



Value Addition and Marketing Analysis of Fish Meat Ball Products in Household Industry in Pangandaran

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

One type of processed fishery product in Pangandaran Regency is Mang ling fish balls. Product processing can increase added value which aims to increase profits. These fish balls are produced on an MSME scale, the quality is not good and they do not have competitiveness. The research was carried out in March 2024 in Wonoharjo Village, Pangandaran Regency. The aim of this research is to analyze the amount of added value obtained and the extent to which the fish ball marketing strategy has been implemented in Mang ling MSMEs. The method used is a survey method by conducting a case study, where respondents are determined using purposive sampling. Added value is analyzed using the Hayami method. The results obtained are that the added value of fish meatball processing is relatively high, namely IDR 80,000/Kg with a profit of IDR 80,000/ Kg output produced. The marketing strategy used has not used planning and is only based on local community habits.

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1. INTRODUCTION

Pangandaran is one of the districts located in West Java. Pangandaran Regency is located at 108°30' - 108°40' E and 7°40'20" - 7°50'20" S. The area borders directly on Ciampis Regency, Cilacap Regency, Indian Ocean, and Tasikmalaya Regency [1]. As one of the regions directly bordering the Indian Ocean, Pangandaran Regency has great fisheries potential very high [2].

One way to optimize fishery products in Pangandaran Regency is by making fishery-based products [2]. Examples of fishery products available in Pangandaran Regency is a fish ball. Meatballs are a gel product made from meat protein such as beef, chicken, fish and shrimp which are boiled so that they have the shape of smooth dots with a compact, elastic and chewy texture [3,4]. This meatball product has high market potential and is a promising industry if it has good quality and taste [4,5].

High quality fish balls can be obtained from good handling of raw materials, right through to the marketing process [4]. In reality, fish balls in Pangandaran Regency are still medium and small scale managed by local Micro, Small and Medium EntelDRises (MSMEs). so it is still not able to be developed optimally [6]. The main challenge for MSMEs this is a way to produce good quality products that have competitive and marketing power effective [7,8]. MSMEs in Pangandaran Regency will be able to survive and compete if they are able to implement management well [8]. One of management management in industry, namely the field of marketing. In marketing it is very important to Analyze the market, customers and products being marketed.

Marketing strategy is one way to win a competitive advantage sustainable both for companies that produce goods or services. Strategy Marketing is used in preparing overall company planning. Besides that Marketing strategies are also needed because of the tough competition faced by companies in general [8]. In such a situation, there is no other choice for anyone companies unless they try to deal with it or completely leave the competitive arena.

Therefore, marketing analysts need to be paid attention to by MSMEs, especially in determining strategy marketing must be really mature so that the marketing strategy used later can really penetrate the market amidst increasing competition.

One of the MSMEs that produces fish balls in Pangandaran is Mang ling MSME. Mang ling MSMEs are still classified as home industries where all production processes are carried out themselves with his family. As a business with its own fans, it certainly has its obstacles faced by these business actors, starting from the perspective of profits and business feasibility the. Therefore, it is necessary to carry out a marketing analysis on Mang ling fish ball MSMEs with the aim of finding out the extent to which marketing strategies have been implemented in these MSMEs.

2. METHODOLOGY

This research was conducted in March 2024 in Wonoharjo Village, Regency Pangandaran. The data collection techniques used in this research are observation and interviews. Observation is direct observation of various activities and conditions in research location related to research objectives, while interviews are collecting data by conducting interviews using questionnaires with related parties related to the research. Respondents in this study were determined using pulDRosive sampling. Data regarding the marketing process obtained will be analyzed descriptively to obtain specific information regarding the marketing strategies used by fish ball MSMEs in Pangandaran Regency. The financial related data obtained was summarized and then analyzed using the Hayami method. In this research, the added value of fish balls is calculated in one production process. After obtaining the calculation results, Reyne's test was carried out in Musa Hubeis (1997):

1. The value added ratio is low if the percentage is <15%;
2. Medium value added ratio if the percentage is 15%; and
3. High value added ratio if the percentage is > 40%.

Table 1. Added value of the Hayami method

No.	Variable	Formula
I	Output, Input and Price	
	1. Output/total production (units/period)	A
	2. Input (IDR/kg)	B
	3. Labor (HOK/day)	C
	4. Conversion Factor	$D = A/B$
	5. Labor Coefficient (HOK)	$E = C/B$
	6. Product Price	F
	7. Labor Wages (IDR/day)	G
II	Revenue and Profits	
	8. Price of Raw Materials (IDR/kg)	H
	9. Other input contributions (IDR)	I
	10. Output value (IDR)	$J = D \times F$
	11. a. Added Value (IDR)	$K = J - H - I$
	b. Value Added Ratio (%)	$L \% = (K/J) \%$
	12. a. Labor income (IDR)	$M = E \times G$
	b. Employee Benefits (%)	$N \% = (M / K) \%$
	13. a. Profit (IDR)	$O = K - M$
	b. Profit Rate (%)	$P \% = (O - J) \%$
III	Balas Jasa untuk Faktor Produksi	
	14. Marjin (IDR/Kg)	$Q = J - H$
	a. Labor Income (%)	$R \% = (M / Q) \%$
	b. Contribution of other inputs (%)	$S \% = (I / Q) \%$
	c. Company Profit (%)	$T \% = (O / Q) \%$

3. RESULTS AND DISCUSSION

3.1 MSME Profile



Fig. 1. Place selling Mang ling fish balls

Mang ling fish balls are a processed fishery product produced by MSMEs Mang ling. The production is located in Bojongjati RT 1 RW 4 Wonoharjo Village, District Pangandaran, Pangandaran Regency. This business has been started since 2006. The products are the result is fish meatballs in sauce. This business was founded on the basis of an idea that Mang ling had with see the fisheries potential in the Pangandaran area. The initial capital used is also pure personal savings without any cooperation with other parties.

Since its inception until now, fish ball production activities have started from preparing the ingredients raw materials and marketing are only carried out by Mang ling and his wife. Even as an industry. Mang ling fish meatballs still uses traditional methods in the production process to marketing. Mang ling's meatball soup products are marketed themselves through selling in schools. At certain times such as the month of Ramadan or other commemorative days, Mang ling will sell at the base near his house.

3.2 Processing

After all the raw materials and additional ingredients and spices were available, process The first processing of Mang ling Fish Meatballs is the process of chopping/grinding the fish. The marlin fish meat is chopped then fried for 5 minutes then the ingredients are added and other spices, then grind again for 5 minutes. Once mixed, the meatballs are molded by forming circles of the required size. The meatballs are cooked with boiling water (boiling) for 2 stages, namely the first without using oil and secondly using oil. The effect of this cooking on the meatball dough is formation of a compact product structure. Meatballs that are already floating on the surface of the water mean. Meatballs were cooked and boiling can be

stopped. Once cooked enough, the meatballs are removed and drained while cooling using a fan.



Fig. 2. Process of Boiling Fish Meatballs

3.3 Value-Added

Added value is the added value that occurs in a commodity because of the commodity. It undergoes further processing in a production process [9]. To know the added value of fish ball products, first determine how much percentage of raw materials and additional materials to produce fish balls [5]. The raw material used by Mang ling to produce fish balls is 10 kg at a price of IDR 500,000 in one production. Raw materials for making Mang ling fish balls is marlin fish obtained from fishermen in Pangandaran. Meanwhile, additional ingredients are for make fish balls, namely 10 kg tapioca flour, salt, sugar and garlic at cost amounting to IDR 300,000. In one production, 8 kg of fish meatballs will be produced which is sold at a price of IDR 200,000/kg. Based on this information, the added value of Mang ling fish ball products can be determined using the Hayami method [10].

Based on Table 2, it shows that for every processing of 10 kg of marlin fish, 10 kg Tapioca flour and other additional ingredients will produce 8 kg of fish balls. From the results the comparison of raw materials with the output (production) produced then obtains the factor conversion of 0.8 kg. The added value generated from processing fish meatballs is IDR. 80,000/Kg of raw materials, this shows the amount of added value per Kg of raw materials. Value-added This

can be increased if the raw materials used are large in size so that produce more meat as well as through reduced input costs and improvements amount of raw materials [9]. In calculating the added value, the value added ratio is also known. fish meatballs which is 50%. A ratio value of more than 40% indicates a classified product ratio value high [9]. The amount of profit obtained by Mang ling MSMEs was IDR. 80,000/Kg.

This fish ball product gets a margin of IDR 110,000.00/kg, this margin is the difference between the output value and the raw materials or contribution of the owner's production factors other than the raw materials used in the production process. The margin obtained can be affects the percentage of direct labor income, input contributions, and profits other business owners. The result obtained is 0% labor income, input contribution others amounted to 27.27% and the entrepreneur's profit was 72.73%.

3.4 Consumer Analysis

Consumers of Mang ling fish balls are consumers who need fish balls as fulfilling his psychological needs. Most of these consumers are middle class like culinary dishes with soup and can be enjoyed with a spicy taste. These consumers will get own satisfaction after eating fish meatballs. Further consumer analysis is carried out with carry out market segmentation. Market segmentation is the process of dividing the market into groups of buyers in accordance with market desires based on needs, characteristics, or behavior that requires its own product or marketing mix [8]. Market segmentation in differentiate into 4, namely:

a. Geographic Segmentation

Geographic segmentation is based on layout/region. This difference can be based on administrative areas, for example based on Village, District, Regency/City, or Country or based on certain geographic conditions. Mang ling's fish meatballs have The target consumers are school children, namely Muhammadiyah Pangandaran High School students and Pangandaran Polytechnic student. Apart from that, fish balls are also sold to consumers Finally, the residents around Wonoharjo Village. The payment system used is cash.

b. Demographic Segmentation

Demographic segmentation is grouping based on demographic data such as age, gender, income, family size, marital status, income level, education, type of work, experience, religion, and so on. Target consumers Mang ling's fish balls are teenagers and adults who are still at school or college. There is no target consumer of men or women.

c. Psychographic Segmentation

Psychographic segmentation is grouping based on social status, lifestyle and personality of the target segment. The target consumers for Mang ling's fish balls are children who like culinary delights without any restrictions on social status in society because the price of fish balls is quite affordable.

d. Behavioral Segmentation

Behavioral segmentation is grouping market segments based on knowledge consumer attitudes and reactions to a product. The target consumers are people who prefer traditional food rather than processed fish products in the form of frozen food. There is no specific time for consumers to buy fish ball products. They will buy when they want it.

3.5 Competitor Analysis

Competitors are companies that produce or sell goods or services the same or similar to the products we offer. A company's competitors can be classified as strong competitors and weak competitors or close competitors with the same product or kind. A company that has strengths that are not easily imitated by competing companies seen as a company that has "Distinctive Competence" carrying out capabilities specific to a company. Distinctive Competence is a specific activity that is developed by the company to be superior compared to its competitors. Competitive advantage caused by the strategic choices made by the company to create market opportunities.

The number of fish ball traders in Pangandaran is quite large with a variety the brand it sells. Each fishball product has its own unique taste and characteristics is an advantage of the

product. Fish balls produced by Mang ling has an advantage in price because it has a relatively cheap price with taste and size Fish meatballs are quite large compared to other fish meatballs. Price of fish balls per the item is 1000 rupiah. The uniqueness of this fish ball product is that it has a white color, It is large in size and does not smell fishy, so it is very suitable for consumers who don't like it pungent fish smell.

The target market for Mang ling's fish balls is school students. Location of fish ball competitors It is very widespread in Pangandaran because Pangandaran is a tourist area which is visited by many tourists. Strategic location for selling fish balls or those selling fish balls are on the East Coast of Pangandaran, Paamrokan Square, MTsN school 1 Pangandaran, Alun-alun Parigi and there are also those selling around.

3.6 Marketing Planning

The process of establishing Mang ling MSMEs was carried out without any product planning. Determination of production and marketing is carried out spontaneously by looking at the opportunities that exist in the market surroundings. The production process is carried out based on the skills possessed by Mang ling. Along As time goes by the production process until marketing begins to adapt to technology and existing trend.

In determining product prices, Mang ling uses a market approach, which means The price adjusts to the price of similar products on the market. However, Mang ling remains Pay attention to the desired profit amount. Through this market approach, Mang ling products able to enter the market whose target consumers are school students.

In the marketing process, of course also pay attention to the promotion process. Mang fish meatball products ling carries out promotions through direct sales. This product can be known to the public as time goes by without using other promotional media such as advertising and sales services as well as other media. Through direct sales, the marketing process occurs directly from producers to consumers without any intermediaries such as wholesalers or parties the other three.

Table 2. Calculation of Added Value

No.	Variable	Amount
I	Output, Input and Price	
	1. Output/total production (units/period)	8
	2. Input (IDR/kg)	10
	3. Labor (HOK/day)	0
	4. Conversion Factor	0,8
	5. Labor Coefficient (HOK)	0
	6. Product Price	IDR200.000
	7. Labor Wages (IDR/day)	0
II	Revenue and Profits	
	8. Price of Raw Materials (IDR/kg)	IDR50.000
	9. Other input contributions (IDR)	IDR30.000
	10. Output value (IDR)	IDR160.000
	11. a. Added Value (IDR)	IDR80.000
	b. Value Added Ratio (%)	50%
	12. a. Labor income (IDR)	0
	b. Employee Benefits (%)	0
	13. a. Profit (IDR)	IDR80.000
	b. Profit Rate (%)	50%
III	Balas Jasa untuk Faktor Produksi	
	14. Marjin (IDR/Kg)	IDR110.000
	a. Labor Income (%)	0
	b. Contribution of other inputs (%)	27,27%
	c. Company Profit (%)	72,73%

3.7 Production Analysis

Production analysis was carried out without using forecasting from fish ball demand data. This is because demand for meatball products tends to be the same every week. With Thus, production for each cycle is carried out at will, taking into account availability raw materials and target consumers. Production will be increased on certain days.

4. CONCLUSION

Based on the research conducted, the following conclusions were obtained:

- The added value generated from processing fish meatballs is IDR. 80,000/ Kg of material standard with a profit of IDR 80,000/Kg output.
- The target consumers for Mang ling's fish balls are students who like culinary delights soup with a spicy taste.
- Most of the competitors of Mang ling's fish ball products are sellers who sell them similar products and the same consumer reach.
- The marketing system uses direct marketing and does not use marketing

promotional media, both print media and social media.

- Product pricing is determined using a market approach to make things easier product enters the market.
- Production analysis is carried out at will without using forecasting from data previous request for fish balls.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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