BUSINESS PLAN FOR OIL PROCESSING ENTERPRISE "HARI LOKA" AS AN EFFORT TO INCREASE THE ADDED VALUE OF COCONUT IN LAMPUNG PROVINCE

Thesis Summary

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THESIS SUMMARY

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ABSTRACT

BUSINESS PLAN FOR OIL PROCESSING ENTERPRISE "HARI LOKA" AS AN EFFORT TO INCREASE THE ADDED VALUE OF COCONUT IN LAMPUNG PROVINCE

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Indonesia, as the world's largest coconut producer, faces challenges related to the low added value of coconut products. Lampung Province also encounters similar issues. Although coconut plantations in Lampung yield 92,664 tons of coconuts from a total plantation area of 98,548 hectares, the benefits for the 218,616 involved farmers remain suboptimal. Therefore, efforts are required to increase the added value of coconuts through a business plan for coconut oil processing to produce higher-value economic products while utilizing the entire coconut.

The objective of this study is to identify the potential for increasing the added value of coconuts in Lampung Province, develop a business plan for coconut oil processing, and evaluate the feasibility of the business plan. Data was collected through observation and interviews, analyzed using an interactive nonlinear analysis method. The business plan was assessed for both financial and non-financial feasibility.

The analysis results indicate that the proposed coconut oil processing business, named "Hari Loka," in Lampung Province is financially and non-financially feasible.

Keywords: Added Value, Coconut Plantations, Oil Processing Industry

RESEARCH BACKGROUND

Indonesia is the world's largest producer of coconuts, with a total plantation area covering 3,374,347 hectares, predominantly managed by smallholder farmers. The national coconut production amounts to 2,853,299 tons (Direktorat Jenderal Perkebunan, 2021). However, the added value remains low (AIP Prisma, 2015). In Lampung Province, the potential coconut plantation spans 91,834 hectares, estimating a yield of 81,880 tons, yet this potential is not fully realized by 218,616 farming households engaged in smallholder coconut cultivation. This is due to the lack of efforts in high-value product processing and the utilization of all coconut components.

Based on this issue, there's an opportunity to enhance the value of smallholder coconut commodities through processing oriented towards high-value products like coconut oil. Three potential types of coconut oil products are coconut cooking oil, virgin coconut oil, and infused virgin coconut oil. Additionally, there's potential for collaboration between coconut meat processing industries and various segmented processing industries of other components like husks and shells to add economic and social value while minimizing the environmental impacts of industrialization. Both opportunities align with the designation of the Koridor Sumatra program as an accelerator for economic development, focusing on the establishment of production centers and processing of agricultural products.

The business planning for oil processing, emphasizing the creation of high-value processed products and prioritizing the effective and efficient utilization of all coconut components, requires systematic and structured thinking. Therefore, academic research related to this business plan is essential, considering the urgent need to increase the value of coconut commodities in Lampung Province.

LITERATURE REVIEW

Coconut Commodity and Smallholder Plantations

Cocos Nucifera Linnaeus, or Coconut, is a pantropical plant with widespread distribution in various parts of the world with a tropical climate (Chan & Elevitch, 2006). The coconut fruit consists of four components that can be processed: flesh,

water, husk, and shell. Coconut flesh is the core component, while water, husk, and shell are by-products. The role of coconut is crucial in meeting food needs, utilizing by-products, and driving industries in various processing sectors (Persley, 1992, as cited in Ritter et al., 2000).

Coconuts can be divided into several varieties, namely Kelapa Dalam, Kelapa Genjah, and Kelapa Hibrida (Sirnawati, 2023). When compared, coconuts suitable for industrial oil processing raw materials are Kelapa Dalam and Kelapa Hibrida. The main source of these coconut types is smallholder coconut plantations. According to Tarigans (2002), smallholder coconut plantations have the following characteristics: 1) very limited land ownership, with an average of about 0.5 hectares per farmer household, 2) typically managed using a monoculture pattern, planting only one type of crop in one plantation area, 3) low productivity, with an estimated yield of 1.1 tons equivalent to copra per hectare per year, 4) low and fluctuating household farmer income, insufficient for the proper needs of coconut farmer households, 5) low technology adoption rates to improve productivity and develop plantation businesses, and 6) a focus on upstream sector products, such as substandard and less competitive granulated coconuts. Therefore, its downstream approach differs from other commodities such as palm oil, which is highly industrialized.

Value Addition in Smallholder Coconut Commodities

Value addition is the outcome obtained through economically enhancing the value of a product by altering its characteristics in terms of place, time, and form into desired market attributes (Coltrain et al., 2000). Optimal value addition in the agro-industry context can be achieved by directly integrating smallholder plantations and agro-companies within specific industrial patterns (Tarigans, 2002). Economically, processed coconut products have a high potential for economic value addition (Ghosh, 2015). Socially, the development of the coconut processing industry can create multiplier effects on economic growth, leading to increased job opportunities, income, and improved standards of living for coconut farmers (Kementerian Koordinator Bidang Perekonomian Republik Indonesia, 2022). Meanwhile, in an environmental context, coconut trees have a positive impact on

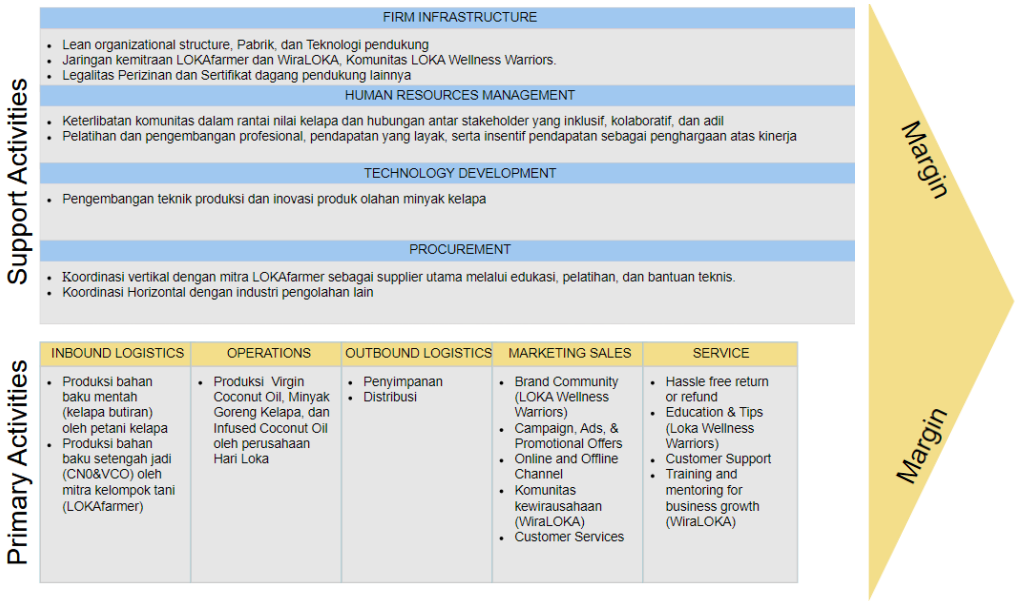
overall ecosystem functioning and biodiversity conservation (Hulvey et al., 2013; Liu et al., 2018).

Indonesian Coconut Agroindustry

Integration of both on-farm and off-farm activities is known as Agroindustry. The definition of industry and its classification, consisting of Small Industry, Medium Industry, and Large Industry, has been regulated in the Peraturan Menteri Perindustrian Number 64/M-IND/PER/7/2016.

Value Chain

Value chain is a framework illustrating the processes or activities a company undertakes to add value to a product or service and can be illustrated using a value chain map (Porter, 1985). The value chain map illustrates a series of interconnected activities within the same system. The terminology used to describe these interconnections is 'linkages' (Porter, 1985). Well-managed linkages within the value chain can enhance a company's competitiveness in the business landscape. The following is the value chain map for the oil processing business of Hari Loka in this business plan research:



Hari Loka's Value Chain Map
Source: Authored by the writer, 2023

The Application and Market Acceptance of Coconut Oil

Presently, both domestic and international markets for vegetable oil are largely dominated by palm oil. Coconut oil faces challenges in competing with palm oil based on production volume and price. Hence, the introduction of coconut oil products in the market needs to be aligned with consumer needs and interests. In the Diffusion of Innovation theory, there are five key factors influencing consumers' decisions to adopt an innovation (Rogers, 2003). These five key factors include: 1) Relative Advantage, 2) Compatibility, 3) Complexity, 4) Trialability, and 5) Observability.

Business Plan

Business planning encompasses a description of business plans and strategies (Duening et al., 2021). The business plan contains of Company Description, Market Analysis and Industry Projections, Marketing Plan, Production Plan, Operational Plan, Human Resources Plan, Financial Plan, and Risk Management Plan.

RESEARCH METHOD

The business plan research uses a descriptive qualitative method. The level of analyzed units include organizations, companies, and individuals. In the organization level, there are Dinas Perkebunan Provinsi Lampung and Dinas Perindustrian dan Perdagangan Provinsi Lampung. In the company level, there are PT Krambil Idjo Yogyakarta, PT Kendi Arindo Lampung, PT Mahligai Indococo Fiber, PT Sabdo Palon, and CV Ariesto Makmur. In the individual level, there are coconut farmers and potential B2C customers.

The above-mentioned informants were selected using purposive sampling to ensure diverse perspectives on the discussed issues, reflecting a comprehensive coverage of the researched topic. The data used in this study consists of primary data from preliminary observations and in-depth interviews, as well as secondary data obtained from publications, academic reports, statistical data, mass media, legal documents, and government policies.

The data was then analyzed using the interactive analysis method (Miles et al., 2014). There are four non-linear stages involved: 1) Data Collection, 2) Data Condensation, 3) Data Presentation, and 4) Drawing Conclusions.

ANALYSIS OF BUSINESS POTENTIAL AND FEASIBILITY

Company Description

Hari Loka is envisioned as a coconut oil processing enterprise in Lampung Province aimed at serving as a catalyst in enhancing the added value of smallholder coconut commodities. The goal is to achieve this by creating high-value processed coconut oil products and utilizing all coconut components, including flesh, shells, husks, and water. Hari Loka provides virgin coconut oil, coconut cooking oil, and infused virgin coconut oil catering to the needs of the cosmeceuticals, nutraceuticals, and healthy vegetable oil industries.

Market Analysis and Industry Projections

In Indonesia, a total of 22,214,099 individuals actively consume coconut oil (Badan Ketahanan Pangan, 2021). This market potential can be expanded by reaching potential customers recommended by medical professionals, especially for those suffering from or at risk of degenerative diseases like diabetes. This aligns with doctors' recommendations for diabetes control among diagnosed populations through dietary adjustments, exercise, and the use of herbal alternatives.

The highest number of diabetes patients in Indonesia come from the provinces of DKI Jakarta, Kalimantan Timur, and Yogyakarta. Within this population, the group that graduated from D1/D2/D3/Higher Education and are employed as PNS/TNI/Polri/BUMN/BUMD form the most dominant segment. With this assumption, Hari Loka's processed coconut oil products become the suitable choice to market to potential upper-middle-class B2C customers who are aware of the importance of consuming coconut oil as part of health maintenance. Additionally, DKI Jakarta and Yogyakarta are also selected as the primary target locations for Hari Loka's market outside Lampung Province.

Virgin Coconut Oil (VCO) holds significant opportunities to compete in the B2B market within the cosmeceuticals and nutraceuticals industries due to the high

demand for value-added products that focus on health benefits, sustainability, and innovation. Apart from the potential market for processed coconut oil products, by-products from oil processing such as coconut shells and husks also have their own market as they can be sold to other processing industries.

Marketing Plan

Hari Loka's marketing plan focuses on B2C and B2B market segmentation. The B2C segment targets individuals who are already aware of the benefits of coconut oil or are advised to consume it for health reasons. Within the B2C segment, the targeted potential customers amount to approximately 41,684 individuals who are active users of coconut oil and diabetes patients, with an estimated minimum spending of Rp 50,000 per year. The projected minimum annual income generated from this segment is around Rp 2,084,200,000. This estimate includes product sales through the entrepreneurship community (WiraLOKA) managed by Hari Loka.

In the B2B market segment, the targeted sales of VCO to cosmeceuticals and nutraceuticals industries are 6,000 liters and 3,000 liters per year, respectively, priced at an average of Rp 50,000 per liter. The estimated annual income from the B2B segment is projected to reach Rp 450,000,000. This revenue estimate does not account for the B2B customer segment from coconut oil processing industries, which are not the primary target but are still possible once the business is established.

Production Plan

Hari Loka conducts production activities in collaboration with smallholder coconut farmers in Lampung Province who are part of farmer groups consisting of 5-10 members. The farmer groups managed within the community named LOKAfarmer play a role in the initial stages of processing unprocessed coconuts into semi-finished products. The production of 1 liter of coconut oil, whether virgin coconut oil or crude coconut oil, requires approximately 8 to 10 coconuts. With this assumption, the targeted minimum production capacity is 1,800 to a maximum of 3,000 coconuts per day, yielding a minimum of 4,500 liters of VCO and/or CNO per farmer group. These products are delivered to Hari Loka's factory every month.

Subsequently, Hari Loka will proceed with refining crude coconut oil into coconut cooking oil and processing virgin coconut oil into consumer-ready products such as packaged virgin coconut oil and infused virgin coconut oil. At the farmer group level, the collection of by-products from processing, such as coconut shells and husks, is also carried out by partnering processing industries.

Human Resource Plan

Internal human resources consist of the CEO, general manager, head of marketing and sales, head of production and operations, marketing and sales staff, production and operations staff, as well as financial and administrative staff. On the other hand, external human resources involve individuals from the LOKAfarmer farmer group community and the WiraLOKA entrepreneurship community.

Financial Plan

Hari Loka requires an initial investment capital of Rp 1.312.975.000 to start the coconut oil processing business in Lampung Province. This cost includes acquiring the premises, factory equipment, office equipment, and other supporting expenses. The company's operational costs for a year are estimated to reach Rp 1.544.634.000, covering production expenses, employee salaries, and other supporting costs.

Cash flow projections are made across three scenarios, based on the assumption that sales revenue will increase by 5% in the normal scenario, 8% in the optimistic scenario, and 1% in the realistic scenario. Before the first year, Hari Loka already has pre-order agreements from 30 WiraLOKA partners, targeting revenue of Rp. 300.000.000. Expenses are assumed to increase by 5% per year due to inflation. Meanwhile, fixed assets will be depreciated using the straight-line depreciation method over 5 years. Additionally, the income tax is estimated at 20% following the regulations of PP Number 30 of 2022.

In the normal scenario, Hari Loka incurs a loss of -Rp 398.704.000 in the first year but manages to turn the situation around in the second year with a net income of Rp 260.272.240. The projections then indicate significant financial performance growth with a net income reaching Rp 2.117.613.951 by the fifth year. In the optimistic scenario, projections also show a loss in the first year, but with

better growth, resulting in a net income of Rp 2.787.049.572 by the fifth year. In the realistic scenario, there is still a loss in the first year, but with slower growth, yielding a net income of Rp 1.418.653.995 by the fifth year.

Financial Feasibility Test

The financial feasibility test is conducted on the three previously projected scenarios. The results will be presented in the table below:

Results of Financial Feasibility Testing: Optimistic, Normal, Realistic Scenarios

Test Criteria	Favorable	Financial Projections		
		Optimistic	Normal	Realistic
NPV	NPV > 0	2.361.723.206	1.573.642.276	574.073.490
IRR	IRR > 6%	31.9	26.5	18.9
PB	PP < 5	4.2	4.4	4.7

Source: Authored by the writer, 2023.

Non-Financial Feasibility Test

The assessment criteria used in this analysis are economic, social, and environmental aspects. Based on the economic analysis, Hari Loka's business is considered feasible due to the increased income of LOKAfarmer partners through the sale of CNO, VCO, and by-products such as coconut husks and shells. Product diversification also aids income stability and reduces entrepreneurial risks. Processing partners of husks and shells in Lampung Province benefit from an economical source of raw materials. Coconut farmers that are not part of the LOKAfarmer community still benefit from fair trading practices, including high purchase prices, coconut water grants, and training in organic fertilizer production to enhance plantation productivity.

Regarding the social aspect, Hari Loka's business is considered viable as it offers benefits to farmers and LOKAfarmer partners through training and job creation. Additionally, it provides employment opportunities for the surrounding community. Furthermore, potential customers grouped under the community named LOKA Wellness Warriors benefit by gaining increased knowledge and access to coconut oil products for their health.

In terms of the environmental aspect, Hari Loka's business is considered feasible due to its positive contribution to the environment. It efficiently utilizes all parts of the coconut, reduces waste, and supports the sustainability of coconut plantations. These plantations also play a role in erosion control, water conservation, and climate change mitigation by carbon absorption and reducing greenhouse gas emissions.

Risk Management Plan

During its operation, Hari Loka may potentially face risks related to sourcing coconut, acquiring CNO and VCO raw materials, shifts in consumer preferences, and ineffective marketing strategies. To mitigate these risks, efforts have been made through various approaches: 1) Strengthening relationships with coconut farmers as the primary source of raw materials, 2) Empowering farmer groups by providing access to technology, supportive equipment, initial financing, and human resource training, 3) Implementing coconut oil production standards compliant with national and international quality standards, enhancing Hari Loka's brand image through the 'Nature's Legacy, Community’s Prosperity' campaign, and 4) Conducting in-depth market research, testing marketing strategies, and continually adapting to market changes.

Exit Strategy

Hari Loka is considering options for acquisition or merger with segmented coconut processing companies or palm oil companies if the losses continue without prospects for improvement. Meanwhile, the final option under consideration is business liquidation.

CONCLUSION AND ACTION PLAN

The coconut commodity from smallholder plantations in Lampung Province holds potential for added value, both financially and non-financially. The business plan for coconut oil processing is outlined as a strategy to enhance the value of this coconut commodity. Financial feasibility tests show that in all scenarios tested, the 'Hari Loka' coconut oil processing business in Lampung Province is viable. Non-financial feasibility analysis also demonstrates positive outcomes regarding

economic, social, and environmental aspects, strengthening the decision to proceed with this business plan.

Action Plan

The action plan comprises stages of the process related to realizing the business, presented through a timeline of activities, responsible parties, as well as objectives and key result.

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