

## Cost of Production Calculation of Tofu SMEs Factory in Tebing Linggahara Village

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### ABSTRACT

This activity is motivated by data showing that the results obtained when observing small tofu factories are still very low. In response to this, the researchers conducted the research aiming to increase the productivity of the tofu factory SMEs in the village of Cliffinggahara by providing knowledge on how to calculate the cost of production (HPP). The objectives to be achieved in this service include (1) knowing the implementation of the experimental method at the tofu factory SMEs in the Cliff Linggahara Village, (2) knowing the increase in productivity results at the Tofu Factory in the Cliff Linggahara Village (3) being able to apply how to calculate the cost of goods sold (HPP) to make it easier to set the selling price of the product. This service is carried out in the village of Tebig Linggahara. This study measured all production results carried out by the tofu factory UMKM in the village of Cliff Linggahara. From the results of the study it showed an increase on certain days. From the research conducted, the method of trading MSMEs in the village of Cliffinggahara was quite good and resulted in a fairly stable economic increase.

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### INTRODUCTION

Determining the cost of production is very important, in addition to seeing information on the cost of production we can also determine the selling price, determine and limit expenses, calculate profits and losses, prepare new things for the future and can record all transactions and any activities. what is done by the factory or business that we will run right.

The definition of cost of production is all costs that have been sacrificed in the production process or activities that transform raw materials into finished products which include raw material costs, direct labor costs and factory overhead costs. The cost of production will show all the costs that we incur for a product that we will re-market to the public. From calculating the cost of production earlier, we can find out all the costs that we have incurred during the product manufacturing process, from there we will be able to determine and determine the selling price that we will sell to the public or producers.

The tofu factory in the Cliff Linggahara village calculates the cost of production in a simple way, most of it only calculates the capital spent and will be compared with the sales that are obtained without distinguishing between expenses or definite costs, while the costs for water, electricity, vehicle oil, fuel and machine depreciation which is used for milling soybeans is not included. While these costs are included in the cost of production which we usually call factory overhead costs.

The Tebig Linggahara village tofu factory is an individual company engaged in manufacturing. However, they buy raw materials which are then carried out by the production process so that finished goods are created that are ready for use. According to jakarta, kompas.com. Manufacturing is a term that may be familiar to the ear. In Indonesia, the economy is also very dependent on manufacturing companies. Directed at the Corporate Finance Institute, manufacturing is a business entity or company that produces finished goods from raw materials using tools, equipment, production machines and parts on a large production scale.

From the tofu factory in Cliff Linggahara Village, there are several things that we can know apart from the method of making tofu regarding changes in weather or weather that may be unstable. This already has regular customers and the buyer who buys the tofu every day. In addition, the buyer or consumer of the tofu factory in the Lingghara Village is a trader too, which means that the tofu is processed or resold.

Apart from that, from the processing of the tofu, the tofu factory that I studied turned out to have tofu dregs and water, which we usually call tofu water or soy milk, but unfortunately the soy milk water was not resold by the factory owner, but distributed to neighbors and around the world. drinking by the family and members who work at the tofu factory even though the tofu water is very expensive if we sell it back what else if we can pack it properly it will make one of the income for the company or factory besides that tofu dregs from the cliff village Linggahara turns out to be made into livestock food. It turns out that the owner of the factory owns ducks and chickens, where the tofu dregs that are processed every day are used as livestock feed.

Based on the background above, to obtain and determine the cost of production in the village of Linggahara Cliff, to calculate it more accurately, several elements should be included, such as production costs, direct labor costs, and factory overhead costs to determine prices. point of sale. Based on the background of the formulation of this problem is a comparison that will be known by the company when we calculate the maximum and accurate cost of production.

## METHOD

is community service is carried out in the village of Lingghara Cliff, to be precise at the tofu factory UMKM. This activity is carried out to see and examine how SMEs are to set prices on products that will be sold to the public and how are entrepreneurs to calculate and record transactions that have been carried out by business owners, especially in working on reports on the cost of production on businesses. .

In this activity the method applied is to find the cost of production using the full costing method, which means that full costing is a method in the world of accounting which explains that all costs that arise in the production process, such as variable costs, fixed costs, Direct costs, investment costs, and all costs used in the production process are used as important indicators for calculating the total.

- a. Business functions, consisting of research and development, design of products, services and processes, production, marketing, distribution, customer service, strategy and administration.
- b. The division into cost objects , consists of direct and indirect costs .
- c. Behavior patterns are associated with changes in cost drivers, consisting of variable costs and fixed costs.
- d. Aggregate or average, consists of total costs and unit costs.
- e. Assets or expenses consist of:

## Cost elements

For add your insight about knowledge economy And accounting , following This a number of understanding production cost from para expert . “ cost production ie related costs \_ direct with production from something product And will met by with earnings in the period where product That for sale ” ( Abdul halim , 1988:5). “ cost production is must cost \_ issued by businessman For can produce output or in other words ie mark all factor production used \_ For produce ( produce ) output” ( Suherman rosyidi , 2003:333). “ cost production is related costs \_ with calculation burden tree production or burden tree sales . Cost production or sale consists on cost material raw And material helper , fee power Work And cost overheads factory ” ( Kuswadi , 2005:22). “ cost production is related costs \_ with production something items , that is amount from material direct wages \_ direct And factory overhead costs ( amen widjaya single , 1993:1). Understanding cost production from para expert Can become description elements What only included \_ production cost . You Can customize it with condition your company \_ manage .

## Elements cost production

Elements production cost done constructive elements \_ formation something production cost. Sometimes business small often ignore costs small that arises Because exists activity effort. Whereas Can So costs This including to in elements production cost. So no Wrong recognize it , following these are 3 groups elements production cost .

1. Direct material costs  
Direct material costs or direct materials are Wrong One element tree in production cost . Direct material costs is cost material contact standard \_ direct with product. Example simply put in company factory know that is peanut soybeans, yeast And salt.
2. Fees power Work direct  
Elements production cost next is cost power Work direct. Cost power Work direct This including wages principal, allowances, and insurance For power the work involved direct in the manufacturing process something product. For example on company know that is helpful workers \_ manage know ..
3. Fees overheads factory  
Besides direct material costs And cost power Work direct, elements production cost other is cost factory overheads or bops. Factory overhead costs \_ is costs that are not direct related with the manufacturing process product , however Enough own role in he made product the .

Including to in cost factory overheads between other materials not \_ direct , energy Work No direct , and cost other overheads Examples of factory overhead factory Lingggahara village, namely:

1. Cost of electricity used on machines and lights in factories.
  2. Fuel costs incurred such as buying wood and diesel.
  3. The cost of water used during tofu production, such as washing soybeans, as well as other tools.
  4. Indirect labor costs such as the factory owner who participates also help in making the dung.
  5. Apart from that, the depreciation of the building or the tofu production site and the depreciation of the machine are also one of the factory overhead costs, but for example, the tofu factory in Cliff Linggahara Village has not taken it into account at all.
1. Collection of cost of goods manufactured  
The cost of production consists of three main components, namely:
    - a. Direct raw materials
    - b. Direct labor costs
    - c. Factory overheads

This service activity is carried out in the village of Linggahara Cliff, carried out for the SMEs of the tofu factory in the Cliff Linggahara Village, the topic taken is the cost of production, where some SMEs that have been established still don't know how to calculate the cost of production, especially SMEs in the village of Linggahara Bah never calculate the cost of production of them . This activity was carried out directly to the umkm of the cliff Linggahara village at the tofu factory by informing the owner with the laptop media in the form of a fowerpoint file and immediately showing what the cost of production was and immediately managing the tofu from raw materials to materials ready for sale. This activity will make it easier for the owner to find out the cost of production which is very important for the business. Where it will make it easier for the owner to set prices and make financial reports on the business properly.

## RESULTS

This community service activity was carried out in the village of Cliff Linggahara for tofu manufacturing SMEs, which in this activity it can be concluded that the SMEs there still do not know how to calculate the cost of production for their business. Even from the activities that were carried out, the cost of production was never calculated, never even paying attention to transactions and depreciation at the umkm tofu factory

After doing research and delivering material for the general tofu factory in the village of Cliff Lingghara, it turned out that the new owner knew that the depreciation of the tofu processing machine should also be taken into account, even water and electricity, are expenditures that must be taken into account in determining the price.

**Table 1. Calculation of Cost of Production of Tofu**

NO	INFORMATION	NEED PER DAY	NEED PER MONTH	COST PER UNIT	AMOUNT
1.	Soya Bean	10KG	300KG	RP. 8000/KG	IDR 2400,000
2.	Labor Costs				
	a. Grinding and cooking section	1 person	Rp. 300,000	RP. 10,000	IDR 300,000
	b. Section filter and print	1 person	300,000 IDR	RP. 10,000	IDR 300,000
3.	Cost of diesel fuel		RP. 150,000		IDR 150,000
4.	Electricity cost	IDR 166	RP. 50,000		IDR 50,000
5.	firewood costs	IDR 10,000	300,000 IDR		IDR 300,000
6.	Total Cost				IDR 3800,000
7.	Production Total	5 boxes x (40,000) 200. tofu box	150 boxes x (40,000) 6000 boxes of tofu	1 box x (40,000) 40 boxes of tofu	150 boxes x (40,000) 6000 boxes of tofu
8.	Production Price	Rp. 200,000	IDR 6000,000	IDR 40,000	IDR 6000,000
9.	Production cost per piece				IDR 633

Source: Data collected by Author

#### EXPLANATION

##### **Soybeans**

The daily requirement is 10 kg

The price per kilo is IDR 8,000

So the daily need for production is  $10 \text{ kg} \times 8,000 = 80,000$

A month's need is  $10 \text{ kg} \times 30 \text{ days} = 300 \text{ kg}$

So  $300 \text{ kg} \times 8,000 = 2,400,000$

##### **Labor costs**

2 employees who are paid monthly 300,000 per 1 employee

So  $300,000 : 30 \text{ working days} = 10,000 \text{ per day}$

And the number of employees employed is 2 people

So  $300,000 \times 2 \text{ people} = 600,000$

So the labor costs incurred each month are worth = 600,000

##### **Diesel fuel costs**

##### **Electricity costs**

from the research above, the cost of electricity spent by the owner was only 50,000

so we can calculate that  $50,000 : 30 \text{ days} = 1600 \text{ per day}$

because it only uses one small light that is only turned on at night

##### **Firewood costs**

300,000 of firewood used per month

so  $300,000 : 30 \text{ days} = 10,000 \text{ per day}$

### How to calculate the hpp (cost of production) full costing method

#### Formula

Cost of production = total cost of production + opening balance of goods in production – ending balance of goods in production

direct material costs IDR 2,400,000

direct labor costs IDR 600,000

factory overhead costs IDR 350,000 +

total production cost Rp 3,800,000

the total production of tofu is 6000 tofu cities

production price per piece = IDR 633



**Figure 1 and 2. Grinding and boiling soybeans**

#### Picture description 1

The description of the picture above is how to process the soybeans to be ground, that is, after washing them thoroughly and separating the beans from the dregs that are still left in the beans, we enter the milling stage, grinding the tofu is very easy because we are assisted by a grinding machine. soy beans specifically for making tofu. From this, we can conclude that making tofu in the village of Cliff Linggahara is very influential on electricity because without electricity the machine we use cannot be used which in making tofu in the village of Cliff Linggahara no longer uses traditional tools in processing tofu, besides that the level of cleanliness that we must pay attention to in washing soybeans and always paying attention to the cleanliness of the machine is one of the most important things as well which we know that the tofu that we often buy at the market we only wash the skin or the outside of the tofu so whatever is mixed on the tofu dough completely invisible to the eye.

#### Picture caption 2

after grinding, then we will filter the soy bean juice to cook until it starts to coagulate. This cooking is done quickly, it only takes 15 minutes. The fuel that is used to cook the tofu is firewood that is bought by one of the local residents and sometimes taken from the field of the tofu factory owner. In addition, the tofu factory owner says that the wood that is good for processing tofu is strong firewood. and hard like rambutan trees and its types because apart from wood and fire it is better that fire wood lasts a long time and is hard to be devoured by fire so if you cook tofu dough it will save more money which is for spending on buying fire wood is reduced because the wood used Very good.



**Figure 3 and 4. Printing and cutting out**

**Picture caption 3**

The information above, after boiling, the soybean starch essence which has almost clumped is added yeast, after that it is stirred, stirred until evenly distributed and it starts to solidify, don't forget to pay attention to the dough so that the lumps of dough are evenly distributed and compact properly and perfectly and it starts to be difficult for us to stir. . Apart from that, choosing soybeans properly is also one of the things that we must pay attention to, apart from maintaining the good taste of tofu, we can also maintain customer trust in the business that we are running, right, because the main ingredient in making tofu is soybeans, which are The first thing we have to pay attention to is the main raw material for making tofu.

**Caption picture 4**

After it solidifies and begins to form, it is immediately placed in the mold so that it can be formed according to the mold that has been provided and immediately printed to turn the soy bean dough into tofu. Then let it rest for 15 minutes, after the tofu juice has solidified and formed into tofu, then tofu then the tofu that has condensed earlier and is printed on the mold, then we will cut the tofu according to the size that has been determined, then stack it and add water so it doesn't know it breaks easily when held and placed in a container that will be marketed to the tax and marketed to the public.



**Figure 5. Photo with the owner of the tofu factory in the village of Cliffingahara**

from the picture above is the result of processing tofu in the village of Lingghara Cliff and taking a photo moment with one of the owners of the tofu factory. During the time of making tofu, I was directly

involved in making tofu and also took part in recording expenses that had been incurred by the tofu owner. , in which case I tell the tofu factory owner how important it is to take into account the cost of production in each business and it will be very important for the progress of the business and overcoming and stabilizing expenses for the business, including the small tofu factory business that is being run.

## CONCLUSION

Based on the calculation of the cost of production carried out by SMEs, the tofu factory in the village of Linggahara is still very low and has not been implemented properly because of the lack of education level and lack of knowledge about managing the business properly. Therefore, the cost of production is also very important. it was only discovered by the business owner after conducting research and learning activities.

In addition, the way to calculate the profits and losses of the tofu factory is only a small part. from the depreciation costs of buildings, water, electricity, and factory overhead costs have not been calculated clearly and well. The business owner only takes into account the cost of raw materials and employee salaries.

After carrying out this community service activity, it can be concluded that many SMEs who are running in the Cliff Linggahara village still do not know how to calculate the cost of production for their business, after doing this research and learning, the SMEs of the tofu factory in the Cliff Linggahara village only know that the costs Factory overhead and machine depreciation are very important things to take into account and improve how to make financial reports clearly and correctly.

This community service activity has recorded all activities and all operations at the factory, including for financial recording and all transaction costs incurred by the factory in the tofu-making operation. raw materials plus direct labor costs and factory overhead costs around Rp. 3800,000 after that it will be divided by the production results that have been carried out as many as 6000 thousand boxes of tofu, so  $3800,000 : 6000 = 633$ .

From this activity, I, as the main role that carries out this activity, really regret that tofu water is not being used properly because tofu water is very expensive and also very useful for human life, apart from that, tofu water can also help to become an additional income for the owner of the factory, especially if the packaging of tofu water or what we often hear is that soy milk can be packaged properly and in a more modern way, eating the product from tofu water can be an additional cost for the business owner or the owner of the factory.

For some things that must be considered by business owners is how to manage materials such as soy milk and dregs can be an income opportunity that can actually be developed to a large extent, besides soy milk is very useful for the needs of the human body which contains good for health, most of the residents of the harbor area are home breeders where sometimes some residents are still confused about looking for feed to give to their livestock such as chickens, ducks and others.

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