



Cashew Culture in Sri Lanka

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Abstract

Sri Lanka's cashew industry is deeply intertwined with its economic and cultural fabric. The increasing global demand for cashews has significantly benefited "Ceylon cashew," which began commercialization in Sri Lanka in the late 20th century. This cultural significance, rooted in historical ties, regional cultivation practices, diverse culinary applications, and overall cultural importance, further bolsters their economic value. Policy changes and trade liberalization in the 1970s further incentivized the export of minor crops, including cashews. Identifying key milestones is crucial for understanding the sector's challenges and opportunities. This research employs a systematic literature review to explore cashew cultivation, its economic significance, and the cultural dimensions of Sri Lankan cashews, including their culinary and social uses. The analysis examines the cashew sector's future direction, addressing identified challenges and opportunities. The study's recommendations address the significant challenges posed by climate change and environmental impact, which can lead to reduced productivity and market volatility. Improved pest control, management of cashew imports, and enhanced extension services are crucial for the sector's sustainable growth and development, alongside value addition and product diversification. Furthermore, Sri Lanka's rich cashew culture presents valuable opportunities, such as promoting the health benefits of cashew nuts and developing cashew-related tourism, with the potential to improve socioeconomic conditions in the country.

Key words: Cashew culture, Sri Lankan cuisine, Economic significance, Cashew tourism, Cashew and heritage

1. Introduction

The cashew in Sri Lanka holds a unique and often understated cultural significance, woven into the fabric of the island nation's heritage. From the sun-drenched orchards dotting the landscape to the aromatic spices of traditional cuisine and the communal joy of festive gatherings, the "Ceylon cashew" transcends its identity as a mere commodity. This study delves into the rich tapestry of this relationship, exploring how the cashew's journey from introduction to widespread cultivation has shaped and been shaped by Sri Lankan culture.

Highly valued cashew nut in tropical island of Sri Lanka, where located in South Asia has earned a global reputation for the captivating and superior taste of its cashews,

often considered to surpass those from other growing regions worldwide. Botanically, the cashew "nut" is a true fruit that dries and does not split open (Orwa, 2009), exhibiting typical dry color ranges from bottle green to greyish brown (Kluczkowski, 2016). The cashew apple is a pseudo-fruit, specifically a drupe. Drupes are characterized by a fleshy outer layer surrounding a shell that encloses a single seed. In the cashew, the "nut" we consume is this seed, distinguished by its curved shape and rich nutrient content. The unique shape of cashew nut couples with distinct and refined taste has fueled the widespread popularity and established as a highly sought-after commodity.

The cashew kernel and the shell liquid each constitute 20%–25% of the nut, is highly nutritious with cholesterol-free while boasts an exceptional combination of fats (approximately 47%, with 82% being beneficial unsaturated fatty acids), proteins, carbohydrates, minerals, and vitamins (Jayeola, 2018). Globally, cashew kernels utilizes for array of products, including desserts, snacks, cashew kernel oil, vegetable oil, cashew kernel milk, yogurt, fortified cookies, crackers, and bread (Jayeola, 2018).

Cashew consumption has experienced significant growth in recent years, driven by increasing demand and its recognized global importance. The surge in consumption has placed considerable pressure on market stakeholders to meet global demand. The cashew market reached a value of \$8.05 billion by end of 2023 and is projected to reach \$10.7 billion by 2028, exhibiting a Compound Annual Growth Rate (CAGR) of 5.9%. Currently, North America holds the largest cashew market share, with an estimated CAGR of 3.2% between 2022 and 2031. The Asia Pacific region closely follows, leading in projected growth with CAGR of 3.3%. Europe holds the third-largest market share, with cashew nut consumption increasing by 5% annually. These growth forecasts will significantly impact supply chain practices, including logistics, storage, and transportation. Crucially, investments in farming infrastructure and increased awareness of the health benefits of nut consumption are vital for future of the cashew industry.

The cashew nut, now recognized as "Ceylon cashew," was introduced to Sri Lanka by the Portuguese in 16th century (Surendra, 1997). Native to Brazil, the cashew crop was first introduced to India for commercial cultivation before making its way to Sri Lanka, according to historical records (Asna, 2024; Jayasekara, 2003). However, cashew cultivation in Sri Lanka only gained significant traction and widespread adoption in 20th century. Following the establishment of the Sri Lanka Cashew Corporation (SLCC) in 1973, with its vision "to become the leading and best quality cashew producer and exporter in the world", this public enterprise provided substantial support to the sector, facilitating commercial activities (Annual report SLCC, 2010).

During the period from 1965 to 1970, Sri Lanka implemented a free trade policy, leading to policy-based initiatives that promoted agricultural exports and encouraged non-traditional exports (Thanthirigama, 2022). These policies aimed to improve and balance the industrial and agricultural sectors in country after 1977. The subsequent trade liberalization further encouraged crop exports, particularly minor export crops within the plantation industry, creating opportunities for

cashew. Despite these opportunities, cashew cultivation in Sri Lanka during this period remained largely confined to home gardens, with limited number of large-scale plantations managed by the state sector, contributing moderately to country's gross domestic product. Large-scale private sector involvement in cashew cultivation was limited in the early stages. However, the current state of the cashew industry in Sri Lanka is significantly more developed than in its early history.

1.1. Research Problem and Gap

The paradoxical "tragedy" of Sri Lanka's cashew industry is found in the complex interplay between its deep-rooted cultural significance and the country's agricultural hereditary traditions. Despite its prominence, these intangible cultural heritages remain relatively underexplored within scholarly discourse. Moreover, the existing literature predominantly focuses on production metrics, trade logistics, and market dynamics, with significantly less emphasis on historical backgrounds, traditional rituals, or the food traditions and culinary interlinks that uniquely define the "Ceylon cashew" experience within Sri Lanka.

The distinctive charm of intangible cashew culture in Sri Lanka is yet to be fully uncovered through focused documentation, which is essential to leverage high-value opportunities in the global "delicacy" market. To address these problems, this study seeks to provide a comprehensive examination of the cultural facets of cashew cultivation, hereditary rituals, and patterns of consumption. By bridging this research gap, the study offers a more holistic understanding of the cashew sector's past, present, and potential future.

1.2. The Research Objectives

As the study aims to explore the cashew culture in Sri Lanka—including key milestones in the Sri Lankan cashew industry and specifically focusing on the cultural significance of cashews—the primary objective is to examine Sri Lankan cashew culture and its multi-faceted interplays.

The specific objectives are declared as follows:

- (i) To investigate the role of cashew in Sri Lankan culture, encompassing the hereditary interplays and heritage associated with the crop.
- (ii) To analyse the challenges and opportunities that the cashew sector faces while identifying strategic key areas for future development.

2. Methodology and Materials

The research methodology employed for this study is a **systematic literature review**, designed to ensure a rigorous and comprehensive synthesis of existing knowledge. The scope of the review encompassed the historical trajectory of the crop, beginning with its colonial introduction to the island, followed by an identification of key "Ceylon cashew" milestones and the evolution of cashew-related rituals within the country. Furthermore, the review examined the central role of the cashew in Sri Lankan food culture and traditional cuisines, tracing how these various

threads weave together from their historical roots to contemporary societal practices.

Moreover, the study adopts a holistic perspective to develop an understanding of the potential future directions for the sector, with a focus on specialized commercial and social aspects. These aspects include:

Commercial Applications: The review explores emerging uses, specifically focusing on the integration of cashew cultivation into the tourism sector.

Environmental Impacts: The study evaluates the ecological dimensions of cashew production and its sustainability.

Health Benefits: The nutritional and medicinal value of cashews was reviewed to identify their role in modern wellness.

Understanding the multi-faceted cashew culture in Sri Lanka is deemed crucial for several reasons as the industry looks toward the near future:

Policy and Practice: It can inform the development of more sustainable and culturally sensitive agricultural and tourism practices.

Strategic Branding: Recognizing and documenting the inherent cultural value can significantly aid in branding and promoting "Ceylon cashew" on the global stage, effectively leveraging its unique heritage as a competitive advantage.

Academic Contribution: This research contributes to a broader appreciation of the intricate connections between agricultural commodities and cultural identity, offering scholarly insights that may be applicable to other regions and crops with significant local cultural relevance.

2.1 The Review Method

This research employed a comprehensive synthesis of both peer-reviewed and grey literature to explore the historical trajectory, ritualistic utility, and cultural traditions surrounding cashew in Sri Lanka. The methodology focused on historical narratives, ethnographic studies, and cultural anthropology to understand the evolution of the sector. Furthermore, these findings were intersected with broader food culture and agrarian traditions to provide a nuanced perspective. The review also evaluated policy and institutional roles, particularly as they relate to customs linked to hospitality and tourism.

The analytical framework combined a narrative synthesis with a thematic analysis to map key themes across the reviewed areas. This process involved diffusing and symbolizing cashew-related culture, heritage, and rituals, specifically examining how regional identity enriches contemporary commercialization prospects.

To ensure academic rigor, multidisciplinary databases and repositories were utilized, including **JSTOR**, **Google Scholar**, **Web of Science**, and specialized **Sociological Abstracts**. These were amalgamated with FAO-based document

repositories and institutional publications from the **Sri Lanka Cashew Corporation** and other research-based data. Additionally, the review intersected various forms of grey literature, such as policy reports, newspapers, travelogues, and economic data regarding supply chain and value chain dynamics.

The inclusion criteria for the reviewed information were based on a specific timeframe extending from the **16th century to the present day**. The study utilized bilingual documentation, incorporating sources in both **Sinhala and English** to capture local nuances. Rigorous exclusion criteria were adopted to maintain focus and quality; studies involving non-Sri Lankan contexts were excluded unless they were directly comparative and culturally informative. Furthermore, low-credibility sources, such as promotional content lacking empirical evidence, were systematically omitted.

Cashew in Sri Lanka is more than a crop, and it carries embedded importance in culture and play roles in multifaceted areas in the country.

3. Results

3.1. Cashew Cultivation role of Sri Lanka

The cashew industry in Sri Lanka has developed significantly, evolving from a cottage industry to more structured production system (Kusala, 2002). The cashew production process in Sri Lanka encompasses cultivation, harvesting, storage, processing, distribution, and sales. As a perennial crop, the cashew tree typically starts bearing fruit from its third year, with harvestable yield achievable from the sixth to eighth year onwards. Cashew is predominantly cultivated in home gardens or smallholdings, accounting for 79% of the cultivation (Integrated rapid development plan: 2024-2026 - NP, 2024). Home gardens, defined as landholdings of less than 40 perches primarily producing for household consumption, are often measured by the number of trees, bushes, or creepers. Nationwide, the cashew sector covers 228,483 hectares (Census of Statistics-Sri Lanka, 2002).

Cashew-growing communities in Sri Lanka comprise various categories: Private estates (26%), Subsidy schemes (33%), Cooperative owned (5%), Home Gardens (3%), and Others (Government programs/joint projects-33%) as depict in figure 1(SLCC Annual Report, 2020).

The global cashew economy is experiencing rapid growth, and Sri Lanka faces competition from major cashew exporters countries in Africa, Brazil, Vietnam, and neighbouring India on fact highlighted by “cashew colony of Sri Lanka”(2017). Sri Lankan cashew enjoys a strong market presence both domestically and internationally. According to Freshela Exporters (n.d.), the country exported 153 tons of cashew nuts in 2022, a significant increase from the 66 tons exported in 2021. Over the past decade, Sri Lankan cashew exports have shown consistent growth, with the most substantial increase in export volume occurring between 2021 and 2022, exceeding 100%. The peak export volume was recorded in 2013 at 251 tons as depict in figure 2 (Freshela Exporters, n.d.).

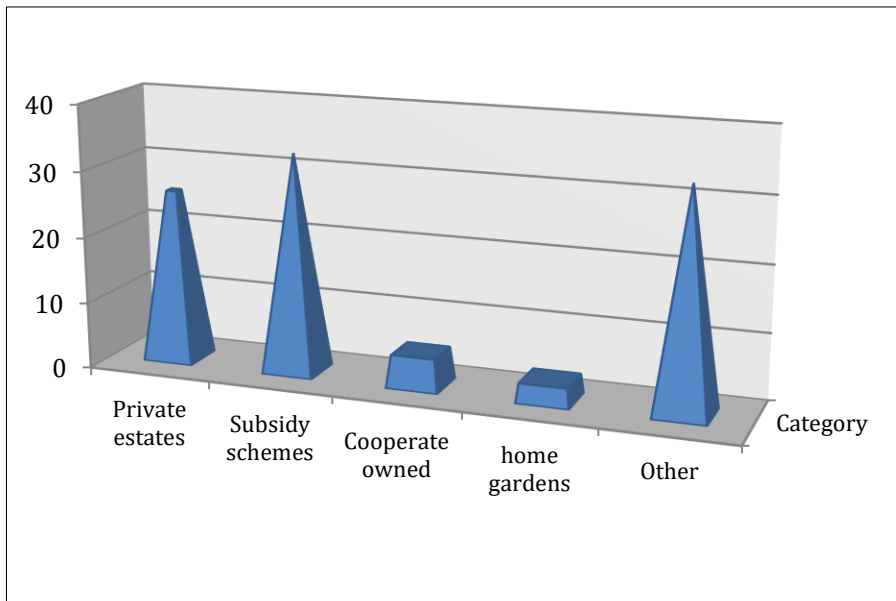


Figure 1. Cashew sector composition in Sri Lanka (Sri Lanka Cashew Corporation Annual Report, 2020).

In Sri Lanka, cashew is considered as low-input crop, capable of surviving in drought conditions with minimal resources (Jayasekara, 2003). However, optimal cultural practices substantially increase cashew yields. Despite various subsidies provided to the Sri Lankan cashew industry, farmers often do not consistently adhere to recommended practices, leading to underutilization of crop's potential (Jayasekara, 2003).

Practices on appropriate plant density, high plant survival rates, proper crop spacing, irrigation, weeding, pest management, soil conservation, and fertilizer application significantly enhance cashew yields. Approximately 65% of cashew plantations have only 40 plants per acre and a mere 3% achieved the recommended 80 plants per acre (Jayasekara, 2003). Furthermore, in cashew industry, roughly 50% of growers are not on recommended spacing arrangements, only 47% practice regular weeding, 48% implement the pest management strategies, 58% use fertilizers, and 55% utilize irrigation as depicted more comprehensive facts in figure 3 (Jayasekara, 2003).

As data highlighted shortcomings in Sri Lanka's cashew sector, the improvement of sector performance needs widespread adoption of recommended agricultural practices with access to high-quality planting material and farmer's education on modern technologies to maximize yields. Despite having nearly 30,000 hectares of cashew land, Sri Lanka's raw cashew production is insufficient to meet the demands of its processing industry due to low average harvests. The average yield of 350 kg/ha in Sri Lanka is significantly lower compared to other cashew-producing countries (SLCC Annual Report and Accounts, 2010).

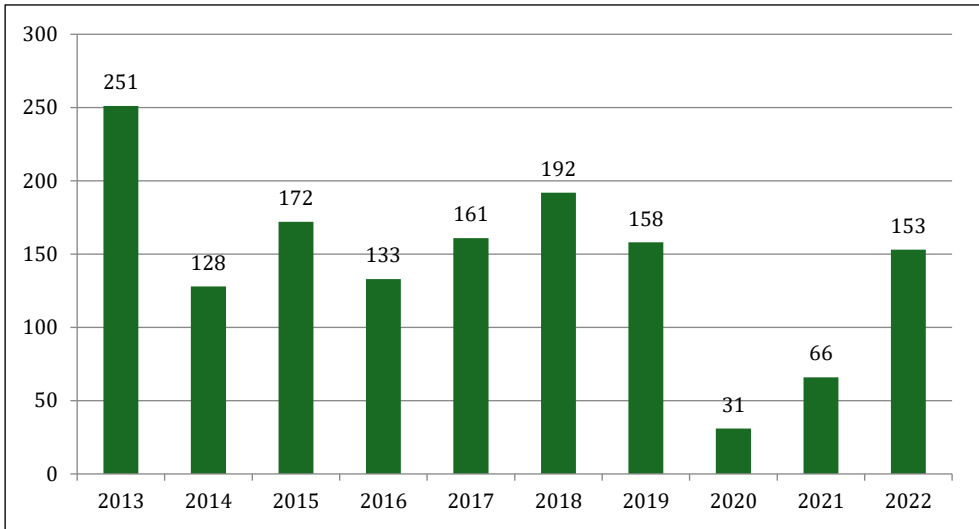


Figure 2. The export volume (tons) of cashew nut from Sri Lanka (Freshela exporters, n.d)

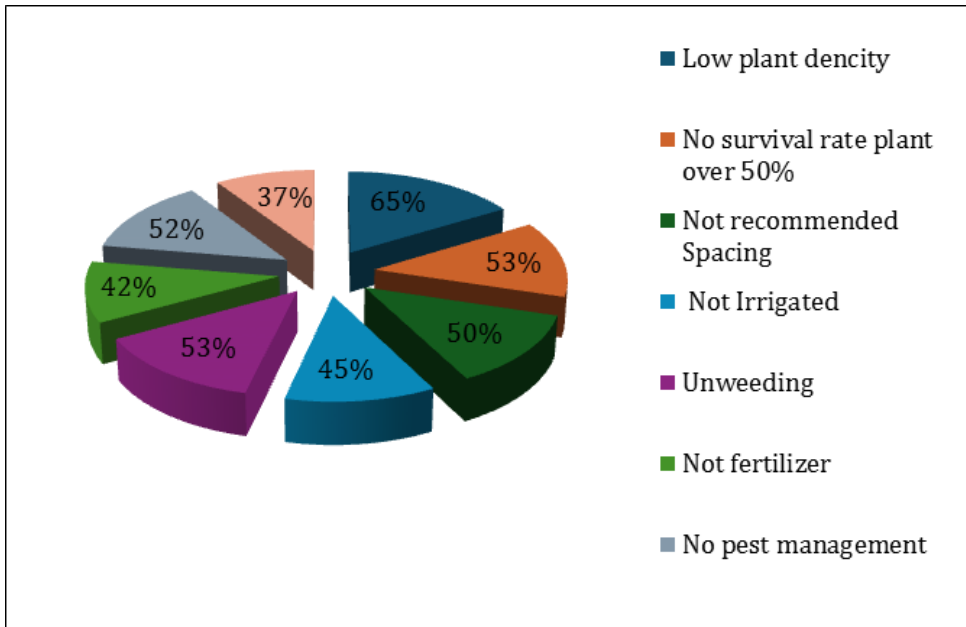


Figure 3. Cashew cultivation practices in Sri Lanka (Jayasekara et al., 2003).

3.2 The Milestones of Sri Lankan Cashew Sector

The cashew tree introduced by Portuguese in 16th century to Sri Lanka, was initially utilized for soil erosion control, highlighting its ecological benefits (Jayasekara, 2003). However, the significant economic potential of cashew crop was recognized

later in the country's development. The Sri Lankan cashew industry experienced substantial growth from late 19th to 20th century, significantly driven by Sri Lanka Cashew Corporation (SLCC) initiatives. In the 1970s, the SLCC established state-owned commercial plantations, primarily in North, East, and North-Western provinces, alongside promoting research activities within the cashew sector (Jayasekara, 2003). The introduction of cashew subsidies in 1978, which included extension services for small growers, provision of planting materials, and cash payments for labour, fostered the favourable environment for expanding cashew production (Jayasekara, 2003). Further subsidy improvements and plant certification commencements during 97-99 boosted the sector production, marked with subsidy provision for cashew home gardens on approximate 125,000 cashew seedlings distribution (Jayasekara, 2003).

The profile of cashew cultivation in Sri Lanka is uneven across the island, with specific regional variations demonstrating higher concentrations due to favourable climatic conditions and soil types. The North-Western province, in particular, stands out as a major cashew-producing region, followed by the Eastern, Northern and North Central provinces (Surendra, 1997). Traditionally, Sri Lanka has cultivated a range of indigenous cashew varieties, each with its own unique characteristics in terms of nut size, shape, and taste. However, the introduction of improved, high-yielding varieties through research initiatives has gradually shifted the varietal composition in commercial plantations, aiming for enhanced productivity and kernel quality (Silva, 2015).

Recent statistics indicates fluctuating trend in cashew production in Sri Lanka, influenced by factors of weather patterns, pest/disease outbreaks, and labour availability (SLCC Annual Report, 2010). While the sector has potential for significant growth, challenges of aging tree stock in some areas, inconsistent adoption of modern agricultural practices, and competition from imported cashews pose constraints on maximizing domestic production. Addressing these challenges through targeted interventions, including replanting programs, farmer training, and improved pest management strategies, is crucial for sustain and enhance Sri Lanka's cashew output (Perera, 2022).

Increasingly growing emphasis on promoting sustainable cashew cultivation practices in Sri Lanka encourages the integrated pest management to reduce reliance on chemical pesticides, promoting water-efficient irrigation techniques, and exploring agroforestry systems that integrate cashew cultivation with other crops to enhance biodiversity and soil health (Ranasinghe, 2021). Adoption of sustainable methods not only contributes to environmental conservation but also enhance the long-term productivity and resilience of cashew farms, ensuring the sector's viability for future generations.

In summary, the journey of cashew cultivation and production in Sri Lanka reflects significant evolution, marked by government support, regional specialization, and growing awareness of the need for sustainable practices. While the sector has achieved considerable progress, addressing existing challenges and embracing innovation will be crucial to unlock its full potential and ensure its continued

contribution to Sri Lankan economy and its cultural landscape. The significant key milestones are depicted in table 1.

Table 1. Ceylon cashew milestones

1970	<ul style="list-style-type: none"> • Government policy on inward looking development strategies
1973	<ul style="list-style-type: none"> • Establish Sri Lanka Cashew Cooperation
1977	<ul style="list-style-type: none"> • Trade liberalization • Minor crop exportation
1978	<ul style="list-style-type: none"> • Cashew subsidy as extension services • Planting materials • Cash payment for labor
1997	<ul style="list-style-type: none"> • Plant certification improvements • Subsidy revisions • Cashew research program
1999	<ul style="list-style-type: none"> • Promotion of cashew home gardens • Cashew seedling distribution
2001	<ul style="list-style-type: none"> • Subsidy revisions
2003	<ul style="list-style-type: none"> • Production of grafted planting materials from high yielding mother plants by SLCC
Future Need	<ul style="list-style-type: none"> • Cashew sector development under planned approached and Strategy

(Authors' creation from Jayasekara, 2003)

3.3 Regional Interplays in Cashew Culture

The cashew tree, locally termed "kaju gaha," is cultivated in many parts of Sri Lanka, with significant concentration in dry zone, particularly in arid regions, due to the plant's notable drought tolerance and its status as marketable commodity with export demand (Jayasekara, 2003). The cashew thrives in Sri Lankan soils, primarily grows on red-yellow Latasols and coastal sandy soils in the intermediate and dry zones. To lesser extent, it is also found on reddish-brown earth soils and red-yellow podzolic soils. Moreover, forest soil is considered the most fertile for cashew cultivation (Fernandopulle, 2003).

In Sri Lanka, cashew has become deeply integrated into culture, as evidenced by its presence in traditional songs, poems, proverbs, idioms, and culinary arts. The Portuguese, who introduced the cashew, called it "Cadju," a term adopted by the Sinhalese as "Kaju" ("cashew the nut", 2022). Cashews are closely linked to livelihoods of local communities. Culturally, cashew trees symbolize abundance and resilience. Their presence in homesteads across the island reflects their significance not only as crop but also as an integral part of Sri Lankan life. The blooming of cashew trees is often associated with seasonal transitions, and their harvest marks periods of communal activity, strengthening social bonds and collective effort. Before the introduction of marbles, local children played a popular game called "Wala kaju" using unshelled cashew nuts. The Sinhalese phrase "like eating cashew" is used metaphorically to describe an easy task. The cashew tree, an evergreen reaching heights of up to 14 meters, has multi-branched structure rather than a straight trunk,

with large, spirally arranged, elliptical leaves. These examples underscore the cultural relevance of the cashew crop in Sri Lanka.

Cashew varieties exhibit regional differences. For instance, the article “cashew the nut” (2022) noted that Puttalam is known for its larger nuts, while Batticaloa's produce is comparatively smaller. Sri Lankan cashews are also recognized for their unique taste. Some locals suggest a distinct difference in taste between local cashews and those from India. Despite the fact that neighbouring India is recording a comparatively very high yield, even Indians love the milky creamy taste of Sri Lankan variety (“cashew the nut”, 2022). These regional cultivation practices and environmental factors contribute to the distinctive taste that characterizes Sri Lankan cashews. Regional variations in cashew cultivation may contribute to crop diversification. Cashews grown in the provinces of Eastern, North-Western, Northern and Southern all are favoured for their taste and yet quality of taste is high in Sri Lankan cashew making high demand both in locally and internationally (“cashew the nut”, 2022). Sri Lankan cashew producers offer both traditional “Kotta kaju,” representing the authentic taste of Sri Lankan cashews, and various flavoured processed cashews that cater to international demands, including those in Europe.

The regional cultivation of cashews plays significant role in livelihoods of numerous communities across Sri Lanka, particularly in aforementioned dry and intermediate zones. For many families, cashew farming represents a primary source of income, contributing to local economies through employment in cultivation, harvesting, and processing. Seasonal labour associated with cashew harvesting also provides crucial economic opportunities for agricultural workers in these regions. Government initiatives and local cooperatives often support cashew farmers through training programs, access to credit, and market linkages, further emphasizing the economic importance of regional cashew cultivation (SLCC Annual report, 2020).

Beyond its culinary uses and economic contributions, the cashew holds other cultural nuances in Sri Lanka. For instance, the wood from the cashew tree, while not as commercially valuable as some other hardwoods, is sometimes used in local carpentry for making simple furniture or agricultural implements. However cashew timber has identified as timber species/items that do not need special permit to transport island wide under law existing in the country (Ruwanpathirana, 2022). Furthermore, in some rural communities, the cashew tree might be associated with folklore or traditional beliefs, although these aspects may be less widely documented. The communal harvesting periods often involve social interactions and celebrations, reinforcing community bonds that extend beyond the purely economic aspects of cashew cultivation (Wijeratne, 2018).

3.4. Cashew in Sri Lankan Cuisine and Culture

Global cashew consumption has increased, with diverse cultures incorporating it into their cuisines in various ways (Torq commodity, 2023). In Sri Lanka, cashew nuts are utilized ranging from value-added snacks (roasted, spiced, flavoured, and fried kernels) to raw and cooked preparations. Baby cashews, prized for their authentic creamy taste, hold a special place in Sri Lankan cuisine. These diverse uses underscore the country's rich culinary traditions.

Cashew finds applications in various culinary preparations. Raw cashew nuts are key ingredient in "Kaju curry," a Sri Lankan delicacy often served with rice. Cashews are also commonly used as a garnish during local festive occasions. Cashew is prominent in Sri Lankan wedding menus, appearing in both main dishes and beverages. Cashews enhance the flavours of festive and traditional desserts of watalappam and coconut cake as elaborated "cashew colony of Sri Lanka"(2017). The Sinhalese, known for their appreciation of the nutritional and medicinal value of plants and fruits, readily incorporated cashew nuts into their traditional cuisine, especially for the Sinhala and Tamil New Year festival in April. Cashew nuts have become a mandatory ingredient in "Hathmaluwa," a traditional curry prepared with seven ingredients to celebrate the new year.

Cashew-based cooking enjoys widespread popularity in Sri Lanka, and the consumption of baby cashews is a distinctive cultural practice. The small, immature cashews, known as "baby" cashews, offer a delicate flavour and exceptional nutritional value. Baby cashews are more than just a snack; they are versatile ingredient that contributes healthier diet and elevate culinary creations. Their creamy, mild texture and nutty flavour make them suitable for both sweet and savoury dishes, including curries, salads, and desserts. In Sri Lankan culture, baby cashews are often prepared as a creamy curry to fully appreciate their distinct flavour.

The cultural significance of cashew in Sri Lanka contributes to continued production of cashews grown within the country. The nut's unique taste and the crop's yield have solidified the long-term viability of cashew industry. Sri Lankan cashews are deeply ingrained in country's culture, playing a prominent role in festivals and ceremonies (Rediscover Sri Lanka,2024). Cashews are considered premium item at every event, symbolizing prosperity. The sweet, creamy taste of cashews evokes joy and is treasured with each bite, making moments at various functions memorable.

The cashew season in Sri Lanka typically begins in March and extends through April, with harvest being most abundant in April. During this period, nuts are collected from under the trees (Personal Observation, April 2024). The cashew processing primarily occurs in Western Province, producing value-added cashew products for export. Kajugama, a village in the Gampaha District approximately 40 km from Colombo, is synonymous with cashew sales. The village's name, derived from the Sinhala words for "cashew nut village," has become an integral part of Sri Lanka's cultural tradition related to the crop. Its history began in 1934 with the entrepreneurial spirit of "Johnna Hamme," who started roasting cashews by the roadside using coconut leaves as fuel before selling them in Colombo. This roadside activity attracted passing motorists, who purchased the roasted cashews, marking the beginning of Kajugama. The village became known for its "cashew girls," whose innovative sales tactics brought significant change to its operations and earned recognition for sellers and their mothers, continuing a tradition for over 70 years. This strong connection between the cashew crop and Sri Lankan culture underscores its significance. Information about Kajugama's history should ideally be corroborated by a reliable source if possible.

Before the commercialization of cashew, farming families harvested the nuts from their home gardens primarily for family consumption, sharing any excess with relatives and friends. Selling cashews was not widespread practice at olden time. The preparation of cashew curry at home was a cherished moment for families. Raw cashew curry is Sri Lankan tradition that enhances social gatherings. The rich Sri Lankan raw cashew nut curry, with its blend of local spices and creamy texture, is a culinary delight.

With commercialization, cashew consumption further increased. It is estimated that Sri Lanka's annual cashew requirement is around 25,000 tons. Currently, cashews have become somewhat luxurious item due to less production yields in country and price fluctuations in industry. It is estimated that only 12,500 tonnes of cashew nuts be produced locally, creating challenges in cashew industry during 2024. Given the country's annual requirement of approximately 25,000 metric tons of cashew nuts in shell, the 2024 Cabinet approved the import of 15,000 tons of cashews to address the shortage and support the local industry, where the lower harvest has created a significant gap between supply and demand (Lanka News Web, 2024).

3.5 Cashew Culture related special aspects

Cashew possesses special characteristics that bridge its economic value with cultural significance. These cultural aspects help boost the country's socio-economic development, particularly through the nutritional benefits of cashews for human health and the potential for cashew-related tourism.

Botanically classified as a seed, the cashew nut provides a substantial amount of energy. Nandi (1998) identified the cashew nut as an important source of "invisible fat" in the diet. The raw nut contains an acrid compound that is a powerful vesicant and abrasive to the skin. The cashew kernel's composition includes approximately 21% protein, 46% fat, and 25% carbohydrates, contributing to a nutritious diet. Owing to its high protein content, cashew can be used alongside cereals, pulses, and vegetables to enhance the dietary profile. Moreover, the high oil content in cashew contributes significantly to the energy density of the diet.

A study published in the British Journal of Nutrition Kelly (2006) suggests that individuals who consume nuts more than four times per week have 37% lower risk of coronary heart disease compared to those who rarely or never consume nuts. Ros (2015) defined "a nut" as a dry fruit with one seed in which the ovary wall becomes hard at maturity, noting that common edible tree nuts include the cashew. Ros (2015) also stated that regular nut consumption is not associated with undue weight gain, which may be considered important for healthy human living. Meanwhile, cashew may also contribute to joint health. According to Medical News Today (n.d.), an animal study found that rats receiving cashew daily had lower rates of inflammation and pain-like behaviour. Fusco (2020) demonstrated that oral consumption of cashew nuts counteracts the inflammatory and oxidative processes involved in osteoarthritis. This may present a valuable option in managing osteoarthritis, although human trials are needed to confirm these effects in people with joint conditions.

During cashew processing, raw or unprocessed cashews can cause skin irritation. Yoo (2019) noted that presence of high levels of 'urushiol' in Anacardiaceae family; the same family of cashew plant belongs, can cause hypersensitivity reactions. Individuals who come into direct contact with urushiol-containing plants may report skin hypersensitivity and systemic reactions of anaphylaxis with airway complications. This can trigger contact dermatitis and tracheitis in some individuals, especially workers in cashew processing. Therefore, implementing essential safety precautions for human resources engage in cashew sector is crucial.

Cashews were primarily spread around the world by travellers. The Brazilian native cashew was introduced to Sri Lanka through Goa in India by the Portuguese (SLCC-Annual Report, 2020) via sea journeys. These historical accounts suggest that the cashew nut was a convenient and valuable commodity carried by travellers. This inherent characteristic presents an opportunity to promote Sri Lankan cashews through travel routes, particularly in tourism. Sri Lanka is a major organic producer in Asia, although the organic market in the country has been described as a 'niche market'. Malkanthi (2011) identified cashew nuts as an organic product. This offers significant potential for cashew tourism in the country. Promoting 'Ceylon cashew' at world tourism marts get enhance Sri Lanka's image. To capitalize on this potential, the Sri Lankan cashew sector needs excellent processing and value addition.

Promotion of authentic Sri Lankan cashew on tourism uncovers the unique taste and encourages purchases with cashew nut factory tours; and cashew plantation tours. Showcase of exposing tourists to the real cashew cultivation environment through plantation visits and processing tours integrates the tourism with cashew industry. "Kajugama" offers a charming location or colony that included in Sri Lankan tour packages to promote cashew tourism.

The "cashew trail programs" supports the livelihood development of cashew farmers. Cashew trails and walks centred on traditional cashew-related activities—harvesting, collection, and various processing methods—provide first-hand experiences of local cashew farming communities while generating revenue for local farmers. Outdoor experiences, such as visiting cashew plantations to collect fallen cashews and observe traditional processing methods, could reveal the authentic Sri Lankan cashew flavours to international visitors, effectively promoting the country's heritage and culture to the world.

Goa in India has already capitalized on this opportunity with its "cashew trail," a unique tour in sun-drenched Goa that traces the journey of the cashew from tree to plate (Borah, 2017).

They promote their region as a popular destination for cashews and cashew-derived products, especially aromatic feni made from the juice of the cashew apple. "Niro" and "Urrak" are examples of such products used in Goa.

The Sri Lankan cashew industry can also develop similar "cashew trails" to realize the potential of cashew tourism in the country.

3.6 Challenges and Opportunities

The important tree crop of cashew possesses favourable climatic factors and soil conditions in Sri Lanka for optimal cashew yield, but the country struggles to meet domestic demand (SLCC-Annual Report, 2020). The numerous challenges in cashew industry need address of market fluctuations, Plummeting prices, competition from imported cashews, and unexpected declines in yield which have forced farmers, some cashew processing units and traders to cease their operations, leading to market instability. To stabilize the industry in recent years, small-scale cashew processors have been granted import licenses for cashew in shell under duty exemptions (SLCC- Annual Report, 2020).

The price of cashew nuts has steadily increased over the past two decades, with particularly sharp recent rise. Frequent export price fluctuations also plague the sector. These variations impact various stakeholders across the cashew supply chain. Farmers, whose income is directly linked to market rates, suffer when market values fluctuate. This instability negatively affects both farmers and the national economy by jeopardizing investments in the sector.

Furthermore, climate change and environmental impact are primary challenges facing the cashew nut industry. Peiris (2024) reveals Sri Lankan cashew industry is confronted with multitude challenges of aging plantations, yield decline, labour shortage and escalating effect of climate change. The reduction of productive land area suitable for cashew cultivation is a growing concern. Adverse climatic conditions during the cashew fruiting season can significantly reduce yields (Priyashantha, 2019). Erratic rainfall patterns disrupt agricultural activities, leading to crop failures and decreased productivity. Priyashantha (2019) notes that unexpected rainfall can cause approximately 25% dry weight losses. Cashew cultivation can also contribute to deforestation as farmers clear land for orchards (Personal hearing evidences, 2025). Lands with less dense undergrowth are often ideal for cashew cultivation, and such land clearing is commonly undertaken by cashew cultivators. These clearances are mostly done manually, with burning of stumps due to labour shortages and cost-effectiveness for small farmers. This practice raises concerns about biodiversity loss, soil erosion, and the overall ecological balance.

When cashew was first introduced to Sri Lanka, pest attacks were not a major concern. However, it has since been discovered that cashews are susceptible to many pests (Ranaweera, 2003). Growers often mistakenly believe that cashew is resistant to pests and diseases. However, pest infestations can severely impact crop yields. Ranaweera(2003) identified various categories of pests affecting cashews in Sri Lanka, including larger animals, 60 species of insects, mites, and nematodes.

Despite facing numerous challenges, the weakness of cashew extension services and related processes, including pest and disease control and fertilization, requires focused attention for crop improvement, encompassing increased productivity and crop stabilization (Jayasekera, 2003).

In context of increased productivity, this implies a higher yield per unit area of land per unit time through better crop management and the use of genetically superior varieties. Moreover, crop stabilization involves the use of pesticides, resistant varieties, and adapted varieties. The average cashew yield per hectare in Sri Lanka is low, at 396 kg/ha, compared to India's 694 kg/ha (Jayasinghe, 2001). Genetically improved plant materials and clonal varieties may help overcome these challenges. However, aligned research and development activities in the sector need to contribute towards the development of potential areas for crop improvement.

In Sri Lanka, the parrots, bats, and rabbits cause some damage to cashew plants, their impact is not considered economically significant. Nematodes also infect cashew roots and seedlings, though they are not always considered a major threat to the crop. However, pests of the stem and root borer, tea mosquito bug, leaf and blossom webber, leaf miner, apple and nut borer, and shoot tip borer are significant causes of damage (Ranaweera, 2003). The stem and root borer and tea mosquito bug infest 68% and 37% of Sri Lankan cashew plantations, respectively, and severe infestations lead to crop losses of nearly 30% (Anon, 1997). Weeds also pose a major threat, as they harbour pests.

Therefore, an Integrated Pest Management (IPM) approach is essential. Cultural practices can be easily integrated into this strategy. The lack of adherence to important cultural practices has seriously affected the cashew industry in Sri Lanka. These challenges need to be addressed through improved extension services and a better integrated management approach. The introduction of host-plant resistance varieties, biological control methodologies, and stricter quarantine regulations in the Sri Lankan cashew industry are necessary for addressing these issues. These improvements can be achieved through government-private sector collaboration on a case-by-case basis.

To maximize the potential of the Sri Lankan cashew industry, converting existing structural obstacles into strategic opportunities is essential for long-term success. As a sector defined by a unique "cashew culture," Sri Lanka currently stands at a critical crossroads where addressing identified challenges and research gaps could unlock substantial foreign exchange earnings and domestic revenue. These developmental avenues include multi-faceted interventions such as comprehensive farmer guidance and training programs, collaborative research and development to introduce improved high-yield varieties, and the integration of modern technological updates for efficient processing. Such systematic engagements empower farmers to mitigate the issues of low productivity while facilitating superior orchard management and rigorous pest control protocols.

In the contemporary industry, the cashew apple remains a significantly underutilized resource despite its inherent value. Empirical evidence suggests a substantial gap in resource optimization; Priyashantha (2019) observed that approximately 83% of Sri Lankan farmers do not utilize cashew apples, often treating them as agricultural waste. Conversely, only 17% of the farming community recognizes the potential of the cashew apple as a supplementary income stream. This stark contrast highlights an untapped economic reservoir within the existing agricultural framework that remains neglected due to traditional processing habits.

There is a profound opportunity for value addition through the development of innovative products that can revolutionize the industry's profitability:

- i. **Cashew apple jam and preserves** offer a shelf-stable method of utilizing the fruit's unique flavour profile.
- ii. **Syrups and concentrated juices** leverage the high vitamin C content and natural sugars of the apple.
- iii. **Cashew wine and fermented beverages** tap into niche markets for artisanal and regional spirits.

Promoting these value-added derivatives holds significant transformative potential, offering the sector a pathway to generate diversified revenue streams and enhance the overall socioeconomic standing of rural communities.

The significance of the cashew sector extends far beyond the export of raw nuts, as Sri Lanka possesses immense potential for growth through strategic value addition. By processing raw nuts into high-quality kernels and diversifying into secondary products such as roasted or flavoured cashews, cashew butter, and cashew milk, the nation can substantially increase its export earnings. This transformation requires targeted investment in processing infrastructure, rigorous quality control measures, and sophisticated branding initiatives to penetrate high-value international markets. Furthermore, branding "Ceylon Cashew" as a premium product is essential to mitigate global competition while preserving the country's unique cashew heritage for future generations.

To support this expansion, parallel policy interventions are necessary to stabilize harvests and ensure consistent availability of raw materials. A stabilized cashew culture allows Sri Lanka to consistently offer a quality product that reflects its cultural identity, thereby strengthening the sector's global standing. These activities play a vital role in sustaining the livelihoods of smallholder farmers and their families, particularly in rural regions where cashew cultivation serves as a reliable income source that contributes to poverty reduction and regional development.

The socio-economic impact of the sector is further amplified by the high level of female engagement, which fosters broader social well-being as new employment opportunities are generated. Beyond the farm gate, the industry supports jobs in transportation, processing, and trade, creating a positive cascading effect throughout the rural economy. By strengthening the entire cashew value chain and integrating traditional cultural strengths with modern economic strategies, Sri Lanka can effectively transform current sector weaknesses into sustainable competitive advantages.

4. Discussion

The cashew, affectionately known locally as "**Kaju gaha**" and recognized globally for the distinct, premium profile of "**Ceylon cashew**," holds a position of considerable importance both in international markets and within the domestic sphere of Sri Lanka. Since its introduction in the 16th century, the crop's cultivation has

transitioned from simple household plots into a significant contributor to the national economy.

This study has highlighted the deep cultural integration of cashews, which is evident in their multifaceted interplay with traditional cuisine, national heritage, and regional diversifications. Such connections exhibit the crop's profound social and cultural impact over generations. This intricate intertwining of the cashew with Sri Lankan customs and rituals underscores its intrinsic value, elevating it far beyond mere commodity status to an essential element of the nation's socio-economic fabric.

The profound agricultural and cultural integration of cashews in Sri Lanka significantly influences its global standing, where the unique flavor profile and heritage associated with "**Ceylon cashew**" contribute to its substantial market appeal both domestically and internationally. This deep cultural embedding provides a unique form of resilience to the industry, fostering robust local consumption while allowing the product to command premium prices within specialized niche markets.

The recognition of cashews as a symbol of prosperity during social gatherings and festive occasions further reinforces their perceived value, driving consistent demand and supporting the livelihoods of smallholder farmers involved in its cultivation and trade. Beyond mere agronomic suitability, the introduction of the species by the Portuguese in the 16th century and its subsequent assimilation into the local language and traditions illustrate how an agricultural species can become deeply embedded in national identity.

The pervasive presence of cashew in local idioms, children's games, and traditional culinary practices demonstrates its combined symbolic and practical significance to the nation. Furthermore, regional variations in cashew characteristics, particularly regarding nut size and flavor, enrich the crop's overall significance. These differentiations, influenced by specific microclimates, diverse soil types, and specialized cultivation practices, contribute to crop diversification and significantly enhance Sri Lanka's competitive advantage in both domestic and international markets.

Economically, cashew cultivation plays a vital role in sustaining livelihoods within the dry and intermediate zones of the country. The crop's seasonal labour requirements generate significant employment opportunities, particularly for women and low-income households, thereby contributing directly to rural economic stability. Targeted support from government agencies and cooperatives—delivered through specialized training, improved credit access and market facilitation—further strengthens the sector's socio-economic impact. These institutional interventions highlight the substantial potential of cashew cultivation as a strategic tool for rural development, poverty reduction, and regional economic resilience.

Despite its profound cultural and economic significance, the Sri Lankan cashew industry faces substantial challenges that impede its full potential. There is an inconsistent adoption of recommended best practices, as evidenced by low average plant density and the underutilization of essential techniques like proper spacing

and rigorous pest management. These factors contribute to significantly lower yields compared to other major cashew-producing nations. This productivity gap not only limits Sri Lanka's ability to meet escalating global and domestic demand but also undermines the profitability for smallholder farmers and the overall competitiveness of the sector.

Addressing these challenges necessitates a targeted and multi-faceted approach. Strengthening agricultural extension services is paramount, with a focus on providing farmers with practical training and resources on Integrated Pest Management (IPM) strategies to combat prevalent threats such as the stem and root borer and the tea mosquito bug.

Furthermore, investing in research and development aimed at identifying and promoting drought-resistant and high-yielding cashew varieties, along with improved clonal propagation techniques, is crucial for enhancing productivity and ensuring crop stabilization in the face of climate change.

The future of Sri Lankan cashew industry extends far beyond the export of raw nuts. Embracing value addition through the processing of cashews into various high-margin products—such as roasted and flavoured kernels, cashew butter, and cashew milk—can significantly increase export earnings and create diverse employment opportunities. Moreover, promoting sustainable agricultural practices, including integrated agroforestry systems and water-efficient irrigation, is vital for the long-term environmental and economic viability of the sector. Such advancements possess the potential to attract environmentally conscious consumers in international markets and secure a robust future for the "Ceylon Cashew" heritage.

By transforming existing challenges into strategic opportunities, the cashew sector plays a pivotal role in sustaining the livelihoods of smallholder farmers and their families, particularly within the dry and intermediate zones of Sri Lanka. This agricultural activity provides a vital income source that directly fosters rural economic development and poverty reduction. Moreover, the unique cultural dimensions of cashew cultivation and traditional processing offer innovative avenues for "cashew-related tourism," similar to the successful "cashew trails" observed in Goa. By curating authentic experiences, such as plantation tours and demonstrations of traditional processing methods in heritage villages like Kajugama, Sri Lanka can diversify its tourism portfolio, generate supplementary revenue for local communities, and elevate the global recognition of the "Ceylon cashew" brand.

The study's findings emphasize significant implications for policy formulation and strategic development across the agricultural and tourism sectors. Recognizing the deep synergy between cultural heritage and economic potential underscores the urgent necessity for integrated policies that balance the conservation of traditional practices with the modernization of production and value-added processing. Government initiatives should prioritize targeted investments in agricultural extension services, research and development focused on climate-resilient and high-yielding varieties, and the creation of infrastructure that facilitates market access and value addition. Furthermore, sustainable tourism policies centred on cashew

culture can effectively diversify income streams for rural inhabitants while enhancing the international appeal of Sri Lanka's unique agricultural landscape.

Ultimately, the ecological adaptability, cultural embeddedness, and socio-economic importance of cashew cultivation in Sri Lanka demonstrate a highly interrelated and dynamic system. The significance of this crop transcends its commercial value, touching upon fundamental themes of identity, tradition, and environmental adaptation. While this research provides a comprehensive overview, future scholarship must address critical gaps, such as the specific impacts of climate change on different growing regions and the efficacy of various adaptation strategies. Additionally, investigating global consumer preferences for niche organic or fair-trade "Ceylon cashew" products and conducting detailed value chain analyses will be essential for ensuring equitable growth. By integrating improved agronomic practices with robust institutional frameworks, Sri Lanka can revitalize its cashew culture for sustainable, long-term prosperity.

5. Conclusion and Recommendations

The systematic exploration of "Cashew Culture in Sri Lanka" underscores the profound and inseparable connections between diverse socio-economic interplays and the rich cultural heritage associated with this cherished nut as set objective one. From its strategic introduction by the Portuguese in the 16th century to its contemporary status as a significant agricultural commodity, the cashew has transcended its role as a mere export to become deeply embedded in the nation's traditions, culinary practices, and social fabric. The unique, premium taste of "Ceylon cashew" and its deep cultural resonance provide a distinctive national identity that warrants continued institutional support and strategic development.

Culturally, the cashew holds a multifaceted significance that permeates the Sri Lankan way of life, from its essential presence in traditional cuisine to its symbolic role in festivals and ceremonies. Its influence extends even into local folklore and children's games, illustrating a level of integration that few other crops achieve. Regional variations in cultivation practices and emergence of cultural landmarks, such as the famous village of "Kajugama," further highlight the unique cultural tapestry woven around this crop. Recognizing and preserving these intangible cultural dimensions is essential for maintaining the global distinctiveness and premium branding of Sri Lankan cashews.

Aligning to the objective two, sustainable growth of the industry hinges on effectively addressing the structural challenges identified, such as low productivity and inconsistent adoption of best practices. Strengthening agricultural extension services to promote Integrated Pest Management (IPM) and investing in research and development for drought-resilient varieties are crucial steps to mitigate the impacts of climate change. An integrated approach—blending modern agronomic innovation with cultural preservation through coordinated efforts between the government and the private sector—is necessary to enhance productivity and ensure the long-term viability of the sector.

Economically, the cashew sector remains a vital pillar for rural livelihoods, particularly in the dry and intermediate zones where it provides critical income and employment for women and smallholder farmers. While the industry faces intense global competition, the rising international demand presents significant opportunities for growth if Sri Lanka can successfully pivot toward high-value processing technologies and sophisticated branding. Institutional support, delivered through specialized training, credit access, and robust cooperative structures, continues to enhance the socio-economic value of the crop for low-income households.

The future of Sri Lankan cashew culture holds immense potential for innovation, particularly through the utilization of the often-discarded cashew apple for value-added products like syrups and wines. Furthermore, leveraging the cultural appeal of the crop to promote agro-tourism initiatives, such as "cashew trails" and plantation visits, can create new revenue streams and enhance the global visibility of Sri Lanka's agricultural heritage. Ultimately, the cashew is a symbol of both economic potential and cultural identity; by fostering innovation and supporting local communities, Sri Lanka can ensure this treasured crop contributes to national prosperity for generations to come.

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