



VALUE-ADDED ANALYSIS AND MARKETING OF CIWIDEY MILKFISH (CASE STUDY ON CV. CIWIDEY FOOD)

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KeyWords

Milkfish, survey method, cost-plus pricing, profit level, rival competitors, descriptive, market segmentation.

ABSTRACT

This research aims to calculate the added value of milkfish processed into stuffed milkfish products and analyze the marketing carried out by CV Ciwidey Food. The research method used is the survey method. Data collection is done through direct observation of the location of the milkfish factory in Ciwidey. The data taken includes the manufacturing process and all things related to product production factors. The collected data were analyzed descriptively. The added value is analyzed using the Hayami method. The results showed that the added value resulting from processing milkfish into stuffed milkfish products was Rp. 24,933/kg. The ratio of added value from processing is 44,52 %. The level of profit obtained by the company amounted to 65.25 %. Marketing analysis of Bandeng Isi Ciwidey uses static market segmentation in terms of geographic distribution to resellers spread throughout Indonesia. Based on the results of observations, Bandeng Isi Ciwidey has rival competitors, substitute competitors, and newcomer competitors. Determination of product prices carried out by CV. Ciwidey Food uses the Cost-Plus Pricing method and the promotion uses social media such as Whatsapp, Instagram, and also Tiktok.

Introduction

In terms of animal protein content, milkfish (*Chanos chanos*.) is considered a high-quality source. The protein found in milkfish contains complete amino acids and is chemically similar to those found in the human body (Wijayanti *et al.* 2016). In addition to its native habitat in brackish waters, this fish is a euryhaline fish, which can live in a range of salinities (from 0 to 140 ppm). As a result, milkfish can live in freshwater (ponds/rice fields), brackish water (ponds), and salt water (sea) (Purnowati *et al.* 2007). It is estimated that milkfish grow at a rate of 1.1-1.7% body weight per day (Sudrajat 2008).

Milkfish (*Chanos chanos*.) are classified as follows (Sudrajat 2008):

Kingdom	: Animalia
Phylum	: Chordata
Subphylum	: Vertebrates
Class	: Osteichthyes
Subclass	: Teleostei
Order	: Malacopterygii
Family	: Chanidae
Genus	: <i>Chanos</i>
Species	: <i>Chanos chanos</i>

Milkfish, like most other fishery commodities, deteriorates quickly. As a result, it must be processed as quickly as possible after harvesting. The goal of processing is to increase the commodity's additional value.

CV. Ciwidey Food is a milkfish processing industry located in Ciwidey, Pasir Jambu District, Bandung Regency. Stuffed milkfish is the final product. This product is one of the best-selling processed goods in Ciwidey and the surrounding area. This study aims to calculate the added value of milkfish processed into stuffed milkfish products and examine CV Ciwidey Food's marketing.

Research Methods

CV. Ciwidey Food, Ciwidey, Bandung Regency, West Java, conducted the research in September 2022. The survey method was used for the research. Direct observation of the location of making milkfish filled with Ciwidey was used to collect data. The data collected includes the process of making processed milkfish filled with Ciwidey as well as all factors related to product production. The information gathered was analyzed descriptively. The Hayami method was used to analyze the product-added value, with Reyne (1987) test criteria as follows (Musa 1997): 1) The value-added ratio is low if the percentage is less than 15%; 2) The added value ratio is moderate if the percentage is between 15% and 40%, and 3) The added value ratio is high if the percentage is greater than 40%.

Table 1. Calculation of the added value of the Hayami method

Variable		Score
I.	Output , Input , and Price	
	1. Output (kg and L)	(1)
	2. Input (Rp/kg)	(2)
	3. Labor (HOK/day)	(3)
	4. Conversion factor	(4)= (1)/(2)
	5. Labor coefficient (HOK)	(5)= (3)/(2)
	6. Output price (Rp/kg and L)	(6)
	7. Labor wages (Rp/day)	(7)
II.	Income and Profit	
	8. Price of raw materials (Rp)	(8)
	9. Contribution of other inputs (Rp)	(9)
	10. Output value (Rp)	(10)= (4) x (6)
	11. a. Value added (Rp)	(11a)= (10) - (9) - (8)

b. Value added ratio (%)	(11b)= (11) / (10) x 100%
12. a. Labor income (Rp)	(12a)= (5) x (7)
b. Labor share (%)	(12b)= (12a) / (11a) x 100%
13. a. Profit (Rp)	(13a)= (11a) x (12a)
b. Profit rate (%)	(13b)= (13a) / (10) x 100%

Source: Hayami *et al.* (1987)

Results and Discussion

1. CV Ciwidey Food Industry Profile

CV. Ciwidey Food is one of the business units involved in processing fisheries into frozen food products. Puri Indah Ciwidey Housing, Puri Ayu Block No. 30, Pasirjambu District, Bandung Regency, West Java is where this company is located. CV. Ciwidey Food opened its doors on April 18, 2020. CV. Ciwidey Food currently employs 30 people and works with 27 distributors throughout Indonesia.

CV. Ciwidey Food is owned by Asep Mahtalrosada, a Vocational High School principal. The initial purpose of building the company was to channel and provide job vacancies for graduates from Vocational High School. During the pandemic, this company was initially in the form of a home-based business but due to the staggering market demand, this company developed into Commanditaire Venootschap (CV)

2. Filling Milkfish Processing

The production of Filled Milkfish is an alternative for fish management in the context of diversifying fishery products and increasing fish consumption in the community. Milkfish is known for its soft meat texture, slightly chewy and savory. However, milkfish is not on everyone's plate because of the many spines and the smell of mud or soil. As a result, the milkfish is processed into Bandeng Isi Ciwidey, a thornless processed product.

In the making of Bandeng Isi Ciwidey, raw materials and supporting materials are needed such as milkfish, breadcrumbs, eggs, powdered milk, garlic, shallots, salt, sugar, chicken stock, and spices. Meanwhile, the equipment used includes knives, spatulas, basins, milling machines, mixers, ovens, and vacuum machines.

After preparing the raw materials, supporting materials, and equipment, proceed with the milkfish processing process with the following steps: clean the fresh milkfish, separate the head, skin, and bones from the fish meat, and make sure the fish skin is not torn, the fish meat is ground, steamed for 3 hours, plus supporting ingredients in the form of spices that have been mashed, stuffing put into the skin of milkfish that has been separated from the meat, fish in the oven, packaged, labeled and ready to be marketed. The processing scheme of Bandeng Isi Ciwidey can be seen in Figure 1 below.

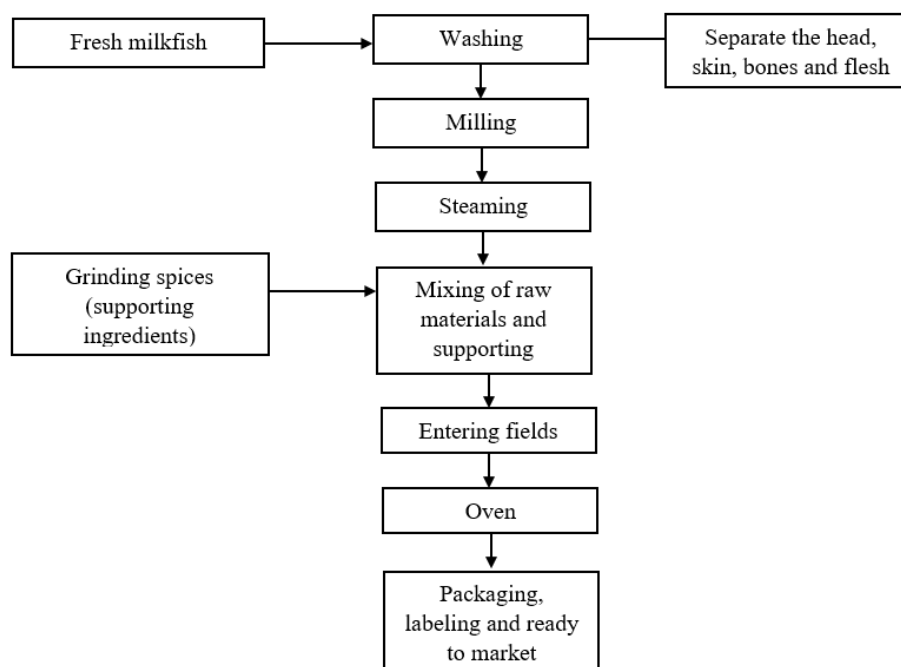


Figure 2. Ciwidey Filled Milkfish Processing Scheme

3. Added Value of Milkfish Processed into Filled Milkfish

Table 2 shows the added value of milkfish processed into stuffed milkfish based on one production process. A single production process produced 500 packs of milkfish (85 kg) with a retail price of Rp. 28.000/pcs (170 grams). Approximately 1,250 fish (250 kg) are needed to produce the Ciwidey Filled Milkfish product. 25,000/kg. The size of this processed milkfish is an average of 200 grams/head.

Table 2. Analysis of the Added Value of Milkfish Contents in Ciwidey

No.	Variable	Score
I Output, Input and Price		
1. Output/total production (kg)	A	85
2. Input (Rp/kg)	B	250
3. Labor (HOK/day)	C	16.8
4. Conversion Factor	$D = A/B$	0.34
5. Labor Coefficient (HOK)	$E = C/B$	0.067
6. Product Price/kg	F	164706
7. Labor Wages (Rp/day)	G	70000
II Income and Profit		
8. Price of Raw Materials (Rp/kg)	H	25000
9. Contribution of other inputs (Rp/kg)	I	6067
10. Output value (Rp)	$J = D \times F$	56000
11. a. Added Value (Rp)	$K = J - H - I$	24933
b. Value Added Ratio (%)	$L \% = (K/J)\%$	44.52%
12. a. Labor income (Rp)	$M = E \times G$	4704
b. Labor Benefits (%)	$N \% = (M/K) \%$	18.87%
13. a. Profit (Rp)	$O = K - M$	20229
b. Profit Rate (%)	$P \% = (O/J) \%$	36.12%
III Remuneration for Factors of Production		
14. Margin (Rp/Kg)	$Q = J - H$	31000
a. Labor Income (%)	$R \% = (M/Q) \%$	15.17%
b. Donations Other inputs (%)	$S \% = (I/Q) \%$	19.57%
c. Company Profit (%)	$T \% = (O/Q) \%$	65.25%

Notes:

Male = 4 (HOK 1)

16 (HOK 0.8)

Based on Table 2, the added value obtained from processing milkfish into stuffed milkfish is Rp. 24993/kg, as opposed to the value-added ratio, is 44.52%. This ratio value is high, meaning that processing milkfish into stuffed milkfish is feasible. The level of profit obtained by the company amounted to 65.25 %.

4. Market Analysis

a. Market segmentation

CV Ciwidey Food used static segmentation, which means the market segmentation is based on the geography of the city, province, and country. The customer segmentation is separated based on their area of residence. Bandeng Isi Ciwidey is distributed to resellers spread throughout Indonesia.

b. Competitor

Some of Bandeng Isi Ciwidey's rival competitors are *Bandeng.inn*, *Bandeng Isi MRB*, and *Bandeng Isi Jeletot Bandung*. Rival competitors are industries that sell stuffed milkfish products without thorns and the same raw materials. Rival competitors are defined as industries that sell stuffed milkfish products free of thorns and using the same raw materials. The only difference is the brand.



Figure 2. Milkfish Filled in Ciwidey and Milkfish Inn

In addition to rival competitors, Bandeng Isi Ciwidey also has substitute competitors. Its substitute competitor products are Bandeng Presto Hj. Lilie, Bandeng Presto Ny. Tjong, Bandeng Presto Bunda, Banpres Bandung, and Bandeng Presto Tugu. Substitute competitors are competitors who produce processed milkfish, which will be used as another option when they want to enjoy ready-to-eat products.



Figure 3. Milkfish Presto

Bandeng Isi Ciwidey has new competitors in the Bandung area who are just starting, including the Bandeng Isi Mrs. Soen, and Bandeng Isi Iteung. Newcomer competitors are competitors who sold bandeng isi with promotional distributions that are still below the number of Bandeng Isi Ciwidey's Instagram followers.

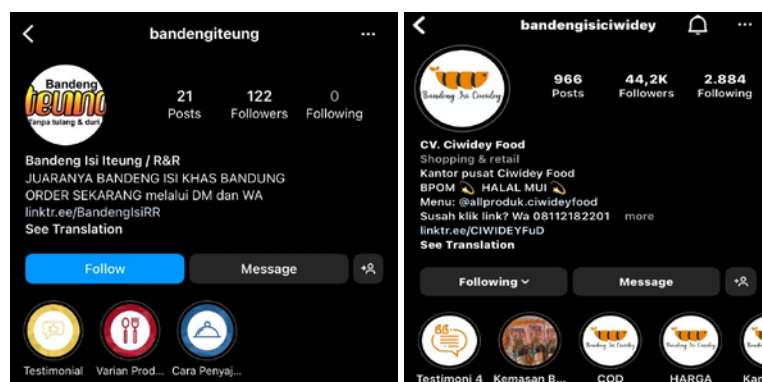


Figure 4. Comparison of the number of followers

c. Pricing

CV Ciwidey Food is used the *Cost-Plus Pricing method*, by adding up the cost of capital and then adding the desired profit. The formula used is:

$$\text{Selling price} = \text{Capital} + \text{Profit percentage}$$

d. Promotion Distribution

The promotion used by Bandung Isi Ciwidey is by utilizing social media such as Whatsapp, Instagram, and also Tiktok. Promotions are carried out by creating interesting content on Bandung Isi Ciwidey's social media accounts and making endorsements to several celebrities.

Conclusion

The results showed that the added value resulting from processing milkfish into stuffed milkfish products was Rp. 24,933/kg. The ratio of added value from processing is 44,52 %. The level of profit obtained by the company amounted to 65.25 %. Marketing analysis of Bandung Isi Ciwidey uses static market segmentation in terms of geographic distribution to resellers spread throughout Indonesia. Based on the results of observations, Ciwidey Milkfish has rival competitors, substitute competitors, and newcomer competitors. Determination of product prices carried out by CV. Ciwidey Food uses the Cost-Plus Pricing method and the promotion uses social media such as Whatsapp, Instagram, and also Tiktok.

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