

ADDED VALUE OF PROCESSING COB FISH INTO SHREDS AND MARKETING ANALYSIS IN CIJULANG DISTRICT, PANGANDARAN REGENCY

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KeyWords

Added Value, Basic Competition, Cost Plus Pricing, Descriptive, Hayami Method, Ratio, Survey.

ABSTRACT

This research aims to calculate the added value of cob fish made into shreds and analyze the marketing of "Abonikol". The research method used is the survey method. Primary data are obtained by the technique of direct interviews with business owners and some labor people. Secondary data was obtained through citations from several published research articles. The data analysis used is value-added analysis based on the Hayami method and descriptive analysis to analyze its marketing. Based on the calculation results, the value added in making shredded cob fish was obtained at Rp. 27,300 / Kg with an added value ratio of 46.5%. The value of this ratio indicates that the cob fish is very worthy of shredding. Marketing analysis of "Abonikol" was carried out on the segmentation of the Pangandaran wilayah market, identified rival competitors 1 product, competitors substitution 3 products, the basis of competition that occurred based on product reference, pricing based on cost plus pricing and promotion by way of personal selling and through social media, such as Facebook and Whatsapp.

INTRODUCTION

Fish is a commodity of marine products that are widely consumed because it is a source of protein that is easily digested and has low fat levels and is beneficial for health. Fish processing is widely carried out by industry because basically fish quickly experience *perishable food* caused by enzymes and microorganisms (Alimusa & Murini 2018). Therefore, there are many industrial processing as an effort to maintain the quality of fish so that its nutrition is maintained. One of the fish processing carried out is made into shredded fish.

Shredded fish is a product used to increase appetite, especially for eating white rice. The main stages of fish shredded processing are boiling, shredding, mixing with spices, frying and packaging (Nurhayati *et al.* 2020).

One of the shredded fish processing is found in Cijulang, Pangandaran Regency. Pangandaran Regency is located in the southeasternmost region of West Java Province. The total area of Pangandaran Regency as a whole reaches 101,092 ha and is divided into ten sub-districts. The development of the Pangandaran Regency area has made a lot of fish processing industry development.

The development of the shredded fish industry in Pangandaran was chosen because the fish shredded industry has high economic value, the fish shredded business is classified as the easiest and cheapest business and with a large profit offer (Sarah *et al.* 2020). The fish shredded processing fishery sector is carried out as an effort to increase added value, welfare, and income of the community and regions.

The fish shredded industry in Cijulang, Pangandaran Regency is shredded cob fish. The shredded cob fish is marketed under the brand "Abonikol" and produced by Ibu Nur.

Cob fish (*Euthynnus affinis*) was chosen because it is easy to obtain, has good nutritional value and is relatively cheap. Cob fish has a protein nutrient content of between 22.6-26.2 g / 100 g of meat, fat between 0.2-2.7 g / 100 g of meat, and several minerals (calcium, phosphorus, iron, and sodium), vitamin A (retinol), and B vitamins (thiamin, riboflavin, and niacin) (Hamidi 2018). Shredded cob fish "Abonikol" is marketed in the area around Pangadaran, the "Abonikol" cob fish shredded business has been going on for more than 10 years. This research aims to calculate the added value of cob fish made into shreds and analyze the pamasaran "Abonikol".

RESEARCH METHODS

The research was carried out in the shredded cob fish processing industry owned by Mrs. Nur, a member of the Nusa Indah fishery product processing and marketing group (Poklahsar) located on Nusawiru Airport Road, Nusa Gede Hamlet, Cijulang Village, Pangadaran. This research was conducted in September 2022.

The method used in this study is the survey method. Primary data were obtained by direct interview techniques with business owners and some of their workforce (Figure 1). Meanwhile, secondary data are obtained by studying and understanding through several scientific literature articles that have been published in nasional journals (Muharom, et al. 2019).



Figure 1. The Process of Collecting Data Through Interviews

The data analysis method used is the value-added analysis of the Hayami method. Added value is the value added that occurs because one commodity undergoes a process of processing, transporting and storing in one production with the use or provision of functional inputs. The calculation of added value is carried out based on the Hayami method. According to Intyas *et al.* (2020), The procedure for calculating value-added using the hayami method can be seen in table 1 below.

Table 1. Value Added Calculation Procedure Using Hayami Method

No.	Variable	Value
Output, Input, Price		
1	Output (Kg/prod)	A
2	Raw material (Kg/prod)	B
3	Labor (HOK/prod)	C
4	Conversion factor (1/2)	$D = A/B$
5	Labor coefficient (3/2)	$E = C/B$
6	Output price (Rp/kg)	F
7	Average labor wage (Rp/HOK)	G
Income And Profit (Rp/kg of raw materials)		
8	Input price (Rp/kg of raw materials)	H
9	Other input donations (Rp/prod)	I
10	Rated output (4x6)	$J = D \times F$
11	a. Value added (10-9-8)	$K = J - H - I$
	b. Value added ratio ((11a/10) x 100%)	$1\% = (K/J) \times 100\%$
12	a. Labor reward (5x7)	$M = E \times G$
	b. Labor share ((12a/11a) x 100%)	$N\% = (M/K) \times 100\%$
13	a. Advantages (11a-12a)	$O = K - M$

No.	Variable	Value
	b. Profit Rate ((13a/11a) x100%)	$P \% = (O/K) \times 100\%$
Production Factors		
14	Margin (10-8) (Rp/kg)	$Q = J-H$
	a. Labor income ((12a/14) x 100%)	$R \% = (M/Q) \times 100\%$
	b. Other input donations ((9/14) x 100%)	$S \% = (I/Q) \times 100\%$
	c. Company profit ((13a/14 x 100%)	$T \% = (O/Q) \times 100\%$

RESULTS AND DISCUSSION

Value Added Analysis of Shredded Cob Fish Business

Value-added analysis is carried out in order to obtain information about the added value produced. The input used in the process of making shredded cob fish is 10 kg and the outpunya is 5 kg shredded. The labor force used was 3 people. For more details about the HOK table and added value can be seen in Tables 2 and 3.

Table 2. Calculation of Working People's Day (HOK)

Activities	Number of Workers (Women)	Length of Work (Hours)	Total
Fish weeding process	3	1	3
Steaming process	2	0,83	1,66
Seasoning processing process	2	0,5	1
Frying process	2	1	2
Drying process	1	0,17	0,17
Packaging process	3	0,5	1,5
Business Hours			9,33
HOK WOMEN			1,166

Table 3. Results of the Calculation of the Added Value of the Cob Fish Shredded Business in Cijulang Regency

Variable	Value
Output, Input, and Pricing	
1 Output (Kg)	5
2 Input (Kg)	10
3 Labor input (HOK)	1,166
4 Conversion factors	0,5
5 Labor coefficient (HOK/kg)	0,1166
6 Product price (Rp/kg)	Rp.2 00.000
7 Average wage of production (Rp/HOK)	Rp.40.000
Revenue, Revenue, and Added Value	
8 Raw material input price (Kg)	IDR 26,200
9 Other input donations (Kg)	IDR23,475

	Variable	Value
10	Product value (Rp/kg)	IDR100,000
11	a. Added value (Rp/kg)	IDR 27,300
	b. Value-added ratio (%)	46,5%
12	a. Labor reward (Rp/kg)	Rp. 4,664
	b. Labor share (%)	17,8%
13	a. Profit (Rp/kg)	Rp.22.636
	b. Profit rate (%)	82,9%
Reply to Production Factors		
14	Margin (Rp/kg)	Rp.73.800
	a. Labor income (%)	6,32%
	b. Other input donations (%)	31,81%
	c. Processing advantages (%)	30,67%

Based on the data in Table 3, a conversion factor of 0.5 was obtained, which means that 1 kg of raw materials for cob fish produces 0.5 kg of shredded fish. According to Alimusa & Murini (2016), the coefficient of labor value is carried out by dividing the amount of labor employed to make products a certain amount of raw materials used. The resulting figure in Table 3 is 0.1166. So, to produce 1 kg of shredded requires a labor force of 0.1166 HOK / Kg.

Other input donations are the value of all materials needed outside the main raw materials and labor (Nur 2018). Other inputs used are water, coconut milk, white sugar, ginger, galangal, pecan, pepper, salt, fuel gas, plastic packaging and product stickers, garlic, and onion. Based on Table 3 and Table 4, the contribution of other inputs in the manufacture of shredded cob fish amounted to Rp. 23,475 / Kg.

Table 4. Cob Fish Production Cost Analysis

Raw Materials	Sum	Unit	Cost (Rp)
Ginger	100	G	IDR 3,500
Coconut milk	3000	MI	IDR 22,500
White sugar	1000	G	IDR 15,000
Galangal	250	G	IDR 5,000
Candlenut	500	G	IDR 15,000
Garlic	250	G	IDR 10,000
Shallot	500	G	IDR 20,000
Salt	300	G	IDR 6,000
Pepper	30	G	IDR 10,000
Goring oil	2000	MI	IDR 28,000
Flavorings	55	G	IDR 2,500
Gaseous fuel	3000	G	IDR 25,000
Pouch packaging and stickers	50	Pcs	IDR 72,250
Total			IDR 234,750
Use of raw materials (kg)			10
Other Input Donations			IDR 23,475

The value of the products sold minus the costs of other input donations and the costs of raw materials, will later be generated added value (Alimusa & Murini 2016). Based on the calculation results in Table 3, an added value of Rp 27,300/Kg was obtained with an added value ratio of 46.55%. The value-added ratio is high because it is more than 40%. The high value-added ratio indicates that the

processing of cob fish into shredded is very feasible because it will get significant profits. The profit rate obtained from the processing of tongkong fish into shredded was 82.9% (Table 3).

Marketing Analysis of Shredded Fish Cobs "Abonikol"

Marketing analysis is very important to do in order to obtain maximum profit, become a product leader and ensure the sustainability of the business or production. According to Moensaku & Kune (2016), the things that need to be done in analyzing the market are determining market segments, identifying competitors, determining prices and doing promotions.

The market segmentation targeted by "Abonikol" is the area around Pangandaran, especially tourist attractions, such as the east coast of Pangandaran, Cijulang and Batu Hiu. Competitors "Abonikol" that exist in this market segment are identified competitors of rivals of 1 product, competitors of substitution of 3 products. The basis of its competition is product-referenced. Abonikol in setting prices based on cost plus pricing, that is, the price is determined based on the cost of goods produced plus the profits obtained. The promotion system carried out is to provide free samples to the surrounding community and personal selling as well as through social media, such as Facebook and Whatsapp.

Conclusion

Based on the calculation results, *the value added* in making shredded cob fish was obtained at Rp. 27,300 / Kg with an added value ratio of 46.5%. The value of this ratio indicates that the cob fish is very worthy of shredding. Marketing analysis of "Abonikol" was carried out on the segmentation of the Pangandaran wilayah market, identified rival competitors 1 product, competitors substitution 3 products, the basis of competition that occurred based on product reference, pricing based on cost plus pricing and promotion by way of personal selling and through social media, such as Facebook and Whatsapp

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References

- [1] Alimusa, L. O., & Murini, M. (2018). Value Added Analysis of Shredded Fish Making in Increasing Household Economic Income in Purirano Village, Kendari Kendari City. *Mega Assets: Journal of Economics And Management*, 5(1), 9. <https://doi.org/10.32833/majem.v5i1.63>
- [2] Hamidi, W. (2018). Value Added Analysis of Agroindustry Shredded Catfish in Koto Mesjid Village, Xiii Koto Kampar District, Kampar Regency, Riau Province (Case Study on Cv. Graha Pratama Fish). *Journal of Agribusiness*, 18(1), 55-65. <https://doi.org/10.31849/agr.v18i1.756>
- [3] Intyas, C. A., Firdaus, M., & Aziz, A. (2020). Value Added Analysis of Dried Layur Fish (*Trichiurus savala*) in Mawar UKM in Weru Village, Paciran District, Lamongan Regency. 181-186.
- [4] Muharom, Y. P., Anna, Z., Riyantini, I., & Suryana, A. A. (2019, December). Value Added Analysis of Tuna Processing Industry in the Ocean Fishing Port Area (Pps) Nizam Zachman Jakarta. *Journal of Fisheries and Marine Affairs*, X, 9-16.
- [5] Mukaromah, N. F., & Wijaya, T. (2020). Perfect Competition Market And Imperfect Competition Market In Islamic Perspective. *PROFIT: Journal of Islamic Economics and Banking Studies*, 4(2), 1-16. <https://doi.org/10.33650/profit.v4i2.1621>
- [6] Mulyana, M. (2019). *Pricing Strategy*. June. <https://doi.org/10.31227/osf.io/tb2zd>
- [7] Moensaku, P. Y., & Kune, S. J. (2016). Implementation of Marketing Mix on Fish Shredded Marketing in Humusu C Village, North Insana District, North Central Timor Regency (Case Study on fish shredded processing group "Pantura"). *Dryland Agribusiness*, 78-81.
- [8] Nur, M. W. (2018). *Added Value of Shredded Milkfish Processing in Bontolebang Village, Bontoharu District, Selayar Islands Regency*. Faculty of Agriculture. Makassar: Muhammadiyah University of Makassar.
- [9] Nurhayati, I., Suharti, T., & Suartika, I. (2020). Value Added Analysis of Shredded and Catfish Meal Production With Zero Waste Principle. *Journal of UIKA Bogor*, 274-282