



ANALYSIS OF STRUCTURE, BEHAVIOR AND PERFORMANCE OF THE SEAWEED DODOL AGROINDUSTRY MARKET IN LEKOK DISTRICT, PASURUAN REGENCY

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Abstract

This study aims to analyze the structure, behavior and performance of the seaweed dodol agro-industry market. The amounts of respondents used are 9 companies in Pasuruan regency. The data analysis methods used are descriptive and quantitative analysis. The descriptive analysis is used to determine the market structure includes the level of product differentiation, market out and in obstructions and the level of market knowledge also market behavior determining includes price determining policy, the system of market organization and marketing functions. The quantitative analysis is used to determine the degree of market concentration that is market segment measurement. For market performance, market margin analysis and profit analysis are used. The result of this research shows that there is a close relationship between the structure, the behavior, and the performance of seaweed dodol agro industry market. It can be seen from the relationship of those three components in dynamic system. The market structure influences the behavior, and both of them influence the market performance, and so the market performance that influences the behavior and the structure of market. The structure of seaweed dodol agro industry market in Pasuruan regency belongs to monopolistic market. The characteristic of this structure is 10-20% market segment. The product differentiation has been done by each dodol seaweed producers, as well as in quality, weight and the packaging. The market out and in obstructions are big and complex enough which consist of investment capital, production cost, and local government policy. Market information is easy to get, but it is not transparent, comes from mass media, agent, retailer, and consumers about the product price, potential location to be market, and material location.

Keywords: Agroindustry, Seaweed Dodol, Market Performance.

1. Introduction

Since the enactment of the free market in Indonesia, the competition between the world market and the domestic market has also increased. In this era of free trade, Indonesia must not remain silent. Acting passively means that Indonesia will be flooded with imported products, while boycotting it is impossible because it will be subject to economic sanctions or other political pressures. The best solution is to take an active role in free trade based on ability and develop the potential of domestic superior commodities that have comparative and competitive advantages.

Along with the increasingly intense market competition, each company must pay attention to the condition of the existing market structure. Because the shape of the market structure will determine the behavior or behavior that must be carried out by each company, so that in the end it will determine whether market performance is effective or not. The market structure is a reflection of the ongoing market competition conditions. When the number of players in the market increases, each company must be vigilant to face this competition. Only companies that are able to adapt are ultimately able to survive. So that the response from market behavior is needed to immediately take a strategy to behave in the market.

Indonesia as a maritime country has bright prospects in the development of seaweed production. Apart from its product potential, seaweed is also a source of foreign exchange and a source of income for coastal communities. Besides being used directly as a food



ingredient, some processed seaweed products such as agar-agar and carrageenan are also available. Indonesia besides exporting seaweed in dry form, also imports processed products which are increasing in number from year to year.

To overcome this increasing import condition, efforts are needed to increase the added value of seaweed. One of them is through agro-industry innovation. Agro-industry is a combination of the industrial sector and the agricultural sector, so it is necessary to develop a seaweed processing factory supported by production that meets the expected quality and quantity.

The potential for processing seaweed into agro-industrial products in the East Java region is generally located in coastal areas, one of which is in the Pasuruan Regency. In this area the development of the seaweed agro-industry has begun to be developed by farmers to increase their income, one of which is through the processing of seaweed into seaweed lunkhead. However, processing alone is not enough, market players must also pay attention to the form of market structure that they operate in, so that it is hoped that this business can provide a truly profitable contribution for entrepreneurs. Under these conditions, the researcher is interested in analyzing the structure, behavior and performance of the seaweed dodol agro-industry market.

2. Methods

2.1 Location and Time Determination Methods

This research was conducted in Pasuruan Regency, especially in Lekok District. This was done purposively (intentionally), because Lekok District is a coastal area which is a center for seaweed cultivation and is directly a place for processing (agro-industry) for various types of processed seaweed products, one of which is lots of seaweed dodol. The research was conducted from January to February 2009.

2.2 Sampling Technique

The sampling method in this study used a random sampling technique.

2.3 Method of collecting data

The data collection techniques used are as follows: interviews, questionnaires, library research. The data that has been obtained from the company that is the object of research is processed again. After the data is processed, an analysis and an interpretation are carried out so that the data becomes more understandable. The final results of the data that have been processed and analyzed will be able to clearly describe the condition of the company under study, especially in terms of analysis of the structure, behavior and performance of the seaweed dodol agro-industry.

2.4 Data analysis method

The method used in this study is a quantitative descriptive method, which is a research method that aims to collect and analyze both primary and secondary data that have a close relationship with the problem under study, to then be interpreted descriptively quantitatively in order to obtain a picture of the problem under study, then compare it with theoretical knowledge to proceed with the problem and possible solutions. To obtain the expected results, the authors conducted research to obtain data and theories that could be used to support the analysis.

3. Results and Discussion

3.1 Market Structure

The market structure shows the market attributes that affect the nature of the competitive process. Elements of market structure include: degree of market concentration, product differentiation, barriers to market entry and exit, as well as the level of knowledge of market participants.

a. Degree of Market Concentration

In this study, to determine the market share of seaweed dodol, production capacity data from producers was used. The production capacity used as the basis for this research is the production capacity for 1 year, namely January 2007 to December 2007.

Table 1. Market Share of Dodol Seaweed Agroindustry Producers 1 Year Period (January - December 2007)

Producer	Annual Production Capacity (Kg)	Market share (%)
CV. Gumindo	1,600	9.77
Gallic Artha Ethar	2,400	14.66
CV. Sea Sari	1050	6,41
Tiara Mustika	3,000	18.33
PT. Eternal Mighty Tirta	1,700	10.38
Seaweed Harmony	2,000	12,22
Sari Pearl	1,120	6,84
Agroindo Mighty	1,000	6,11
Nobility	2,500	15,27
Total	16,370	100

Source: Primary Data, processed 2009

From the calculation above, it can be seen that the nine dodol seaweed agro-industries have a market share below 20%. Tiara Mustika owns the largest market share, namely 18.33%, Budi Luhur 15.12%, Galic Artha Ethar 14.66, Seaweed Harmoni 12.22%, PT Tirta Perkasa Abadi 10.38%, CV. Gumindo 9.77%, Mutiara Sari 7%, CV. Sari Laut 6.41%, and the smallest is Agroindo perkasa of 6.11%. From the total market share of each agro-industry, it appears that the market structure formed is a monopolistic market structure, namely between 10-20%.

CR4 is calculated by adding up the 4 companies that have the largest total market share. The CR4 calculation yields a result of 60.41 indicating that the market structure formed is a monopolistic market structure.

IHH is calculated by adding up the square of each company's market share in an industry. The IHH calculation in Appendix 20 shows the results between $1000 < HHI < 1800$ which indicates that the agro-industry market share is a type of market between tight monopolistic and loose oligopolistic.

b. Product Differentiation

The differentiation of seaweed dodol products can be seen in terms of quality, packaging weight, and packaging shape.

Table 2. Different forms of seaweed dodol from each agro-industry in Lekok District

No	Company	Forms of Differentiation		
		Quality	Packaging Weight (Gram)	Packaging Form
1	CV. Gumindo	Superior, standard, Mini	200 , 300, 500	Boxes, baskets, mica
2	Gallic Artha Ethar	Superior, standard	300, 500	Mica plastic
3	CV. Sea Sari	Standard, mini	150, 300, 500	Box, plastic
4	Tiara Mustika	Superior, standard, mini	150, 200, 300	Box, mica, plastic, basket
5	PT. Eternal Mighty Tirta	Superior, standard, mini	150,200,500	Box, mica, plastic
6	Seaweed Harmony	Superior, mini	300, 500	Box, mica, basket
7	Sari Pearl	Superior, mini	150, 200,300	Box, mica, plastic
8	Agroindo Mighty	Standard	350	Mika, Plastics
9	Nobility	Superior, standard	300, 200, 350	Box, mica, plastic, basket

Source: Primary Data, 2009

3.2 Market Behavior

Research on the behavior of the seaweed dodol market is more focused on pricing policy methods, marketing channels (distribution channels), and marketing functions.

Price can be defined simply as the value of an item or service as measured by an amount of money where based on that value a person or company is willing to release the goods or services owned by another party. In the pricing method, there are several factors that must be considered by a producer, which affect the pricing itself, including: Cost Factors, Competitor Output Prices, Market Segmentation.

3.3 Market Performance

Market performance is defined as how the marketing system that is formed can meet the social goals and objectives of all market participants. Market performance can be evaluated by measuring: Analysis of marketing margin distribution; Distribution of shares; R/C analysis.

The results of the research on the seaweed dodol marketing system in Lekok District show that there are three types of marketing channels. Each of these marketing agencies performs different marketing functions based on the marketing function activities carried out by each marketing agency, so that marketing margin calculations can be carried out. Marketing margin analysis is used to find out whether marketers' margins or profits have been distributed fairly among each of the marketing agencies involved. Thus a market can be assessed as efficient or not in carrying out activities. This margin calculation is carried out to determine the distribution of margins, shares, and profits or costs at each marketing agency.

3.4 The Relationship Between Structure, Behavior and Market Performance of Seaweed Dodol Agroindustry in Pasuruan Regency

In relation to market behavior, four concepts will be discussed in the market structure, namely market concentration, product differentiation, entry and exit barriers to the market, and market information.

a. Degree of Market Concentration

In the degree of market concentration there is one variable, namely the quantity of

products in each producer which will be associated with nine variables of market behavior, including: type of marketing agency, location of marketing agency, physical function and facility function.

For the storage function, it is relative that the more goods are produced, the greater the storage function performed. CV. Mutiara Sari has higher storage costs because it stores raw materials in large quantities. The transportation function that is carried out also does not apply that the more goods are produced, the greater the transportation function. But depending on how each company can create efficiency so that the cost of transportation used is also getting smaller. For the biggest transportation costs is CV. Mutiara Sari with a total of 3,409, but with a level of production capacity that is not higher than Tiara Mustika.

b. Product Differentiation

In product differentiation, there are three variables, namely product quality in each manufacturer, weight and packaging form which will be associated with one variable from market behavior, namely output pricing, which is measured by production costs per kg and market segmentation.

The content of seaweed raw materials used to make seaweed dodol products greatly affects the quality of the product. The greater the percentage of raw seaweed used, the better quality seaweed dodol will be produced. Good quality seaweed dodol products, of course, are sold at a higher price, because they require more seaweed raw materials.

Good product quality will affect the setting of high prices. The higher the price of seaweed dodol, it will affect the consumer segment that buys it. Consumers in the lower middle segment will certainly buy seaweed dodol products at a lower price.

c. Market Exit Barriers

In terms of entry and exit barriers to the market, there are two variables, namely: investment capital and production costs which will be associated with one variable from market behavior, namely: output pricing as measured by production costs and the marketing function.

Production cost is a very influential factor on the continuity of the company's production. The higher the production costs owned by the seaweed dodol agro-industry, the higher the price of the product that is set. Besides affecting prices, production costs will also affect marketing functions. The greater the production costs, the producers will tend to suppress marketing functions.

d. Market Information

In market information there are three variables, namely information on raw material prices, location of raw materials and market locations, which will be associated with nine variables of market behavior, including: output prices, location of marketing institutions, physical functions and facilities functions.

The high production costs are of course influenced by raw materials, so that the nine seaweed dodol producers need to know information about price developments for seaweed raw materials. The more complete and abundant information about seaweed raw materials will help producers to get the lowest prices, which in turn will reduce production costs and increase profits.

The location or location of the seaweed raw materials will affect the cost. The farther the location of the raw materials from the seaweed dodol agro-industry, the higher the production costs.

The locations of agents and retailers are influenced by market location information.

With the location of agents and retailers in each market location, it will make it easier for producers to expand the market.

e. Summary of Linkages Between Market Structure and Market Behavior

Between market structure and behavior has a very close relationship through the concepts and variables. The market share of producers who are getting bigger makes producers carry out their marketing activities even bigger, through the selection of locations and types of marketing institutions that are increasingly broad and varied, as well as more complex marketing functions. The company's product differentiation in the form of quality, packaging form, and packaging weight will affect the behavior of producers in pricing and market segmentation. The higher the quality of the product, the higher the cost of production, thus affecting the price of the product. The high price of the product makes the market segmentation served is the upper middle class.

Market information includes information on raw material prices, as well as market locations. Information on raw material prices can reduce production costs and increase storage costs, because when prices fall producers have to buy seaweed in larger quantities so storage costs increase. Information about the location of raw materials can reduce production costs, risk and transportation functions because with closer raw material locations, producers can reduce production costs. The risk borne due to damage becomes smaller. Market location information will also greatly influence producers in making decisions in determining the location of marketing channels so that marketing becomes more efficient.

f. Summary of Linkages Between Market Behavior and Market Performance

There is a very close relationship between market behavior and performance, because the conditions on how producers behave in the market will affect how producers carry out their marketing activities to be efficient. The pricing policy relates to margin, share and R/C ratio of marketing activities carried out by producers. The higher the price set, the greater the margin and the smaller the share, so that marketing becomes unethical. However, setting a high price with a high level of profit will make the seaweed dodol agro-industry feasible to develop.

The marketing agencies involved and the marketing functions carried out in marketing also affect the size of marketing margins. The more the number of marketing agencies involved and the marketing functions performed, the greater the margin, so that marketing becomes inefficient.

4. Conclusion

The market behavior that is formed reflects the market structure, where the level of competition is getting tougher because certain product differentiation is needed to win market competition, both in terms of product, price and marketing functions, namely physical functions and facility functions, to improve product quality. In setting prices, producers pay close attention to cost factors and competitor factors, in addition to other factors such as market segmentation. In marketing, manufacturers use a variety of marketing agencies, namely agents and retailers.

There is a close relationship between market structure and the behavior and performance of the seaweed dodol agro-industry market and vice versa. This can be seen from the market structure of the seaweed dodol agro-industry, which is monopolistic in form, which will affect how producers behave, which is reflected in pricing policies, marketing channels and

marketing functions that are carried out. From the conditions of monopolistic competition, in setting prices, producers pay close attention to competitors' conditions, cost factors, and market segmentation. In addition to price fixing, the monopolistic market structure that is formed also influences the marketing activities of producers through the type and location of marketing agencies and marketing functions. The more the number of marketing agencies and the marketing functions carried out will make marketing performance inefficient. This condition will affect market behavior, where producers will reduce their marketing costs and tend to use marketing channels from producers directly to consumers. Ineffective marketing performance conditions can also cause some existing companies to be overwhelmed by competitive conditions so they choose to leave the market.

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