

Increased Value Addition of Liberica as Robusta Additive at Pangkalan Bun Shop

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ABSTRACT

The study aims to calculate the income and added value of businesses that process liberica coffee fruit into ground coffee. This survey lasted for one month, from August 2020 to September 2020. The research place is the KBA Coffee Shop owned by Mr. Sutrisno in South Arut District. The method taken in this study is to use primary data and secondary data. Primary data were obtained through live interviews using a series of questions. Secondary data were obtained through supporting literature and their relation to this study. The data analysis methods used in this study are: (1) calculating the business income of liberica coffee fruit processed into coffee grounds, (2) calculating the added value of liberica coffee grounds. The results of the study showed that the Liberica coffee ground processing business provided income to Mr. Sutrisno of Rp. 2 million. 17,991,111.13 per month. The added value enjoyed by KBA coffee shop owners is Rp. 22,830 / Kg of raw materials used. This added value is what KBA Coffee Shop obtains when using 1 kg of raw materials..

Keywords: analysis, added value, liberica coffee

INTRODUCTION

The agribusiness system consists of input subsystems (upstream agro-industry), agriculture (farming), output systems (downstream agro-industry), marketing and support. Therefore, the development of the agricultural product processing industry is inseparable from the development of agribusiness[1]. The development of agriculture-related industries can increase production, prices of agricultural products, increase farmers' incomes, and create added value for agricultural products. [2].

The agricultural sector, particularly agribusiness, plays a role in the national economy and offers several possible benefits [3]. The

benefits in question include, for example, added value to the agricultural industry by preserving agricultural products in more durable processed products. Coffee is an agricultural product with added value for processing and excellent market opportunities [4].

According to the description above, the problems or objectives of this study are: How much is the operational cost, revenue, and income. Then look at the magnitude of the added value of the effort [5].

Because Liberica coffee is a plant with a single root system, messages can be easily transmitted as lateral roots grow and develop at

ground level. Coffee trees are a group of shrubs with strong trunks and a height of up to 2-4 meters [6]. The trunk of a coffee tree has two types of branching (dimorphism): autotropic and oblique. Autotropic branches have trunk branches that grow vertically, while oblique branches grow sideways or horizontally and have stem branches that serve as places of growth of flowers and fruits. The coffee tree has smooth green leaves and a glossy surface [7].

Coffee leaves are 15-40 cm long and 7-30 cm wide, with petiole lengths of 1-1.5 cm. Coffee leaves have 10 to 12 pairs of veins, blunt at the base and tapering at the ends. The edges of the leaves are wavy and the veins are concave [8]. This makes the surface of the coffee leaves look hollow. The leaves of the coffee tree grow opposite the trunk, branches and twigs [9].

Coffee fruits consist of skin, fruit and seeds [10]. The outer skin of the coffee fruit consists of three parts, namely the outer skin layer (endocarp), the pulp layer (mesocarp), and the corneal layer (endocarp). Coffee fruits also have unique characteristics. That is, the seeds are slightly rounded, the grooves of the beans are thicker than arabica coffee, and the middle line from top to bottom is almost flat. [11]

Ground coffee is coffee beans that have been finely ground or crushed [12]. From ripe coffee fruits to packaged coffee grounds, the process of making ground coffee can be a little complicated for the general public. Below is a brief explanation of the process of making coffee grounds. The first step is to harvest a good ripe coffee fruit and separate the coffee beans from the pulp. The next step is to dry, roast and grind the coffee beans into coffee grounds [13].

Manufacturing costs are the costs incurred in processing raw materials into products that can be sold. Examples include the depreciation costs of machinery and equipment, the cost of raw materials [14], the cost of auxiliary materials, the cost of salaries for employees working in parts directly and indirectly related to the manufacturing process [15].

Income is all income, whether in the form of money or in the form of third-party goods or finished goods, which is judged on the amount of

wealth that existed at the time [16]. Income is a source of income for a person who meets his daily needs and is directly or indirectly very important for a person's survival and livelihood.

Revenue has a significant impact on business continuity. The more income a business has, the better it is able to fund all the expenses and activities it carries out. Personal status can be measured using the concept of income [17]. Income indicates the total amount of money received by an individual or household over a certain period of time [18]. Income has another definition. In other words, it is said that income is the magnitude of income from work, and usually a person's income is calculated on an annual or monthly basis [19].

Gross revenue is all the income earned by the company from the sale of goods produced [20]. Average revenue is the revenue from each product sale. Marginal revenue is additional revenue from the sale of one more unit of production [21].

The production of palm oil is Indonesia's most important agricultural export and a major contributor to the economic well-being of rural populations [1]. Palm oil production is Indonesia's most important agricultural export and a major factor in the country's rural people's overall economic well-being [2]. The commodity accounts for 53.56 percent of the total contribution made by the plantation industry, which totals \$204 trillion, to the country's foreign exchange income [3]. This foreign exchange revenue is not only gained through huge private and state-owned plantations but also through small-scale plantations or community plantations [4]. The palm oil industry in Indonesia is responsible for a total annual output of 48.68 million tonnes, of which crude palm oil (CPO) accounts for 40.57 million tonnes and palm kernel oil (PKO) accounts for 8.11 million tonnes. Big private plantations account for 29.39 million tonnes of total production, while large state plantations provide 2.49 million tonnes (5 percent). Most of the production comes from independent oil palm farms, which equal 16.8 million tonnes (35 percent) (60 percent). Additionally, the sector contributes significantly to the region's growth by creating job opportunities and raising smallholders' general standard of living.

The relatively large contribution made by independent oil palm farmers was the impetus for the Indonesian government to make Permentan Regulation No.11/2015 concerning the Indonesian Sustainable Palm Oil Certification System (ISPO). This regulation was made in the context of the development of sustainable oil palm plantations. ISPO stands for Indonesian Sustainable Palm Oil and is a set of best practices for producing sustainable palm oil developed to comply with Indonesia's existing legal framework. This rule is anticipated to act as a kind of accelerated national development agenda and government efforts to eliminate the negative concerns associated with Indonesia's palm oil business [5]. Given that farmers' FFB (Fresh Fruit Bunches) goods will also be a part of the supply chain of palm oil processing facilities, ISPO certification is an absolute necessity for business players, including corporations, plasma, and individual smallholders.

In addition to contributing to economic growth, oil palm plantations can potentially affect the environment negatively. The public sector, the private sector, and the state hold these plantations. However, some people argue that the plantation has a detrimental influence. Some people believe that expanding large-scale oil palm plantations harms the environment, is the cause of biodiversity loss, threatens the existence of tropical forests, and contributes to climate change. Additionally, the palm oil that is produced by these plantations is thought by some to be harmful to one's health. Independent oil palm farmers need sustainable cultivation practices to increase competitiveness and environmental sustainability.

Independent oil palm farmers must develop sustainable plantations. Empirical research by [6]

Sustainable agriculture requires superior seeds, fertilizers, OPT control, and harvest/post-harvest handling.

Many issues arise as a result of the existence of independent oil palm plantations. Some of these issues include relatively low productivity in comparison to that of large companies, a lack of capital and skills, a weak bargaining position for farmers in terms of determining fruit prices, a large number of lands that do not have legal certificates, a lack of role from KUD and farmer groups, and a lack of attention to the environmental sustainability. Given these circumstances, there is a possibility that it will be difficult for independent palm oil to satisfy the standards that ISPO outlines for sustainable plantings (Indonesian sustainable palm oil). Farmers are the most important factor in deciding whether oil palm agriculture is sustainable. The inaccessibility of financing and deficiencies in information technology provide obstacles for smallholders engaged in producing sustainable oil palm. In light of this circumstance, researchers wish to investigate how independent oil palm farmers in Kempas District respond or react (behave) to attempts to promote a sustainable business as described in the ISPO framework.

This research uses the Theory of Planned Behavior (theory of planned behaviour) to understand the behavioural intentions of independent oil palm farmers related to increasing sustainable business. This theory assumes that an individual's behaviour is influenced by their intentions and has implications for agricultural policy and industrial strategy. This study aims to analyze the behavioural intentions of independent oil palm farmers in the Sambas District to increase sustainable business.

MATERIALS AND METHODS

The sampling method for this study was carried out for one month from August 2021 to September 2021 at a café in Khunpai Batu Atas Village, South Alto District, West Kotawaringin Regency, Central Kalimantan [22]. A targeted sampling technique in which the researcher consciously decides which sample to take.

The data collection techniques used in this study include observation, interviews, and literature review. The data collection method is an interview technique, that is, direct communication with the respondent by asking questions and obtaining information, as well as entering it in writing into a tool or data collection or questionnaire.

RESULTS AND DISCUSSION

Libika Coffee Beans to Libika Coffee Powder Cost, Revenue and Revenue Analysis will help you to find out the amount of costs associated with the production of Coffee Cherries into Coffee Powder and the amount of revenue and revenue from the sale of Libika. coffee garden. Manufacturing costs are the costs incurred in processing raw materials into products that can be

sold. Examples are the depreciation costs of machinery and equipment, the cost of raw materials, the cost of auxiliary materials, the cost of salaries of employees working in parts that are directly and indirectly related to the manufacturing process.

No	Equipment	Number of Units	Price	Amount (Rp)	Economical Lifespan	Residual Value	Monthly Depreciation
1.	Sorting Machine	1	36.000.000	36.000.000	6 years	14.000.000	305.555,55
2.	Peeling Machine	1	5.500.000	5.500.000	4 years	1.500.000	83.333,33
3.	Roasting Machine	1	38.000.000	38.000.000	6 years	16.000.000	305.555,55
4.	Milling Machine	2	500.000	1.000.000	3 years	200.000	22.222,22
Total Tool Depreciation Charges							716.666,65

The depreciation cost is obtained from the amount of the price of the goods deducted by the depreciation value and divided by the economic age and the results for the sorting machine get a depreciation value of Rp. 305,555.55, the paring machine gets a

depreciation value of Rp. 83,333.33, the roasting machine gets a depreciation value of Rp. 305,555.55, and the milling machine obtained a depreciation value of asmuch as Rp. 22,222.22.

Fixed Costs	Sum	Total Cost (Rp/month)
1. Labor Wages	2 people @Rp 2,000,000	IDR 4,000,000
2. Electricity Payment	1 time @ IDR 100,000	IDR 100,000
3. Sorting machine	1 unit @ IDR 305,555.55	IDR 305,555.55
4. Peeling Machine	1 unit @ Rp 83.333	IDR 83,333.33
5. Roasting Machine	1unit @ IDR 305,555.55	IDR 305,555.55
6. Milling machine	2 units @ IDR 22,222.22	IDR 44,444.44
Total Fixed Costs :		IDR 4. 838,888.87

Fixed costs in the processing of liberica coffee consist of labor wages, electricity payments, sorting machines, peeling machines, roasting machines, and milling machines.

1. The labor in the processing of coffee buah into liberica coffee grounds consisting of 2 workers is labor.
2. out-of-family work (TKLK). In the processing of coffee buah, labor is one of the important aspects to produce coffee fruit (*Cherry Red*) into coffee grounds. In the processing process it has many activities such as sorting, peeling, washing,

drying and peeling leather as well as packaging. There are two workers in a coffee shop owned by Mr. Sutrisno with a wage of Rp. 2,000,000 / person, so that the total labor cost is Rp. 4,000,000

3. The cost of paying for electricity in liberica coffee processing is Rp.100.000/month
4. The depreciation cost of the sorting machine is Rp. 305,555.55/month, the depreciation cost of the stripping machine is Rp. 83,333.33/month, the depreciation cost of the roasting machine is Rp. 305,555.55/month and the depreciation cost of the milling machine is 44,444.44/month.

Variable Costs	Sum	Total Cost (Rp/month)
Cost of Raw Materials (Buah Coffee)	1000 kg @Rp 5,000	IDR 5,000,000
Total Cost of Raw Materials:		IDR 5,000,000
LPG Gas 5kg	4 pieces @Rp 80,000	IDR 320,000
Packaging		
@ 50 gram	400 @ IDR 1,000	IDR 400,000
@ 100 gram	200 @ IDR 2,000	IDR 400,000
@ 125 gram	160 @ IDR 4,000	IDR 640,000
@ 200 gram	100 @ IDR 4,500	IDR 450,000
@ 250 gram	80 @ IDR 4,500	IDR 360,000
Total Cost of Auxiliary Materials:		IDR 2,250,000
Total Non-Fixed Costs		IDR 7,570,000

Non-fixed costs in the processing of liberica coffee consist of the cost of raw materials in the form of liberica coffee beans in the amount of 1,000 kg / month. For every 1 kg of liberica coffee fruit is able to produce as much as 1 ounce of ground coffee, so that in 1000 kg of coffee fruit produce 100 kg of ready-to-sell coffee grounds.

LPG requires 4 units per month at a price of Rp80,000/unit, so the cost of purchasing LPG gas is Rp320,000/month. This LPG gas is used in the roasting process by roasters. The roasting time varies between 7 and 20 minutes, depending on the moisture content of the coffee beans and the desired roasting rate.

KBA Shop's ground coffee product packaging consists of aluminum foil in the form of stand-up pouches of various sizes. The sizes used are 50 grams, 100 grams, 125 grams, 200 grams and 250 grams, and the cost of purchasing a package for one month of production is Rp. 2,250,000.

Income is the amount of money received by the business owner for the sale of products from the production of goods and services. The revenue component indicates the income from the sale of KBA ground coffee.

Number of Productions (kg/month)	Price (Rp)	Total Receipts (IDR)
50 gram@400 pack	IDR 15,000	IDR 6,000,000
100 gram@200 packs	Rp30.000	IDR 6,000,000
125 gram@160 packs	Rp40.000	IDR 6,400,000
200 gram@100 pack	Rp60.000	IDR 6,000,000
250 gram@80 packs	Rp75.000	IDR 6,000,000
Total Admissions		Rp30.400.000

The total cost of production is the sum of all costs necessary to produce all output, both goods and services. These costs can be calculated by adding fixed costs to variable costs. Based on the results of the survey of fixed and variable costs needed to process Liberica coffee in a month of August 2021, the total fixed costs are IDR 4,838,888 (4 million 838,888 rupiah). receive. Costs arise from labor, electricity and depreciation of components of various types of production machines. Sorting machine, paring machine, milling machine, etc. Variable costs such as raw

material costs, LPG gas costs, and packaging costs are 7.57 million rupiah (7.57 million rupiah). Adding fixed costs to variable costs, production costs were Rs 12,408,888 (12 million)

Mr. Sutrisno's income from one month's observation at his café is IDR 17,991,111 (IDR 7,991,111). The result is calculated by subtracting the total production cost of Rp 12,408,888 from the total cost of revenue of Rp 30,400,000

No.	Description	Fee (Rp)
1.	Reception (TR)	IDR 30. 400,000
2.	Production Cost (TC)	IDR 12. 408,888
Revenue = TR – TC		IDR 17,991,111

From the information in Table 10, Sutrisno's monthly income from the production of KBA coffee grounds is IDR

17,991,111.13.

CONCLUSION

The production costs incurred in the production of processing coffee beans into coffee grounds consist of fixed costs of Rp. 4,838,888 and the variable cost for raw materials of 1000kg/month is IDR 7,570,000. 12. 408,888. The income received from the sale of packaged coffee grounds per month as much as 100 kg of coffee grounds with 5 different packaging resulted in Rp. 30,400,000,-. The income earned from the business is IDR 18,280,000

Analysis of the added value of liberica coffee beans into coffee grounds obtained results for gross added value (NTb) Rp. 22,830,000, and for net added value (NTn) Rp.22,396,500, so that for added value per raw material (NTbb) of 22,830 / kg. This means that 1 kg of liberica coffee beans has an added value of Rp. 22,830, - from each kg of coffee grounds produced.

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