# Marketing Analysis of Purple Eggplant in the District of Likupang East Minahasa Utara

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#### **Abstract**

The purpose of this study was to analyze, margin and marketing efficiency of purple eggplant at Yayasan Sander Batuna, East Likupang district. The data analysis technique used in this research is descriptive method. To analyze the variables in this study using margin analysis and marketing efficiency. The results show that the marketing channels in the foundation are farmers-retailers-consumers. The marketing margin obtained is Rp.5.455/Kg and the value of farmer's shares is 45.45%, this shows that marketing cannot be said to be efficient.

## Keywords

marketing; margin; efficiency; marketing channel



## I. Introduction

Indonesia is an agricultural country that has great potential in the agricultural sector. Based on data from the Ministry of Agriculture, the area of Indonesia's rice fields reaches 7.6 million ha. North Sumatra is one of the provinces that have potential in the agricultural sector. The area of agricultural land in North Sumatra is around 34% of the total land area in Indonesia. North Sumatra is a province consisting of 33 regencies / cities. Each district and city has a diversity of geographical conditions that are different from the others. (Lubis, N. et al. 2020)

Agriculture is the driving sector of the economystate and a provider of jobs for today's society. Because it cannot be denied that agricultural products are the basic needs of society. Agriculture-based business is a business activity that often gets considerable attention from the government because of its important role in the context of economic development and rural economic recovery. Agricultural business is quite influential for long-term economic development and agricultural business development. In terms of agricultural-based activities, it has the potential to produce various superior commodities

The development of agriculture-based businesses cannot be separated from the efforts made to empower farmers such as training activities. Farmer training center is one of the institutions that aim to increase knowledge and training of farmers that support the performance of the government for farmer empowerment. One of the training institutions in North Sulawesi is the Sander Batuna Foundation, which is located in Wineru Village, East Likupang District.

Agricultural commodities cultivated at the Sander Batuna Foundation include: cayenne pepper, melon, watermelon and purple eggplant. The object of this research is the purple eggplant marketing analysis. The purple eggplant marketing activity is one of the important aspects to see whether the efforts carried out by the foundation can be said to be successful or

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not. Marketing is an activity or process of transferring production results to the consumption sector. A business can be said to be successful or not seen from its marketing activities. Activities and the ultimate goal of a business, namely marketing or sales activities that aim to make a profit. In marketing activities, other parties are required to support marketing efforts. These parties are referred to as marketing institutions, where the role of marketing institutions affects the marketing chain. The main obstacle in purple eggplant cultivation is the purple eggplant marketing activity where the level of demand for purple eggplant is quite low while the purple eggplant marketing activity is only marketed in the Likupang market. Problems caused by the lack of market and the level of demand for purple eggplant caused the cultivation of purple eggplant to be limited only according to the level of market demand.

Research on horticultural marketing, especially purple eggplant, has been widely carried out, especially in medium and small farming scales. The study was conducted by Ketty, et al (2020) Management of purple eggplant farming in Tuataka Village, East Kupang District, Kupang Regency. Ernawadi, et al (2018) Mapping of Market Potential and Marketing Strategy for Sweet Purple Eggplant. Bau Bani, et al (2020) Farming Performance and Marketing of Purple Eggplant in Kupang Regency, East Nusa Tenggara. Nofrita and Wisra (2016) Marketing Mix of Purple Eggplant (Solanum melogena L) at STA Baliak Mayang Unit LKMA Pincuran Bonjo. These studies generally measure farm income and look at performance, as well as market potential. In this study, marketing efficiency based on marketing analysis is associated with market demand and market behavior.

## II. Review of Literature

# 2.1 Marketing

Marketing activities can simply be defined as activities or businesses that aim to move goods or services from producers to consumers. The series of marketing actions performed is referred to as the marketing function. Distribution activities of a particular good from producers to consumers often involve one to several groups of intermediary traders who buy and sell goods. Some of these groups of traders act as selling agents for the owner of the goods (Abidini, 2017). The marketing function is an orderly procedure and if the situation changes it can change over time (Hanafie, 2010).

The creation of an item and the exchange of products or values resulting from the needs and desires of a person or group of people. So that marketing can be said as a social and managerial process. Every human activity carried out in marketing is always related to the market, this means that everything that is done works with the market with the aim of realizing potential exchanges to satisfy every need and desire of humans (Kotler, 1992).

Marketing is a series of activities or services carried out to move a product from producers to consumers. Produceris a person who produces an original product. The first product sales activity is carried out by producers or farmers. The purpose of marketing is to deliver products (goods or services) to final consumers as the final transaction (Anindita in Maulida, 2012).

In general, marketing can be said as a process of flow of goods/products that occur in the market. In this case the goods are distributed from the producer to the hands of the final consumer accompanied by:

- 1. Addition of form use through processing,
- 2. Adding the use of the place through the transportation process, and
- 3. The addition of time through the storage process (Sudiyono, 2002).

## 2.2 Marketing Channels and Marketing Agencies

A series of marketing channels will be created from each product distribution activity from farmers to consumers. In marketing, marketing channels will be formed differently according to the commodity.

According to Kotler in Wirapraja et al (2021), defining marketing channels is a set of organizations that are involved and interdependent in the effort to provide products that can be used or consumed by the final consumer. In the marketing channel, the marketing agency has the task of acting as an intermediary that carries out the work of moving goods from the production sector to the consumption sector. It overcomes the space, time and possession gaps that separate goods from those who need or want them. The distribution channel (channel of distribution) is defined as a marketing channel in which the marketing channel includes institutions that carry out all the functions of activities to move products and property rights from the production sector to the consumption environment (Kotler, 1987). Marketing agencies have the task of distributing goods from producers to consumers which is a flow of marketing channels.

Short length A marketing channel that is formed is determined by the number of marketing institutions involved in the marketing process of a particular product or commodity. The activity of distributing products into the hands of household and industrial consumers is the role of marketing institutions that carry out marketing functions.

The activity of distributing goods from consumers to producers is carried out directly by people or business entities referred to as marketing institutions. Marketing activities involve middlemen, collectors, wholesalers and retailers who carry out the marketing function. The institutions involved in marketing can be defined as follows (Sudiyono, 2002):

- a. A middleman or often referred to as a contractor is a person or in this case a marketing agency that has a direct relationship with the producer of the initial product, in this case the farmer, and conducts transactions in cash or by using a purchase contract.
- b. Collector traders, namely people or marketing institutions who buy agricultural commodities from middlemen, the number of commodities purchased is relatively small.
- c. Wholesalers, namely marketing institutions that carry out activities to collect agricultural commodities from collectors and carry out the distribution process to selling agents and retailers who have collaborated and reached mutual agreements.
- d. Retailers are people or selling agents of marketing institutions who directly deal with and make transactions with consumers.

# 2.3. Marketing Costs, Profits and Margins

# a. Marketing Fee

In every marketing activity always requires a fee because for each activity carried out it will add value to a product. Expenditures on marketing costs begin when agricultural products get certain treatment. Expenditure on marketing costs starts from harvesting activities, distribution activities to points of sale as well as for packaging activities. For the large costs that will be incurred in marketing are charged to the producer.

In general, costs are contributions or sacrifices that must be made by producers to manage their farms with the aim of getting maximum results. Marketing costs are costs incurred for activities or business activities of marketing agricultural commodities. According to Soekartawi in Primyastanto (2011), all costs incurred for marketing purposes are marketing costs. In marketing there are costs that must be incurred, namely transportation costs, storage costs, packaging costs, levies and others. The amount of costs incurred for marketing activities can vary due to the type of commodity, marketing agency, marketing

location of a commodity, and the effectiveness of the marketing carried out (Rahim and Hastuti, 2007).

## **b.** Marketing Advantage

In addition to cost, profit is something that is considered in marketing. According to Soekartiwi in Primyastanto (2011), marketing advantage is the difference in the price paid by consumers and the price received by producers. Distance is one indicator that is quite influential in marketing profits. Each marketing agency has the right to determine the marketing benefits. In activities for determining profits by marketing agencies, it causes differences for each marketing agency. The price difference in each marketing agency in the marketing process can affect the amount of marketing margin results.

# c. Marketing Margin

According to Sudiyono (2002), prices and marketing costs are two things that need to be known to see marketing margins. Marketing margin is the difference between the price paid by final consumers and the price received by farmers, marketing margin is often used in marketing analysis in terms of price. Analysis of distribution of marketing margins can be seen by seeing that in the marketing process there is more than one marketing agency so that it can be seen the analysis of distribution of marketing margins at each of the marketing agencies involved.

The difference in prices at institutions in a marketing system, in this case the difference between the total price paid by consumers and the total price received by farmers for traded agricultural commodities. Marketing margin can be expressed mathematically and then translated for each component of the costs involved in the marketing margin. Marketing margin can be determined using three methods, namely by knowing the marketing channels of a particular commodity, price comparisons from each marketing agency and the collection of each gross sale and purchase of each trader. Systematically marketing margin can be formulated as follows:

 $\mu = \mathcal{P}r - \mathcal{P}\mathcal{F}$ 

Information:

 $\mu$ : Marketing Margin

Pr: Price paid by consumers (Rp)

 $\mathcal{PF}$ : Price received by farmers or producers of agricultural commodities

# 2.4. Marketing Efficiency

Marketing efficiency is a benchmark in marketing activities to see whether marketing efforts have been carried out properly and correctly. According to Sudiyono (2002), one way to improve the marketing system efficiently is to change the product output and reduce marketing costs. Marketing efficiency can be measured by using a comparison of marketing outputs, namely prices at the final consumer level and marketing costs that have been incurred.

The percentage of marketing margin and share received by farmers is a benchmark to see economic efficiency. The characteristics used to determine marketing is said to be economically efficient, namely the value of the marketing margin obtained is low and the percentage received by farmers is quite high, which is above 50% (Darmawanti, 2005).

According to Soekartiwi in Primyastanti (2011), marketing benefits, prices received by final consumers, availability of physical and marketing facilities and market competition are factors that can be used to measure marketing efficiency.

Marketing activities with the aim of conveying the results of production from producers or farmers into the hands of consumers by offering affordable prices or costs or the lowest possible costs and then being able to make a fair distribution of the total price paid by the final consumer to the participating parties, taking part in the production and marketing of certain goods or commodities is a trading system that can be said to be efficient. Fair in this sense is intended to provide remuneration from marketing activities in accordance with the sacrifices of each marketing agency.

## III. Research Methods

#### 3.1 Place and time

The research was conducted at the Sander Batuna Foundation, Wineru Village, East Likupang District. This research was conducted for six months, starting from February-August 2021.

#### 3.2 Data Collection

The primary data used in this study were obtained through interviews with the purple eggplant cultivator foundation at the Sander Batuna Foundation and traders who are partners. For secondary data obtained from various related institutions that support the research.

## 3.3. Research Procedure

The research procedure was carried out as follows:

- 1. Conduct a survey first at the research location.
- 2. Conduct a literature study related to the research conducted.
- 3. Develop a questionnaire conducted for research.
- 4. Observation activities, interviews, and filling out questionnaires.
- 5. Perform data analysis and data processing.
- 6. Prepare reports on research results and prepare reports.

# 3.4 Research Variables

The research variables used are:

- 1. Consumers are people who buy purple eggplant to be consumed according to the level of need
- 2. The purple eggplant marketing channel is a series of marketing institutions through which purple eggplant is distributed from farmers to consumers.
- 3. The price of purple eggplant at the farmer level and marketing agency is the price received by farmers when selling eggplant expressed in rupiah per kilogram (Rp/Kg).
- 4. Marketing costs are all costs incurred by eggplant marketing institutions measured by adding up all marketing costs of each institution involved in the marketing channel and expressed in rupiah (Rp).
- 5. Marketing margin is the difference between how much consumers pay and how much farmers receive for their agricultural products. Marketing margin is measured by comparing the price of purple eggplant at the consumer level with the price of purple eggplant at the farmer level and is expressed in rupiah (Rp).

## 3.5 Data analysis

This research will use descriptive analysis research method. The methods used to conduct this research are descriptive analysis, namely "research intended to collect information about the status of an existing symptom, namely the state of symptoms according

to what they were at the time the research was conducted". Descriptive analytical research method in addition to trying to describe the actual events in the field, also formulate problems, analyze data to answer problems, formulate conclusions and compile research reports. The steps taken to analyze the data are

- 1. Knowing the purple eggplant marketing channel at the Sander Batuna Foundation by following the production flow of purple eggplant from farmers to final consumers.
- 2. Knowing the amount of marketing costs and marketing margins at the marketing agency level in marketing channels is done by calculating the costs, profits and marketing margins for each marketing agency in various purple eggplant marketing channels in the dr. Sander Batuna.

#### a. Market Fee

Marketing costs can be calculated using the formula:

$$Bp=Bp1+bp2+...+Mr$$

Where:

Mr : Marketing costs of purple eggplant

bp1,bp2,... Mr: Marketing costs of each purple eggplant marketing agency

## **b.** Marketing Advantage

The benefits of each marketing agency involved in marketing purple eggplant at the Sander Batuna Foundation are formulated as follows:

$$Kpn = Psn-Pbn-Bpn$$

#### c. Marketing Margin

Marketing margin is the difference between the price paid by consumers and the price received by farmers, formulated as:

$$\mu = \mathcal{Pr} - \mathcal{PF}$$

Information:

μ: Marketing Margin

Pr: Price paid by consumers (Rp)

 $\mathcal{PF}$ : Price received by farmers or producers of agricultural commodities

Knowing the economic efficiency of purple eggplant marketing, marketing margin analysis is used and calculating the farmer's share using the formula:

$$Mp = \frac{Pf}{Pr} \times 100\%$$

Where:

F :Share received by the Foundation pr : Prices at the consumer level

Pf : Price of purple eggplant at foundation level

The criteria used to determine that purple eggplant marketing is considered economically efficient is that the marketing channel has a high percentage value of the portion received by eggplant farmers. If the share received by farmers is less than 50%, it means that it is not efficient, and if the share received by farmers is more than 50%, then marketing is said to be efficient (Darmawati, 2005).

## IV. Result and Discussion

## 4.1. Description of Research Site

The research was conducted at the Foundation. Sander Batuna is located in Wineru Village, East Likupang District, North Sulawesi Province. Wineru Village is located on the northern coast of the island of Sulawesi, with a distance of 13.68 km from North Minahasa Regency. Administrative boundaries are as follows:

North: Surabaya Beach
South: Winuri Village
East: Maen Village
West: Deer Village



Source: Google Maps Figure 1. Research Site Map

#### 4.2. Overview of the Foundation and the commodities cultivated

The Sander Batuna Foundation is a farmer companion institution engaged in agribusiness that produces, procures and markets agricultural products. Some of the commodities that are cultivated in this place are purple eggplant, cayenne pepper, melon, and watermelon. For purple eggplant agricultural products, the foundation produces and marketing activities only around the cultivation area. Purple eggplant is marketed at the Likupang market, for the production of purple eggplant is bought by small traders and then resold at the market price. The price offered by the foundation for purple eggplant commodity of Rp. 10,000/bag ( $\pm 22\text{kg}$ ). Purple eggplant traders sell for IDR 5,000/bundle ( $\pm 500$  grams) for the purple eggplant harvest, the qualification of the harvest which is included in the eligible category for sale is the eggplant length of 8-15 cm. The cultivation or production of purple eggplant takes place in the Wineru Village, or more precisely at the Sander Batuna Foundation. The purple eggplant production is distributed to retailers in the Likupang market, the distance between Wineru Village and Likupang Market  $\pm 3$  km, takes 7 minutes by car.

Promotion is a communication used by consumers to influence producers to buy a product. In promotional research conducted by the foundation, namely directly approaching retailers who have collaborated to market purple eggplant, then traders directly market purple eggplant to consumers or buyers.

## 4.3. Marketing Channels

There is one marketing agency that is involved in marketing purple eggplant from the foundation to consumers. Generally, the foundation already has a subscription retailer and periodically harvesting purple eggplant twice a week and sorting the purple eggplant produced by looking at the qualifications of purple eggplant that meet the requirements, namely eggplant length of 8-15 cm.

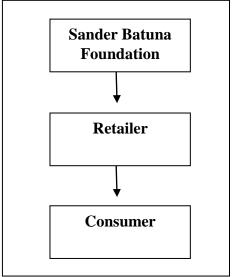


Figure 2. Purple Eggplant Marketing Channel

From the picture above, it can be seen that the purple eggplant marketing has one marketing channel, namely: Farmers - Retailers - Consumers. In this marketing channel, the foundation goes directly to retailers to market purple eggplant. The foundation has packed the purple eggplant with the size of one sack to be marketed to retailers. AfterPurple eggplant arrives at the market, retailers will weigh and repackage it for sale to consumers. Purple eggplant is sold in bundles at a price of Rp. 5000/bundle (500 grams). Then when consumers buy, retailers will carry out the function of packaging purple eggplant (packed in plastic). In this study, purple eggplant sales were carried out by retailers, for one sack of eggplant can be sold within 2-3 days this has physical risks. These physical risks can be in the form of shrinkage of eggplant fruit weight and volume, damaged fruit conditions and fruit rot.

## 4.4. Marketing Margin

Marketing margin is often used as an indicator of marketing efficiency. The amount of marketing margin in various marketing channels can be different, because it depends on the length of a marketing channel and the activities that have been carried out as well as the profits expected by each marketing agency.

**Table 1.** Costs and marketing margins of purple eggplant at the Sander Batuna Foundation

No	DESCRIPTION	RP/KG	Percentage (%)
1.	Sander Batuna Foundation		
	1. The price of purple eggplant in the foundation	4,545	11.95
	2. Harvest Cost		
	a. Labor costs	213	0.56
	b. Packing fee	90	0.23
	3. Freight/Transportation Fee	397	1.04

The amount of costs	700	1.84
2. Retailer		
<ol> <li>Purchase price</li> </ol>	4,545	11.95
2. Marketing costs		
a. Packing fee	100	0.26
b. Retribution fee	113	0.29
c. Cost of depreciation	826	2.17
Total marketing costs	1.039	2.73
3. Total cost	5.584	14.68
4. Selling price	10,000	26.29
5. Marketing advantage	4.416	11,614
4. Marketing margin	5.455	14.34

Source: Primary Data Analysis

Based on the table that the marketing channel for purple eggplant commodity, the related traders are retailers. The price offered is Rp. 4,545/Kg while the price offered by retailers to consumers is Rp. 10,000/Kg. The foundation in this marketing channel incurs harvest costs where in the harvest costs there are labor costs and packing costs. For labor costs, the foundation provides a salary of Rp. 75,000/day for harvesting activities takes two hours. The yield of purple eggplant is  $\pm$  4 sacks (88 kg) with an estimate of one sack of 22 kg of purple eggplant. The costs incurred for employee salaries are Rp. 213/ Kg. After the purple eggplant is harvested, the angu eggplant will be packed into sacks. The cost of packaging is Rp. 90/Kg and for transportation costs of Rp. 35. 000 for once distributing purple eggplant at the Likupang Market, the transportation costs that must be paid by the foundation are Rp. 397/Kg. The total cost to distribute the purple eggplant is Rp. 700/kg.

The foundation pays for harvesting, packing and transportation from farms to retailersn but they only do sorting and do not do grading activities on the harvest. Sorting is the process of separating unfit purple eggplant from purple eggplant with good conditions. The retailer performs the storage function because the eggplant that is sold does not run out immediately. Marketing costsThe biggest expense that must be spent by marketing agencies in this case retailers is the depreciation cost of Rp. 826/Kg. The total marketing cost is Rp. 1.039/Kg, where in marketing costs there are packaging costs, levies and depreciation costs.

**Table 2.** Cost, Profit and Marketing Margin and Farmer Share on the purple eggplant marketing channel

No	Description	Amount (Rp/Kg)	(%)					
1.	Marketing costs	1.039	-					
2.	Marketing advantage	4.416	-					
3	Marketing margin	5.455	-					
4.	Farmer's share Nilai		45.45					

Source: Primary Data Analysis

Economical marketing efficiency is one way to determine the efficiency of marketing channels by using the producer farmer indicator or commonly called farmer's share. The size of the farmer's share is influenced by the size of the marketing margin, the lower the marketing margin, the greater the share that will be received by farmers. Based on table 2 shows that the farmer share value is 45.45%, this indicates that marketing activities are not economically efficient.

## V. Conclusion

Based on the results of research and discussion conducted on the Marketing Analysis of Purple Eggplant in Wineru Village, the following conclusions are drawn:

- 1. Purple eggplant marketing activities are carried out directly by farmers by directly visiting buyers, in this case retailers. For the marketing channel that is carried out, namely Farmers Retailers Consumers.
- 2. The price for purple eggplant is determined by the retailer by following the market price. For now, the price of purple eggplant tends to be stable, which is Rp. 10,000/Kg.
- 3. Judging from the economic efficiency, the farmer share value is 45.45%. This shows that marketing activities can be said to be inefficient.
- 4. The duties and functions of marketing agencies in this case the Sander Batuna Foundation and retailers are:
  - a). Producers: as purple eggplant producers carry out transportation and sales activities.
  - b). Retailer: Performs marketing functions such as packaging and sales

## **Suggestion**

The marketing activities carried out by the Sander Batuna Foundation which are only carried out at the Likupang Market because the marketing activities carried out to be less efficient. Based on these problems then:

- 1. There needs to be cooperation between the foundation and business actors, in this case a marketing agency that is willing to market purple eggplant outside Likupang District.
- 2. To increase the income and production of purple eggplant, it is better for farmers to market their products outside the Likupang area or in markets in Manado by reducing production costs and applying competitive prices.

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