

Analysis Of Hpp Calculations With The Full Costing Method As A Basis For Setting The Selling Price Of Homecare Products

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ABSTRACT

This study aims to know the accurate calculation of the cost of production so that it can determine the selling price of products at PT Cheimiko Multi Lestari based on the full costing method where this calculation method includes all costs both variable and fixed, namely raw material costs (BBB), factory overhead (BOP), and direct labor costs (BTKL), this research method uses a qualitative method which focuses on research observations and leads to descriptive and uses a quantitative method which calculates the data obtained by PT Chemiko Multi Lestari into the cost accounting group. The results of this study indicate that the calculation of the cost of production at PT Cheimiko Multi Lestari yields a cost of production of IDR 43.350 for Detergent Fresh Lavender products and IDR 44.800 for Softener Fresh Lavender products (5 Liter size), thus obtaining a selling price of IDR 44.350 for Detergent Fresh Lavender products. and IDR 50.800 for the Softener Fresh Lavender product (5 Liter size) with a profit (margin) from each product of IDR 1.000 and IDR 6.000. While the calculation using the full costing method produces a production cost of IDR 25.368 for Detergent Fresh Lavender products and IDR 21.918 for Softener Fresh Lavender products, then results in a selling price of IDR 32.877 for Softener Fresh Lavender products (each size 5 Liter) from the calculation of the full costing method respectively each product has a profit of IDR 12.684 and IDR 10.959. So that the difference in the calculation of the cost of goods at PT Cheimiko Multi Lestari has a small profit and the calculation using the full costing method has a large profit for 10.000 pcs of finished product, therefore the calculation of the cost of production using the full costing method is very influential both in determining the selling price to compete between other competitors

Keywords: Cost of Production, Full Costing Method, Selling Price

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Introduction

Economic development in Indonesia has indirectly encouraged business competition between entities in various fields. All industries and companies are competing to improve the quality of their production, this is done to get more market share. The main goal of the company is to get as much profit as possible so that the survival of the company is guaranteed, besides that the company also carries out its operational activities, namely developing its business so that it is more advanced and can benefit the general public.

One of the problems often faced by companies is the calculation of the cost of production in determining the selling price. The selling price is closely related to the achievement of profit which can be interpreted as a reward for the efforts of goods or services produced by the company.

The problem faced by PT Chemiko Multi Lestari in calculating the cost of goods produced as a determination of the selling price of products is uncontrolled production costs which cause the cost of goods to be too high which will reduce product competitiveness and ultimately reduce profits. Therefore, a strategy is needed in the efficiency of production costs in order to calculate the cost of goods and determine the right selling price.

In determining the calculation of the cost of production of PT Chemiko Multi Lestari still uses a very simple method or is done manually, because there are still factory overhead costs that have not been taken into account in calculating the cost of production such as water, electricity (internet), transportation costs and machine depreciation costs. From several cost elements that are included in the calculation of the cost of goods manufactured, it greatly affects the amount of profit obtained at PT Chemiko Multi Lestari. This happens because the calculation of the cost of goods produced is not good or not detailed in determining the selling price.

So the purpose of the study is to determine the calculation of the cost of goods produced and the determination of the selling price of products at PT Chemiko Multi Lestari and based on the full costing method, as well as to find out between the calculation of the cost of goods produced and the determination of the selling price of products at PT Chemiko Multi Lestari based on the company and the calculation based on the full costing method.

The difference in the results of the research that I conducted with previous researchers is very different, in previous researchers conducted by Yana Sari, N. 2019 with her research entitled "Analysis of the Calculation of the Cost of Production of Tofu Products with the Full Costing Method as a Basis for Setting Selling Prices" this type of research is more on food or food ingredients, namely making tofu, while the research method I do is more directed to household needs products, where the product has quite a lot of stages and processes, one of which is the production process and the raw materials made are made on average from chemicals. Therefore in this study there are stages or processes that are very important for the company, where the stage is the initial production process to produce a product so the process is laboratory testing of raw materials to be produced, this process is used to regulate the viscosity (viscosity) and dosage of raw materials to be processed whether it is in accordance with the standard formulation determined by the company. This lab testing process must also require a sterile room and special tools in order to produce a perfect sample besides that the production process must also follow the sample that has been determined by the lab testing section. The place of the production process is also must always be clean and organized so that the product to be produced maintains its temperature resistance and is good for sale.

So that the difference between Yana Sari's research, N. 2019 with her research entitled "Analysis of the Calculation of the Cost of Production of Tofu Products with the Full Costing Method as a Basis for Setting Selling Prices" with the research I conducted at PT Chemiko Multi Lestari is different in terms of costs, previous research only focused on determining the selling price directly and manually while the research I did focused on determining the online-based selling price as well as a group of costs that are different from previous research, namely marketing costs where marketing admins manage online sites to sell these products.

Research Method

The variables used in this study have two variables, namely variable one method of calculating the cost of production (X), and the second variable method of calculating the selling price (Y). The method used in this research is qualitative data analysis method, which is an analysis of data described in words or sentences. And quantitative data analysis is a data analysis that describes the numbers obtained from calculations or measurements.

Result

The results of this discussion show the calculation of the company's cost of goods produced and the cost of goods produced using the full costing method of each product. The following is the calculation of the company's cost of goods manufactured :

a. Detergent Raw Materials

Table 1. Detergent Raw Materials

No	Material Name	Raw Material Price per g/mL	Concentration %	HPP (Raw Materials)
1	Water	Rp 1,00	89,01	Rp 89,01
2	Sodium Laureth Sulfate	Rp 14,98	6	Rp 89,88
3	Dodecyl Sulfonic Acid	Rp 28,86	1,5	Rp 43,29
4	COU	Rp 21,00	1	Rp 21,00
5	BKC	Rp 46,00	0,1	Rp 4,60
6	Sodium Carbonate	Rp 13,00	0,1	Rp 1,30
7	Lavender Perfume	Rp 317,29	0,2	Rp 63,46
8	PEG-40	Rp 82,14	0,08	Rp 6,57
9	Sodium Chloride	Rp 5,60	2	Rp 11,20
10	Purple Colorant	Rp 100,00	0,01	Rp 1,00
Total			100	Rp 331

The table above shows the result of IDR 331 for the cost of raw materials for detergent.

b. Softener Raw Materials

Table 2. Softener Raw Materials

No	Material Name	Raw Material Price per g/mL	Concentration %	HPP (Raw Materials)
1	Water	Rp 1,00	99,15	Rp 99,15
2	M300	Rp 168,00	0,4	Rp 67,20
3	EDTA	Rp 46,00	0,06	Rp 2,76
4	Perfume	Rp 316,61	0,3	Rp 94,98
5	PEG-40	Rp 82,14	0,08	Rp 6,57
6	Dye	Rp 130,00	0,01	Rp 1,30
Total			100	Rp 272

The table above shows the result of IDR 272 for the cost of softener raw materials.

a. Calculation of Cost of Detergent

Spare Fluctuation

(Reserve for purchase price increases because the majority of raw materials use USD prices)

Spare Price Fluctuation 20%

(Total Raw Material COGS x Spare Fluctuation Price)

= (IDR 331 x 20%)

= IDR 66 (per 100 ML)

Generating profit from raw materials of IDR 66 per ML

Raw Material Price per 100 ML

(Total Raw Material COGS + Fluctuation Spare Results)

= (IDR 331 + IDR 66)

= Rp 397 (total raw material per 100 ML)

Resulting in a raw material price per 100 ML of Rp 397 dollars

Raw Material Price per 1 L

(Raw Material Price per ML x Liter)

= (IDR 397 x 10)

= IDR 3,970 (total raw materials per 1 Liter)
 Resulting in a raw material price per 1 Liter of IDR 3,970 rupiahs

Raw Material Price Per 25,000 L

(1L Raw Material Yield x Number of Orders to be Produced)
 = (IDR 3,970 x 25,000)
 = IDR 99,250,000 (total production raw material costs)
 So the raw material costs incurred during production per 25,000 liters are
 IDR 99,250,000 rupiah.

b. Calculation of Cost of Softener

Spare Fluctuation

(Reserve for purchase price increases because the majority of raw materials use USD prices)

Spare Price Fluctuation 20%

(Total Raw Material COGS x Spare Fluctuation Price)
 = (IDR 272 x 20%)
 = Rp 54 (per 100 ML)
 Resulting in a profit from raw materials of Rp 54 per ML.

Raw Material Price per 100 ML

(Total Raw Material COGS + Fluctuation Spare Results)
 = (Rp 272 + Rp 54)
 = IDR 326 (total raw material per 100 ML)
 Resulting in a raw material price per 100 ML of IDR 326.

Raw Material Price per 1 L

(Raw Material Price per ML x Liter)
 = (IDR 326 x 10)
 = IDR 3,260 (total raw materials per 1 Liter)
 Resulting in a raw material price per 1 liter of IDR 3,260 rupiah.

Raw Material Price per 25,000 L

(1L Raw Material Yield x Number of Orders to be Produced)
 = (Rp 3,260 x 25,000)
 = IDR 81,500,000 (total production raw material costs)

Table 3. Calculation of Cost of Detergent

Detergent	
Quantity 5,000 Pcs x 5 Liters	
Volume 25,000 Liters	
Raw Material Cost Per 25,000 L	Rp 99,250,000
Soluble Material Coefficient Cost Rp 200,-/Liter	Rp 5,000,000
Overhead Cost IDR 3,000/Liter	Rp 75,000,000
Packaging & Label Cost IDR 7,500/Pcs	Rp 37.500.000 +
Total	Rp 216,750,000
COGS / 5 Liter Packaging	Rp 43.350
Selling Price	Rp 44.350

So the results of the calculation of the cost of goods produced to the company's selling price include all cost elements, namely producing a cost of goods produced of IDR 43,350 and a selling price of IDR 44,350 for Detergent products (1 pcs, size 5 liters) for 5,000 pcs.

Table 4. Calculation of Cost of Softener

Softener	
Quantity 5,000 Pcs x 5 Liters	
Volume 25,000 Liters	
Raw Material Cost Per 25,000 L	Rp 81.500.000
Rp 30.000.000	Rp 30.000.000
Overhead Cost IDR 3,000/Liter	Rp 75.000.000
Packaging & Labeling Cost IDR 7,500/Pcs	Rp 37.500.000 +
Total	Rp 224.00.000
COGS / 5 Liter Packaging	Rp 44.800
Selling Price	Rp 50.800

And the results of the calculation of the cost of production of the company's selling price include elements of all costs resulting in a cost of production of IDR 44,800 and a selling price of IDR 50,800 softener products (1 pcs of 5 liters size) for 5,000 pcs.

Table 5 of Calculation of Cost of Production of Detergent with Selling Price of Full Costing Method

Cost of Goods Manufactured	
Raw Material Cost :	
Detergent Raw Material Cost	Rp 12.100
Raw material cost of auxiliaries	Rp 7.100
Total :	Rp 19.200
Overhead Costs	Rp 6.168
Cost of Goods Manufactured	Rp 25.368
Margin (Profit)	Rp 12.684
Selling Price	Rp 38.070

The table above is the result of the calculation of the cost of production and selling price for fresh lavender variant detergent products including raw material costs, overhead costs resulting in a cost of production of Rp 25,368 (1 pcs of 5 liter size), has a margin (profit) of Rp 12,684 calculated from the total cost of production multiplied by 50%, resulting in a selling price of Rp 38,070 per 1 jerry can of 5 liters (detergent).

Table 6 Calculation of Cost of Goods Manufactured Softener with Full Costing Method Selling Price

Cost of Goods Manufactured	
Raw Material Cost :	
Softener Raw Material Cost	Rp 8.650
Raw material cost	Rp 7.100
Total :	Rp 15.750
Overhead Cost	Rp 6.168
Cost of Goods Manufactured	Rp 21.918
Margin (profit)	Rp 10.959
Selling Price	Rp 32.877

The table above is the result of the calculation of the cost of production and selling price for fresh lavender variant detergent products including raw material costs, overhead costs resulting in a cost of production of Rp 21,918 (1 pcs size 5 liters), has a margin (profit) of Rp 10,959 calculated from the total cost of production multiplied by 50%, resulting in a selling price of Rp 32,877 per 1 jerry can size 5 liters (softener).

Table 7 Comparison Table of Cost of Goods Manufactured of PT Chemiko Multi Lestari With Full Costing Method

Produk	HPP Chemiko	COGS Full Costing
Detergent Fresh Lavender	Rp 43,350	Rp 25,368
Softener Fresh Lavender	IDR 44,800	Rp 21,918
Produk	Harga Jual Chemiko	Harga Jual Full Costing
Detergent Fresh Lavender	Rp 44.350	Rp 25,368
Softener Fresh Lavender	Rp 50.800	Rp 21,918
Produk	Selisih HPP	Selisih Laba
Detergent Fresh Lavender	Rp 17.982	Rp 6.280
Softener Fresh Lavender	Rp 22.882	Rp 17.927

The table above outlines that there are some differences between the results of the cost of goods produced by PT Chemiko Multi Lestari and the results of the cost of goods of the full costing method, and the comparison of the cost of goods produced and the selling price of PT Chemiko Multi Lestari with the full costing method has a difference in cost of goods produced and a difference in profit, therefore the calculation of the cost of goods and selling prices calculated at PT Chemiko Multi Lestari is greater and the calculation using the full costing method is smaller so that it can compete among other competitors.

Conclusion

The calculation of the cost of goods produced at PT Chemiko Multi Lestari, which discusses the calculation of raw material costs, overhead costs and direct labor costs, the calculation of raw materials in the company, which takes into account the percentage of product raw materials used and the calculation of the margin (profit) generated by PT Chemiko Multi Lestari only includes raw material costs (20% total per / ml) and factory overhead costs (per / liter) to obtain the selling price.

The calculation of raw material costs calculated by PT Chemiko Multi Lestari includes water raw materials while the water expense in the full costing method is classified as factory overhead costs because the source of the water comes from electricity (water machine), then the calculation of overhead costs and direct labor costs calculated at PT Chemiko Multi Lestari is not clear or still using manualization and the calculation of the resulting profit only includes raw material costs (soluble material coefficient), the calculation of the cost of production of PT Chemiko Multi Lestari is Rp 43.350 (5 Liter detergent) and Rp 44,800 (5 Liter softener) with a company selling price of Rp 44,350 (5 Liter detergent) and Rp 50,800 (5 Liter softener). Meanwhile, the full costing method includes all cost elements properly and correctly, resulting in a finished product, namely the cost of goods of Rp 25,368 (5 Liter detergent) and Rp 21,918 (5 Liter softener) by producing a selling price of Rp 38,070 (5 Liter detergent) and Rp 32.877 (softener 5 Liter) for per 1 jerry can of product, has a margin (profit) of Rp 12,684 (detergent 5 Liter) and Rp 10,959 (softener 5 Liter) from 50% of the calculation of the cost of raw materials (BBB), factory overhead costs (BOP) and direct labor costs (BTKL).

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