193	103	116	285	125
Magnesium (mg)	77	107	74	46	33	34	31	45
Zinc (mg)	0.9	1.2	1.6	0.7	0.4	1.3	0.7	0.9
Vitamin B6 (mg)	0	0	0.1	0.2	0.1	0.1	0.3	0.2
Folate (mcg)	12	6	20	32	3	6	14	28
Riboflavin (mg)	0.3	0	0.1	0	0	0	0.1	0
Niacin (mg)	1	0.1	0.4	0.5	0.7	0.3	0.4	0.3
Vitamin E (mg)	7.3	1.6	0.3	4.3	0.2	0.4	0.7	0.2
Calcium (mg)	76	45	13	32	20	20	30	28
Iron (mg)	1.1	0.7	1.7	1.3	0.8	0.7	1.1	0.8

Source: USDA, 2015



SHELLING



ROASTING



ROASTING



PACKAGING

CASHEW PRODUCTION

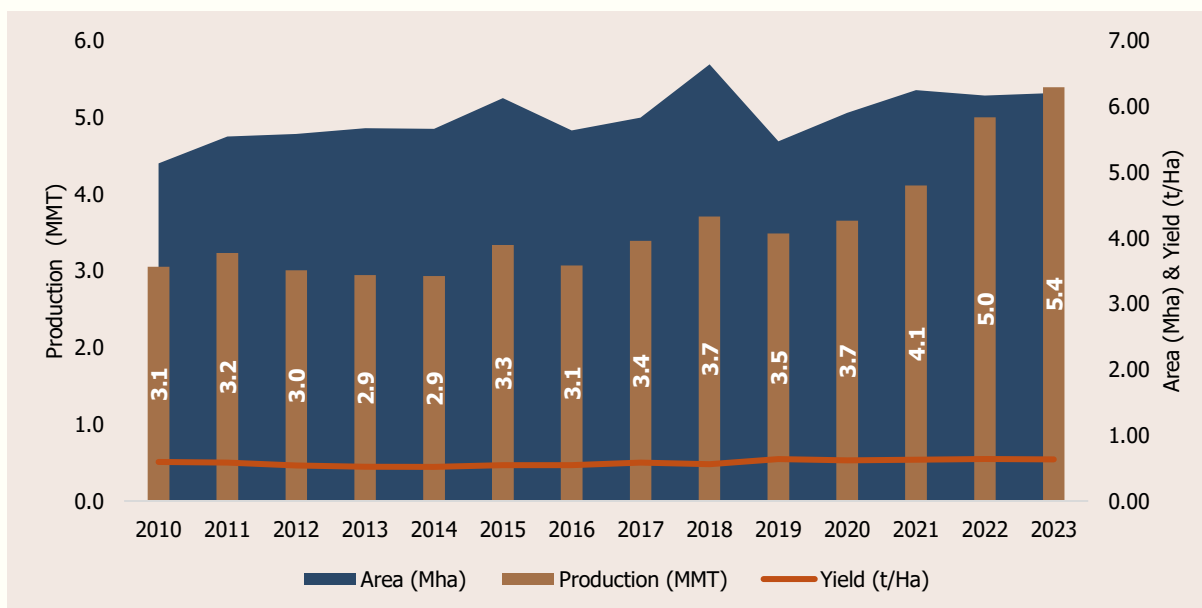
TRENDS, VALUE CHAIN AND MARKET DYNAMICS

CASHEW PRODUCTION: TRENDS, VALUE CHAIN AND MARKET DYNAMICS

2.1 GLOBAL SCENARIO

Global production of RCN is increasing at an average annual growth rate (AAGR) of 4.8% rising from 3.1 MMT in 2010 to 5.4 MMT in 2023. In TE 2023, global production was 4.83 MMT cultivated across an area of 6.2 million hectares (Mha) (FAOSTAT, 2023; INC, 2024) (**FIGURE 2.1**). The largest producer of cashew nuts is Côte d'Ivoire, accounting for 24% share in global production (1.15 MMT in TE 2023). India ranks as the second-largest producer, accounting for 16% of the global output (0.77 MMT). Cambodia ranks third in global production, accounting for 13% of global production (0.66 MMT). Vietnam, with a production of 0.36 MMT in TE 2023, contributed a 7.4% share in global production. Tanzania is a significant African producer, generating approximately 0.2 MMT in TE 2023. Other notable producers include Benin, Philippines, Indonesia, Mozambique, and Burkina Faso, Brazil, etc., each making reasonable contributions to the global supply of raw cashew nuts (**FIGURE 2.2**).

FIGURE 2.1: GLOBAL PRODUCTION AND AREA OF RAW CASHEW NUT (RCN)



Source: FAOSTAT, 2024

From 2010 to 2024, the global average yield of cashew nuts was 0.6 tonnes per hectare (t/ha), reflecting steady but moderate improvements in productivity. India, with an average yield of 0.6 t/ha, aligns closely with the global average and that of Côte d'Ivoire, the largest producer of cashew nuts. Vietnam, the world's largest exporter of cashew kernels, registers a higher average yield of 1.2 t/ha. Meanwhile, the Philippines stands as an outlier with an exceptionally high yield of 6.8 t/ha. (FIGURE 2.3). Palawan is the top cashew-producing province in the Philippines. It is also regarded as the country's cashew capital. Ninety percent of the country's total cashew production is from Palawan with municipalities such as Roxas, El Nido, and Dumaran as the top three cashew producing municipalities. With Palawan's abundance in this fruit, cashew is the One Town, One Product (OTOP) of the province (Fuertes, Aragon, Bathan, Billedo, & Paller, 2020).

FIGURE 2.2: MAJOR PRODUCERS OF RCN (TE 2023: 4.83 MMT)

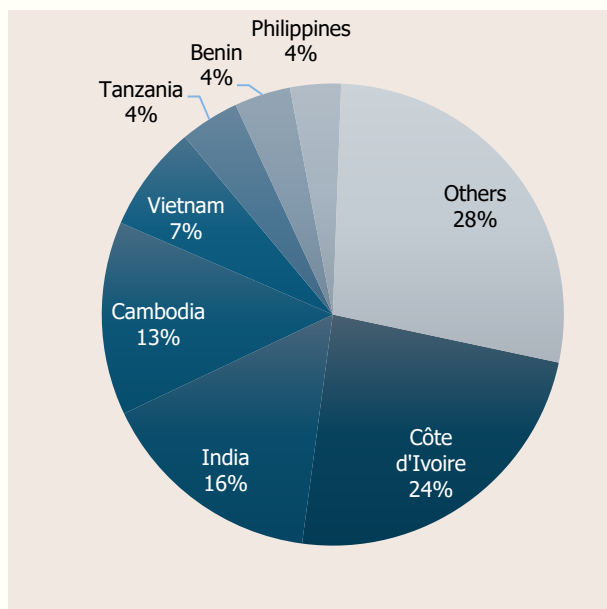
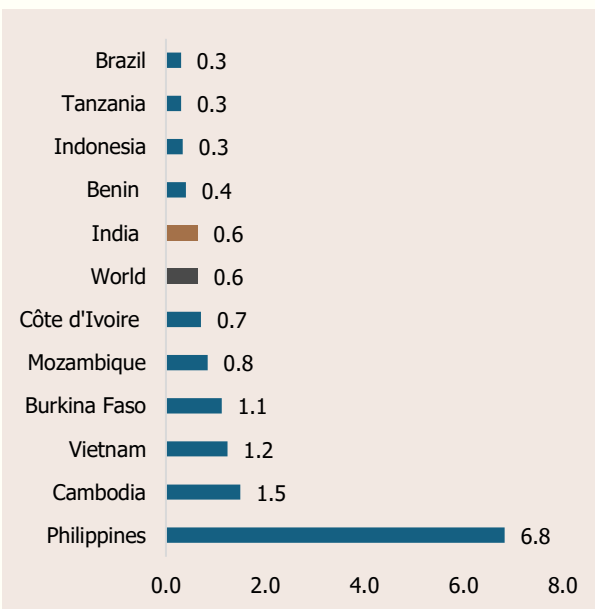


FIGURE 2.3: YIELD OF MAJOR PRODUCERS OF RCN (T/HA) IN TE 2023



Source: FAOSTAT, 2024; INC, 2024

Cashew Seasonality across the World: Seasonality is another key factor in global cashew production. Overall cashew harvesting seasons for each country are determined by how far north or south lies from the equator. In Northern Hemisphere cashew-producing countries, the harvest season runs from February to July, with the peak harvest period between March and April. In the Southern Hemisphere, the harvest season spans from August to February, with the core harvest period between October and December. The exact timing of the harvest in each country can vary slightly each year, primarily due to weather conditions. TABLE 2.1 below illustrates the harvest periods for cashew-producing countries in both hemispheres.

TABLE 2.1: RCN HARVEST SEASON

Crop	Country/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Northern	Nigeria			Harvest	Core Harvest	Core Harvest	Harvest						
	Benin			Harvest	Core Harvest	Core Harvest	Harvest						
	Togo			Harvest	Core Harvest	Core Harvest	Harvest						
	Ghana			Harvest	Core Harvest	Core Harvest	Harvest						
	Côte d'Ivoire			Harvest	Core Harvest	Core Harvest	Harvest	Harvest					
	Burkina Faso			Harvest	Core Harvest	Core Harvest	Harvest						
	Mali			Harvest	Core Harvest	Core Harvest	Harvest						
	G. Bissau			Harvest	Core Harvest	Core Harvest	Harvest						
	Senegal			Harvest	Core Harvest	Core Harvest	Harvest						
	Gambia			Harvest	Core Harvest	Core Harvest	Harvest	Harvest					
	Guinea		Harvest	Core Harvest	Core Harvest	Harvest							
	India		Harvest	Core Harvest	Core Harvest	Harvest	Harvest						
	Vietnam		Harvest	Core Harvest	Core Harvest	Harvest							
	Cambodia		Harvest	Core Harvest	Core Harvest	Harvest							
Southern	Indonesia	Harvest	Harvest							Harvest	Core Harvest	Core Harvest	Harvest
	Brazil	Harvest	Harvest							Harvest	Core Harvest	Core Harvest	Core Harvest
	Tanzania	Harvest	Harvest								Harvest	Core Harvest	Core Harvest
	Mozambique	Harvest	Harvest								Harvest	Core Harvest	Core Harvest
Harvest Season, slightly variable each year depending mainly on weather													
Core Harvest													

Source: USDA, 2018

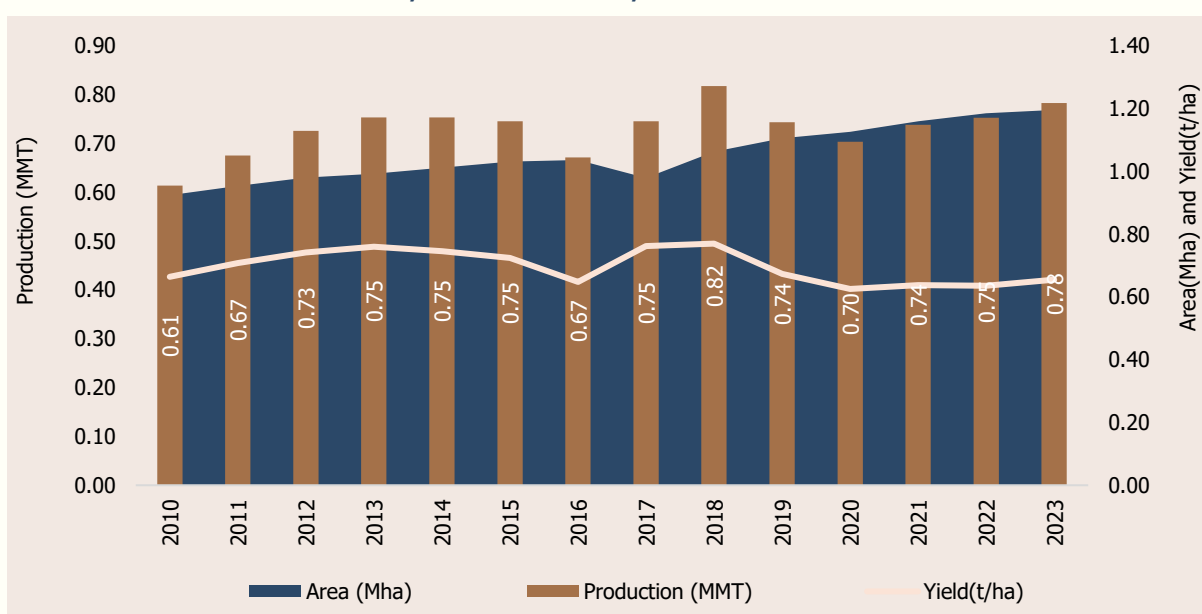
2.2 DOMESTIC SCENARIO

India's cashew industry is witnessing steady growth. Increasing consumer awareness about the health benefits of cashews, growth in the snack food and confectionery sectors, and expanding urban middle-class consumption have contributed to higher domestic intake. India is now among the largest consumers of cashew kernels, with demand growing at an estimated 5–7% annually.

This domestic appetite is encouraging processors to expand capacity and modernize operations, positioning India as both a major global player and a robust internal market for cashew products.

In terms of production, India remains one of the world’s largest cashew producers. The industry plays a significant economic role, providing employment to over 1 million people across farms and processing facilities in rural areas (IBEF, 2024). As of TE 2023, cashew cultivation in India spans 1.2 Mha, producing approximately 0.8 MMT annually. Production has shown moderate growth, increasing from 0.61 MMT in 2010 to 0.78 MMT in 2023, at an AAGR of 2.1%, below the global average of 4.8% during 2011-2023. Similarly, the area under cashew cultivation has expanded marginally from 0.92 Mha in 2010 to 1.2 Mha in 2023 (**FIGURE 2.4**).

FIGURE 2.4: AREA, PRODUCTION, AND YIELD OF RCN IN INDIA



Source: FAOSTAT, 2024

In India, cashew cultivation is predominantly concentrated along the coastal regions of the peninsula. The major cashew-producing states include Maharashtra, Kerala, Karnataka, Tamil Nadu, Andhra Pradesh, Goa, Odisha, West Bengal, and parts of the North-Eastern region. Maharashtra leads in production, contributing 25% (0.19 MMT), followed by Andhra Pradesh at 17% (0.13 MMT) and Odisha at 16% (0.12 MMT) (**FIGURE 2.5**). In terms of area under cultivation, Odisha holds the largest share with 19% (0.22 Mha), followed by Andhra Pradesh with 17% and Maharashtra with 16% (**FIGURE 2.6**).

In India, the national average yield of cashews stands at 0.6 t/ha in TE 2023, consistent with the average yield of the top seven producing states collectively contributing 91% of the country’s total production (**FIGURE 2.7**). This yield, however, remains significantly lower than Vietnam’s average of 1.2 t/h.

FIGURE 2.5: MAJOR RCN PRODUCING STATES IN INDIA (TE 2023: 0.8 MMT)

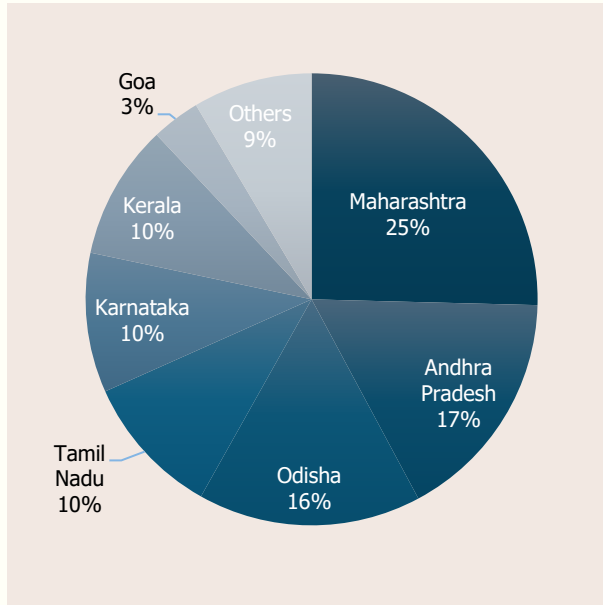
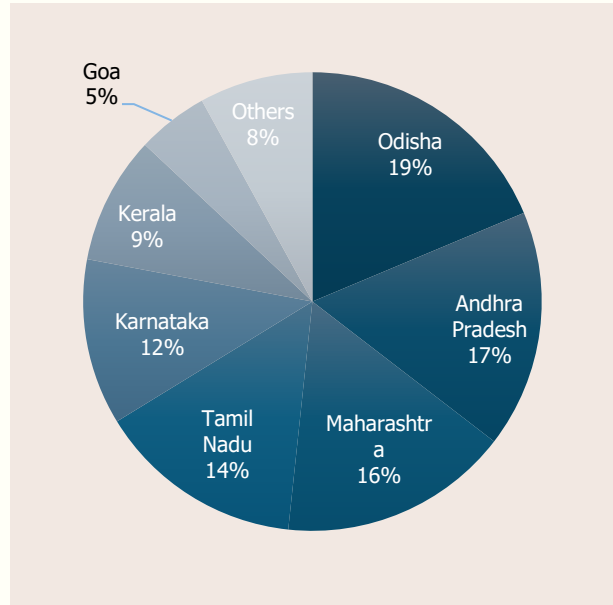
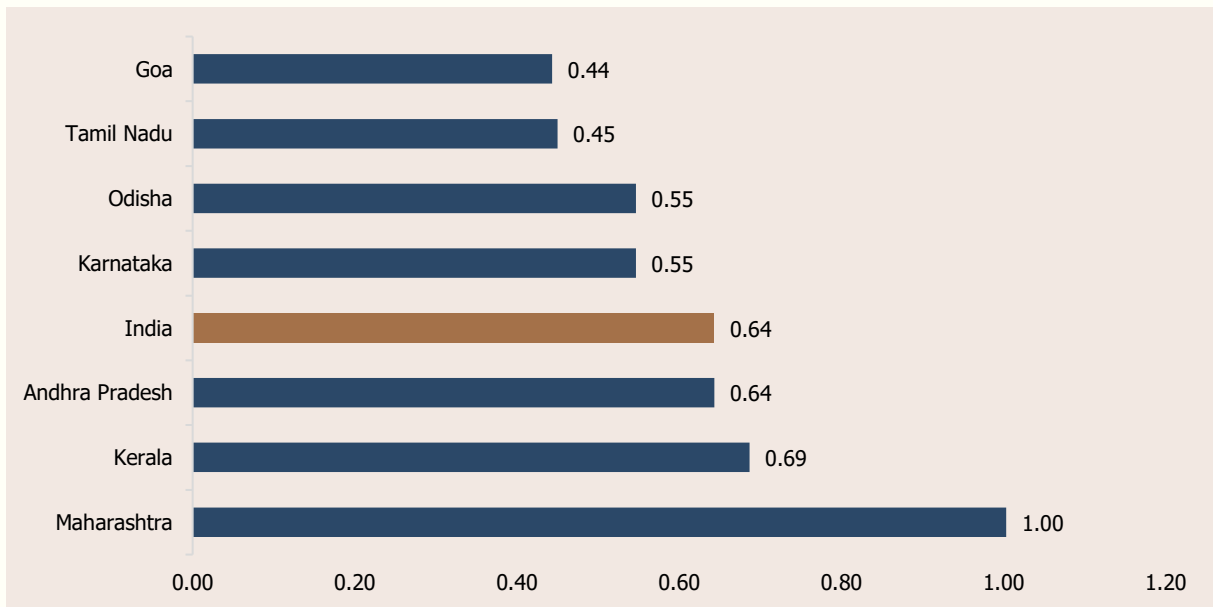


FIGURE 2.6: AREA-WISE MAJOR RCN PRODUCING STATES IN INDIA (TE 2023: 1.8 MHA)



Source: Ministry of Agriculture & Farmers' Welfare, GoI

FIGURE 2.7: STATE-WISE YIELD OF RCN PRODUCERS (TE 2023: 0.6 T/HA)



Source: Ministry of Agriculture & Farmers' Welfare, GoI

This raises an important question: why can't these states become key exporting hubs for cashews? Among the top-producing states, Maharashtra and Kerala are well-positioned for export-focused production. They have above-average yields and benefit from their proximity to major ports, such as Jawaharlal Nehru Port Trust (JNPT) in Mumbai and Cochin Port in Kerala. By capitalizing on these advantages, along with strategic investments in yield enhancement,

processing infrastructure and export logistics, these states could emerge as significant players in the global cashew market. They suggest that states like Kerala (Kollam), Karnataka (Mangalore), Tamil Nadu (Kanyakumari and Pudukkottai), and Andhra Pradesh (Visakhapatnam and Rajahmundry) should be better supported and developed as export hubs.

2.2.1 Organic Cashew Cultivation in India

Organic agriculture is a sustainable farming system that emphasises natural processes and inputs, avoiding the use of synthetic chemicals, fertilizers, and pesticides. This is a method of farming that works at grass root level preserving the reproductive and regenerative capacity of the soil, ensuring good plant nutrition, and sound soil management, and produces nutritious vitamin-rich food with natural resistance to diseases. India has significant potential for organic production, due to its diverse and favourable agro-climatic conditions. These advantages enable Indian organic producers to effectively cater to both domestic and international markets.

According to The Research Institute of Organic Agriculture (FiBL) and International Federation of Organic Agriculture Movements (IFOAM): The World of Organic Agriculture 2025, India ranks second only to Australia in terms of total area under organic agriculture, with 4.40 million hectares, and holds the distinction of having the largest number of organic producers in the world. In India, organic exports fall under the purview of the National Programme for Organic Production (NPOP), administered by the Department of Commerce, Government of India. APEDA is the secretariat for implementation of the NPOP. In the overall organic basket, cashew has emerged as one of the promising products due to its export potential and increasing global demand for organically grown nuts. Cashew cultivation in India is witnessing a shift towards organic practices. Farmers are adopting sustainable methods that align with standards laid by NPOP, and export facilitation agencies. Organic cashew not only fetches premium prices in international markets but also attracts health-conscious consumers. With growing awareness and institutional support, organic cashew is becoming a flagship product in India's organic export basket.

In FY 2024–25, India's total organic cashew production was estimated at approximately 6,272.70 metric tonnes, with the majority coming from Goa (36%), followed by Odisha (26%), Kerala (16.5%), and Maharashtra (11.14%). Other contributing states include Karnataka, Meghalaya, Andhra Pradesh, and Tamil Nadu. The area under organic cashew cultivation (including both fully organic and in-conversion areas) has expanded from 42,266.38 hectares in FY 2020–21 to 54,458.5 hectares in FY 2024–25, reflecting a Compound Annual Growth Rate (CAGR) of 5.20%. Cashew cultivation in India spans a range of agro-climatic zones. Goa leads with the largest organic cultivation area followed by Maharashtra, Meghalaya, and Kerala. States like Andhra Pradesh, Karnataka, Tamil Nadu, and Chhattisgarh also contribute smaller but significant areas, while Uttar Pradesh reports the least area under organic cashew.

2.2.2 Consumption Patterns for Cashew in India

India has traditionally been one of the largest consumers of cashew nuts globally with a robust domestic market driven by cultural, culinary, and festive consumption. Unlike many export-oriented commodities, domestic demand for cashews often rivals or exceeds export volumes, making India both a major processor and consumer.

2.2.3 Key Drivers of High Domestic Demand of Cashews:

- **Cultural and Festive Significance:** Cashews are deeply embedded in Indian culinary traditions, especially during festivals and celebrations. Sweets like Kaju Katli, Kaju Rolls, and cashew-based mithai are widely consumed during Diwali, weddings, and other festivals, spurring seasonal spikes in demand.
- **Rising Middle-Class Consumption:** Growing urbanization, increasing per capita incomes, and a shift towards premium snacking have made roasted, salted, flavoured, and health-oriented cashew snacks popular across metropolitan and tier-2 cities.
- **Institutional and Bulk Demand:** The hotel, restaurant, and catering (HoReCa) segment, along with the bakery and confectionery industries, account for a significant share of cashew consumption, using them as ingredients in sweets, curries, gravies, and desserts.
- **Health & Wellness Trend:** Cashews are seen as a nutritious source of healthy fats, protein, and minerals, which has increased their appeal as a functional food among health-conscious consumers.

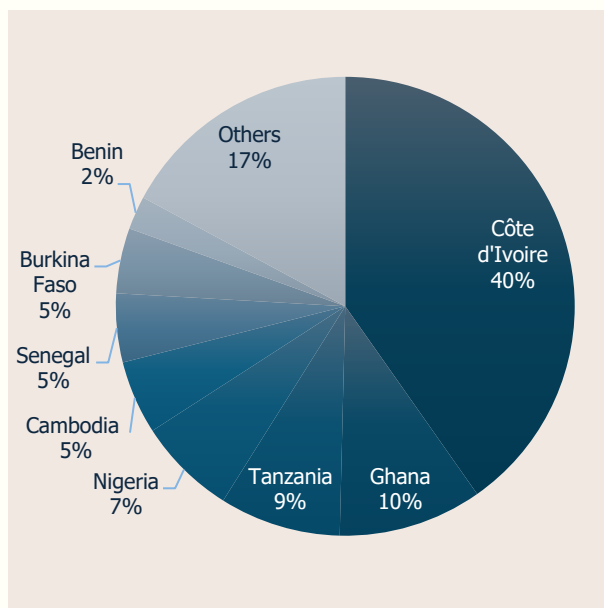
2.3 GLOBAL CASHEW TRADE SCENARIO

RCNs are predominantly supplied by African and certain Asian countries. Major exporters include Côte d'Ivoire, Ghana, Nigeria, Tanzania, Senegal, Burkina Faso, Cambodia, and Benin. Côte d'Ivoire leads global RCN exports, contributing 40% of the world trade, valued at USD 930.4 million. It primarily serves the import markets of Vietnam and India, ranking as the top exporter to Vietnam and the second-largest to India. Ghana follows with a 10% share of global export value (USD 234.2 million), exporting mainly to India, Vietnam, and the UAE, and standing as India's largest RCN supplier. Nigeria accounts for 7% of world RCN exports, catering primarily to Vietnam and India, emphasising Africa's central role in the global raw cashew trade (**FIGURE 2.8**).

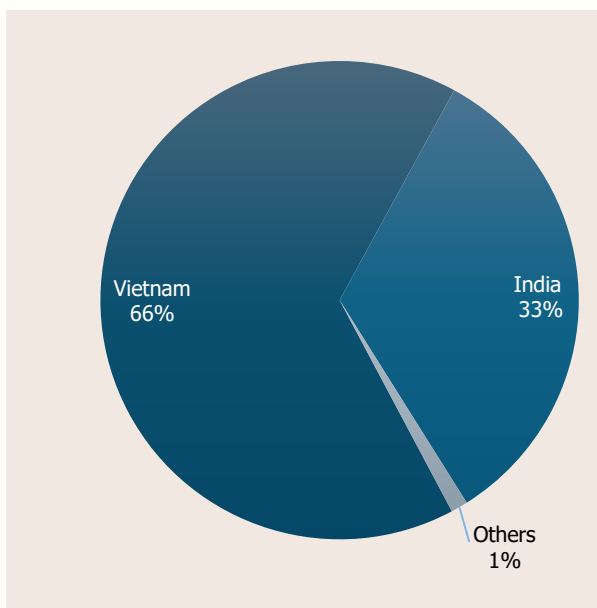
The primary demand for RCN comes from Vietnam and India, driven by their reliance on imports to satisfy domestic needs and their focus on export-driven production of cashew kernels (processed from RCN). These two countries are pivotal in influencing global cashew market trends. In TE 2023, Vietnam was the largest importer of RCN, accounting for 66% of global imports (valued at USD 2.8 billion), sourcing primarily from African countries like Côte d'Ivoire, Ghana, and Nigeria and Cambodia. India followed with 33% of global imports (USD 1.4 billion), mainly importing from Ghana (16%), Côte d'Ivoire (16%), Benin (14%), Togo, and Tanzania (**FIGURE**

2.9). There is often a significant discrepancy between the data reported by exporting and importing countries that can stem from time lags between actual exports and imports, differences between cost, insurance, and freight (CIF) values versus Free on Board (FOB) values or other logistical factors. In such cases, trade officials rely on the importer's data for greater accuracy.

**FIGURE 2.8: VALUE-WISE RCN EXPORTING COUNTRIES
(TE 2023: USD 2.3 BILLION)**



**FIGURE 2.9: VALUE-WISE RCN IMPORTING COUNTRIES
(TE 2023: USD 4.3 BILLION)**



Source: ITC Trade Map, 2024

In India, one of the major challenges faced by cashew processing units is the availability of raw materials. Domestic production covers only about half of the demand, and the import of raw cashew nuts (RCN) is largely controlled by traders rather than processors. These traders often engage in hoarding practices, selling raw cashews to processors at inflated prices, which significantly increases processing costs (Key Informant Interview (KII), 2025). This results in higher raw material costs, squeezed profit margins for processors, and reduced competitiveness in the market. It is essential to address this issue by closely monitoring and regulating such practices to ensure fair pricing and a more sustainable supply chain.

Major Exporters and Importers of Cashew Kernels: RCN are processed to produce cashew kernels, making RCN a highly valuable global commodity with strong demand, particularly in countries focused on processing. Over the years, the export volume of cashew kernels (as reported by importing countries) has nearly doubled, rising from 3.6 lakh tonnes in 2012 to 6.2 lakh tonnes in 2023. This increase reflects a growing global demand, driven by heightened consumer awareness of the health benefits of cashews and their expanding use in the food and snack industries.

Vietnam is the largest exporter of cashew kernels, accounting for 63% of global exports in TE 2023, with exports valued at USD 2.8 billion. Whereas, India, the second-largest exporter, represented only 8% of global exports, worth USD 0.37 billion (**FIGURE 2.10**). The substantial gap between the top two exporters underscores Vietnam's dominant position in the cashew export market. While India is a major producer and processor, it primarily focuses on meeting its domestic demand, as it remains the largest consumer of cashews, with 3.2 lakh tonnes consumed in 2021-22.

FIGURE 2.10: VALUE-WISE CASHEW KERNEL EXPORTING COUNTRIES

TE 2023: USD 4.5 BILLION

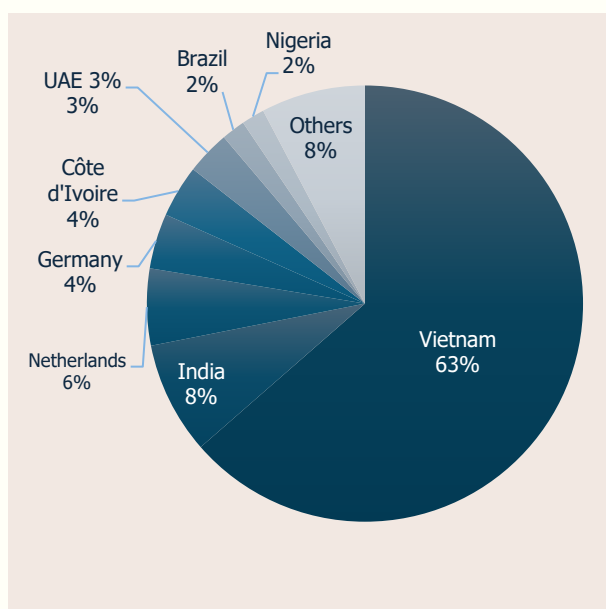
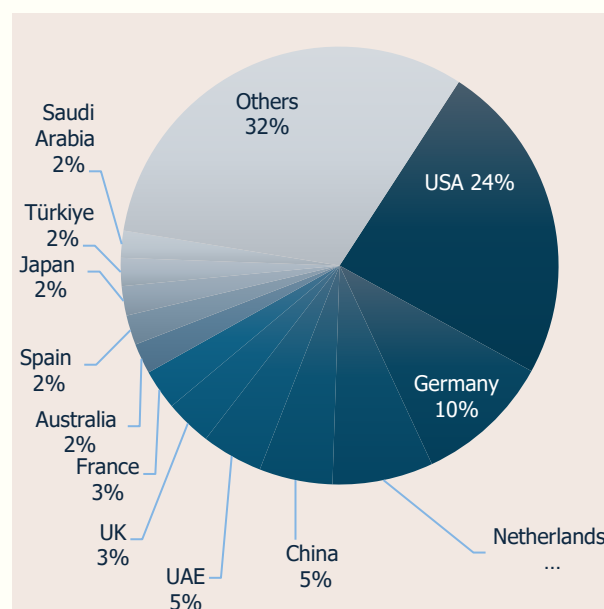


FIGURE 2.11: VALUE-WISE CASHEW KERNEL IMPORTING COUNTRIES

TE 2023: USD 4.2 BILLION



Source: ITC Trade Map, 2024

The primary demand for cashews comes from the USA, Germany, the Netherlands, the UAE, and China. The USA is the largest importer, accounting for 24% of global imports in TE 2023. Most of its cashews (88%) are sourced from Vietnam, with smaller contributions from Côte d'Ivoire (2%), Brazil (2%), and India (2%). Germany ranks as the second-largest importer, representing 10% of global imports, followed by the Netherlands at 8%, and the UAE and China, each at 5% (**FIGURE 2.11**). Vietnam leads as the dominant exporter to most of these countries, while India is the top supplier to the Netherlands, providing 72% of its imports.

Interestingly, the Netherlands and Germany are the third and fourth-largest exporters of cashew kernels, with exports valued at USD 254.1 million and USD 182.7 million, respectively, in TE 2023. However, neither country produces or processes cashews; they mainly serve as re-export hubs within Europe. Côte d'Ivoire, the largest producer of RCN, exported USD 173.2 million worth of cashew kernels in TE 2023. This underscores the increasing potential for competition from African

countries, as they invest more in their cashew processing industries. In the near future, African cashew kernels are likely to compete with Indian kernels not just in price, but also in quality. This emerging trend presents a potential threat of raw material shortages and growing global competition in the export market.

2.4 CASHEW TRADE FROM INDIA

India exports cashew kernels to over 100 countries, with key markets including the UAE, Japan, the Netherlands, Saudi Arabia, and the USA. In TE 2023, approximately 0.5 lakh tonnes of cashew kernels were exported, in addition to by-products such as CNSL and Cardanol. However, a concerning trend emerges when looking at the temporal decline in cashew kernel exports which have decreased from USD 893.4 million in 2011 to USD 333.1 million in 2023. This decline raises questions about India's competitiveness in the global export market (**FIGURE 2.12**).

In TE 2023, the UAE was India's largest export market, accounting for 33% of exports, valued at USD 122.4 million. Japan remains a key market for India, accounting for 12% of exports (USD 46.5 million), where India holds the position of top exporter, reflecting its strategic importance. Both the Netherlands and Saudi Arabia held a 10% share, with India ranking as the second-largest exporter in these markets (**FIGURE 2.13**).

India ranks as the second-largest global importer of RCN, with imports valued at approximately USD 1.4 billion in 2023. This marks significant growth, with an AAGR of 5.1% over the past decade, rising from USD 812.5 million in 2013 to USD 1.4 billion in 2023 (**FIGURE 2.12**). The majority of India's RCN imports come from African nations, with Ghana and Côte d'Ivoire each accounting for 16% of imports (USD 236.2 million and USD 235.5 million, respectively, in TE 2023). Benin follows with 14% (USD 210.8 million), and Tanzania contributes 8% (**FIGURE 2.14**). India's increasing reliance on RCN imports underscores the growing demand for processed cashews but also raises questions about the sustainability of local production. Balancing this demand with the support of domestic producers and enhancing the efficiency of processing operations is crucial to ensuring long-term stability and competitiveness in the industry.

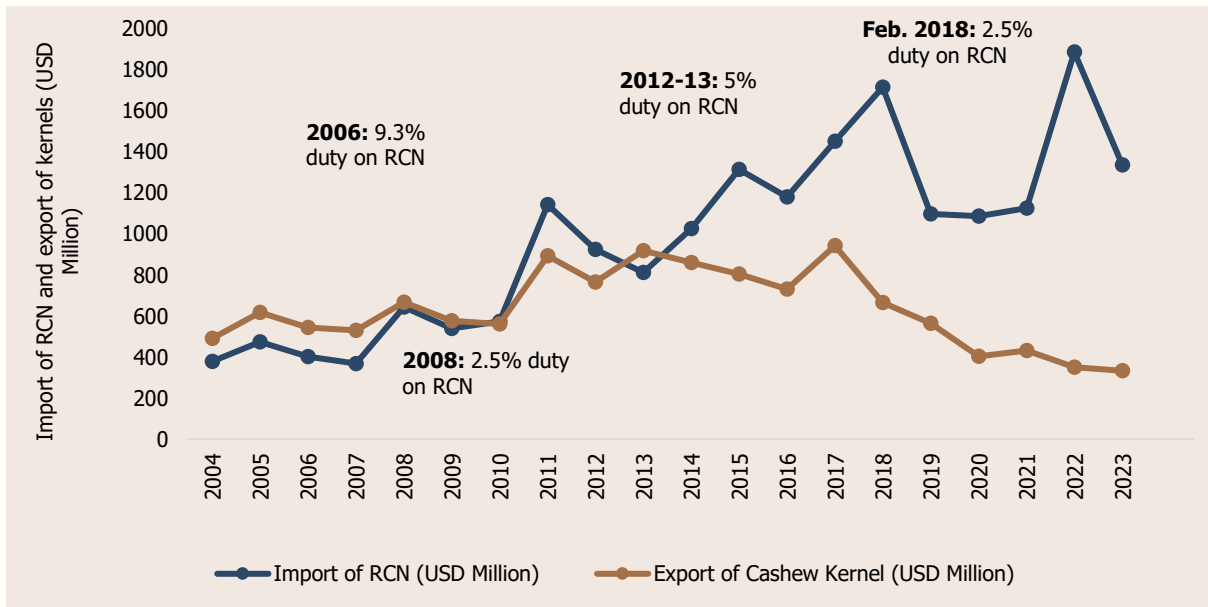
2.4.1 Import Policy of RCN and Kernels in India

Over the years, India's import policy for raw cashew nuts has increasingly focused on reducing customs duties. A major change took place in 2008 when the basic customs duty on RCN was lowered from 9.3% to 2.5% to facilitate imports and support the domestic cashew processing sector. This was raised back to 5% in 2012-13. In 2018, the duty was reduced again to 2.5%, and the Goods and Services Tax (GST) on RCN was also cut from 12% to 5%, further supporting the industry.

Under the Duty-Free Tariff Preference (DFTP) Scheme, RCN can be imported duty-free from Least Developed Countries (LDCs) (Ministry of Commerce & Industry, 2019). In contrast, the import duty on cashew kernels—both whole and broken—was increased from 45% to 70% in 2019.

According to a DGFT notification dated June 12, 2019, the import of cashew kernels (whole or broken) was reclassified from "free" to "prohibited," unless the CIF value exceeds INR 680 per kg for broken cashews or INR 720 per kg for whole cashews. Additionally, India imposes high basic customs duties on cashew kernels (roasted, salted, broken, whole etc.), ranging from 30% to 70%, along with an IGST levy of 12% and a 10% Social Welfare Surcharge (Rangasamy, 2024).

FIGURE 2.12: EXPORT OF CASHEW KERNELS AND IMPORT OF RCN BY INDIA



Source: ITC Trade Map, 2024

FIGURE 2.13: EXPORT DESTINATION OF KERNELS FROM INDIA (TE 2023)

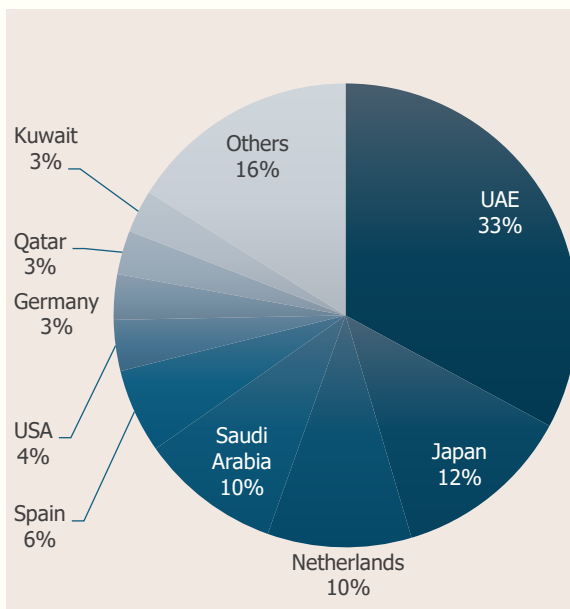
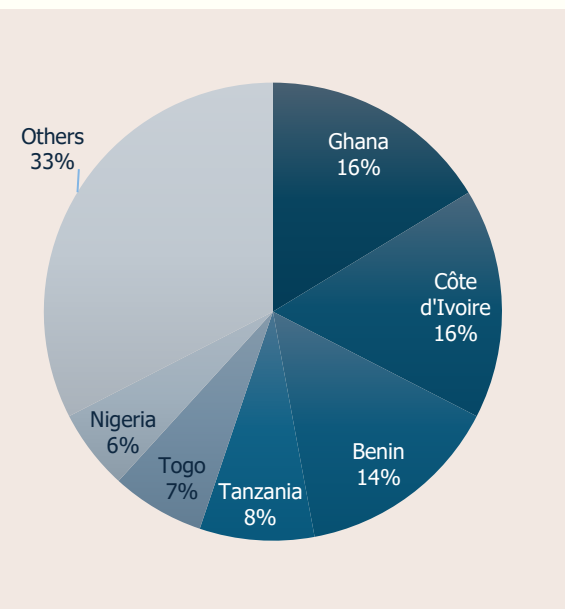


FIGURE 2.14: IMPORT DESTINATIONS OF RCN FOR INDIA (TE 2023)



Source: ITC Trade Map, 2024

2.5 ORGANIC CASHEW EXPORTS FROM INDIA

India continues to maintain a strong presence in the global organic products market, with cashew products playing a key role in its export portfolio. In FY 2024-25, India exported 1,895.89 MT of organic cashew products, valued at USD 17.65 million. The primary export destinations included the United States, the European Union, Switzerland, Japan, and Great Britain. With increasing areas under organic cashew farming across various states, the sector is poised for significant growth. As demand for organic products rises worldwide, India's organic cashew sector is well-positioned to meet this demand, contributing substantially to the country's export goals and the growth of sustainable agricultural practices. APEDA's efforts to promote organic cashew exports, both through strategic marketing initiatives and quality assurance programs, will play a crucial role in boosting India's presence in global markets. To further strengthen India's global presence, a more focused and targeted effort is essential in promoting organic cashews as a key export product.

BOX 2.1: EXPORT OF BY-PRODUCTS OF CASHEW

After cashew processing, the shells and other byproducts are used to produce products like **CNSL** and **shell charcoal**. CNSL is a valuable raw material for industries using polymer-based products, such as paints, varnishes, resins, brake linings, and rubber compounds. It is extracted through methods like hot oil bath, expellers, kiln, or solvent extraction, with the hot oil bath being the most common. This method extracts around 50% of the liquid, while expellers can yield up to 90%. CNSL has gained global market interest due to its wide industrial applications, and India, along with Vietnam and Brazil, has become a major producer and exporter. India's exports of CNSL have nearly doubled, from USD 3.59 million in 2011-12 to USD 7.12 million in 2022-23. The largest destination for CNSL exports from India is North Korea, which accounts for 33% of the total exports, followed by Vietnam (18%), Belgium (15%), and the UK (8%) (DGFT, 2023).

The remains of shell after the extraction of CNSL is called **shell charcoal**. This is used as a fuel. The shell charcoal is used in processing of cashew for drying after shelling. Other cashew by-products include Shell Cake, Testa, Cashew Apple, and Gum. The de-oiled cashew shell, also known as cashew shell cake, is a by-product obtained during the extraction of CNSL. Cashew shell cake can be carbonized and mixed with a binder to create briquettes, which are used as fuel in industrial boilers. It can also be processed into vermiculite, a material useful for gardening and hydroponics (Kerala Cashew Board, 2023).

The thin skin surrounding the cashew kernel, known as testa, contains high levels of tannins and is used as a raw material for tanning agents in the leather industry. Cashew apples, rich in vitamin C and antioxidants, are used to make pectin, juices, alcoholic beverages, vinegars, syrups, and jams. The fibrous residue from juicing the cashew apple is repurposed as animal feed or as a carotenoid-rich ingredient for food supplements and natural food colorants. Cashew apple juice is produced in countries like Brazil, Senegal, Vietnam, and Ghana, where cashew apple brandy is also a popular product. Additionally, cashew gum, harvested from the tree's bark, has various uses in the food industry and pharmaceuticals. However, India has seen limited success in producing these by-products at scale (Kerala Cashew Board, 2023).

2.6 INDIAN CASHEW VARIETIES AND GI-TAGGED VARIETIES

Varieties of Cashews: The choice of suitable cashew varieties for the specific region and the appropriate package of practices determines the final yield. More than 30 varieties with exportable grade of cashew kernels are released from different research institutes in India. As winter draws to a close, the harvest season in eastern states like Odisha and Andhra Pradesh begins in March or April, while the western coastal regions of Goa, Maharashtra, and Kerala start harvesting in

January. Harvest times are indicated by the separation of the RCN from fully developed cashew apples (TNAU, 2023).

Globally, distinct varieties are preferred in different cashew-growing countries. In Cambodia, the M23 variety dominates, accounting for 70% of total cashew production. (EU-German CAPSAFE, 2024) It is prized for its large, premium-grade nuts and high yields, averaging 1.4–2 tons per hectare. In Vietnam, commonly cultivated varieties include ES-04, EK-24, and BD-01, which yield around 55–65 kg per plant per year. Additionally, organic farming-oriented varieties such as DW Cashew, LBW Cashew, and SW Cashew are grown for their unique traits and suitability for sustainable cultivation. In India, the most prominent varieties are the Vengurla types (Vengurla-1 to Vengurla-7), with kernel size increasing progressively from V1 to V7, and V7 producing the longest kernels. Among these, Vengurla-4 is notable for its mean nut yield of 17.2 kg per tree. More recently, the Directorate of Cashew Research (DCR), Puttur released two high-yielding jumbo nut varieties, Nethra Jumbo and Nethra Ganga. These varieties produce nuts weighing 12–13 grams each and are well-suited for high-density planting with good response to pruning. In the case of Nethra Jumbo, processing 100 kg of nuts yields about 29–30 kg of kernels, making it highly attractive for commercial cultivation (TNN, 2024).

TABLE 2.2: POPULAR VARIETIES OF CASHEW IN INDIA

State	Varieties
Kerala	Amrutha, Anagha, Anakkayam-1, Dhana, Dharasree, <u>K-22-1</u> , Kanaka, Madakkathara -1, Madakkathara-2, Priyanka, Sulabha, Mrudula, Poornima, Sree, KAU Nihara
Tamil Nadu	VRI-1, VRI-2, VRI-3, VRI-4, VRI (CW) H1
Karnataka	Chintamani-1, Chintamani-2 NRCC-1, NRCC-2, Ullal-1, Ullal-2, Ullal-3, Ullal-4, UN-50, H-130, Bhaskara, Nethra Vaman
Andhra Pradesh	BPP-1, BPP-2, BPP-3, BPP-4, BPP-5, BPP-6, BPP-8, BPP -10, BPP -11
Maharashtra	Vengurla-1, Vengurla-2, Vengurla-3, Vengurla-4, Vengurla-5, Vengurla-6, Vengurla-7, Vengurla-8
Odisha	Bhubaneswar-1, Jagannath, Balabhadra
Goa	Goa-1, Goa 2
West Bengal	Jhargram-1, Jhargram-2

Source: TNAU, 2023

Geographical Indication (GI) tags are awarded to specific products that possess unique qualities, helping them gain recognition and higher value in international markets. For cashew nuts, GI tags have been granted to two varieties: **Vengurla cashew** (kidney-shaped kernel,

creamy-white in colour and delightfully sweet) and **Goan cashew** (organic, better taste and unique flavour) (Rathour et al., 2024). There has been increasing pressure from exporters to include the **Panruti cashew** variety from Tamil Nadu in the list of GI-tagged products. This variety is renowned for its high protein content and distinctive characteristics (KII, 2025). However, one of the major challenges with GI-tagged varieties in India is that processors or traders often neglect quality standards, packaging, and proper weighting, resulting in subpar products. For example, in Goa, many shops sell cashews from countries like Benin, Ivory Coast, Ghana, Guinea Bissau, and Tanzania, and from other Indian states, often marketing them as Goan cashews. This lack of quality control has led to numerous complaints, tarnishing the reputation of "Brand Goa." The influx of cheaper cashews has put immense pressure on local processing units and manufacturers, who have struggled to sell their produce within the state. As a result, many have been forced to explore external markets, reduce production, or even shut down their factories. This highlights the need for stricter regulation and better-quality management to protect the reputation of GI-tagged products and the livelihoods of local cashew processors.

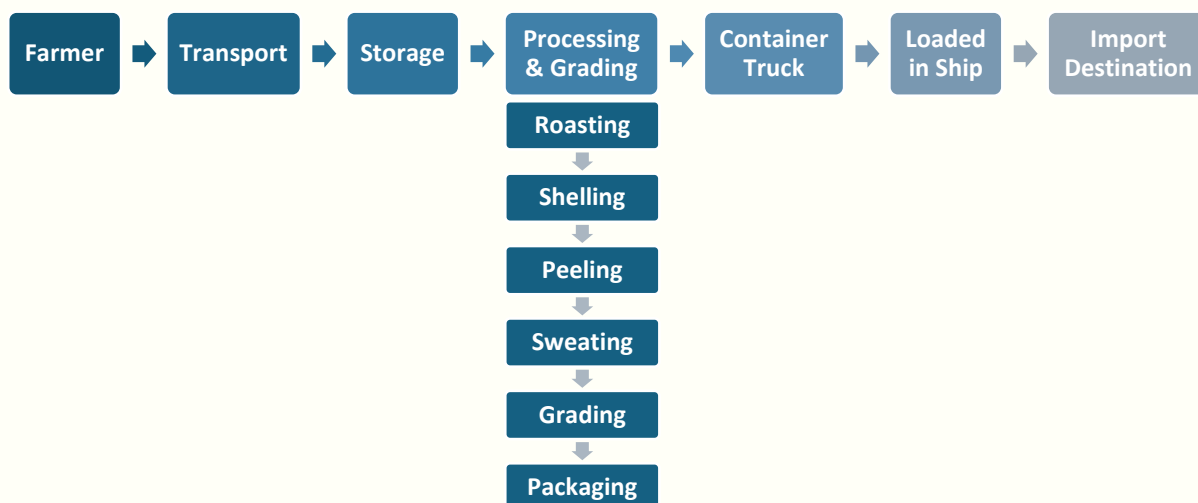
2.7 VALUE CHAIN OF CASHEW KERNELS

Within the cashew producing regions, farmers collect the mature fruits and nuts that have fallen to the ground and sell them to a village aggregator. The village aggregator may operate across 5-6 villages and collects the produce and sells it to the processor. The processor then processes the raw nut into cashew kernels. On the other hand, there is a high dependence on imports of RCNs from West African countries such as Burkina Faso and Benin. This is because the RCNs produced locally are not enough to feed the processing capacities. Processors identify an importing firm or contractor in African countries, who works on a commission basis. The contractor buys RCNs from the farmers in Africa, aggregates and sorts the produce, packs it into 20 kg bags and transports it by ship. The processors source the RCNs from Africa after the local harvest season (February to May) is over. The kernels processed from imported African cashew nuts do not fetch the same price as those processed from local nuts. Cashew kernels processed from African cashew nuts are smaller and lack the distinctive taste that the Konkan cashews have. Hence, RCNs from Africa are almost always sourced at a 20% discount over the local raw cashew nuts. Thus, the overall supply of RCN is sourced through direct farmer purchases, local markets, traders, and imports (aggregators or traders generally keep a markup of 20-30% before selling to processors).

At processing plants, edible kernel is extracted from the raw cashew nut. The processing steps include roasting, shelling, peeling, sweating, and grading. Roasting is done to make the shell brittle and can be carried out using methods such as open pan roasting, drum roasting, or oil bath roasting. After roasting, the nuts are shelled to remove the kernels. The kernels are then dried to reduce moisture and loosen the adhering testa (thin skin). Peeling follows, where the testa is removed from the kernel. The kernels are then spread indoors to absorb moisture, reducing brittleness and preventing breakage during grading. The final processing stage is

grading, where kernels are sorted based on visual characteristics such as whole, split, and broken. They are also size-graded by the number of kernels per pound. While most grading is done manually, mechanisation is also used for size grading. After grading, the processed cashew kernels are packed. In some cases, the packaging includes evacuation and filling with carbon dioxide, while in other cases, a re-humidification step is used to prevent over-drying. The packaged kernels are then transported via container trucks to ports, where they are loaded onto ships for export.

FIGURE 2.15: EXPORT VALUE CHAIN OF CASHEW KERNELS



Source: Author's own compilation

Grading and Classification: There are 25 exportable grades of cashew kernels. The kernels are stored into wholes, splits and broken primarily based on visual characteristics. The wholes are again size-graded based on the number of kernels per pound. The entire grading operation is done manually. However, for size-grading mechanical operation is also practiced.

TABLE 2.3: CASHEW CLASSIFICATION BASED ON COLOUR OF THE KERNEL

(United Nations Economic Commission for Europe)

Class	Commercial Designation	Description
Extra	White	white, pale ivory, pale ash - grey light yellow
Class I	Scorched or lightly blemished	light brown, light ivory, light ash grey, deep ivory, yellow
Class II	Scorched seconds or dessert	light brown, amber, light blue, deep brown, deep blue discoloured, black spotted, immature, blemished and stained kernels are permitted

Source: Global Cashew Council (2022)

TABLE 2.4: CLASSIFICATION BASED ON SIZE OF THE KERNEL

(Internationally Accepted)

Size Code or Count	Maximum Number of Kernels per Pound	Maximum Number of Kernels per Kilogram
W150 (largest & rarest)	150	325
W180 (premium)	170-180	395
W210 (jumbo)	200-210	465
W240 (standard)	220-240	530
W320 (Smaller but most popular)	300-320	706
W450 (smaller & relatively cheaper)	400-450	990
W500	450-500	1100

Source: Kerala Cashew Board (2023)

2.8 CASHEW KERNEL PRODUCING COMPANIES

Globally, key players in the cashew kernel market are Olam International, Vietnam Cashew Processing Co, Nutsco Inc, DVK Group, Prime Nuts FZE and Bismi Cashew Company.

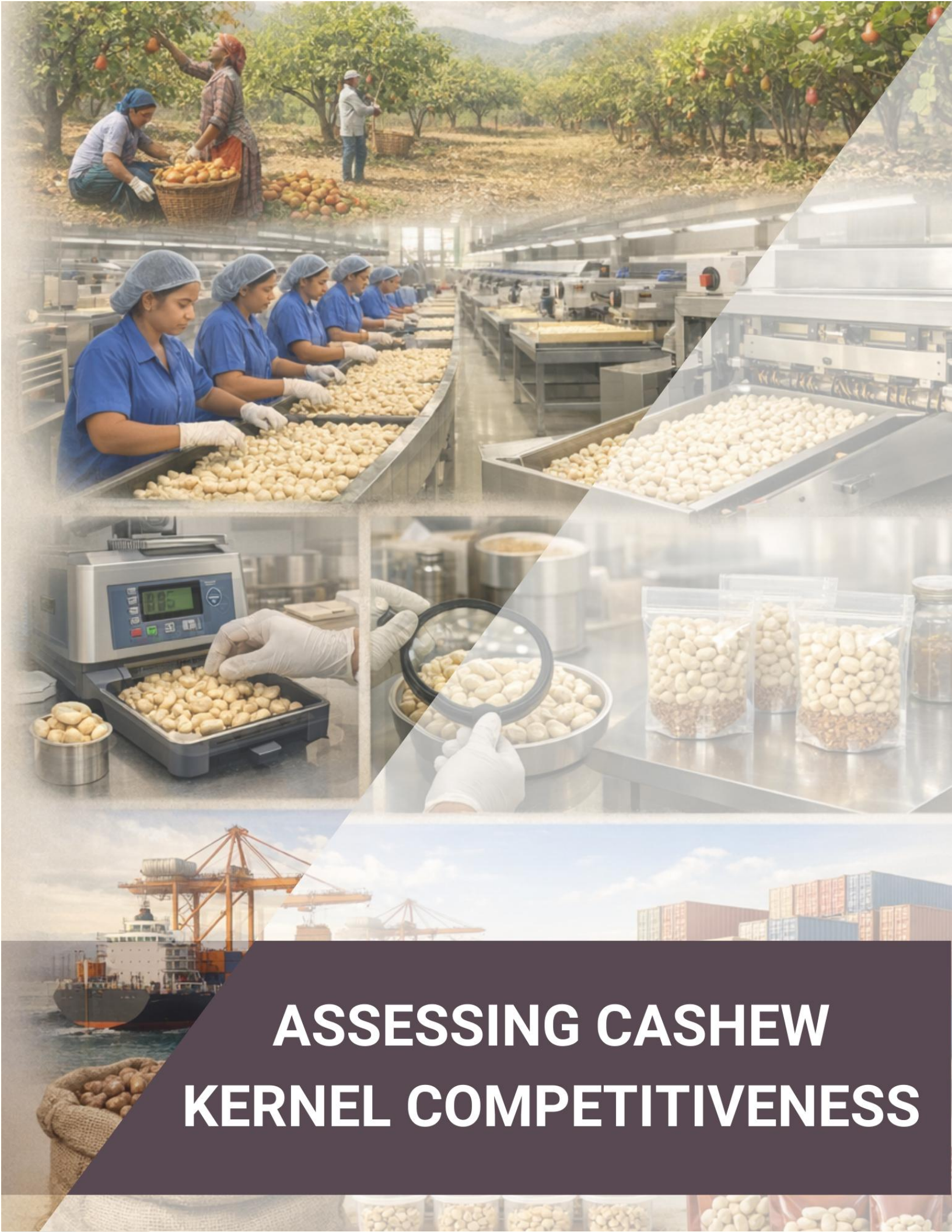
TABLE 2.5: MAJOR CASHEW KERNEL PRODUCING COMPANIES

GLOBAL PLAYERS	INDIAN PLAYERS
<ol style="list-style-type: none">1. Olam International2. Vietnam Cashew Processing Co3. Nutsco Inc4. DVK Group5. Prime Nuts FZE6. Bismi Cashew Company	<ol style="list-style-type: none">1. Alphonso Cashew Industries2. India Food Exports3. Bolas Agro Private Ltd4. Sunfood Corporation5. Tasty Nut Industries6. Kerala Nut Food Company7. Intersnack Cashew India Private Limited8. Prakash Exports9. Golden Cashew Products Private Limited10. Fair Exports (India) Private Limited

Source: Straits Research (2024)

Olam International: This Singaporean multinational is considered the world's largest cashew supplier. They have a significant presence in RCN production and processing. Olam has more than 15 cashew processing across the world and most of which are in Asia and Africa and the marketing offices in the USA, Europe, Dubai, India, Australia, and Singapore.

Alphonso Cashew Industries: Alphonso is one of the major processing companies in India with 13 processing facilities in Kerala, Tamil Nadu, and other southern states. They procure raw cashews globally and have the latest processing facilities catering to customers spread across 43 countries.



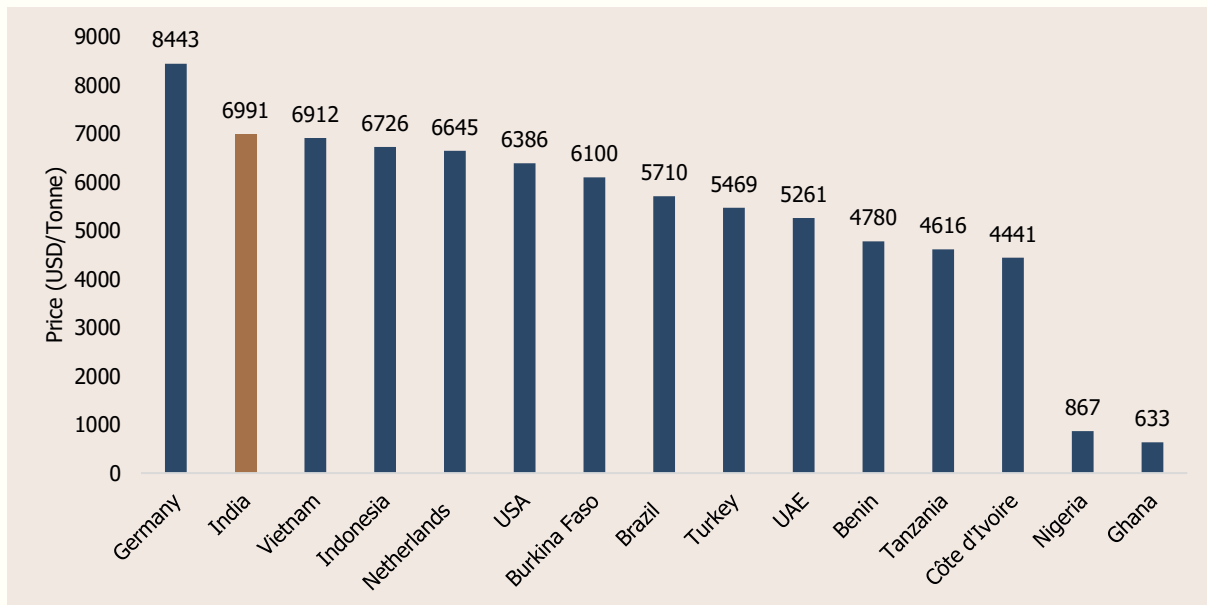
ASSESSING CASHEW KERNEL COMPETITIVENESS

ASSESSING CASHEW KERNEL COMPETITIVENESS

3.1 GLOBAL PRICE SCENARIO

The pricing of Indian cashew kernels reveals that they are not competitive in the global market, with a price of USD 6992 per tonne for in 2023. In comparison, Vietnam, a major competitor, offers cashew kernels at USD 6,912 per tonne. African countries have a more competitive price advantage, with Côte d'Ivoire cashew kernels priced at USD 4,441 per tonne and Benin at USD 4,780 per tonne. In the long run, India's share of the cashew kernel market may be impacted, as its prices are higher than those of most other countries. While Indian cashew kernels are renowned for their premium quality and taste, maintaining a strong market share after Vietnam, necessitates reducing the price which could improve India's competitiveness, allowing it to capture new markets and boost exports.

FIGURE 3.1: INTERNATIONAL PRICES OF CASHEW KERNELS (2023)



Source: ITC Trade Map, 2023

The temporal trend of cashew kernel exports from India reveals a significant decline in exports to the USA, the largest global importer. Exports to the USA dropped from USD 268.4 million in 2012 to just USD 7 million in 2023, a shift largely captured by Vietnam. In 2023, Vietnam's cashew kernels had a unit value price (UVP) of USD 5,848 per tonne, while India's UVP was USD 7,368 per tonne—about 21% higher, which has hindered India's competitiveness. Consequently, Vietnam's exports to the USA have more than doubled, increasing from USD 392 million in 2012

to USD 745.5 million in 2023. This price disparity has significantly contributed to India's loss of market share in the USA, as the country struggles to compete with Vietnam.

Similarly, India's exports to Germany have seen a sharp decline, dropping from USD 153.8 million in 2012 to USD 12.3 million in 2022. Meanwhile, Vietnam's exports to Germany have surged from USD 32.8 million in 2013 to USD 266.6 million in 2023, effectively dominating the market. The price competitiveness advantage is clear: in 2023, Vietnam's UVP in Germany was USD 6,109 per tonne, significantly lower than India's UVP of USD 8,113 per tonne. This stark difference in pricing has eroded India's position in key European markets, where Vietnam has capitalized on its lower costs to capture a larger share of the market.

FIGURE 3.2: UVP OF INDIA AND VIETNAM IN USA

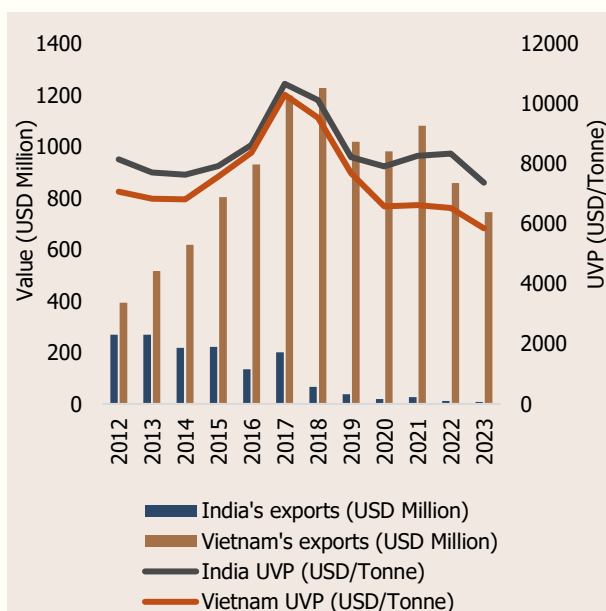
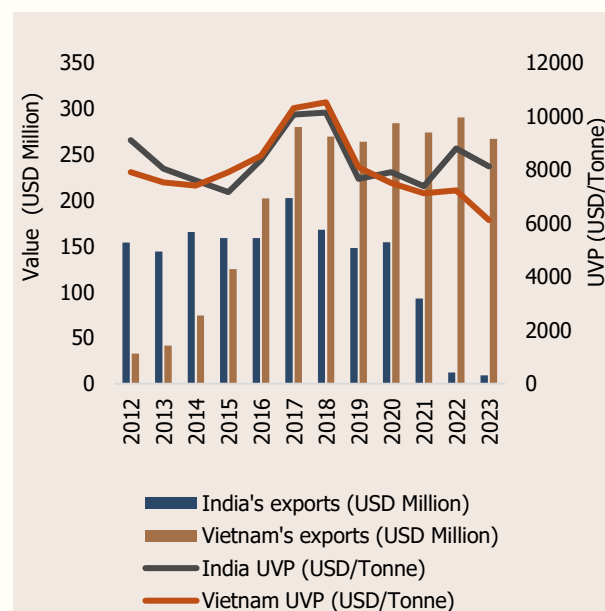


FIGURE 3.3: UVP OF INDIA AND VIETNAM IN GERMANY

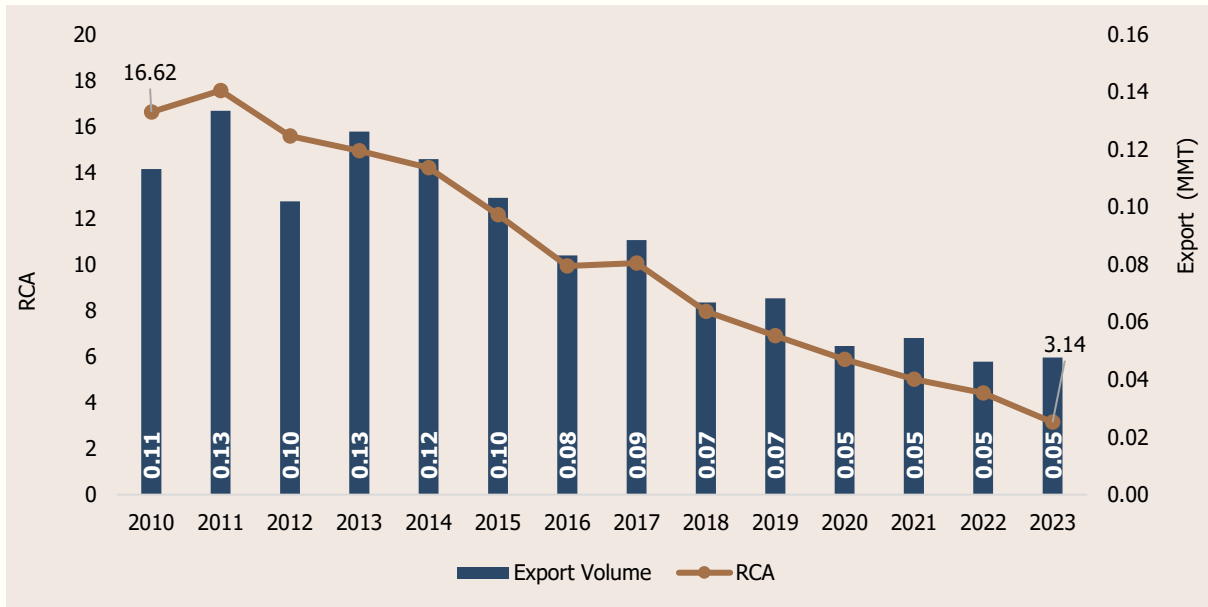


Source: ITC Trade Map, 2024

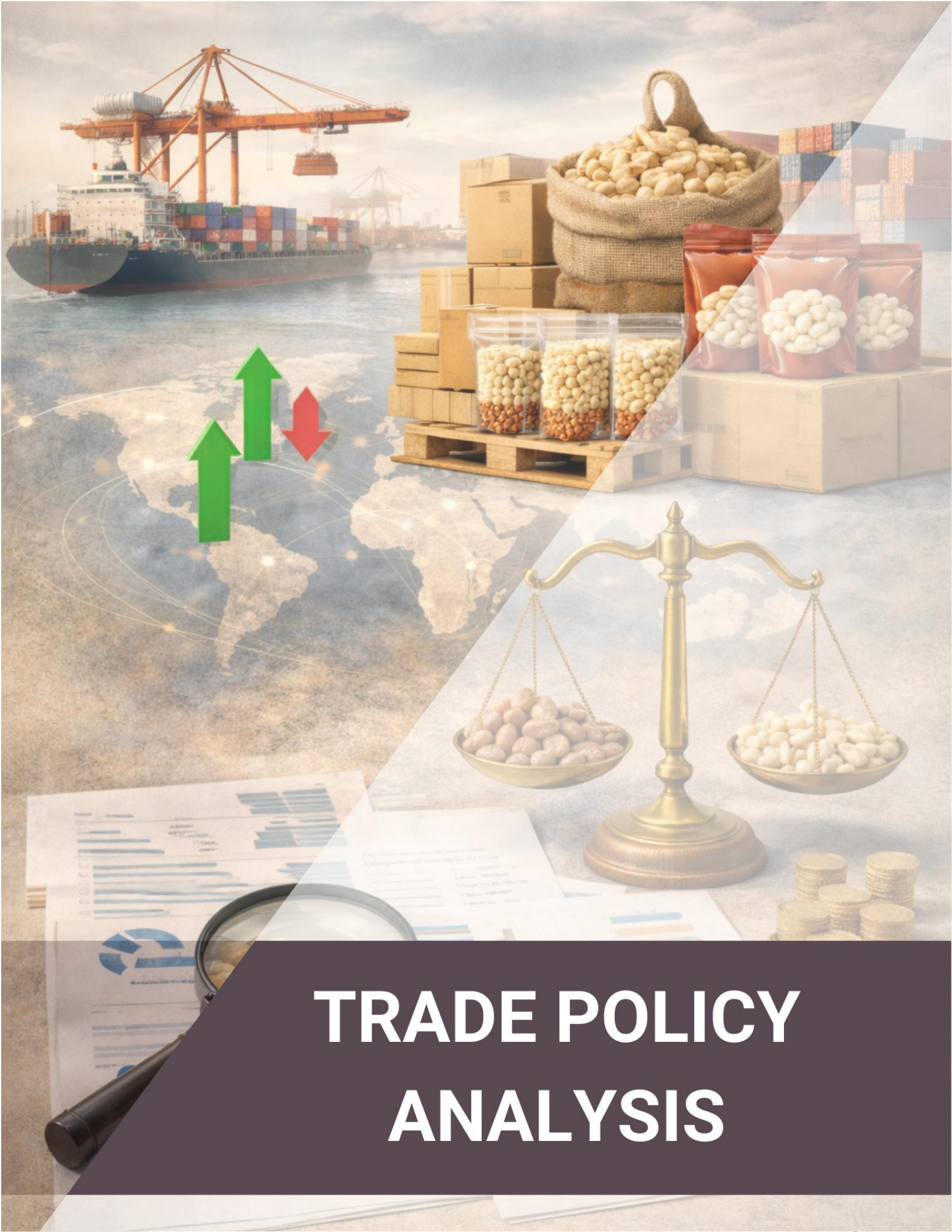
3.2 REVEALED COMPARATIVE ADVANTAGE (RCA)

India's RCA for cashew kernels has consistently remained above 1, reflecting the country's strong position in the global market. However, over the past decade, this advantage has diminished, with India's RCA falling from 16.6 in 2010 to 3.14 in 2023. Despite this decline, an RCA above 1 still indicates potential for India to regain lost market share and strengthen its global standing. The primary factor behind this reduction in RCA is the increasing competition from Vietnam, whose expanding processing capabilities and efficiency have made it a formidable competitor, challenging India's market presence.

FIGURE 3.4: RCA OF INDIAN CASHEW KERNELS



Source: Authors Computation (UN COMTRADE, 2023)



TRADE POLICY ANALYSIS

TRADE POLICY ANALYSIS

4.1 TARIFF MEASURES

This section analyses tariffs for major cashew kernel importing countries and those where India is a key exporter, based on the ITC Trade Map data.

United Arab Emirates (UAE): In TE 2024, the UAE imported cashews worth USD 191.8 million. India is the largest exporter, accounting for 64% (USD 122.7 million), followed by Vietnam at 32% (USD 61.4 million). The UAE imposes a 5% Most Favoured Nation (MFN) tariff on cashews, but India enjoys a preferential 0% rate, giving it a strong competitive edge and scope to expand its market share. In contrast, Saudi Arabia, Qatar, Kuwait, and Oman levy a 5% tariff, while Iran, an important buyer, imposes a steep 40%. Addressing this issue through focused trade negotiations with Iran and other Gulf countries (except the UAE) could help lower tariff barriers and unlock growth opportunities for Indian cashew exports.

TABLE 4.1: TARIFF ANALYSIS TE 2024

(1) UAE (Cashew Imports in TE 2024 = USD 191.8 Million)

Competing Countries	MFN	% Share	UVP	Distance in Kms
India	5% (Pref- 0%)	64%	6142	3602.1
Vietnam	5%	32%	4973	10315.6
Nigeria	5%	1%	4061	15404.9
Mozambique	5%	1%	2914	7982.1
Côte d'Ivoire'	5%	1%	3537	15871.6

Japan: Japan imported cashews worth USD 84.4 million in TE 2024. Vietnam leads with a 50% share (USD42.3 million), followed by India at 48% (USD 40.5 million). All exporting countries enjoy a 0% tariff.

(2) Japan (Cashew Imports in TE 2024 = USD 84.4 Million)

Competing Countries	MFN	% Share	UVP	Distance in Kms
Vietnam	0%	50%	7542	19838.6
India	0%	48%	6265	10711.97
Cambodia	0%	2%	8892	6730.2

Saudi Arabia: With a 56% share (USD 55.5 million) Vietnam has become leading exporter to Saudi Arabia, and India follows at 40% (USD 39.7 million). All countries face 5% tariff on cashew imports in Saudi Arabia.

(3) Saudi Arabia (Cashew Imports in TE 2024 = USD 99.2 Million)

Competing Countries	MFN	% Share	UVP	Distance in Kms
Vietnam	5%	56%	5956	11638.0
India	5%	40%	7246	5002.3

China: China imported cashews worth USD 241.2 million in TE 2024, with Vietnam accounting for 92% (USD 221 million), benefiting from a preferential tariff of 0%-7%. Côte d'Ivoire holds a 5% share (USD 12.06 million) but faces a 10% tariff. India currently has no market presence in China.

(4) China (Cashew Imports in TE 2024 = USD 241.2 Million)

Competing Countries	MFN	% Share	UVP	Distance in Kms
Vietnam	10% (Pref- 0%-7%)	92%	6118	2865.0
Côte d'Ivoire'	10%	5%	3133	23009.2
Myanmar	10% (Pref- 0%-7%)	3%	5043	4438.0
India	10%	0%	-	8710.0

United Kingdom (UK): The UK imported cashews worth USD 143.9 million in TE 2024. Vietnam leads with 89% (USD 127.58 million), and India contributes only 3% (USD 4.3 million). All exporters face a 0% tariff in the UK.

(5) UK (Cashew Imports in TE 2024 = USD 143.9 Million)

Competing Countries	MFN	% Share	UVP	Distance in Kms
Vietnam	0%	89%	5768	20094.2
Netherlands	0%	2%	6946	248.2
India	0%	3%	7785	13115.9
Côte d'Ivoire'	0%	1%	5627	7780.3

United States of America (USA): The USA is the largest importer of cashews, with imports valued at USD 962.3 million in TE 2024. Vietnam dominates the market with an 89% share (USD 856.4 million), followed by Côte d'Ivoire at 4% (USD 38.5 million). India's contribution to the US cashew import market is minimal at 1%. All countries face a 0% tariff for cashew imports into the USA.

(6) USA (Cashew Imports in TE 2024 = USD 962.3 Million)

Competing Countries	MFN	% Share	UVP	Distance in Kms
Vietnam	0%	89%	6147	23713.0
Côte d'Ivoire'	0%	4%	5665	11015.7
Brazil	0%	2%	6209	11425.0
Thailand	0%	1%	10974	22249.9
Nigeria	0%	1%	6169	11860.2
India	0%	1%	7736	17119.9

European Union: EU countries are net importers of cashew kernels with Germany, Netherlands, and France being the top importers. They contributed to 22% of global cashew kernel imports for TE 2024. Also, 20% of India's cashew kernel exports are to Netherlands, Spain, and Germany for TE 2024. Vietnam is one of the major competitors for India in EU countries and it is difficult to capture these potential markets.

Germany is the second-largest importer of cashews, with imports totalling USD 426.7 million in TE 2024. However, Vietnam leads with a 64% market share (USD 271.7 million), followed by the

Netherlands at 12% (USD 51.8 million) and India at 3%. All countries face a 0% tariff for cashew imports in Germany.

(7) Germany (Cashew Imports in TE 2024 = USD 426.7 Million)				
Competing Countries	MFN	% Share	UVP	Distance in Kms
Vietnam	0%	64%	6421	20779.4
Netherlands	0%	12%	6385	631.5
Côte d'Ivoire'	0%	13%	6580	8465.5
India	0%	3%	8267	14143.7
Burkina Faso	0%	1%	6905	10410.7
Brazil	0%	1%	5870	13014.0

In TE 2024, the Netherlands, the third-largest global importer of cashew kernels, imported USD 308.6 million worth of cashews. Vietnam accounted for 69% of this total (USD 213.5 million), while India contributed 12% (USD37.6 million). The Netherlands imposes a 0% tariff on cashew imports, and the country is likely re-exporting kernels to Germany.

(8) Netherlands (Cashew Imports in TE 2024 = USD 308.6 Million)				
Competing Countries	MFN	% Share	UVP	Distance in Kms
Vietnam	0%	69%	6356	920264.6
India	0%	12%	7418	613628.9
Côte d'Ivoire'	0%	3%	6074	7950.6
Burkina Faso	0%	4%	6514	7624.8
Germany	0%	2%	8539	631.5

Source: ITC Trade Map, 2024

4.2 NON-TARIFF MEASURES

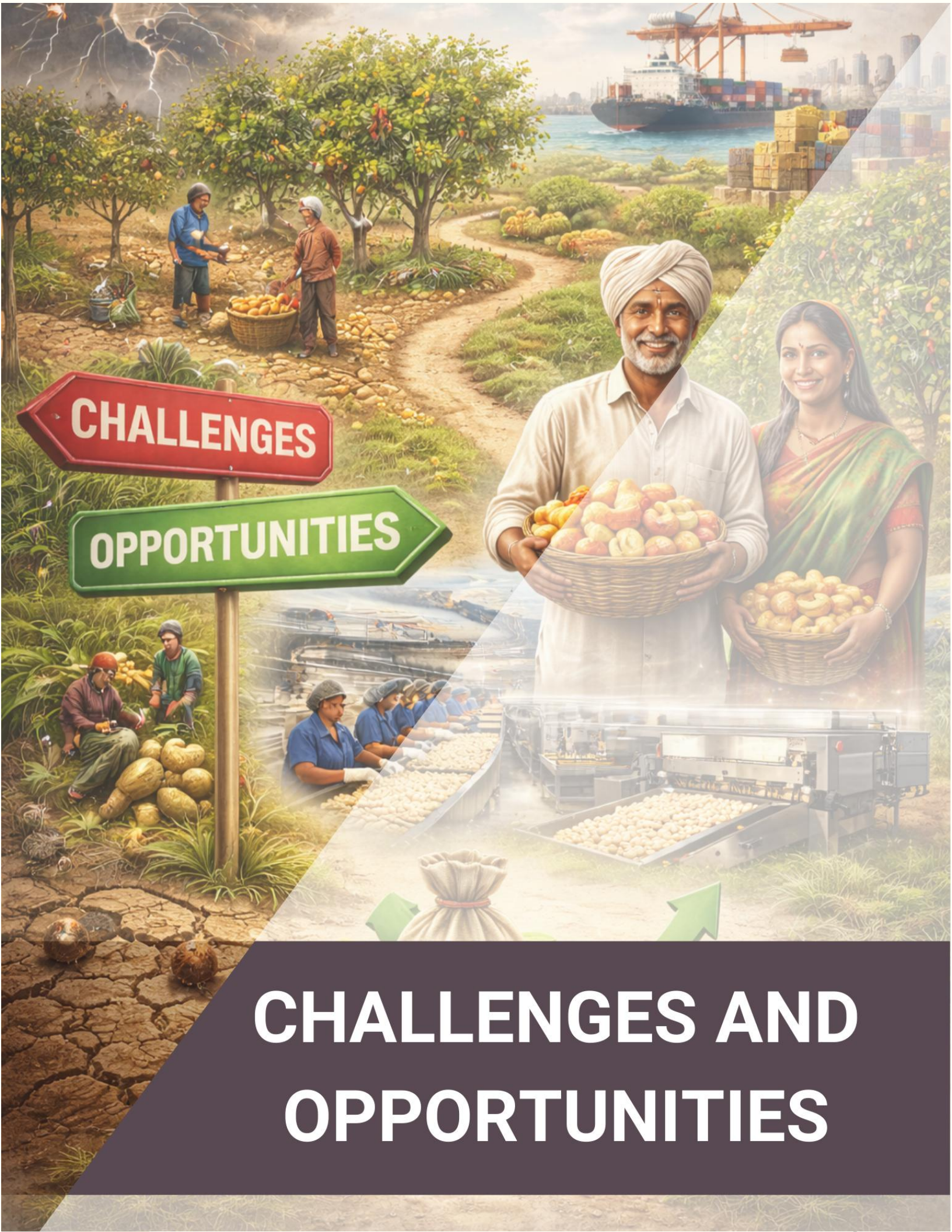
Indian cashew kernels face several non-tariff barriers (NTBs) in export markets, which pose significant challenges to their competitiveness and export potential. These barriers primarily arise from quality, safety, and regulatory requirements set by importing countries. A key NTB faced by Indian cashew exporters is compliance with sanitary and phytosanitary (SPS) measures that enforce stringent safety and health standards related to pesticide residues and contamination from pests or diseases. Further, many importing countries impose Maximum Residue Limits (MRLs) for pesticides and chemicals used during cashew production and processing. For example, the European Union (EU) and Japan have very strict MRLs, especially for aflatoxins. The EU limits aflatoxins to just 4 ppb, presenting a challenge for Indian exporters due to climatic and processing factors because microbial limits (ML) for total aflatoxins in both nuts for further processing and ready-to-eat cashews is 10 ppb. In general, stringent MLs require processors and traders to implement robust quality control and monitoring systems.¹

Some of the other quality measures required by importing countries include:

- **Good Agricultural Practices (GAPs):** These guidelines provide growers with principles for on-farm production and post-production processing to ensure the safety and quality of cashews. GAPs minimize potential hazards such as pathogens, contaminants, and pest management materials.
- **Good Manufacturing Practices (GMPs):** These standards define the procedures to be followed during processing, packaging, storage, and transport. GMPs are designed to ensure that cashews are handled under the best sanitary conditions, maintaining product quality.

Hazard Analysis and Critical Control Points (HACCP): This preventive approach to food safety helps identify, assess, and control risks from biological, chemical, and physical hazards in the production process.

¹ EU food safety regulations, including MRLs and aflatoxin thresholds, are subject to periodic revisions. The figures cited here reflect the regulatory framework as of 2022.



CHALLENGES

OPPORTUNITIES

CHALLENGES AND OPPORTUNITIES

CHALLENGES AND OPPORTUNITIES

As discussed in Sections 2 and 3, India's cashew kernel exports have been steadily declining in recent years, while the import of RCNs has been on the rise. This dependence on imports raises the cost of production and highlights the challenges within India's domestic production capacity. Additionally, the Indian cashew industry faces intensified competition on two fronts: from Vietnam, which benefits from economies of scale and lower processing costs, and from African countries, which, as primary RCN producers, are increasingly investing in their own processing capabilities. Many African nations are beginning to restrict the export of RCN, opting to process more locally and capture greater value from their own raw materials. This shift threatens India's long-standing position in the global cashew market, as both cost and quality factors increasingly undermine the competitiveness of Indian cashews.

In addition to these external pressures, the Indian cashew sector faces several internal challenges:

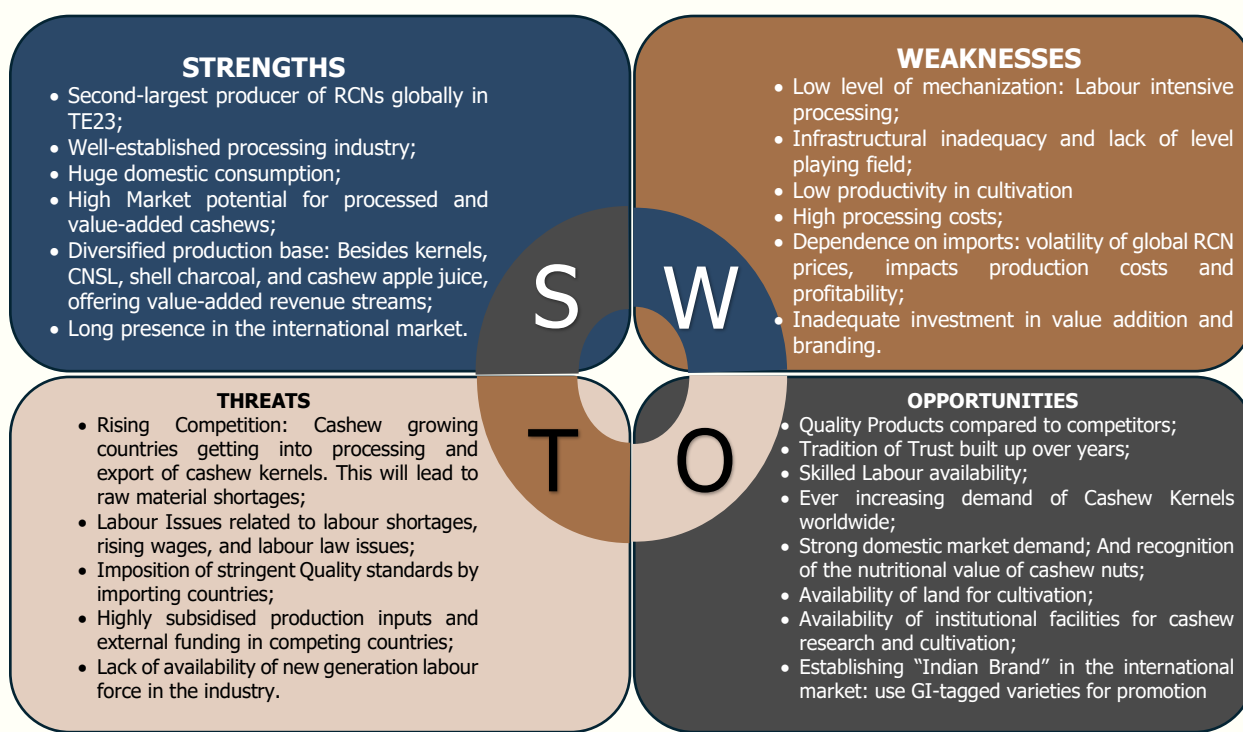
- 1. Low Productivity:** Cashew sector faces stagnation in productivity, driven primarily by labour-intensive farming practices and outdated production methods. This hampers the industry's ability to meet the rising demand for cashews globally and to maintain competitive output levels.
- 2. Growing Gap between Processing Capacity and RCN availability:** There is an increasing mismatch between the available supply of RCN and the capacity of processing units. As the supply of domestic RCN declines, processors are forced to import RCN to meet demand, increasing costs and reducing overall profitability for the industry.
- 3. Slow mechanization:** Unlike other global producers, such as Vietnam, which have embraced automation and modernized their cashew processing systems, cashew industry in India has been slow to adopt mechanization. This delay has resulted in lower efficiency, higher labour costs, and an inability to compete with the more advanced, cost-efficient operations in other cashew-producing countries.
- 4. High wages due to labour unionism:** This challenge pertains mainly to Kerala's cashew factories that face elevated labour costs due to strong labour unions and their demands for higher wages. This has contributed to the rising cost of processing, making it harder for Kerala-based processors to compete with low-cost alternatives from other states within India and abroad, particularly from countries like Vietnam, where labour costs are significantly lower. The Kerala government recently (in 2024) initiated a **INR 14.5 crore** project to revamp the state's cashew sector (Annual Plan Proposals, GoK, 2024-25). This initiative

includes brand promotion, modernization of factories, and the cultivation of organic cashew on barren government land. The project aims to enhance product quality, improve working conditions, and reduce dependency on imported raw cashew nuts.

- 5. FSSAI treats Raw Cashew under edible cashew norms:** One of the key challenges in cashew exports is that the Food Safety and Standards Authority of India (FSSAI) currently treats raw cashew nuts under the same norms as edible cashew kernels. However, raw cashew nuts are not fit for direct consumption, as they have not undergone the essential treatment processing steps such as steam boiling, shell removal, and heating. Applying the standards meant for edible cashew kernels to imported raw cashew nuts, particularly those sourced from Africa, creates unnecessary regulatory hurdles. It is important that raw cashew imports be assessed separately, recognizing their inedible nature prior to processing.

In light of these issues, a SWOT analysis of the Indian cashew industry reveals significant opportunities and critical challenges in maintaining its global market position while addressing internal inefficiencies. The analysis underscores the urgent need for strategic investments in technology, production, and market diversification to remain competitive. Modernizing processing facilities, adopting new technologies, and improving supply chain efficiency are essential steps for the Indian cashew industry to thrive in the global marketplace. By addressing these areas, India can improve its competitiveness, reduce costs, and secure a stronger foothold in the global cashew trade.

FIGURE 5.1: SWOT ANALYSIS



Source: Author's Compilation



BENCHMARKING BEST PRACTICES

BENCHMARKING BEST PRACTICES

6.1 VIETNAM – MECHANISATION AND ECONOMIES OF SCALE

Vietnam's emergence as the world's top cashew exporter underscores the critical role of strategic government support, technological innovation, sustainable cultivation and processing practices, and diversified export markets. The following factors have been key to Vietnam's success:

- Vietnam enjoys a significant advantage over India in raw cashew imports, primarily due to its ability to source large volumes from neighboring countries like Cambodia at zero import tariffs. Its geographic proximity and shared land borders result in low logistics costs, further enhancing its competitiveness.
- **R&D Investments:** Significant investments in research and development have led to the cultivation of high-yield cashew varieties and optimized farming practices. These advancements have increased productivity and boosted profitability. Vietnam is also focusing on enhancing kernel flavour, a key response to the evolving demands of international markets.
- **High-end Automation Technologies and Large-scale Processing:** With an average processing capacity of 200 tonnes per day, which increases by 10% annually, Vietnam has invested heavily in automation. The government supports processors with funding for machinery upgrades and capacity expansion, ensuring efficiency and cost-effectiveness.
- **Adherence to International Standards:** Vietnam has strengthened its global credibility by adhering to international quality standards, such as HACCP certifications, ensuring that its cashews meet rigorous safety and quality requirements.
- **Export-oriented Policies:** The country's economic reforms, notably the Doi Moi policy, marked a significant shift towards a market-oriented economy, driving the success of its agricultural exports, including cashews. The removal of export taxes boosted cashew exports, making them more competitive globally.
- **Lower Freight Costs:** Freight costs from Vietnam to major markets like the USA are notably lower than those from India, giving Vietnam a competitive advantage in export logistics.

Additionally, Vietnam sources raw cashew nuts (RCN) in bulk from neighboring Cambodia, further reducing its import costs and enhancing overall competitiveness in global markets.

- **Market Diversification:** Vietnam has aggressively marketed value-added cashew products, such as roasted nuts and cashew butter. In addition to dominant markets like the US and China, Vietnam has successfully penetrated European and Asian markets, broadening its export base and mitigating market risks.
- **Competitive Financing:** Vietnam offers term loans for cashew manufacturing at interest rates of 4%-5%, with simplified documentation requirements compared to the 9%-10% interest rates in India.

These best practices have allowed Vietnam to dominate global cashew exports and build a sustainable and competitive cashew industry that can respond flexibly to market demands

6.2 PHILIPPINES – DIVERSIFICATION INTO CASHEW APPLE BASED PRODUCTS

The Philippines has successfully capitalized on the underutilized potential of cashew apples, traditionally discarded after nut harvesting, by diversifying into value-added products. The cashew apple, which makes up 90% of the fruit, was not consumed due to its astringency. Farmers lacked awareness of its processing potential, and often discarded after the nuts were removed. Through targeted efforts to promote the economic value of the entire cashew fruit, the Philippines has turned this once-wasted resource into a thriving market segment.

The **Department of Agriculture-Palawan Research and Experiment Station (DA-PRES)** has played a pivotal role in advancing this transformation. As part of its technology commercialization strategies, DA-PRES conducted extensive promotional campaigns and training sessions for farmers to educate them on cashew production and product development. The initiative aimed at increasing farmers' interest in processing and value-adding activities, moving beyond the traditional salted fried split nuts and roasted whole nuts to more innovative products.

Key Developments in Cashew Product Diversification:

- **Cashew Apple Products:** DA-PRES's efforts have led to the creation of a diverse range of products from the cashew apple, including cashew wine, prunes, jams, jellies, polvoron (a type of Filipino sweet), and even soap. By tapping into the economic potential of cashew apple processing, its market value has now grown to over four times the value of the nuts.
- **Increased Income for Farmers:** The focus on processing the cashew apple has boosted farmers' incomes. With the support of the Department of Agriculture-Bureau of Agricultural Research (DA-BAR) under its National Technology Commercialization Program (NTCP), the Philippine government has facilitated research on product development, improving

opportunities for farmers to generate additional revenue from what was once considered waste.

- **Research and Innovation:** The Western Philippines University has pioneered research on the cashew apple, working closely with DA-PRES to improve processing techniques and introduce innovative products. Their collaborative research has led to the development of new products and processing methods that enhance the economic viability of cashew farming in the region.
- **Focus on Packaging and Branding:** Recognizing the importance of market presentation, DA-PRES introduced advanced packaging materials to local producers, processors, and manufacturers. This initiative ensures the products are visually appealing and meets the packaging standards for supermarkets and international markets. Including nutritional facts on labels has been a key part of this strategy, enhancing the marketability of Philippine cashew products.
- **International Market Penetration:** As a result of these efforts, cashew apple-based products from the Philippines are gradually gaining recognition locally and internationally. The government's focus on improving product packaging, labelling, and branding has opened doors for Philippine cashew products to penetrate global markets, including supermarkets and speciality stores around the world.

STRATEGIES TO BOOST INDIA'S CASHEW EXPORTS

India has been a leader in the global cashew market, being the first country to commercialize cashew as a horticultural crop. Despite its historical dominance, India now faces significant challenges in keeping pace with competitors, particularly in terms of yield, price and quality.

As major players like Vietnam and African nations continue to advance, India finds itself at a critical juncture where strategic interventions are urgently needed. Policymakers, researchers, processors, and farmers must come together to revitalize India's cashew industry and strengthen its position in the global market.

7.1 STRENGTHENING DIRECTORATE OF CASHEW AND COCOA DEVELOPMENT (DCCD) INITIATIVES

- **Area Expansion & Replanting Programs:**

DCCD's roadmap to expand cashew cultivation by 1.2 lakh hectares under Mission for Integrated Development of Horticulture (MIDH) and Rashtriya Krishi Vikas Yojana (RKVY) (PIB, 2019) must be aggressively implemented. Apart from rejuvenating old trees, replacing senile plantations with high-yielding grafts will create a long-term, sustainable yield advantage. Special attention should be given to the Konkan belt, where Maharashtra's state government has coordinated massive planting programs of Vengurla varieties (ICAR, 2025).

- **Formation and Support for FPOs/FPCs:**

Encourage the formation and strengthening of Farmer Producer Organizations (FPOs) and Farmer Producer Companies (FPCs) to pool resources, adopt advanced cultivation technologies, ensure access to quality planting materials, and build stronger linkages with processors and exporters. This collective approach will enhance bargaining power, improve productivity, and align farmers with domestic and export market opportunities (Kumar R. , 2024).

- **Quality Planting Materials & Accredited Nurseries:**

Strengthen DCCD-accredited nurseries to scale up production of grafts (84 lakh annually at present) and hybrid seedlings (Kumar R. , 2024). Establishing polyclonal and mother gardens ensures a reliable seed stock pipeline, while maintaining genetic purity. A centralized certification system should be instituted to assure farmers and exporters of quality.

- **Promotion of Advanced Cultivation Technologies:**

High-density planting, pruning, drip irrigation, integrated pest and disease management, and mechanized harvesting must be widely promoted. Demonstration farms and model clusters should be set up to showcase profitability gains, encouraging adoption. Development of mobile apps in local languages can aid in wider dissemination of scientific practices.

- **Capacity Building and Training:**

DCCD conducts training programs to improve cashew cultivation, processing, and post-harvest management (ICAR, 2022). These should be scaled up with greater focus on processing standards and cashew apple utilization for value-added products. Women and youth can be engaged in activities like making candy, syrup, liquor, and vinegar, creating new livelihood opportunities and supporting inclusive growth.

- **Financial Assistance & Subsidy Programs:**

Schemes under MIDH and RKVY providing subsidies for high-density planting, drip irrigation, and integrated pest management must be made more accessible. A simplified approval process and convergence with state programs can accelerate adoption. Cost-sharing models with FPOs, cooperatives, and private players will ensure scalability.

Stakeholder Coordination

- Strong coordination between DCCD, state agriculture departments, FPOs, NGOs, and private processors is required to ensure effective planting and training programs.
- Export houses can be linked with FPO clusters to create farm-to-export value chains, ensuring traceability and quality control from the farmgate to the international buyer.
- Public-private partnerships (PPPs) can play a vital role in funding R&D, promoting technology adoption, and creating export-ready cashew hubs in key production zones.

7.2 SHORT TERM: BRANDING, QUALITY MANAGEMENT, AND MARKETING

- To strengthen India's position in the global cashew market, a robust global brand that emphasizes the unique quality of Indian cashews should be created. For instance, cashews from Kollam could be marketed as a premium product, known for its superior taste, texture, and quality—attributes that can set them apart. One of the most effective ways to achieve this is by leveraging GI for specific cashew-producing regions, such as Vengurla cashews and Goan Cashews. GI-tagged products highlight the distinctiveness of cashews from these regions and establish trust with consumers globally.

- Along with GI tags, India must focus on implementing **quality management systems** that align with international standards. Certifications like GAP, GMP and HACCP can ensure that Indian cashews meet global safety and quality requirements, helping to build consumer confidence and trust. These systems will help Indian producers stay competitive in the face of stringent international quality expectations.

7.2.1 Branding and Promotion through Collaborations

- Partnering with high-end retail outlets across potential markets can help position Indian cashews as an easy-to-get product, appealing to both the Indian diaspora and local consumers. Roasted cashews with Indian flavours can attract new buyers, while participation in trade fairs, buyer-seller meets, and tasting events can enhance visibility.
- Strategic tie-up can be established with major retail chains and similar platforms across the world, where free small samples of cashew are given with other purchases. This initiative will help increase global visibility for Indian cashews and encourage consumers to develop a taste for them. Along with the sample, an attractive, small chit highlighting the health benefits of cashews can be included, creating greater awareness about their nutritional value and promoting healthier eating habits. This combined approach can effectively build brand recognition and expand the international market for Indian cashews.
- Partner with international coffee chains (like Starbucks, Costa Coffee, etc.) to introduce limited-edition cashew-based snacks (like cashew bites, roasted flavoured cashews and other value-added products) as an add-on or combo with coffee purchases. Highlight cashew as a premium, healthy, and energy-boosting snack. This taps into the global coffee culture, positions cashews as a lifestyle product, and exposes it to a broad, health-conscious audience.

7.2.2 Branding and Promotion through Events

- Organize online and in-store "Taste of India" experiences in major global cities where consumers can attend free cashew tasting sessions (either virtually with samples sent beforehand or physically in stores). Pair Indian cashews with wine, cheese, or local favourite foods. During the event, educate consumers about India's rich cashew heritage, nutritional benefits, and different product forms (roasted, spiced, sweetened, cashew butter, etc.), creating emotional engagement and product loyalty.
- Launch an international Cashew Wellness Box — Exporters can introduce a box that can purchase on monthly bases containing different Indian cashew snacks along with curated content on fitness, mindfulness, and healthy recipes. Collaborate with fitness influencers and

health bloggers abroad to promote it. This would position Indian cashews not just as a snack but as an essential part of a modern, healthy lifestyle.

- Innovative marketing strategies, social media campaign can engage food influencers and chefs across the world, generating buzz and consumer interest. Programs like the "Cashew Connoisseur Program" for hotels and fine-dining restaurants can boost brand visibility, while tie-ups with high-end bars to pair cashews with craft cocktails can further drive demand. These efforts will strengthen India's cashew exports through branding, promotions, and strategic collaborations.

7.3 SHORT TERM: NEGOTIATE TARIFF REDUCTIONS AND STRENGTHEN BILATERAL RELATIONS

India has significant opportunities in the gulf region, due to the presence of a large Indian diaspora, consistent demand, and geographical proximity. However, India's cashew exports to Iran and other gulf countries (except UAE) face substantial tariff barriers, limiting market access. Currently, India faces a steep 40% tariff on cashew exports to Iran, which hampers its competitiveness in this market. To enhance exports to Iran and other gulf countries like Saudi Arabia, Qatar, Kuwait, and Oman, where a 5% tariff is imposed. To improve market access, India must pursue strategic trade negotiations and FTAs aimed at lowering these tariff barriers.

- India should work on enhancing trade facilitation measures and exploring free trade agreements (FTAs) with these countries. FTAs could reduce or eliminate tariffs on cashew exports and improve market access. Strengthening bilateral agreements would provide more streamlined logistics, enhance trade infrastructure, and ease the regulatory environment for exporters.
- By adopting a proactive approach to negotiating tariff reductions and enhancing trade relations with the GCC countries, India can solidify its position as a leading exporter in the region and unlock new growth opportunities for the cashew industry.

7.4 SHORT TERM: OTHER STRATEGIES

- A key challenge faced by India's cashew industry is the fragmented and unorganized nature of its processing sector. Unlike Vietnam, which secures a long-term, guaranteed supply of raw cashew nuts through bulk purchases at reasonable prices, Indian cashew processors are predominantly smallholders working in unorganised sector with limited financial capacity. These small-scale units lack the capital required for bulk procurement and are unable to ensure year-round supply. Many processors struggle with loan repayments and face difficulties in accessing additional credit due to a lack of collateral. Although India has adequate warehouse facilities to store bulk purchases, the purchasing power to utilize this infrastructure effectively remains a major bottleneck.

One way to address this challenge is to encourage collaboration among processors through the formation of processing clusters or consortia focused on joint raw cashew procurement. By pooling their resources, small processors can collectively negotiate better prices, ensure consistent supply, and share storage infrastructure more efficiently. Further, promoting long-term supply contracts directly with African suppliers and exploring partnerships with private trading companies can help secure raw material at competitive rates. Building trust and coordination within the processing community will be key to achieving the scale and efficiency needed to compete globally.

- Some exporters suggested that efforts should be made to diversify the sources of raw cashew nuts available to Indian processors by strengthening imports from additional producing countries such as Kenya, Cambodia, Burkina Faso, and others. Expanding sourcing options will help reduce dependency on a few markets and ensure a more stable supply. At the same time, for countries like Ivory Coast, Mozambique, and Benin, where raw nut sale policies are often unstable, government-level interventions and diplomatic engagement are necessary to secure long-term supply for Indian processors.

7.5 MEDIUM TERM: EXPAND PLANTATION AREA AND INCREASE PRODUCTION

- The most critical and impactful intervention for India's cashew sector is to focus on expanding plantation areas and improving the productivity of existing plantations. While RCN production has grown due to the expansion of acreage, much of the country's plantation base consists of seedling-origin trees with low yields. These trees raised from unverified varieties, contribute to inconsistent productivity and hinder the potential for scaling up production. To reverse this trend, India must prioritize the replacement of underperforming trees—those yielding less than 4-5 kg of nuts per year—with high-yielding grafted cashew trees. This requires coordinated efforts to ensure a steady supply of quality planting materials. A concerted push for genetic improvement of the cashew crop through research and development is crucial for increasing yields and enhancing the overall quality of cashews. Additionally, R&D must focus on improving processing efficiency—specifically shelling and reducing aflatoxin contamination in the kernels, essential to meet the stringent standards of international markets.
- India should actively explore innovations in sustainable cashew production, including practices such as organic cultivation, integrated pest management, agroforestry, intercropping, and the use of solar energy in processing facilities to lower carbon emissions. These initiatives can significantly enhance the quality and marketability of Indian cashews, while enabling producers to obtain certifications such as **USDA Organic**, **EU Organic**, and **Fair Trade**. These certifications can help Indian exporters tap into premium markets and command higher prices. Countries like Benin, Burkina Faso, and Côte d'Ivoire (Ivory Coast) in West Africa have

successfully adopted such sustainable practices, with Benin emerging as a particularly strong example of integrating eco-friendly methods into cashew cultivation and processing.

- **Enhance Extension and Advisory Services:** To foster growth in the cashew sector, India must invest in robust extension and advisory services for educating farmers. This should focus on promoting the cultivation of high-yielding cashew varieties and equipping farmers with knowledge on scientific orchard management practices. Through targeted outreach efforts such as awareness campaigns, farmer participatory technology demonstrations, and farmer field schools, India can build a strong foundation of informed and skilled growers. The key to this strategy lies in engaging farmers at the grassroots level. By integrating participatory and interactive approaches into training and support systems, the adoption of best practices can be accelerated. These services can help improve both the quantity and quality of the raw cashew nuts produced, strengthening the value chain and supporting the broader cashew industry.

7.6 MEDIUM TERM: PRODUCT DIVERSIFICATION

- While the classic salted, dried cashew nut remains a beloved snack, there is an increasing demand for more innovative and diverse flavour profiles. Brands are embracing a wave of creativity by experimenting with various seasonings and coatings to cater to evolving consumer preferences. From savoury options like smoky BBQ and spicy chilli lime to sweet varieties such as honey and cinnamon, dried cashews are being reimaged with exciting flavours. These unique variations enhance the snacking experience and appeal to adventurous palates, broadening the appeal of cashews beyond traditional snack categories and providing consumers with a dynamic alternative to regular offerings.
- To remain competitive in the global market, India must also focus on **diversifying its cashew products**. Moving beyond just roasted or flavoured cashews, India should look to **value-added products** such as cashew butter, cashew-based snacks, and even plant-based cashew milk. These products align with the growing global demand for healthy, plant-based food options and cater to changing consumer preferences. By tapping into this market, India can position itself as a leader in innovative, sustainable snacking while commanding higher prices. Value-added products also provide an opportunity to expand India's reach, particularly in health-conscious, developed markets.
- Another key growth opportunity lies in **cashew apple processing**, a largely underutilized part of the cashew fruit. Traditionally, cashew apples are discarded or used sparingly in certain regions, like Goa, where they are processed into feni, an alcoholic beverage. However, the potential of cashew apples is vast. Research and development efforts, similar to those in the Philippines, could unlock new avenues for **cashew apple-based products** such as jams, juices, prunes, health supplements, and even unique beverages. These products would reduce waste and create new revenue streams, offering employment opportunities and increasing

the economic value of cashew cultivation. By investing in **innovative processing technologies** for both cashew nuts and apples, India can maximize the utility of the entire cashew fruit, turning what was once a by-product into a valuable commodity.

- Product diversification can also be done using processing waste generated during cashew operations, such as scrapings and polishing powder, which currently go to waste. With proper processing, these byproducts can be converted into value-added products like cashew oil, cashew paste, cashew butter, and protein powder, opening new revenue streams for processors. Additionally, earlier, lower grades such as DW (Dessert Wholes) and NW (Not Wholes) and SPS (Second Processed Scrap) were successfully exported to less developed countries. A comprehensive approach focusing on full product utilization and tapping into secondary markets can significantly enhance the profitability and sustainability of the Indian cashew industry.

7.7 MEDIUM TERM: UPGRADE PROCESSING INFRASTRUCTURE

- India's cashew exports play a crucial role in the economy, with a significant portion of processing occurring in states like Kerala, Tamil Nadu, Karnataka, and Andhra Pradesh. However, many processing facilities in these regions still rely on outdated machinery and inefficient methods, which hampers productivity and raises operational costs. As a result, India is losing its long-established competitive edge to countries like Vietnam. To maintain its position in the global market, India must prioritize the modernization of its processing infrastructure. A notable example of modernized cashew processing infrastructure that India can look to for inspiration is **Vietnam's Binh Phuoc Cashew Processing Cluster** located in Binh Phuoc Province. This accounts for nearly 50% of Vietnam's cashew output and is widely recognized as a global benchmark for efficiency, automation, and scale.
- Further, Vietnam has positioned itself as a global leader in producing high-quality cashew processing machinery, which India currently imports. Moreover, Indian cashew factories typically have an average processing capacity of 30-35 tonnes per day, compared to Vietnam's 70-80 tonnes per day (KII, 2025), illustrating a significant efficiency gap. To bridge this gap, India must invest in the development of indigenous machinery to reduce dependence on imports, lower costs, and ensure the sustainable growth of the processing industry.
- Under Notification S.O. 3515(E) dated 29 July 2022, "cashew nuts and its products" were formally included in the First Schedule of the APEDA Act, 1985. Building on this, APEDA, on 23 August 2024, extended the Financial Assistance Scheme (FAS 2021-26) specifically to the cashew sector under its Infrastructure Development component. The core objective of this initiative is to modernize processing infrastructure and machinery across the cashew industry to enhance both processing capacity and the quality standards of final products. The scheme provides financial support for the adoption of advanced technologies such as fully automated

nut cutting and shelling machines, modern sorting and grading lines, and automated colour sorting systems. These interventions aim to replace outdated manual methods, improve operational efficiency, and raise export competitiveness. This is a welcome and strategic step that should be actively pursued, as it encourages processors to invest in modern infrastructure while enhancing product quality, scale of operations, and India's overall position in global cashew exports.

7.8 MEDIUM TERM: DEVELOPMENT OF EXPORT HUBS IN KEY STATES

- **Kerala (Kollam), Karnataka (Mangalore), Tamil Nadu (Kanyakumari and Pudukkottai), and Andhra Pradesh (Visakhapatnam and Rajahmundry)** are strategic locations with the necessary groundwork to become key export hubs. By improving processing facilities and related infrastructure, streamlining port operations, storage, and transportation networks, these regions can handle larger export volumes, ultimately positioning India as a stronger global player.
- Apart from infrastructure upgrades, these states require assistance in improving yield and enhancing price competitiveness. Efforts should be directed toward supporting local farmers with access to high-yielding cashew varieties, better agricultural practices, and fair pricing mechanisms.

For India to remain competitive in the global cashew industry, it must focus on strategic investments in technology, modernization of processing facilities, and improved supply chain efficiency. Targeting emerging markets, developing export hubs, negotiating tariff reductions, and enhancing product quality through branding and GI-tagging will strengthen India's position.

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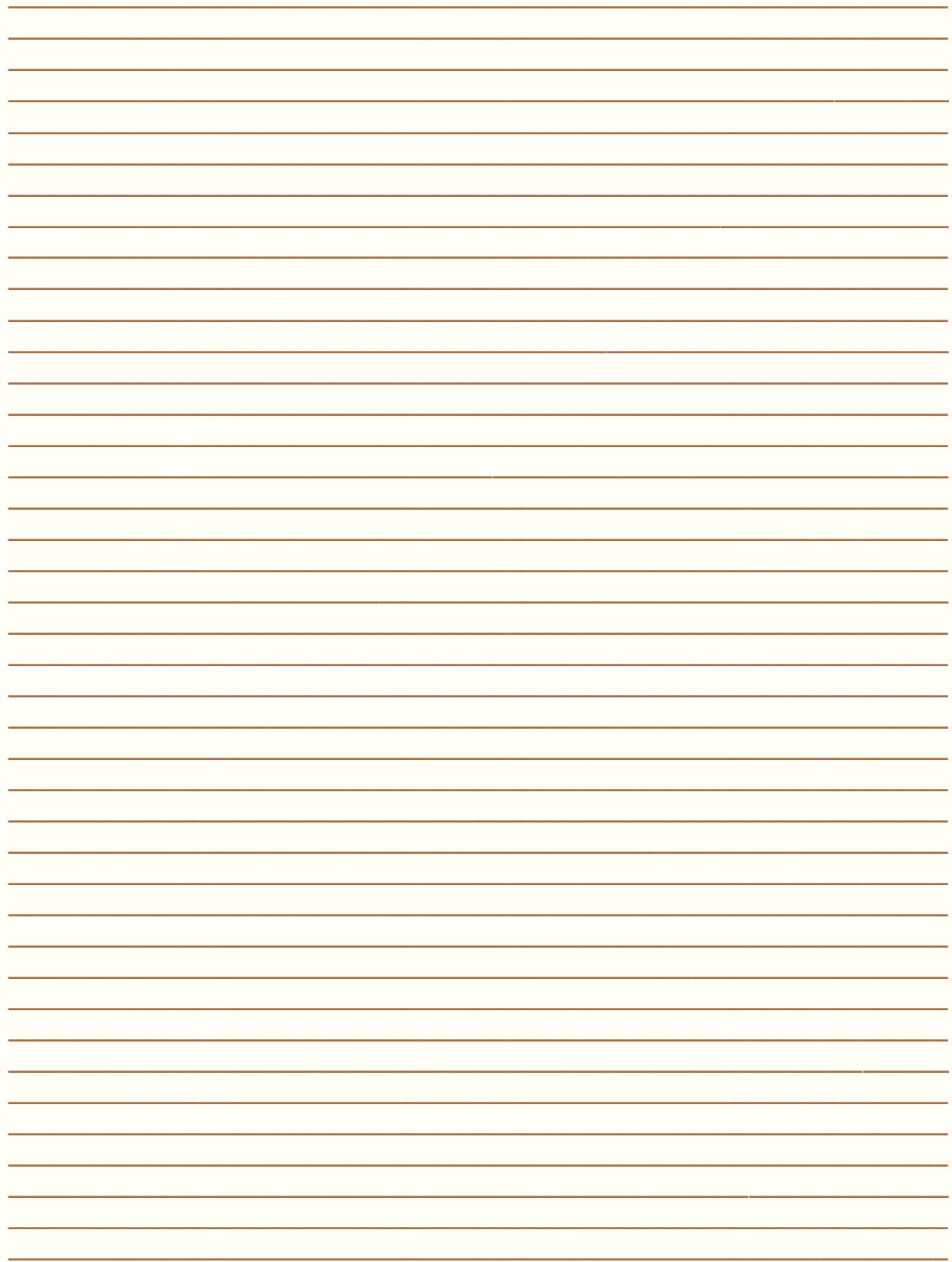
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