



# Effectiveness Methods in Determining The Cost of Ffb Production in Palm Oil Plantations

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## ABSTRACT

This study explains the factors that can affect the determination of the cost of producing fresh fruit. When the Company determines production costs, the Company PT. Kartika Hijau Lestari performs calculations using the complete cost method. Where the total cost method is the determination of production costs in determining the correct price of production, a company must consider the components of production costs consisting of direct material costs, direct labor costs, and overhead costs. All these costs are costs associated with the production process. The results showed that the total cost of production in December 2021 was 62,257,798 rubles and produced 9,972 kg of fresh fruit. The cost of producing fresh fruit was 1,027 rubles/kg. Based on the results of the study, it can be stated that the direct material costs of PT. Kartika Hijau Lestari owns fresh fruit bunches purchased from the Company's plantations, and in determining the selling price of fresh fruit bunches, PT. Kartika Hijau Lestari monitors market prices.

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## 1. INTRODUCTION

A company is an organization that generally has specific goals to be achieved in its business activities. When establishing a company, the company's goal is to obtain the maximum profit, increase its value, and respond to the community's needs so that the company's welfare can develop. A company can compete nationally and internationally with the right strategies and policies.

For industrial companies, production cost information is one of the most important types of information. This information can be used for various purposes, such as cost control for efficiency, product pricing, decision-making, and many other purposes. The role of accounting becomes essential in achieving these goals.

PT. Kartika Hijau Lestari is a company engaged in the cultivation and management of oil palm plantations. Fresh fruit bunches are obtained as the primary commodity during planting, which costs a lot of money. The cost components vary from planting, maintaining, harvesting/harvesting to processing into ready-to-sell products. The correct calculation of production costs leads to determining the right selling price, which becomes the expected profit later. The high cost of producing fresh fruit bunches at PT.

Kartika Hijau Lestari will definitely affect sales. The following is the production data of PT. Kartika Hijau Lestari 2018 – 2021:

Table 1. FFB production of PT. Sustainable Green Kartika from 2018 - 2021

Year	Production (Kg)	Total (Rp)
2018	7,118,625	10,427,715,493
2019	8,543,101	11,325,701,348
2020	6,698,022	10,636,351,409
2021	8,248,484	18,818,337,506

Based on Table 1 above shows that PT. Kartika Hijau Lestari has a fluctuating sales and production volume. In 2018 total production was 7,118,625 kilograms, and total sales were Rp. 10,427,715,493, in 2019 total production was 8,543,101 kilograms and total sales were Rp. 11,325,701,348, in 2020 total production was 6,698,022 kilograms and total sales were Rp. sales of Rp. 10,636.351,409. Meanwhile, in 2021 the total production is 8,248,484 kilograms with total sales of Rp. 18,818,337,506.

The results of sales and production of PT. Kartika Hijau Lestari experiences ups and downs every year. So there are still many problems in calculating the cost of production of fresh fruit bunches (FFB) at PT. Sustainable Green Kartika. Cost price is all expenses incurred to produce 1 kilogram of Fresh Fruit Bunches (FFB), including maintenance, harvest, and transportation costs.

This is intended to make it easier for companies to know how much the company costs to produce a product, called the cost of production. Cost of Production in the industry is the most significant part of the company's costs. If cost information for a job or process is readily available, then management has a solid basis for planning its activities. Companies must be careful and detailed in making financial reports, especially those relating to production costs, so there are no deviations and waste of costs in the production process.

## 2. RESEARCH METHOD

### 2.1 Cost accounting

Cost accounting in calculating the cost of production plays a role in determining, analyzing, and reporting costs that support financial statements so that they can show good assets. Cost accounting provides cost data for various purposes, so the costs incurred in the company must be classified and appropriately recorded, thus enabling a careful calculation of the cost of goods manufactured. Cost accounting is one of the branches of accounting, which is a management tool for monitoring and recording cost transactions systematically and presenting cost information in the form of cost reports (Supriyono, 2011).

Cost accounting is recording, classifying, summarizing, and presenting costs, manufacturing, and selling products and services in specific ways and interpreting them. Cost accounting in calculating the cost of production has a role in determining, analyzing, and reporting cost items that support financial statements so that they can show valuable data (Mulyadi, 2015). Cost accounting is also a part of management accounting that places more emphasis on determining costs and controlling costs, which are related to the costs of producing an item. Overall, cost accounting provides the information management needs in managing the company (Dunia & Wasilah, 2012).

This is very helpful for management in planning, controlling earnings, determining the cost of goods and services, and assisting management in decision-making. Cost accounting is also an accounting that is intended to provide cost information for management, both production costs, and non-production costs.

### 2.2 Understanding Costs and Classes

Cost has various meanings because it has undergone a development process from the past to the present. The term cost is often confused with the term expense. Cost is

the economic sacrifice needed to obtain goods or services, while expenses are costs incurred to produce goods or services in a certain period but no longer provide economic benefits for economic activities in the next period. Costs are sacrifices of economic resources measured in units of money, which have occurred, are occurring, or are likely to occur for certain purposes (Mulyadi, 2010).

Production costs are costs incurred to process raw materials into products that are ready for sale. Examples are the cost of depreciation of machinery and equipment, the cost of raw materials, the cost of auxiliary materials, the cost of salaries of employees who work in parts, both directly and indirectly related to the production process. According to the object of expenditure, production costs are broadly divided into raw material costs, direct labor costs, and factory overhead costs. Raw material costs and direct labor costs are also referred to as prime costs, while direct labor costs and factory overhead costs are often referred to as conversion costs, which are costs to convert (convert) raw materials. into finished products (Mulyadi,

Cost classification is a systematic grouping process and all existing elements into certain, more concise groups to obtain the information needed (Mulyadi, 2015).

### 2.3 Cost of goods sold

The cost of production or product cost is an important element to assess the success (performance) of trading and manufacturing companies. The application of the cost of production is very important considering the benefits of information on the cost of production is to determine the selling price of the product and to determine the cost of inventory of finished products and products in process that will be presented in the balance sheet.

Cost of Production is all costs incurred to produce a good or service during the period concerned. In other words, that the cost of production is the cost to obtain finished goods that are ready to be sold (Mulyadi, 2015). There are three groups of inventories related to determining the cost of goods used to produce raw materials into finished goods, namely raw material inventory, work in process inventory, and finished goods inventory (Sujarweni, 2015).

In this study, the approach used is quantitative descriptive data. Quantitative research requires numbers, starting from data collection, interpretation of the data, and the appearance of the results (Suharsimi Arikunto, 2013). At the same time, descriptive research intends to describe situations or events. It aims to make a systematic, clear, and valid description of the facts and characteristics of a particular population or area (Suryabrata, 2013). This type of research was chosen to determine the cost of production.

This research was conducted at the Oil Palm Plantation of PT. Kartika Hijau Lestari address at Jalan Brigjend Katamso, Istana Bisnis Center Complex No. 27 Medan Maimun, North Sumatra. The research time starts in September 2021 and will be finished. The type of data in this study is quantitative data presented in the form of numbers in the form of costs used in the company's production process. The cost of goods manufactured (cost of goods manufactured) is the total production cost of goods that have been completed and transferred into finished goods inventory during a period (Raiborn and Kinney, 2011).

## 3 RESULTS AND DISCUSSIONS

### 3.1 Palm Oil Plantation Industry

Oil palm (*Elaeis guineensis* Jacq) is one of the important plantation crops as a producer of vegetable oil for food products, industrial oil, and biofuel biodiesel (Teoh, 2012). The large variety of palm oil derivative products causes this plant to have strategic value and provide a high contribution to export income for Indonesia. Oil palm plantations can also be used as the main source of livelihood for farmers. Palm oil is a palm oil-producing commodity that supports the national economy (Fauzi, 2012).

Oil palm plantation activities have had a positive or beneficial external influence on the surrounding area. Some of the benefits of plantation activities on socio-economic aspects are to improve the welfare of the surrounding community, expand employment and business opportunities and contribute to regional development (Syahza, 2011). Oil palm plantations are a type of business that has a long period of time. Oil palm planted at this time will only be harvested 2–3 years later, so an investment is needed that can guarantee maximum final results.

### 3.2 Components of Production Cost

Based on the information obtained from PT. Kartika Hijau Lestari, the cost components that are taken into account in determining the cost of production of Fresh Fruit Bunches consist of:

a. Direct Raw Material Cost

The main raw materials in PT. Kartika Hijau Lestari for its processing or production is fresh fruit bunches (FFB) originating from oil palm plantations with an area of 406.50 Ha owned by the company. FFB is transported using vehicles owned by the company. In addition to the direct material costs incurred by PT. Kartika Hijau Lestari for FFB, the company also incurs other direct production costs, namely:

b. Plant maintenance costs

It is a cost incurred by the company to keep the palm trees in good condition, strong, and fresh so that they have a long period of time or life. Plant maintenance costs, consisting of: PIR/PSR PKL/TPH+Peng Spray Fees. Water, Goal Spray Cost + Peng. Water, Dish Scratching Fee / Manual TPH, The cost of the wooden child jack, Goal Trip Cost, Weed Control Fee, Principal Shooting Cost, Cost of Road Midrib Shoots, Cost of Pest & Disease Eradication, Basic Census Fee, Road Maintenance Fee, Trench Maintenance Fee, Bridge Maintenance Fee, Border/Disk Maintenance Fee, Principal Insertion Fee, Sanitation and Castration Fee, Harvest Titi Fee, Fertilizer cost.

### 3.3 Calculation of Cost of Production

The cost of production is the total cost of production incurred or the sacrifice of economic resources in the context of making a product, where each company expects maximum profit in each of its production activities. The cost of production can be used as a benchmark by the company to determine the price policy on its products. Therefore, the calculation of the cost of production is very important in a manufacturing company to determine or estimate the profit to be obtained. The right calculation will provide benefits that match the company's expectations. The expected profit can be calculated along with the predetermined cost of production. After that, the selling price of the product will be obtained. The company produces mass production and calculates the cost of goods manufactured using full costing cost of goods manufactured. And the company also classifies production costs according to the relationship between costs and those being financed, namely direct costs and indirect costs. Where included in the calculation of the cost of production are fixed costs and variable costs. FFB production costs per kilogram in December 2021 are:

The resulting production costs Amount of production produced, Then the calculation of the cost of production:

= Rp.462.257.798449.972 Kg

= Rp.1.027/Kg

From the report and the results of the calculation analysis above, it can be seen that to be able to identify the cost per kilogram, theoretically the calculation of the cost of production per kilogram is shown as follows:

a. Direct cost

From the data collection above, it can be seen that FFB production in December 2021 is 449.972/kg. Thus, the direct cost per kilogram of FFB can be found using the following formula:

Direct cost

Amount of production produced, Then the direct cost per kilogram of FFB is

= Rp.307.760.432449.972 Kg

= Rp. 684/Kg

b. Indirect Cost

From the data collection, it can be seen that FFB production as of December 31, 2021 is Rp. 449.972/kg, but the company's expenses for indirect costs as of December 31, 2021 are Rp. 154.497.366. Thus the indirect costs can be calculated by the following formula: Indirect costs per kg for December 2021

Indirect costs Amount of production produced, Then the calculation is

= Rp.154.497.366449.972 Kg

= Rp.309/Kg

#### 4. CONCLUSION

Based on the results of the research and the results of the discussions described in the previous chapter, it can be concluded that: PT. Kartika Hijau Lestari in analyzing the calculation of the cost of production using the full costing method where the costs included in the calculation of the cost of production are all costs used, namely raw material costs, direct labor costs and variable and fixed overhead costs. In calculating the cost of production of fresh fruit bunches, the company is not familiar with the existence of initial inventory and ending inventory, because the fresh fruit bunches are directly harvested and produced. In calculating the cost of production of fresh fruit bunches, the costs calculated as production costs include raw material costs, direct labor costs, and overhead costs.

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