

Analysis Value Added Of Brown Crepe Industrial Bokar in Banjar District (Case Study in Uppb Suka Makmur Simpang Empat Subdistrict)

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Abstract. At present, the number of natural rubber producing countries is increasing, so that world rubber products are increasing. Rubber production will also increase. In other words, the rubber supply increased, which caused the price of rubber to fall. This situation forces businesses in the field of rubber to act competitively by processing rubber products that have high added value, so that they will improve product competitiveness. This study aims to determine the processing aspects of Brown Crepe (BC), analyze the added value and profitability and gross margins at UPPB SUKA MAKUR, Banjar Regency. The results of the study show aspects of BC processing from soil lumps, starting with soaking first so that the raw material is softer and easier to process through machine grinding and washing. Furthermore, further milling is carried out so that it becomes a low quality BC3 sheet, with value added of only 14.36%, while the profit obtained is IDR 459 / kg or IDR 6,298,857, - / period, fihat is the comparison between profits with total costs. So that the BC product processing industry is said to be a business that provides benefits to entrepreneurs because the value of profitability is greater than zero. Furthermore, when compared with the current interest rates of the People's Business Credit (KUR), the BC product processing industry still shows a profit rate of six times exceeding the KUR interest rate of 7% / year. While the gross margin obtained is Rp. 1,296 / kg. This situation shows that the gross processing margin of BC products is very thin, which is only 19.94% of the price received by employers. The small gross margin in the BC product processing industry is due to the large number of costs that are burden by employers.

Keywords: Brown Crepe, Value added, Profitability

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I. Preliminary

The requirement for natural rubber continues to increase with increasing population and economic growth. With income increasing, the demand for motorized vehicles and the automotive industry, the requirement of hospitals, medical equipment and households, will also increase the demand for rubber, both natural rubber and synthetic rubber. Based on the characteristics possessed by different natural rubber and synthetic rubber, they cannot replace each other but complement to each other. Therefore, efforts to increase the supply of rubber, especially the types of natural rubber and the rubber production industry, are steps that must be encouraged.

The prospect of world maritime is expected to remain bright with stronger environmental awareness and some of the world's leading tire factories are starting to introduce more types of green tyres which contain more natural rubber (originally 30-40% to 60-80%), as well as the number of industrial companies that use rubber raw material is increasing. Besides that with the decreasing sources of un-renewable oil and coal fields as raw materials for synthetic rubber, competition with these substitute products has diminished.

Indonesia is the second largest producer of natural rubber in the world with a production of 2.534 million tons after Thailand which produces 3.086 million tons. Viewed from the area of natural rubber plantations, Indonesia has the largest area in the world with 3.43 million ha or about 1.5 times the area of Thai rubber plantations which only have an area of 2.67 million ha or Malaysia (1.02 million ha). Indonesia and Thailand and Malaysia are members of the International Tripartite Rubber Council (ITRC), the largest rubber producing country in the world.

II. Method

This research is a case study on UPPB SUKA MAMKUR. Data collected in the form of primary and secondary data. Primary data collected with exclusive interviews from farmers or entrepreneurs who process Brown Crepe products.

Secondary data were obtained from the agency of Plantation Office of South Kalimantan Province, Department of Industry and Trade of Banjar Regency, Agricultural Dinar, Plantation, and Livestock of Banjar Regency, Central Statistics Agency of South Kalimantan Province, Central Bureau of Statistics Banjar Regency, and sub-district government and research villages.

Analysis Data

To answer the first aim, that is to learn the technicality of brown crepe processing at UPPB SUKA MAKMUR, Analysis was carried out in an interpretive descriptive manner to describe conditions that were close to the actual situation. The second objective is to calculate the value added of bokar into a semi-finished product Brown Crepe. The definition of value added is the value added of a commodity because of the functional input that is given to the commodity. The functional input is process to change form (form utility), or saving (time utility). Calculation of value added is done by subtracting the value of processed rubber products by the value of lump raw materials and the value of supporting materials including fuel, water, chemicals, shrinkage of machinery, and others. Identifying and the costs incurred will facilitate the formation of a cost structure consisting of fixed costs and variable costs. Fixed costs include machine depreciation costs, capital interest, and overhead costs, while variable costs include raw material costs, processing costs (fuel, electricity, water, labor), and marketing costs (packaging, loading and unloading, etc.) .

The third objective is to analyze profitability by reducing the value of production with the overall costs incurred and expressed in percentage (%).

III. Results And Discussion

Processing Brown Crepe

Ground lumps are the main raw material for processing brown crepe (BC). This product is one of the processed rubber products that are included in conventional types of natural rubber. In general, the classification of natural rubber types consisted of eight groups, that is rubber, conventional natural rubber, concentrated latex, block rubber, crumb rubber, tyre rubber, and reclaimed rubber. Furthermore, some products including conventional natural rubber in addition to brown crepe, ribbed smoked sheet (RSS), white or pale crepe, brown crepe estate, and brown crepe compo.

In the research location, Brown Crepe produced is using the main raw material of soil lump. With such raw materials, the Brown Crepe produced only gain Brown Crepe 3 category, which is the lowest quality product of this type. In addition, BC produced at the research site are sold in a wet condition, whereas to enter the BC 3 category it should have to get criteria for products to be completely dry 60% and not contain natural impurities such as leaves and bark, dark brown and not showing white spots that indicate growthless products (<http://www.bajabang.co.id/>)

Basically, the processing of brown crepe from bokar ingredients (in this case land lumps, tatal sap, or rubber rejects) is a very simple process. Lump is a latex clot that is usually accommodated in tapping bowls, where the clumping process can occur due to natural processes or due to the addition of coagulation substances (ant acids or like that). However, there are some parts of this liquid latex that are not accommodated in the bowl and fall to the ground to become small lumps. Generally, lumps of soil are dirty because they are mixed with soil and other particles.

The ground lumps used as raw materials in the BC processing unit usually originate from the area around PT PTP Nusantara XIII in South Salak Lake, Selan and Bokor Rivers, and several other areas. This state company operates with a focus on the production of semi-finished rubber material in the form of rubber sheets (Ribbed Smoked Sheet). To produce RSS, the raw material used is latex liquid. If the latex container (tapping bowl) containing latex liquid is taken from the tree, while the tapped tree still leaves sap droplets that are not accommodated and fall to the ground until they clump themselves into lumps (soil). The raw material that can also be used is tatal gum, which is a former latex liquid that clots and is still attached to the rubber tree. These raw materials are mostly supplied from outside the region, such as from North Hulu Sungai Regency. Other raw materials are reject lumps, ie lumps that are not accepted by crumb rubber factories because they do not meet factory criteria.

In the processing of brown crepe, lumps of soil are soaked in advance so that the material is more soft and easy to process at the time of enumeration and milling (Figure 3). Before the production process is carried out, the raw materials are first sorted from items mixed with raw materials such as plastic sacks, twigs, or other impurities (Figure 4). The process of milling raw materials (soil lumps, reject lumps, or tatal) is done using a machine called mangal. This machine is equipped with a generator that uses diesel fuel. During the processing, lumps of ground are flattened with a milled machine (grinder) and at the same time washed with flowing water continuously.

The first enumeration or grinding aims to clear lumps of contaminants such as sacks of raw materials (plastic), raffia, leaves, twigs, and soil, while glued together. In addition, also to lighten the second grinding

machine.

The ground lumps are constantly milled and glued to each other until they make one sheet with a length of approximately 1 (one) meter. The time needed to wash and grind is around 8-10 minutes. If the time of delivery of goods is done quickly, then the Brown Crepe product does not need to be soaked, in other words, after being rolled straight it is taken to the warehouse while waiting for the shipment of goods.

In some cases, BC processing is accompanied by heating. This treatment aims, among others, to preserve BC sheets so that they can last a long time, can know the final color of BC products to determine product quality, and can reduce the water content to the desired limit. In BC processing at the research site no heating is carried out to adjust to consumer demand. Instead, BC products are only soaked in a pool of water.

The packaging of BC products produced by Mr. Jamsar's production house is not wrapped. Brown crepe is only rolled well and neatly so that it is easy to carry and transport. Products are made almost uniform in terms of size, which is 55 cm and weighs approximately 25 kg / roll.

Profitability

Profitability (return on equity) is the ability of a company to obtain profit, which is a measure used to assess the extent to which a company is able to generate income was available to company owners for the capital they invest in the company. In other words, profitability (economy) or return on equity (ROE) is a measurement of the company's overall ability to generate profits with the overall assets was available in the company. Furthermore, in this study profitability is measured from the profit generated from the company.

Value Added Analysis

Value added analysis is a method of estimating the extent to which the raw material received by treatment changes so that it adds value. The value added of BC products originating from raw materials, that is soil lumps, rejected lumps, or tatal is an increase in the selling value of raw materials after processing. In other words, the amount of value added calculated is a reduction in the cost of raw materials and other inputs to the value of BC products, but does not include labor costs. Supporting costs in this analysis are the cost of water and the cost of fuel. Based on the calculation results it is known that 14.36% of the value of BC products is value added of rubber ingredients in the form of soil lumps, rejected lumps, and tatal. The analysis of the added value of the BC product processing industry can be seen in

Table 1. Calculation value added of Brown Crepe Product

No	Variabel	Jumlah
Output,input dan Price		
1	Output (kg)	13,723
2	Raw Material (kg)	17,584
3	Labor (HOK)	69
4	Factor Conversion	0.780
5	Labor coefficient	0.003
6	Output Price (Rp/kg)	6,500
7	Labor Average Wage (Rp)	89,498
Income andProfit (Rp/Kg)		
8	Raw Material Price (Rp/kg)	3,065
9	Contribution other input (Rp/kg)	1,277
10	Outpu Grade (Rp/kg)	5,070
11.a	a. Value added (Rp/Kg)	728
.b	b. Ratio Value Added (%)	14.36
12.a	Labor Reward	269
.b	Labor Part	37
13.a	Profit	459
.b	Profit Value	63
Retribution Factors Production		
14	Profit Margin	2,005
a	Profit	23
b	Labor	13
c	Other input	64

There are five factors that influence the amount of profit of a business, that is product price (output), variable costs per product unit, quantity produced during a certain period, fixed costs used during the production process, and tax (in percent). From the five factors, there are four factors that can be influenced by an entrepreneur, that is costs, the number of products produced, and prices. While general tax is a fixed percentage, so the amount will be determined by how much profit the company produces. In other words, if the company does not bring profit, there is no tax fee.

Based on the calculation, the profit generated from processing BC products is Rp. 459 / kg or Rp. 6,298,857, - / period, which is a comparison between profits and total costs which are represented in percentages. Based on the calculation of the profitability of the BC product processing industry, it is 7.06%, which means that every use of production inputs Rp. 1, it will generate a profit of Rp. 7.06. So the BC product processing industry is said to be a business that provides benefits to employers because the value of profitability is greater than zero. Furthermore, when compared with the current interest rates of the People's Business Credit (KUR), the Brown Crepe product processing industry still shows a profit rate of six times exceeding the KUR interest rate of 7% / year.

Calculation of industry gross margin produces gain value Rp. 1,296 / kg. This situation shows that the gross processing margin of BC products is very thin, which is only 19.94% price gained by employers. By knowing the amount of gross margin, the company can make it as an evaluation of company performance. Based on benchmark level margins, BC product processing businesses are at a very risky level because gross margins are below <20%, whereas a business should have gross margins of more than 30%. With performance like this, the business can be continued with the assumption that the production process and the prices of inputs and output can be controlled by the entrepreneur.

The small gross margin in the BC product processing industry is due to the large number of costs that are burdened by employers. For example, the amount of fees that must be deposited to the owners of capital as a reward of Rp 200 / kg for capital participation, which is Rp. 95,000,000. As long as the capital is not returned then the amount will continue to be burdened by employers. The amount of the fee is enough for the entrepreneur, because it is greater than the profit generated by the entrepreneur. In addition, the capital received from BRI in the form of KUR of Rp 200,000,000 and interest 9% also adds to the (fixed) costs that must be burdened by the entrepreneur. This situation of course makes it difficult for entrepreneurs to develop companies because of limited capital.

IV. Conclusions And Suggestion

Conclusion

Based on the results and discussion in this study, it can be concluded that:

1. In the research location, Brown Crepe produced is using the main raw material of soil lump. With such raw materials, the Brown Crepe produced only gain the Brown Crepe 3 category, which is the lowest quality product of this type.
2. Based on the calculation results it is known that 14.36% of the value of BC products is the value added of rubber ingredients in the form of soil lumps, rejected lumps, and tatal
3. Based on calculations, the profit generated from processing BC products is Rp. 459 / kg or Rp. 6,298,857, - / period. So the BC product processing industry is said to be a business that provides benefits to employers because the value of profitability is greater than zero

Suggestion

Based on the results and discussion and conclusions in this study, it can be suggested:

1. Companies that can improve the quality of Brown Crepe was brown crepe 3 category, which is the lowest quality of this type.
2. The BC product processing industry includes businesses that have value added to be developed by farmers
3. BC industry gross margin is very thin, this is due to the large amount of costs that become a burden on employers. This could be an evaluation material for the government in making various policies in the effort to develop rubber plantations and related to the development of the Brown Crepe rubber processing industry.

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