



ANALYSIS OF PRODUCTION COST TO DETERMINE SELLING PRICE (CASE STUDY ON KUB SEJAHTERA SMES)

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ARTICLE INFORMATION	ABSTRACT
<i>Article History:</i> Received 05 Juni, 2025 Revised 25 Juli, 2025 Published 25 Oktober, 2025 <i>Keyword:</i> Cost of Goods Production, Full Costing, Variable Costing, Selling price	<i>This study aimed to determine how to calculate the cost of production using the full costing method and variable costing to determine the selling price for MSME KUB Sejahtera. MSME KUB Sejahtera is a business that produces spineless milkfish. The calculation of the cost of production carried out by MSMEs KUB Sejahtera is still simple and is done manually. MSMEs KUB Sejahtera does not take into account factory overhead costs, which are an element of the cost of production. This study uses quantitative descriptive research methods. The study results showed that the calculation of the cost of production carried out by MSMEs KUB Sejahtera produces lower results than using full costing and variable costing. This difference is caused by the calculation method carried out by MSMEs KUB Sejahtera not taking into account factory overhead costs, which are one of the elements in calculating the cost of production. While the full costing method takes into account both fixed and variable factory overhead costs, variable costing methods take into account only variable factory overhead costs. The differences in the results of the cost of production calculation affect the determination of the selling price, which is based on the full costing method that produces a higher selling price than the variable costing method.</i>

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1. Introduction

country or region, including Indonesia (Marisyah, 2022). As the number of MSME players increases, there will be more competition among business players. This will force every business owner to manage their business more

effectively and efficiently in order to produce high-quality products so that they can survive and thrive in the face of business competition (Aulia et al., 2021). In order to achieve work effectiveness and efficiency, MSMEs also need to create policies, one of which is the determination of the cost of production (Pasapan et al., 2023). MSMEs often set their selling prices incorrectly. This is because MSMEs are inaccurate in determining the cost of goods produced for the products they manufacture. The cost of goods produced calculations made by MSMEs do not fully take into account factory overhead costs, so the selling prices set by MSMEs are still inaccurate (Marisya, 2022). Whereas setting prices too high can result in a decline in consumer purchasing power, conversely, if prices are too low, it will affect the profits and performance of a business. Therefore, a policy that can be implemented so that the business can continue to run amid fierce competition is to calculate the cost of production, which will later be used as a guide for setting selling prices (Murnawan et al., 2021). To reduce errors in determining the cost of goods manufactured and to achieve stable selling prices, it is necessary to use a good pricing method. There are two approaches to determining the cost of goods manufactured, namely the full costing method and variable costing method (Harefa et al., 2022). The full costing method in calculating the cost of production includes all cost components, such as raw material costs, direct labor costs, and factory overhead costs, both fixed and variable, which is beneficial for long-term decision-making in a business (Khaerunnisa & Pardede, 2021). Meanwhile, the variable costing method is a method of determining the cost of production by only taking into account variable production costs, including raw material costs, direct labor costs, and variable factory overhead costs, so it is suitable for short-term decision making that does not require consideration of non-production costs (Sujarweni, 2022).

UMKM KUB Sejahtera is a micro, small, and medium enterprise engaged in the food sector, producing boneless milkfish located at Jl. Aki Balak, Rt.28, Kel. Karang Anyar Pantai, Kec. Tarakan Barat, Kota Tarakan, managed by Mr. Samuel Samban and his wife. This business focuses on the production of boneless milkfish and distributes its products by selling them to restaurants, marketing them in Surabaya, and exporting them to Tawau. In calculating the cost of production, the KUB Sejahtera MSME only takes into account the cost of raw materials and labor, so the method of calculating the cost of production used by this MSME is still very simple because it does not take into account factory overhead costs in the production process. Similarly, in determining the selling price, it is only based on the price of raw materials and buyer demand. If demand is high, the price is cheaper than the retail price. Therefore, inaccuracies in calculating the cost of production will result in inaccuracies in determining the selling price due to the lack of detailed production costs. Based on the background and issues described above, the researcher is interested in conducting research entitled "Analysis of Production Cost to Determine Selling Price (Case Study of KUB Sejahtera MSMEs)". Based on the background of the problem above, the formulation of the problem in this study is as follows: How is the cost of production calculated using the full costing method and variable costing methods to determine the selling price at KUB Sejahtera SME?

2. Literatur Review

2.1. Supply and Demand Theory

The theory of supply states that the higher the price of a good, the lower the quantity of goods demanded; conversely, the lower the price of a good, the higher the quantity of goods demanded (Zahara & Anwar, 2021). Meanwhile, the theory of demand states that if the price of goods increases, the quantity of goods supplied increases, and conversely, if the price of goods decreases, the quantity of goods supplied decreases (Zahara & Anwar, 2021). Market equilibrium is the quantity of goods supplied by producers equal to the quantity of goods demanded by consumers at a certain price level (Zahara & Anwar, 2021).

2.2 Modern Management Theory

Modern management theory developed through two main streams, namely the behavioral stream organizations and quantitative approaches (Ansory & Indrasari, 2018). Modern theory suggests that organizations are not closed systems related to a stable environment, but rather open systems that must adapt to changes in their environment. Meanwhile, the quantitative school emphasizes the application of quantitative methods in the context of management, with a primary focus on the need to use data, statistics, and numerical analysis to support the management decision-making process (Ansory & Indrasari, 2018). The application of modern management theory in this study is that modern management uses data analysis and quantitative methods to support decision-making. Calculating the cost of production provides information about the production costs incurred for each product, thereby helping to determine the right selling price to achieve business profits.

Cost, as defined by Sujarweni (2022), is the amount that can be exchanged for one unit of currency to purchase goods and services needed by a business, both for the current and future periods. Conversely, according to Lendombela et al. (2021), cost is the amount of economic value measured by one unit of currency that has occurred or is expected to occur in order to achieve a specific goal. Cost is the sacrifice made by a company to produce goods or services that will ultimately benefit the business itself (Purnama et al., 2019). From these definitions, it can be concluded that cost is an economic resource measured in monetary units used by business actors to produce goods or services that will benefit the business itself.

2.4 Cost of Goods Manufactured

The cost of production is the total amount of economic resources sacrificed to convert raw materials into finished goods (Purnama et al., 2019). Meanwhile, according to Triharyati (2019), the cost of production is the total cost used to process raw materials into finished products that are ready to be sold to customers. According to Sujarweni (2022), the cost of goods manufactured is the total amount of costs incurred during the production process, which includes raw material costs, labor costs, and factory overhead. Based on this definition, it can be concluded that the cost of goods manufactured is the total amount of costs incurred by a company to convert raw materials into finished goods that are suitable for sale to customers.

2.5 Full Costing Method

The *full costing* method is a way to determine the cost of goods manufactured by taking into account all production costs, including fixed and variable costs of the products produced (Sujarweni, 2022). Thus, the presentation of the cost of goods manufactured using the *full costing* method is as follows:

Cost of Goods Produced:

Raw material costs	Rp. xxx.xxx Direct
labor costs	Rp. xxx.xxx Fixed
<i>factory overhead</i> costs	Rp. xxx.xxx Variable
<i>factory overhead</i> costs	<u>Rp. xxx.xxx + Cost</u>
of goods sold	<u>Rp. xxx.xxx</u>

2.6 Variable Costing Method

Variable costing is a method of calculating production costs that only takes variable production costs into account in the cost of goods manufactured, which includes raw material costs, direct labor costs, and variable *factory overhead* costs (Theny et al., 2021). Based on Sujarweni's book (2022), the *variable costing* method is a way to determine the price of a product by only taking into account variable production costs. Therefore, this method works best as a tool for short-term planning and decision-making, where non-production costs do not need to be taken into account. Thus, the presentation of the cost of goods manufactured using the *variable costing* method is as follows:

Production Cost:

Raw material costs	Rp. xxx.xxx
Direct labor costs	Rp. xxx.xxx
<i>Factory overhead</i> costs	<u>Rp. xxx.xxx +</u>
Variable	
Product cost	<u>Rp. xxx.xxx</u>

2.7. Selling price

According to Kotler, , and Keller (2009), the selling price is the amount of money invested in it, or the amount of money that customers are willing to pay for the product (Sujarweni, 2022). Meanwhile, Hansen and Mowen (2001), as cited in Triharyati (2019), state that the selling price is the amount of money charged by a business unit to buyers or customers for goods or services that have

been sold. The selling price is intended to cover all costs related to goods or services and generate the profit expected by the company (Indahwati & Sunrowiyati, 2021). Based on these definitions, it can be concluded that the selling price is the amount of costs incurred by the company to provide goods or services plus the profit expected by the producer.

2.8. Cost Plus Pricing Method

The cost plus pricing method is a business strategy used to set the selling price of a product unit, whereby the selling price that has been set will be sufficient to cover all costs incurred during production and provide the desired return on investment for the business (Purnama et al., 2019). According to Sujarweni (2022), cost plus pricing is an expense that becomes the basis for calculating the cost of goods sold and can be determined according to the procedure used to calculate the cost of goods sold. The formula used is: Total selling price = Total cost + Margin

3. Research Methodology

3.1. Research Design

Based on the type of data obtained in this study, the author used a quantitative approach with descriptive research techniques to describes the research results. The descriptive quantitative method in this study will investigate the cost of production using the full costing and variable costing methods to determine the selling price at KUB Sejahtera MSMEs

3.2. Time and Location of Research

The location of this research is at the KUB Sejahtera SME, located at Jl. Aki Balak, Rt.28, Karang Anyar Pantai Village, Tarakan Barat Subdistrict, Tarakan City. This research will be conducted over a period of 3 months, from April 2024 to June 2024.

3.3. Data Sources

Data Primary and secondary data are the two types of data sources used in this study. Primary data is a data source that provides direct access to the data collector (Sugiyono, 2018). The data is collected directly by the researcher from the research location. is data that obtained in the form of publications from evidence, records, or historical reports in the form of archives (Szahro & Purwanto, 2021). The secondary data used by the researcher are records of information on costs and all reports related to the production process.

3.4. Data Collection

The data collection techniques used in this study were:

1. Observation
2. Interview
3. Documentation

3.5. Data Analysis Techniques

This study uses quantitative descriptive analysis as a data analysis method, which involves summarizing information collected from observations conducted at KUB Sejahtera MSMEs. Then, in the data analysis in this study, the following formula is used:

The full costing method formula is as follow

Cost of Goods Manufactured:	
Raw material costs	Rp. xxx
Direct labor costs	Rp. xxx
Fixed <i>factory</i> <i>overhead</i> costs	Rp. xxx
Variable <i>factory</i> <i>overhead</i> costs	<u>Rp. xxx +</u>

Source : Processed data

The formula for the *variable costing* method is as follows:

Cost of Goods Manufactured:	Rp.xxx
Raw material costs	Rp. xxx
Direct labor costs	
<i>Factory overhead</i> costs	<u>Rp.xxx +</u>
Variable Product cost	<u>Rp.xxx</u>

Source: Sujarweni, 2022

Determining the selling price using the *cost plus pricing* method can be seen as follows:

$$\text{Selling Price} = \text{Total Cost} + \text{Margin}$$

Source: Sujarweni, 2022

4. Results and Discussion

4.1 Overview of the Research Object

UMKM KUB Sejahtera is a micro, small, and medium enterprise engaged in the food sector, located at Jl. Aki Balak, Rt.28, Kel. Karang Anyar Pantai, Kec. Tarakan Barat, Kota Tarakan, managed by Mr. Samuel Samban and his wife, which was established in 2015.

The results of the study show differences in the calculation of production cost between KUB Sejahtera MSMEs, the full costing method, and variable costing. The calculation of production cost by KUB Sejahtera MSMEs is still relatively simple because it does not take into account factory *overhead* costs, which are one of the elements of production cost. However, the *full costing* method takes into account both fixed and variable overhead costs, while the *variable costing* method only takes into account variable factory *overhead* costs. The difference in the calculation of the cost of production affects the determination of the selling price,

Table 4.1 Calculation of Production Cost for KUB Sejahtera MSMEs Using the *Full Costing* Method

Description	Cost (IDR)	Total Cost (IDR)
Cost Material Raw		26,080,000
Cost Direct Labor		10,045,000
Overhead Costs Variable Factory Costs:		
Electricity Costs	1,000,000	
Water Costs	500,000	
Ice Costs	300,000	
Cost Plastic Polyethylene	481,000	
Equipment Maintenance Costs	20,000	
Total Cost Overhead Variable Factory		2,301,000
Overhead Costs Fixed Factory:		
Cost Freezer Machine Service	2,000,000	
Cost Fixed Asset Depreciation	1,237,208	
Total Expenses Overhead Fixed Plant		3,237,208
Total Cost Production		41,663,208
Total Production		1,715 kg
Price Cost Production Per kg		24,293

Source: Processed data, 2025

Based on Table 4.1, it can be seen that the calculation of the cost of production for KUB Sejahtera MSMEs using the *full costing* method resulted in a total production cost in April of IDR 41,663,208

Table 4. 2 Calculation of Production Cost for KUB Sejahtera MSMEs Using the *Variable Costing* Method

Description	Cost (Rp)	Total Cost (IDR)
Raw Material Cost		26,080,000
Direct Labor Cost		10,045,000
Overhead Costs Variable Factory Costs:		
Electricity Costs	1,000,000	
Water Costs	500,000	
Ice Costs	300,000	
Plastic Fee Polyethylene	481,000	
Equipment Maintenance Costs	20,000	
Total Cost Overhead Variable Factory Costs		2,301,000
Total Cost Production		38,426,000
Quantity Production		1,715 kg
Cost Price Production per kg		22,406

Source: Processed data, 2025

From Table 4.2, the total production cost using the *variable costing* method in April is Rp.38,426,000 with a production cost per kg of Rp.22,406. The production cost calculation presented above can be used as a reference in determining the selling price of UMKM KUB Sejahtera. The following is the calculation of the selling price of UMKM KUB Sejahtera:

Table 4.3 Calculation of the Selling Price of UMKM KUB Sejahtera Products

Description	Total Cost (Rp)
Production Cost	36,125,000
Marketing Costs	2,500,000
Cost Administration & General	400,000
Total Cost	39,025,000
Markup 30%	11,707,000
Selling Price	50,732,500
Selling Price per Kg	29,582
Rounding	30,000

Source: Processed data, 2024 Based on Table 4.3, the total costs incurred by KUB Sejahtera MSMEs amounted to IDR 39,025,000. From the total costs incurred, KUB Sejahtera MSMEs expected a profit of 30%. Therefore, based on these calculations, the selling price is Rp.29,582 per kg, rounded to Rp.30,000 per kg.

Table 4. 4 Product Selling Price Calculation Using the *Full Costing* Method

Description	Total Cost (IDR)
Production Costs	41,663,208
Marketing Cost	2,500,000
Administrative Administration & General	400,000
Total Cost	44,563,208
Markup 30%	13,368,962
Selling Price	57,932,170
Selling Price per Kg	33,780
Rounding	34,000

Based on Table 4.4, the method used in calculating the selling price of the product is the *cost plus pricing* method, resulting in a selling price of Rp.34,000 per kg for boneless milkfish.

Table 4.5 Product Selling Price Calculation Using the *Variable Costing* Method

Description	Total Cost (Rp)
Production Cost	38,426
Marketing Costs	2,500,000
Administrative & General Costs	400,000
Total Expenses	41,326,000
30% Markup	12,397,800
Selling Price	53,723,800
Selling Price per Kg	31,326
Rounding	31,000

Source: Processed data, 2025

Based on Table 4.5, the method used in calculating the selling price of the product is the *cost plus pricing* method with a profit margin of 30% expected by MSMEs, resulting in a selling price of milkfish without bones per kg of Rp.31,000.

Conclusion

5.1 Conclusion

There are differences in the calculation of production cost between UMKM KUB Sejahtera, the *full costing* method, and the *variable costing* method, due to differences in cost allocation from the outset. In the calculations of UMKM KUB Sejahtera, factory *overhead* costs are not charged, while the *full costing* method calculates all factory *overhead* costs, both fixed and variable, and the *variable costing* method calculates only variable factory *overhead* costs.

The selling price determined from the cost of production calculation according to UMKM KUB Sejahtera is IDR 30,000 per kg, while the cost of production calculation using the *full costing* method results in a selling price of IDR 34,000 per kg, and the cost of production calculation using the *variable costing* method results in a selling price of IDR 31,000 per kg.

5.2 Recommendations

1. It is recommended that KUB Sejahtera MSMEs use the *full costing* method to calculate the cost of goods manufactured, as this method takes into account all production costs incurred by the business, thereby producing a more accurate cost of goods manufactured that can be used to determine the appropriate selling price. Meanwhile, calculating the cost of production using the *variable costing* method is suitable for short-term decision-making by management, particularly for determining short-term selling prices, such as whether to accept or reject special orders.
2. It is recommended that KUB Sejahtera MSMEs prepare production cost reports that include all costs incurred during the production process so that the costs used can be ascertained, making it easier and more accurate to calculate the cost of production.
3. It is recommended that KUB Sejahtera MSMEs use a simple Excel application to calculate their cost of production so that they can cope with changes in production costs that can change at any time, thereby ensuring that their cost of production is more precise and accurate.

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