

## **VALUE ADDED ANALYSIS OF MANG NCUN SHREDDED CATFISH: CASE STUDY IN MSME CV. ADISYAFIDZ BAROKAH, NAGREG-WEST JAVA, INDONESIA**

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### **KeyWords**

market segmentation, rival, selling price, output, input, value added.

### **ABSTRACT**

The purpose of this study was to analyze the added value and profits of entrepreneurs as well as the marketing analysis of catfish processed into shredded fish products at UMKM CV. Adisyafidz Barokah. The method used in this study is a purposive method. Respondents interviewed in this study were owners of Adiyasfidz Barokah. Data collection methods used in this study include interviews, recording and observation. The data analysis method used in this research is quantitative descriptive analysis. Measurement of added value using the Hayami method. The research results show that catfish processed into shredded products provides the added value of more than 0 ( $AV > 0$ ) which means that this business is feasible to run. The processed product of shredded fish has an added value of Rp. 157,000.00-/kg and a value added ratio of 86.2%. Fish products that are processed into shredded fish cost 0.52 times the price of fish sold fresh. The results are 3.7% of direct labor income, 4.8% of other input contributions and 91.3% of entrepreneur profits. The efficiency of production costs must be done so that the business can make a profit. The added value and profits obtained by the fish processing industry are strongly influenced by the production costs incurred. The marketing of shredded catfish "Mang Ncun" takes geographic segmentation, namely the Nagreg area and its surroundings. There are rival competitors 1. Pricing uses the Cost Plus Pricing method. Promotion is carried out by participating in various exhibitions held by other agencies or events and utilizing social media such as WhatsApp, Instagram, and Facebook.

## Introduction

Catfish (*Clarias* sp.) is one of the cultivated fish species in Indonesia whose distribution covers the islands of Java, Sumatra, Sulawesi, and Kalimantan. Catfish in Indonesia are naturally found in public waters. The total production of cultivated catfish in 2020 was 347,511.48 tons, this production decreased from previous years, namely in 2018 of 1,027,032.54 tons and in 2019 of 981,623.40 tons (KKP 2021).

Catfish has several advantages, both in terms of taste, price, nutritional content, and easy cultivation methods (Cahyahati et al. 2019). In addition, catfish is one of the fish that is most easily accepted by the community because of its various advantages. These advantages include fast growth, high adaptability to the environment, good taste and high nutritional content and low prices (Ubadillah and Herseolistorini 2010).

As a popular fish product, catfish has a very high animal protein content, around 22.0% to 44.6% (w/k). Other nutrients include +20.8 (w/k) fat content, +14.6% (w/k) minerals, water and +6.81% (w/k) (Adebayo et al. 2016). Catfish is also rich in essential amino acids, such as essential amino acids (percentage of protein): arginine 4.3%, histidine 1.5%, isoleucine 2.6%, leucine 3.5%, lysine 5.1%, methionine 2.3%, phenylalanine 5.0%, threonine 2.0%, tryptophan 0.5% and valine 3.0% (Robinson and Li 2015). Various preparations made from raw catfish are produced in an effort to increase consumer acceptance of processed catfish products, one of which can be processed into shredded catfish (Kusumayanti et al 2011).

Although the potential and utilization of fishery resources in Indonesia are relatively high, fish has not become food that is in demand by most Indonesian people. In fact, the level of fish consumption in Indonesia is still far behind other nations with a much smaller potential for fishery resources.

The Ministry of Marine Affairs and Fisheries noted that the national fish consumption figure in 2021 will reach 55.37 kg/capita. This figure increased by 1.48% compared to the previous year, which was 54.56 kg/capita last year. The highest fish consumption figure was in Maluku, as much as 77.49 kg/capita last year. In fact, Indonesia has the potential for abundant fish resources, which amounted to 9.9 million tons in 2018 supported by the potential for fish cultivation areas which reached 83.6 million hectares. The low public interest in fish can be overcome by processing fish into various processed products such as shredded.

Shredded fish is a processed product made from fish that has gone through processing such as grinding, seasoning and frying. Abon is also one of the durable foods and has high protein and low cholesterol levels (Fitri 2019). Shredded meat is generally made from beef, but fish meat can also be used as raw material for making shredded fish, including catfish. Processing catfish into shredded to increase its economic value and also to maintain fish stocks so as not to over-production (Suryani et al 2007). In addition, according to Nurhayati (2019), the market needs criteria for catfish are based on the shape and size of the fish (1 kilo totaling 6-9 fish) so that if they do not match the market criteria, the fish cannot be traded. Including catfish with a size of > 1 kg (oversize) and catfish brooders that are not productive to produce seeds, so that fish with sizes that are not in accordance with market standards are very minimal in demand. Therefore, as an innovation step using oversized catfish, it is processed into processed fish products that have a higher added value, namely shredded catfish.

Industries that carry out processing to create new products will increase economic value after processing, providing higher prices and greater profits without going through a processing process. This study aimed to analyze the added value and profits of entrepreneurs and the marketing analysis of catfish processed into shredded fish products at MSME CV. Adisyafidz Barokah.

## Research methods

The research was conducted in September 2022 at the UMKM "CV. Adisyafidz barokah" Nagreg District, Bandung Regency, West Java, which is located in KP. Margabakti RT. 01 RW. 16, Ganjarsabar Village. The research method used is a case study method (case study). The type of data used is primary data. The method used in this study is a purposive method. Respondents interviewed in this study were owners of Adiyasfidz Barokah. Data collection methods used in this study include interviews, recording and observation. The data analysis method used in this research is quantitative descriptive analysis.

The data analysis used in this research is quantitative analysis to see the added value analysis. There are 2 ways to calculate added value. First, the added value during processing consists of: technical factors (production capacity, amount of materials and labor) and market factors (output prices, labor, labor wages, prices of raw materials and other inputs). Value-added analysis is generally carried out using the Hayami method. The measurement of added value using the Hayami method is carried out by identifying the main components, such as the inputs used, the output produced, the price of raw materials, the selling price of the product, the cost of labor, and the contribution of other inputs. The Hayami method has advantages.

Value added is the added value of a commodity due to the treatment given to the commodity. The value added assessment criteria are as follows:

1. If the added value (AV) > 0, it means that the catfish processing business provides added value (positive).
2. If the added value (AV) < 0, it means that the catfish processing business does not provide added value (negative).

## Results and Discussion

### CV. Adisyafidz Barokah

Adisyafidz Barokah is one of the SMEs processing catfish in Kp. Margabakti 01/16 Ganjarsabar Village, Nagreg District, Bandung Regency. Adisyafidz Barokah is one of the pioneers of UMKM in Bandung Regency which already has a PIRT number and a halal certificate from MUI. The production site owned by Adisyafidz Barokah is right behind the business owner's house. Adisyafidz Barokah has the trademark Mang Ncun and has several processed catfish products such as shredded fish, nuggets, dragon feet, cork thorn egg cake, skin crackers, and cuankie.

Adisyafidz Barokah applies fish processing with the principle of zero waste. Catfish processing in society in general has not implemented integrated technology. Processed catfish products are not fully utilized as raw materials. The community has not applied the zero waste principle, that is, they have not utilized all catfish products into various processed products. Generally the bones (thorns), the head of the catfish will be removed. This has the potential to damage the environment (Widyatami and Wiguna 2016). Starting with the wasted part of the catfish as waste from the production of shredded fish such as bones, skin and innards of catfish Adisyafidz barokah tried to use this part into an innovative product and succeeded in making several waste-based products such as fish bones into cork egg products, Fish skin is made into fish skin crackers and catfish innards are reused as fish feed. Therefore, the principle of catfish processing carried out by Adisyafidz Barokah can be used as an example for all fish processing industries throughout Bandung Regency and even Indonesia.

#### Procedure for Making Shredded Mang Ncun Catfish

1. Catfish as raw material is washed until completely clean.
2. After the raw materials are washed and clean, the catfish is filleted properly.
3. After being filleted then steamed until cooked for about 1 hour.
4. Make sure the catfish meat has been separated from the spines, then crush or mash the catfish meat until smooth.
5. Prepare the spices (shallots, garlic, coriander, ginger, nutmeg and galangal) to be mashed until soft.
6. After the spices are mashed, the catfish meat is marinated with spices.
7. Fry the marinated catfish meat along with the spices until fragrant.
8. Stir continuously until cooked and dry.
9. After the abon is cooked, then drain and do the packaging.

#### Analysis of Added Value of Shredded Catfish Mang Ncun

Shredded fish products are sold to resellers who regularly buy shredded stock from processing houses at a price of Rp. 32,000/pcs, containing 100gr/pcs of shredded fish. Resellers usually sell shredded fish at a price of IDR 35,000/pcs. Adiyasfidz barokah will give discounts to consumers or wholesalers if you buy more than 1,000 pcs, the price will be cheaper.

Catfish processed into shredded can provide added value for each processor. The added value of shredded fish can be calculated based on production results. Value added analysis can be used as a description of the production process based on the contribution of each factor of production. The basis for calculating raw materials is 25 kg / week of catfish, with one production that will produce 13 kg / week of shredded. The following is an analysis of the added value of shredded fish processing **Table 1**.

**Table 1.** Analysis of the added value of shredded fish in Mang Ncun

No	Description	Shredded Fish
<b>I</b>	<b>Output, Input, Price</b>	
1.	Output (kg)	13
2.	Raw fish ingredients/input (kg)	25
3.	Labor (HOK)	2,6
4.	Conversion factor (1/2)	0,52
5.	Labor coefficient (3/2)	0,104
6.	Output price (Rp/kg)	350.000
7.	Direct Labor Wage (Rp/HOK)	60.000

## II Income and Profit

8.	Raw material price (Rp/kg)	17.000
9.	Other input contributions (Rp/kg)	8.000
10.	Output Value (Rp) (4x6)	182.000
11.	a. Value-added (Rp) (10-9-8)	157.000
	b. Value Added Ratio (%) (11a/10)	86,2
12.	a. Direct Labor Income (Rp)(5x7)	6.240
	b. Labor Department (%) (12a/11a)	3,9
13.	a. Profit (IDR)(11a-12a)	150.760
	b. Profit Rate (%) (13a/11a)	96

## III Owner Remuneration Factor of Production

14.	Margin (Rp) (10-8)	165.000
	a. Direct Labor Income (%) (12a/14)	3,7
	b. Other Input Contribution (%) (9/14)	4,8
	c. Entrepreneur's Profit (%) (13a/14)	91,3

The results of the analysis of the added value of the Hayami method in Table 1 explain that the conversion value of the catfish floss product is 0.52. This value indicates that every one kilogram of fresh catfish processed will produce 0.52 kg of shredded catfish products. The added value obtained from shredded fish is Rp. 157,000 per kilogram is obtained from the output value minus the price of raw materials and other input industries with the percentage added value, namely the value added divided by the output value multiplied by 100%, so that a value added ratio of 86.2 is obtained. Based on table 1 explains that shredded fish provides a positive value and provides added value greater than zero, namely there is an added value of 86.2 (added value > 0) which is a feasible business to run, it can be said that the price of product materials greatly affects the added value. a product. According to Rum (2011), a business activity will earn a margin, other input contributions, and entrepreneur profits. This is included in the calculation by business actors as remuneration for the owners of production factors.

Fish Shredded Products get a margin of Rp. 165,000/kg, the margin is the difference between the output value and the raw materials or the contribution of the owner's production factors other than the raw materials used in the production process. The margin earned can affect the percentage of direct labor income, input contributions, and other business owners' profits. The results obtained are 3.7% of direct labor income, 4.8% of other input contributions and 91.3% of entrepreneur profits. The profit of the entrepreneur is influenced by the price of materials and the amount of labor (HOK) in the production process.

The advantage of processing catfish into shredded fish in one production using 25 kg/week of raw materials and producing an output of 13 kg/week of shredded fish obtained Rp. 150,760 with a 96% profit percentage. Labor is obtained as much as Rp. 6.240/kg with a value added percentage value of 3.9%. The added value is quite large from SMEs CV. Adisyafidz Barokah is influenced by several factors such as low labor wages, cheap raw materials, and other costs.

### Market Analysis

#### 1. Market Segmentation

Market segmentation is in the form of static segmentation where the way of looking at the market is based on region/geography (city, province, country). Geographic segmentation is separating customers based on where they are located. This shredded catfish product is distributed to gift shops and resellers in Nagreg and outside the city. In addition, these MSMEs also partner with the

fisheries food security service.

## 2. Competitors

There are rival competitors for shredded catfish mang ncun. Rival competitors are people who sell the same product and the raw materials used are the same. The rival competitor for the mang ncun shredded catfish is the shredded fish product from Abah ubed. The difference between the abon mang ncun fish product and the abah ubed product is the distinctive taste and texture of the spices. The spice taste of the shredded fish product is more pronounced and the texture of the shredded fish is just right, not too soft and not too rough.

## 3. Pricing

Determination of the price for shredded catfish using the Cost Plus Pricing method which is calculated from the cost of production and the price of the materials used. According to Mulyadi (2001), Cost-plus pricing is a method of determining the selling price by adding the expected profit above the full future costs of producing and marketing the product. This pricing method has two cost approaches, namely: a full costing approach (all elements of production costs) and a variable costing approach (raw material costs, direct labor costs and variable factory overhead costs).

## 4. Promotion Distribution

Promotions for shredded mang ncun catfish are usually done by participating in various exhibitions held by other agencies or events. In addition, this MSME utilizes social media such as WhatsApp, Instagram, and Facebook as promotional media.

## Conclusion

The research results show that catfish processed into shredded products provides added value of more than 0 ( $AV > 0$ ) which means that this business is feasible to run. The processed product of shredded fish has an added value of Rp. 157,000.00-/kg and a value added ratio of 86.2%. Fish products that are processed into shredded fish cost 0.52 times the price of fish sold fresh. The results obtained are 3.7% of direct labor income, 4.8% of other input contributions and 91.3% of entrepreneur profits. Efficiency of production costs must be done so that the business can make a profit. The added value and profits obtained by the fish processing industry are strongly influenced by the production costs incurred. The marketing of shredded catfish "Mang Ncun" takes geographic segmentation, namely the Nagreg area and its surroundings. There are rival competitors 1. Pricing uses the Cost Plus Pricing method. Promotion is carried out by participating in various exhibitions held by other agencies or events and utilizing social media such as WhatsApp, Instagram, and Facebook.

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