

ANALYSIS OF THE ADDED VALUE OF LIBERIKA COFFEE POWDER IN SAMUSTIDA VILLAGE, TELUK KERAMAT DISTRICT

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Abstract

The purpose of the study is to analyze the added value of Liberika coffee powder in Samustida Village, Teluk Keramat District. The Mitra Sejahtera Cooperative in Samustida Village has been processing coffee into coffee powder. Using the Hayami method, the research analysis found that the added value of processing coffee powder was Rp 6,930/kg, with an added value ratio of 39.33%. The coffee powder processing business received a positive added value or was classified as a moderate increase in value. To increase income, production of coffee powder must be increased, and efforts must be made to find raw materials, as well as to utilize the resources available within the cooperative according to their respective roles and functions.

Keywords: *Added value analysis, cooperative, Liberika coffee.*

INTRODUCTION

Coffea (*Coffea sp.*) is the main agricultural commodity in Kalimantan Barat, along with rubber and palm oil. According to data from the Kalimantan Barat Statistics Agency (BPS), the largest coffee plantations were located in the Sambas, Ketapang, and Kubu Raya districts in 2023. One variety of coffee that is widely cultivated is Liberika coffee, which has unique characteristics and the potential to become a leading commodity.

Sambas County, divided into several districts, is the largest producer of coffee in West Kalimantan. According to data from the Sambas Statistics Agency (BPS) in 2023, one of the largest coffee-producing districts is Teluk Keramat, with 680 hectares of coffee plantations and a production of 260 tons. Given the size and production of coffee plantations, many people process the coffee into powder to be marketed in markets and coffee shops in Sambas, with unique brands and flavors. Coffee processing is still on a small scale (home industry).

In the Teluk Keramat district, many people still process coffee traditionally and use it for home industries, as well as for their own consumption or to sell to coffee lovers. The traditional processing method requires the use of traditional tools and a significant amount of time and labor to process coffee cherries into green beans and coffee powder. This results in inconsistent quality and taste, as well as uneven grinding.

Samustida Village is the largest coffee-growing village in Teluk Keramat, with 72.75 hectares of coffee plants, of which 63.75 hectares are not yet producing and 9 hectares are producing (Identification of Samustida Village's Potential Resources, 2024). With the large amount of coffee plants, there is a cooperative that processes coffee into coffee powder. This cooperative is called Koperasi Mitra Sejahtera and has 19 members.

Koperasi Mitra Sejahtera processes fresh coffee beans into raw coffee beans and coffee powder under the brand name Kopi Insanak. The source of the coffee beans is the group's 4-hectare garden, the members' 20-hectare gardens, and the coffee plantations of farmers in Samustida Village. The coffee beans are of the liberica variety. The processing uses a semi-wet method with modern equipment and a motorized machine.

Kopi Insanak is a product of the cooperative and was first produced in 2023. It is sold in stores around the production site in Samustida and Pimpin, as well as through orders from coffee lovers in the Sambas and Pontianak markets and cafes. In May 2024, the green bean coffee produced by the cooperative was sold at a price of Rp 70,000/kg, while the price of Insanak coffee powder sold to consumers was around Rp 200,000/kg.

The cooperative processes coffee beans from fresh coffee fruit into green beans, which are then processed into coffee powder. This process requires raw materials, labor, and other inputs, as well as price references for raw materials and products, to determine the value added by the production process. Therefore, an analysis of the added value of the coffee produced by the Mitra Sejahtera Cooperative in Samustida Village, Teluk Keramat District, Sambas Regency is necessary.

HAYAMI METHOD

The Hayami method is an analysis method that calculates the added value, labor compensation, profit, profit margin, and profit margin (Maulidah, 2011). The Hayami method is a value-added analysis method that estimates the change in the value of raw materials after processing. (Epaga, P., et al., 2019). The formula is shown in Table 2.3 below: (Hayami et al., 1987).

Table 1. The procedure for calculating added value using the Hayami method

No	Variable (output, input, price)	Notasi
1	Production (kg/process)	A
2	Raw materials (kg/process)	B
3	Labor (person/process)	C
4	Conversion factor (1/2)	$D=A/B$
5	Labor coefficient (3/2)	$E=C/B$
6	Average product price (Rp/kg)	F
7	Average wage (Rp/person/process)	G
Income and Profit		
8	Price of raw materials (Rp/kg):	H
9	Other inputs (Rp/kg):	I
10	Product Value (Rp/kg):	$J= D \times F$
11	a. a. Value Added (Rp/kg) (10-8-9):	$K= J-H-I$
	b. b. Added Value Ratio (11a/10):	$L (\%) = K/J \times 100\%$
12	a. a. Labor Compensation (Rp/kg) (5x7):	$M= E \times G$
	b. b. Labor Compensation (Rp/hour) (5x7)	$N(\%) = M/K \times 100\%$
13	a. a. Profit (Rp) (11a-12a):	$O= K-M$
	b. b. Profit Margin (13a/11a):	$P (\%) = O/K \times 100\%$

compensation for production factors		
14	Margine (10-8) (Rp)	$Q = J - H$
	a. a. Labor Income (12a/14)	$R(\%) = (M/Q) \times 100\%$
	b. b. Other Inputs (%) (9/14)	$S(\%) = (I/Q) \times 100\%$
	c. c. Profit Margin (13a/14)	$T(\%) = (O/Q) \times 100\%$

Source : data Primery

According to Noviantari et al. (2015), The criteria for the value added can be interpreted as follows:

1. $NT > 0$ means the processing step adds value, resulting in a positive outcome or profit.
2. $NT < 0$: The processing provides a negative value added, meaning that the processing causes a loss.

According to Hubeis (1997) in Nabilah et al. (2015), the value added ratio indicator is used to determine the criteria for low, medium, or high value added. The indicators are as follows:

1. If ratio $< 15\%$, value added is low
2. A ratio of 15% to 40% indicates a moderate value added.
3. If the value added ratio is greater than 40% , then the value added is high.

METHODS

This study is a quantitative descriptive case study conducted at the Mitra Sejahtera Cooperative in Samustida Village, Teluk Keramat District, Sambas Regency, which processes coffee powder. Data collection methods include interviews, field observations, and documentation.

The data analysis used was the Hayami method, which aims to determine the added value of processing coffee beans (harvested coffee beans/fresh coffee beans) into coffee powder, thus revealing the amount and category of added value generated in the processing at the Mitra Sejahtera Cooperative in Samustida Village. To calculate the added value and added value ratio, it is necessary to know the production (output), raw materials (input), labor, product price, raw material price, and other input contributions.

RESULTS AND DISCUSSION

Mitra Sejahtera Cooperative is located in Samustida Village, Teluk Keramat District, Sambas Regency, and was formed in 2019. The cooperative was formed from a farming group that cultivated coffee plants in Samustida Village. The Mitra Sejahtera Cooperative aims to facilitate the processing and marketing of coffee, as well as to collect the harvests of farmers and groups to be processed into green coffee beans and coffee powder.

The cooperative manages the harvest of coffee plants, buying coffee fruit from farmers or groups that partner with the cooperative. The cooperative's partners are the Sejahtera, Sejahtera I, and Sumber Usaha groups. These groups sell their harvests to the cooperative for Rp 5,000 per kilogram, and the cooperative processes them into green coffee beans and coffee powder for sale.

The added value generated from processing coffee beans (green beans) into roasted coffee beans and coffee powder in one month at the Mitra Sejahtera Cooperative in Samustida Village is calculated using the Hayami method. To determine the added value using the Hayami method, it is necessary to know the variables obtained using the Hayami method.

The Hayami method is used to calculate the added value and the added value ratio produced by processing green coffee beans and coffee powder (kopi insanak) at the Mitra Sejahtera Cooperative in Samustida Village. The value added analysis is based on production variables (output), raw materials (input), labor, product prices, raw material prices, and other input contributions in coffee processing. The calculation of the added value of coffee powder using the Hayami method is shown in Table 2. below:

Table 2. Value Added of Ground Coffee from Koperasi Mitra Sejahtera in Samustida Village.

No	Variable (output, input, price)	Powder coffea
1	Production (kg/process)	20
2	Raw materials (kg/process)	227
3	Labor (person/process)	4
4	Conversion factor (1/2)	0,088
5	Labor coefficient (3/2)	0,017
6	Average product price (Rp/kg)	200.000
7	Average wage (Rp/person/process)	120.000
Income and profit		
8	Price of Raw materials (Rp/kg):	5.000
9	Other inputs (Rp/kg):	5.691
10	Product Value (Rp/kg):	17.621
11	a. a. Value Added (Rp/kg) (10-8-9):	6.930
	b. b. Added Value Ratio (11a/10):	39,33%
12	a. a. Labor Compensation (Rp/kg) (5x7):	2.115
	b. b. Labor Compensation (Rp/hour) (5x7)	30,51%
13	a. a. Profit (Rp) (11a-12a):	4.816
	b. b. Profit Margin (13a/11a):	69,49%
compensation for production factors		
14	Margine (10-8) (Rp)	12.621
	a. a. Labor Income (12a/14)	16,75%
	b. b. Other Inputs (%) (9/14)	45,09%
	c. c. Profit Margin (13a/14)	45,09%

Source : Primery data

According to Table 2, the added value from processing coffee beans into coffee powder is Rp 6,930, with an added value ratio of 39.33%. The processing used 227 kg of raw materials at a cost of Rp 5,000/kg.

The processing of fresh coffee fruit into coffee powder at the Mitra Sejahtera cooperative in Samustida village yields 20 kg of coffee powder per month at a price of Rp

200,000 per kg. This is produced from 227 kg of fresh coffee fruit per month at a price of Rp 5,000 per kg. To produce this, the cooperative requires three HOKs with a daily wage of Rp 120,000, as well as other input contributions, including production aids and equipment depreciation, totaling Rp 1,291,944 per month, or Rp 5,691 per kilogram.

Processing fresh coffee beans into coffee powder (kopi insanak) at the Mitra Sejahtera cooperative generates an added value of Rp 6,930/kg. This is considered a positive value or profit, as stated by Noviantari et al. (2015). A positive added value (≥ 0) means the processing generates added value, meaning the processing is profitable. The value-added ratio is 39.33%, considered moderate by Hubeis (1997) and Nabilah et al. (2015). A value-added ratio between 15% and 40% indicates moderate value addition.

According to Talbot (2002) in Dwi Kartika's *Journal of Management and Business Applications*, (2018), the added value is influenced by two factors: technical and market. The technical factors in coffee processing at the Koperasi Mitra Sejahtera cooperative in Samustida village include the technology used and the quality of the raw materials. Koperasi Mitra Sejahtera's coffee processing business has adopted modern technology, including pulping, hulling, roasting, and grinding machines. Only ripe red coffee beans are used as raw materials in the coffee processing. The market factor in coffee processing at the cooperative includes the selling price of the product. The price of Insanak coffee powder is higher because it is processed using a longer method.

CONCLUSION

This study shows that the added value generated from processing coffee at the Mitra Sejahtera Cooperative in Samustida Village is Rp 6,930/kg, with a value-added ratio of 39.33%. The added value of coffee powder is positive and falls into the moderate category.

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