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## Cost of goods sold analysis of banana blossom chicken nuggets in the women farmers group “KWT Kebersamaan” in Padang Pariaman Regency

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# Cost of goods sold analysis of banana blossom chicken nuggets in the women farmers group “KWT Kebersamaan” in Padang Pariaman Regency

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**Abstract.** Chicken nuggets are one of the products of meat processing technology that has good nutritional value and affordable prices compared to processed beef products. Despite having a fairly complete and good nutritional content, chicken nuggets contain high fat and low fiber. To increase the nutritional value of chicken nuggets, the Women Farmers Group “KWT *KEBERSAMAAN*” tried to make processed nugget with the ingredients of banana blossom and chicken meat. This study aims to analyze the cost of production and the cost of goods sold in banana blossom chicken nugget. Data used in this study were primary data from the company and secondary data obtained through literature in line the title of the study. Method of calculating the cost of production and the cost of goods sold in this study is to use the full costing method and variable costing method. Results of this study showed that The cost of production obtained from the variable costing method is IDR 8,519/pack, while the full costing method costs IDR 10,719/pack. 200 gram of banana blossom-chicken nuggets per pack is sold at a price of IDR 10000, while the result of the research shows that the cost of goods sold is higher than the selling price set by the KWT Kebersamaan. The cost of goods sold using the variable costing method is IDR 13,074/pack and the full costing method obtains IDR 15,923/pack.

**Keywords** – cost of goods sold, banana blossom chicken nuggets.

## 1. Introduction

Chicken nuggets are one of the products of processed meat that has good nutritional value and is affordable, compared to processed beef products. Nutritional content of chicken nuggets consists of protein, fat, carbohydrates, and minerals. The protein is derived from chicken meat which consists of complete amino acids. Despite having a fairly complete and good nutritional content, chicken nuggets contain high fat and low fiber. [4] that the largest percentage of respondents who consumed chicken nuggets were between the ages of 20-25 years. This age range is a productive age range as they have their own income, and their needs of food vary. Thus, respondents can independently decide to consume chicken nuggets according to their needs and income. Additionally, productive age consumers tend to choose ready-to-eat and ready-to-be-cooked food products which promise no nutritional content reduction, including nugget products. As food technology continues to develop, changes in people's consumption patterns continue to occur. People, especially in urban areas, prefer to consume food products that are ready to eat and ready to be cooked, due to the high level of everyday community mobility [7].

Banana blossom is usually cooked and served as a kind of vegetable in a menu. In addition to its low price, banana blossom offers many health benefits, especially for those in a diet program, as it contains high fiber and low fat. Despite the high fiber content, banana blossom is relatively low on other nutritional content, especially protein. Therefore, there has to be some additional high-nutrition



ingredients in the processing stage [1]. One way to supplement the nutritional content of banana blossoms is by mixing animal protein, such as chicken meat. Banana blossom nugget is a new product created by KWT Kebersamaan, with a background knowledge of children liking inexpensive fast food that has good nutritional value. Nugget products are still quite difficult to obtain in Padang Pariaman Regency, hence the large market opportunity to develop. A product survives in the market if they are liked or in demand by the community. In other words, the demand for the product should increase over time. The costs incurred to produce a product must be calculated meticulously, while currently, KWT Kebersamaan has not included all the cost components in the calculation of production costs, which has an impact on the selling price being not accordingly to the actual conditions. Determination of the selling price of this nugget product is only based on the common nugget prices in the market, making it difficult to calculate how much profit is obtained. Meanwhile, this business is expected to support and improve the financials of group members and the surrounding community.

## 2. Materials and methods

The research was conducted at the Female Farmer Group (KWT) Kebersamaan in Padang Pariaman Regency for 5 months in 2018. The selection of the research location was intentional, as KWT is the only group that has carried out the processing of banana blossom nuggets in Padang Pariaman Regency.

The research uses the case study method. [3] states that a case study focuses on research subjects related to specific or typical phases throughout a personality that aims to provide a detailed description of the background, traits, and characteristics that are typical in the case, or the status of the individual to form a general nature. Data are analyzed using quantitative descriptive analysis with full costing method and variable costing method.

The data used in this study is primary data from the Female Farmer Group (KWT) Kebersamaan, while the secondary, supporting data for the discussion is obtained from relevant Departments or Agencies. To determine the cost of production and the cost of goods sold for banana blossom nuggets, the cost components observed include:

- a. Raw materials cost (IDR/kg/production),
- b. Labor cost (IDR/kg/production),
- c. Supporting materials cost (IDR/kg/production),
- d. Overhead cost (IDR/production)
- e. Marketing cost (IDR/production)

## 3. Results and discussion

Female Farmer Group (KWT) Kebersamaan is a group of female farmers in Padang Pariaman Regency who has processed banana blossom into various diversified products such as banana blossom jerky and banana blossom nuggets. KWT Kebersamaan's nuggets is a ready-to-eat food product that is highly favored by the public, therefore the high cost of raw materials production will have an impact on the selling price received by consumers. The high cost of feed ingredients and breeds of broiler chickens will have an impact on the sale of chicken meat and will also directly impact the high prices of products made from chicken meat. Nuggets are generally made from chicken meat with the addition of other complementary spices. But now, consumers can try nuggets with banana blossoms as the raw ingredient, in addition to chicken meat. [2] said that one of the shortcomings of fast food is the lack of vegetables. Therefore, fast food innovation needs the addition of vegetables to meet the required vegetable fiber content for health reasons. Some vegetables that have been added in the process of making nuggets include spinach, broccoli, carrots, and others. One of the vegetables that has the potential to be added to nuggets is *Moringa oleifera* L.

KWT Kebersamaan is able to produce 3 kg of banana blossom nuggets in one production. It will be marketed in 200-gram packages with a selling price of IDR 10000. This price is determined by calculating the price of raw materials used and divided by the number of nuggets produced. The calculation is still done with a very simple method and does not take into account labor costs or depreciation of the equipment used. The results of [6] study stated that the low selling price of a traditional business occurs because the business owner only uses intuition and makeshift calculations

without classifying the costs incurred to determine production cost, while the cost of the products produced must be calculated thoroughly. Other factors include the lack of adequate financial records, causing the owner to experience difficulty in calculating the costs incurred, including in the classification.

**Table 1.** Raw material costs for Banana Blossom Nugget in one production.

No	Material	Unit	Price/ unit (IDR)	Total (IDR)
1	Chicken breast	Kg	50000	25000
2	Banana blossom	Kg	4000	8000
3	Tapioca flour	Kg	22000	1320
4	Egg	Egg	1500	7500

In one production of banana blossom-chicken nuggets, 1.5 kg of banana blossom and 0.5 kg of chicken meat were used. This mixture of raw materials will produce 3 kg of banana blossom nuggets per production. The banana blossom nuggets produced will be marketed in a plastic packaging, weighing 200 grams/pack.

**Table 2.** Overhead business costs of Banana Blossom Nugget.

	Overhead cost	Variable Costing (IDR)	Full Costing (IDR)
1.	Variable cost		
a.	Gas Elpiji	13.000	13.000
b.	Ingredients	3.960	3.960
c.	Other materials	9.000	9.000
2.	Fixed cost		
a.	Tools depreciation cost	-	3.000
b.	Electricity cost	-	20.000
c.	Water cost	-	10.000
	Total of overhead cost	25.960	58.960

The cost used in making banana blossom nuggets consist of fixed costs and variable costs. Variable costs will be included in the variable costing method while the fixed costs will be included in the full costing method calculation. Labor costs is a direct spending on labor, calculated as the result of business overhead costs. The processing of banana blossom-chicken nuggets involves 2 workers with a wage of IDR 30000/person/production.

**Table 3.** Cost of production and cost of goods sold per 1 kg of Banana Blossom-Chicken Nuggets.

Point	Variable Costing (Rp)	Full Costing (Rp)
1. Cost of Production	42.593	53.593
2. Cost of Goods Sold	65.371	79.671

Table 3 shows that the cost of production of banana blossom nuggets with full costing method is greater than that of the variable costing method. This is because the costs included in the calculation of variable costing are just the variable costs, while the fixed costs are not calculated. The cost of production and cost of goods sold in the table above are used to produce 3 kg of banana blossom nuggets, or equals to 15 packs with each package weighing 200 grams.

The cost of production with the variable costing method for each packaging is IDR 8,519/pack while the full costing method results in IDR 10,719/pack. 200 grams of banana blossom-chicken nuggets per pack is sold at IDR 10000 while based on the results of the study, it can be seen that the cost of goods sold using the variable costing method is IDR 13,074/pack, and the full costing method results in IDR 15,923/pack. It appears that the selling price offered by KWT Kebersamaan is much lower than the cost of goods sold calculated using the full costing and variable costing methods. According to [5], the selling

price is the sum of the final value of goods generated from the production and other costs to produce an item, plus an amount of desired benefits.

#### 4. Conclusion

The cost of production obtained from the variable costing method is IDR 8,519/pack, while the full costing method costs IDR 10,719/pack. 200 gram of banana blossom-chicken nuggets per pack is sold at a price of IDR 10000, while the result of the research shows that the cost of goods sold is higher than the selling price set by the KWT Kebersamaan. The cost of goods sold using the variable costing method is IDR 13,074/pack and the full costing method obtains IDR 15,923/pack.

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