

Present status and future prospects of coconut kernel-based industries in Sri Lanka

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1. Introduction

Sri Lanka is the fifth largest coconut producing country in the world which yields 2,500-3,000 million nuts per annum. In general, two third of the production consumes locally as fresh nuts and the rest, dedicates to agro-industries. From 2015 to 2019 an upward trend for coconut based products were clearly visible with a earning of US \$609.77 million foreign exchange and a contribution of 7.42% to the GDP of the agriculture sector in 2019. Kernel-based products were the most popularized and dominant category compared with non-kernel. Coconut grown in Sri Lanka has unique characteristics since it delivers favourable kernel taste. Therefore, Sri Lanka has a competitive advantage over coconut in the world market. However, as a result of low productivity, adverse climatic conditions, land fragmentation for housing purposes along with the gradual increment in domestic consumption has created a critical shortage of nuts for industrial use (Jayewardene, 2018; Pieris & Kularathne, 2015). Simultaneously, industrial usage of coconut has also increased as a result of ample opportunities in international markets. This attracted many new entrants recently into the industry seeking more prospects (Pathiraja et al., 2015). However the central question focuses, whether these agro-industries are sustainable enough to cater the flourishing demand and ready for the next leap in the sector creating favourable prospects. In light of this, it is pivotal to understand the real context of the coconut kernel-based industry and its nature. Hence, study attempted to explore the current status, constraints and opportunities in the coconut kernel-based industries in Sri Lanka.

2. Materials and Methods

A total of 50 registered coconut kernel-based industries representing the areas of Kurunegala, Puttalam and Gampaha, where nearly 70% of the cultivation and industries concentrated were randomly selected from a list provided by the Coconut Development Authority. Both primary and secondary data were collected. Primary data collection was done using pre-tested structured questionnaire from kernel-based industry representatives, key informant interviews from responsible officers (i.e. officers of the Coconut Cultivation Board, Coconut Development Board, Coconut Research Institute, divisional coconut development officers and agricultural research and production assistants of the relevant areas) and through case study analysis in order to ensure the information richness. This enables to include a variety of settings, situations and participants, including negative cases or extreme cases to obtain rich data (Moser & Korstjens, 2017). Primary data mainly focused on coconut production and marketing aspects, kernel-based product types, export volumes, roles and responsibilities of private and public parties, constraints and opportunities within the industry and hence, cascaded under both qualitative and quantitative nature. The survey was implemented in August to September 2019. Secondary data were gathered from various secondary sources such as relevant institutional documents, websites, other national and international journal articles, periodicals and reports. Descriptive statistical measures (frequency, central tendency, dispersion and position) were used to analyse the data. A SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis was also deployed to assess the industry.

3. Results and Discussion

A significant portion of coconut properties in Sri Lanka (nearly 75%) belonged to smallholders (less than 20 ac.) and the rest to the estate sector where both private and government companies hold ownership. The contribution of the smallholding sector to the total annual coconut production was 70%. There were 547 registered coconut based products exporters around the country in 2018 and 80 – 85 percent contribution originated from the coconut production triangle. Currently, there were around 50 mega scale coconut based product manufacturers around the country and Silvermill Group of Companies (Giriulla Mills Limited) holds the market leadership in the industry. Mega players approximately consumed 100,000 – 150,000 nuts in an average per day. Jafferjee Brothers, Hayleys Group, Jacobi Carbons Lanka (Pvt.) Ltd. and Canro exporters were also major players in the industry. Further, 17 brokers and 237 coconut estate dealers were registered in 2018. A total of 37 coconut based products are exported annually and 18 comprised of kernel-based (Cocount Development Authority, 2018). Coconut oil, virgin coconut oil, desiccated coconut, coconut cream, milk, milk powder, copra, fresh nut and seed nut are considered the most popular products.

The leading constraint (27%) of the manufacturing industries was the prevalence of relatively unstable market for products. As a result, both producers and manufacturers suffered severely. This has a direct impact on the market share of both local and international levels. Next, was the low demand for local desiccated (16%) industry due to poor quality products. The third one was the labour shortage (12%) for processing and other activities and this ultimately lead to increased cost of production. Limited supply and unplanned allocation of raw materials were also a constraint in the industry. This diluted commercial level planning process creating major lapses in the industry. Heavy market competition (4%) and climatic change (4%) were also identified as constraints. In addition, ad-hoc tax changes, low profit margins, higher production cost, inability of applying for higher standard certifications, adulterations and use of chemicals were also mentioned as minor constraints.



Figure 1. A SWOT Analysis for the Coconut Kernel-Based Industry

Coconut based production industry is an ideal industry for the rural development through encouragement of small and medium scale agribusinesses around the country (Abeysekara et al., 2020). However, in order to expand industrial prospects, it is essential to increase the production and productivity (19%) simultaneously in plantations. Study emphasised that, the productivity of coconut production in Sri Lanka was much lower compared to other South-Asian counterparts. Adoption of good management practices are required to overcome this

issue. Similarly, manufacturers highlighted the need of modern technological know-how (19%) in the processing sector in order to maintain high standards. This is a vital aspect when meeting international market requirements. Increased productivity requires increased product manufacturing to retain market stability. It has been suggested to restrict the importation of palm oil (9%). However, a total ban of palm oil is not plausible. There should be a proper mechanism and policy procedures on importation of palm oil. Upgrading of desiccated coconut mills (9%) was also suggested. These mills require new machinery to increase production efficiency. Upgrading old mills is worthwhile with increased market prospects. The promotion of small scale production and coconut home gardening (6%) was emphasised in order to strike a balance between household and industry consumption.

4. Conclusions

Considering the coconut kernel-based industries, Sri Lanka has reached a transitional stage where it has to cater to vast demand for both processed products and fresh nuts. Industrial growth could be propelled through giving more emphasis on industries like virgin coconut oil, fresh king coconut, coconut cream and coconut milk. Upgrading the technology of small and medium sector local desiccated industries is must to enhance the standards of manufacturing in order to compete with global markets. Proper mechanism has to be identified to convert the wastage of household fresh coconut consumption into industrial usage. Widening quality assurance by accrediting Quality Assurance Methodology like ISO 22000:2005 Food Safety for the coconut kernel-based products is essential to enhance the quality and standards of the products.

5. References

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