Original Research Article

ANALYSIS OF VALUE ADDED PRODUCTS OF TENGGIRI FISH DRIED BATAGOR AT PT HADE BOGATAMA NUSANTARA, BANDUNG CITY

ABSTRACT

Batagor is a typical food from the area of Bandung, West Java - Indonesia. This research aims to 1) analyze the added value of mackerel fillets processed into dry batagor and 2) analyze the marketing of dried batagor by PT Hade Bogatama Nusantara which includes market segmentation, pricing, competitor identification, and promotion. The research method used is a case study. Data collection consists of primary data and secondary data. Primary data was collected using survey methods and direct interviews with the owner of PT Hade Bogatama Nusantara. The interview technique used, namely unstructured interviews, where the interviewer does not ask questions that have been arranged systematically. Meanwhile, secondary data was obtained from several supporting pieces of literature, such as journals and books. Added value analysis was carried out based on the Hayami method and marketing analysis was carried out descriptively. Based on the Hayamin method, the added value of mackerel fillets processed into dry batagor products is Rp. 114.698.19 per kg. The value-added ratio is 59,74 percent. This dry batagor market segmentation is based on static methods on demographic and geographical groups with the main target being housewives and teenagers. Identifying competitors from the dry batagor product of PT Hade Bogatama Nusantara is very large, rival and substitute competitors. The competition that occurs is based on cost advantage competition and product differentiation. Pricing is based on cost plus pricing. Promotion through online media, namely Instagram, Tiktok, and Facebook.

Keywords: Fillet, competitors, product differentiation, cost advantage, promotion.

1. INTRODUCTION

The city of Bandung has great potential in developing culinary tourism. Culinary tourism is one of the main attractions in the city of Bandung (Rukma et al. 2018). Some of the typical foods of the city of Bandung which is famous for its savory and delicious taste is batagor. Food made with the basic ingredients of mackerel can captivate all the tongues of its fans and has been available in several other cities in Indonesia.

Mackerel is one of the economically important pelagic fish in Indonesia because it has a high protein content and is good for growth. Mackerel contains 76,5% water, 21,4% protein, 0,56% fat, 0,61% carbohydrates, and 0,93% ash content (Mahardika et al. 2014 in Rahayu dan Destiana 2022). However, fish nutrition can change if it is not processed properly. One example of processing or diversifying fish products is the dried batagor of mackerel.

Batagor is a typical food from the Bandung area which is similar to dumplings but is cooked by frying. Batagor can be soft or dry. The difference in the process of making dry batagor

and soft batagor lies in the length of time they are fried. Soft batagor can be consumed directly with peanut sauce, soy sauce, sauce, chili sauce, and lime. Meanwhile, dry batagor can be processed as a mixed ingredient in making seblak, boiled noodles, aci meatballs, cuanki, and so on. The way to make this dry batagor is very easy, namely by boiling it together with seblak or noodles until the dry batagor becomes soft or you can douse it with hot water. One of Indonesia's biggest meatball topping aci and seblak centers is PT Hade Bogatama Nusantara.

PT Hade Bogatama Nusantara was founded in 2011, this PT sells various processed products typical of Bandung flour. Initially, this PT only produced 1 type of processed product, but over time until 2017, this PT expanded the production of processed products from typical Bandung flour. PT Hade Bogatama Nusantara has expanded shipments to almost all parts of Indonesia. The research aims to 1) analyze the added value of mackerel fillets processed into dry batagor and 2) analyze the marketing of dried batagor by PT Hade Bogatama Nusantara which includes market segmentation, pricing, competitor identification, on and promotion.

2. MATERIALS AND METHODS

This research was carried out at PT Hade Bogatama Nusantara, located at Jl. Sukamaju, Cipadung Kulon, Kec. Panyileukan, Bandung City, West Java 40614 (Arzela Ruko No. 12, next to Gondangdia Regency 1). The research method used is a case study. Data collection consists of primary data and secondary data. Primary data was collected using survey methods and direct interviews with the owner of PT Hade Bogatama Nusantara. The interview technique used, namely unstructured interviews, where the interviewer does not ask questions that have been arranged systematically. Meanwhile, secondary data was obtained from several supporting pieces of literature, such as journals and books. Added value analysis was carried out based on the Hayami method and marketing analysis was carried out descriptively.

3. RESULTS AND DISCUSSION

3.1 COMPANY PROFILES

PT Hade Bogatama Nusantara is a company engaged in the field of flour processing food typical of Bandung which was pioneered by Mr. Ade Hidayat. PT Hade Bogatama Nusantara started as a home industry in 2011 and gradually expanded as a distributor of complementary raw materials for Bandung specialties. At the beginning of production around 2011, PT Hade Bogatama Nusantara only marketed its products in the Bandung area, but as demand and business growth increased, the company expanded its facilities and capacity in 2017. PT Hade Bogatama Nusantara has been trusted as the distributor of choice by brands of popular food in Indonesia. Brands have established long-term partnerships with PT Hade Bogatama Nusantara.

The advantage of PT Hade Bogatama Nusantara, namely that there is a lot of demand for dry batagor products, even though there is a lot of competition between sellers, resellers, and even factories, dry batagor remains a snack that has a lot of demand because dry batagor can be used as a topping for seblak, aci meatballs, typical Bandung cuanki. is trending at the moment. In addition, PT Hade Bogatama is collaborating with the KAI logistics expedition, this is so that it can provide more convenience to consumers and speed up the delivery process easier, and can provide discounts that are quite profitable for consumers.

3.2 GENERAL DESCRIPTION OF THE PRODUCT

Bandung Dry Batagor is one type of snack that is popular in the city of Bandung. Food this one is certainly no stranger to society, not even just in Bandung, but in various parts of Indonesia. Batagor stands for fried tofu meatballs. This dry batagor can be used as a complementary topping for seblak, meatball aci, and typical Bandung cuanki, by boiling it or dousing it with hot water until soft. This dry batagor can last up to 3 months in the packaging.

Fig 1. Dried batagor

3.3 CLASSIFICATION OF TENGIRI FISH

Quoted from fishbase.org (2022), taxonomically, mackerel is classified as follows:

Phylum	: Chordata
Class	: Actinopteri
Order	: Scombriformes
Family	: Scombridae
Sub family	: Scombrinae
Genus	: Scomberomorus
Species	: *Scomberomorus commerson*

Fig 2. Mackerel fish

Mackerel is a type of fish that is classified as economically important and is one of the most popular fish in the world (Santoso and Susilo 2016). In addition, mackerel is also a type of fish that is used in various types of processed products and is spread on the market in large quantities. Mackerel can be processed into crackers, dumplings, batagor, and empek-empek (the signature food of Palembang).

3.4 INGREDIENTS AND PROCESSING STEPS FOR TENGIRI FISH DRIED BATAGOR

3.4.1 INGREDIENTS

The materials used in the production of dry batagor at PT Hade Bogatama Nusantara are as follows:

1. 125 kg mackerel fillet (main ingredient)
2. 250 kg of wheat flour
3. 100 kg of oil
4. 20 duck eggs
5. 6 kg of salt
6. 1 kg of flavoring
7. Enough water

3.4.2 PROCESSING STEPS

Here are the steps in making mackerel dry batagor:

1. Mackerel that has been filleted is ground first, then added 250 kg of flour, 20 duck eggs, 6 kg of salt, 1 kg of flavoring, and sufficient water, then stirred until evenly distributed
2. After the ingredients are thoroughly mixed, it is done manually using a spoon and fork, then placed on a tray
3. Then, the frying process is carried out by going through 3 stages, namely the initial development stage, the maximum development stage, and the "washing" stage.
4. After that, the dried mackerel batagor is drained for approximately 2-3 hours, then the packing process is carried out.

3.4.3 OTHER INPUT CONTRIBUTIONS

Other input contributions included in PT Hade Bogatama Nusantara's dried mackerel batagor production, namely:

1. Electrical (water machines, mixers, grinders)
   The use of electricity in this industry requires a power of 352,08 kWh per day or equivalent to Rp. 374.542 per day.
2. Production support tools (spoon, fork, pan, spatula, and filter)
3. Plastic
   The total use of plastic is 1200 sheets with a unit price of Rp. 150

3.5 ADDED VALUE ANALYSIS

Fishery processing aims to increase the added value of domestic fishery products. In this case, an analysis of added value was carried out to see the addition obtained from processing mackerel into dried mackerel batagor at PT Hade Bogatama Nusantara. The calculation method for seeing the addition of this value uses the Hayami procedure. The results of calculating the added value of mackerel dry batagor products can be seen in Table 1:

Table 1. The results of the analysis of added value to the tenggiri fish dried batagor product of PT Hade Bogatama Nusantara with the Hayami method

No	Variable	Score
I. Output, Input, and Price		

1	Output (Kg)		1	300
2	Input(Kgs)		2	125
3	Labor (HOK)		3	10,8
4	conversion factor	4 = ½		2,4
5	Labor coefficient (HOK/Kg)	5 = 3/2		0.0864
6	Output price (Rp)		6	80000
7	Labor wages (Rp/day)		7	1050000
II. Acceptance and Profits				
8	Raw material prices (Rp/kg)		8	60000
9	Contribution of other inputs (Rp/kg)		9	17301.81
10	Output value (Rp/kg)	10 = 4 x 6		192000
11	a. Value added (Rp/kg)	11a = 10 - 9 - 8		114698,19
	b. Value added ratio (%)	11b = 11a/10 x 100%		59,74
12	a. Labor income (Rp/kg)	12a = 5 x 7		90720
	b. Labor share (%)	12b = 12a/10 x 100%		47
13	a. Profit (IDR)	13a = 11a - 12a		23978,19
	b. Profit rate (%)	13b = 13a/11a x 100%		20,91
III. Reply to Owners of Factors of Production				
14	Margin (Rp/Kg)	14 = 10 - 8		132000
	a. Labor Income (%)	14a = 12a/14		68,73
	b. Contribution of Other Inputs (%)	14b = 9/14		13,11
	c. Company Profit (%)	14c = 13a/14		18,17

The results of the added value analysis using the Hayami method in Table 1 explain that the dry Batagor output from PT Hade Bogatama Nusantara is 300 kg. With the input used in one product that is equal to 125 kg. Judging from the value of the resulting conversion factor that is equal to 2,4. The number of workers at PT Hade Bogatama is 12 people, namely 6 men and 6 women. Each worker has their tasks such as printing, frying, packing, etc. The wage system here is per day, the wages for men and women are differentiated according to the weight of the work. For male workers, PT Hade Bogatama pays Rp. 100.000/day, women workers are given a wage of Rp. 75.000/day. The resulting HOK is 10,8 with a labor coefficient of 0,0864, and the labor wage issued by PT Hade Bogatama for workers is Rp. 1.050.000/day. Based on calculations, it was also found that the output price of this dried batagor mackerel product was Rp. 80.000/kg. This price refers to the cost-plus pricing method.

PT. Hade Bogatama Nusantara uses Cost Plus Pricing in calculating the selling price. Garrison et al. (2013) stated that cost-plus pricing is the process of determining the selling price by calculating the production cost per unit, deciding how much profit is desired, then determining the selling price. The steps used to determine the total cost of the product are then determined by fixed costs and variable costs. The total cost is then divided by the number of units to produce the total unit cost. The final step is to multiply the markup percentage to get the cost of sales and the company's profit margin.

The price of the main raw material, namely mackerel, is Rp. 60.000/kg, with other input contributions of 17.301,81/kg. The output value generated from the processing of this dry batagor is Rp. 192.000/kg. The added value obtained from PT Hade Bogatama's dry batagor is Rp. 114.698,19 per kilogram where the value is obtained from the output value minus the price of raw materials and other input industries from the added value produced. It can be seen that this dry batagor gives a positive value according to the statement of Hayami et al. (1987) that if added value > 0 then the processing business provides positive added value (+). The resulting added value ratio is by calculating the added value divided by the output value multiplied by 100%, the value-added ratio is 59,74%.

Labor income per kilogram, namely Rp. 90,720 with a workforce share of 47%. The profit in one production of dry batagor is Rp. 23.978,19 with a profit rate of 20,91%. PT Hade Bogatama's dry batagor gets a margin of Rp. 132.000/kg resulting from the difference between the output value and the raw materials used in the production process. The resulting labor income is 68,73%, the value of the contribution of other inputs generated is 13,11% and the profit earned by PT Hade Bogatama is 18,17% where the things that influence this profit are the price of raw materials, the contribution of other inputs and labor (HOK) in the production process.

3.6 MARKET SEGMENTATION

The market segmentation for dried mackerel batagor products is static because it does not refer to dynamic community behavior. In this static market segmentation, there are two related variables, namely segmentation based on geography and demographics. This geographic segmentation refers to a particular area, be it a city, country, region, and so on. Meanwhile, demographic segmentation refers to grouping demographic units based on age, gender, income, occupation, and so on. The marketing of dried mackerel batagor products tends to focus on demographic segmentation, because the targets are entrepreneurs who have baso aci products, outlets, developing MSMEs, and housewives.

3.7 COMPETITION BASIS

The product of dried mackerel batagor at PT Hade Bogatama refers to the basis of cost advantage competition and product differentiation. This company is categorized based on cost advantage competition because this company has an advantage over other competitors by delivering greater value, lower prices, or by providing more appropriate benefits even at high prices. Likewise with the basis of product differentiation competition, because the products offered have differences from other competitors' offerings, thus making the products at PT Hade Bogatama Nusantara special. Because of this, several competitors choose to be affiliated with PT Hade Bogatama,

3.8 PROMOTIONS

The mackerel dried batagor products at PT Hade Bogatama Nusantara are marketed through various social media, namely Instagram, Tiktok, Facebook, Whatsapp, and marketplaces, such as Shopee, Tokopedia, Lazada, Blibli, and Bukalapak. In addition, you can also go offline by coming directly to the PT Hade Bogatama Nusantara office address.

4. CONCLUSION

Based on the Hayamin method, the added value of mackerel fillets processed into dry batagor products is Rp. 114.698.19 per kg. The value-added ratio is 59,74 percent. This dry batagor market segmentation is based on static methods on demographic and geographical groups with the main target being housewives and teenagers. Identifying competitors from the dry batagor product of PT Hade Bogatama Nusantara is very large, rival and substitute competitors. The competition that occurs is based on cost advantage competition and product differentiation. Pricing is based on cost plus pricing. Promotion through online media, namely Instagram, Tiktok, and Facebook.

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