

# MARKETING ANALYSIS OF GAHARU (*AQUILARIA MALACCENSIS*) AT DENDANG VILLAGE STABAT DISTRICT

(Case Study: CV. Cahaya Gaharu)

Didik Mahendra<sup>1</sup>, Gustina Siregar<sup>2</sup>, Hardiansyah Sinaga<sup>3</sup>  
<sup>1,2,3</sup>Universitas Muhammadiyah Sumatera Utara, Indonesia

[didikmahendra05@gmail.com](mailto:didikmahendra05@gmail.com)

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## Abstract

This study aims to determine the pattern of agarwood marketing channels, and analyze the marketing efficiency of agarwood in CV. Cahaya Gaharu Village Dendang Kec. Stabat. The type of research used is descriptive and qualitative. Determination of the research location is done intentionally or purposively. The analysis technique used is to determine the pattern of marketing channels and calculate marketing margins. The marketing process carried out by CV. Cahaya Gaharu creates a marketing channel, namely CV. Cahaya Gaharu by coming to the farmer's place and buying it according to a predetermined price, then CV. Cahaya Gaharu sells it or markets it domestically or abroad. The marketing margin obtained from the only marketing channel is Rp. 6,980,000 per kilogram of wood, the share margin received is very small, namely 0.29%. This is because farmers sell directly to retailers who sell agricultural products in the country and abroad. Efficiency in the marketing channel of 40% indicates that the marketing channel is less efficient. The lack of efficiency from this business process is due to the many challenges faced, such as transportation costs and harvesting agarwood which takes a long life of up to 7 years, there is uncertainty in harvesting agarwood which can worsen supply.

**Keywords:** *Agarwood, Marketing Channels, Efficiency*

## Introduction

Gaharu or agaru and aguru in Sanskrit are interpreted as "non-floating wood" quoted by Lopez-Sampson 2018). These natural gaharu products were found in Indonesia before the 1980s, especially in Kalimantan, Sumatra, Papua, and West Nusa Tenggara. However, in the course of time around the 2010s, natural gaharu products became increasingly scarce in the forest. One of the indicators is the non-fulfillment of the supply quota provided by the Natural Resources Conservation Agency (BKSDA) office in each province, especially East Kalimantan to the gaharu collectors at the provincial level in the five-year period of 2013-2018 (Hidayat, 2018).

Indonesia is one of the agarwood producing countries in the world. Other countries in Southeast Asia (ASEAN) that produce agarwood include Malaysia, Vietnam, Cambodia, Thailand, Laos and Papua New Guinea (Jung 2009). Agarwood is one of the local and global commodity products. Southeast Asia, with Indonesia as one of the largest agarwood producers, has actually been providing agarwood products that are traded locally and internationally. This is reinforced by the opinion of Suharto et al (2016) who said that global trade related to 'gaharu' has

been carried out since two thousand 2000 years ago. In the context of this gaharu trading, Indonesia and Malaysia have played a major role as the main agarwood suppliers in the international trade in the early 1990s. This relates to the main suppliers prior to the 1990s, including India, Bangladesh, Thailand, Cambodia, Vietnam and China. The relatively high price of agarwood also occurs in both domestic and international trade centers such as Singapore, Hong Kong, Shanghai, Taiwan, Riyad, Dubai, Kuwait. The type of agarwood, *Aqualira Marxensis*, is mostly found in natural and growing forests in East Kalimantan.

This Agarwood or Agarwood Tree commodity has high economic value with high selling prices that have increased even abroad and also helps the country's economic resources or foreign exchange. The form of regulation and knowing marketing really needs special attention. There needs to be an approach in the marketing of agarwood in Dendang Village, Stabat District which is expected to provide an overview of the efficiency or not of marketing agarwood as a consideration in conveying products from producers to consumers as well as consumers will find it easier to get products from producers. By knowing the marketing of agarwood in Dendang Village, Stabat District, it will be able to provide optimal solutions for product accuracy, timeliness and market needs. Therefore, researchers are interested in analyzing the marketing of agarwood in Dendang Village, Stabat District, Langkat Regency.

## Literature Review

### Agarwood (*Aquilaria Malaccensis*) Morphology

Agarwood is a forest plant that has high economic value, because the wood contains a fragrant resin. This scented resin comes from *Aquilaria*, *Gyrinops*, and *Gonystylus* types of plants. The demand for agarwood continues to increase, because of the many benefits of agarwood. Along with the advancement of science and industrial technology, gaharu is not only used as an ingredient in perfumery (perfume industry), but is also used as a raw material for medicines, cosmetics, incense, and preservatives for various types of accessories.

### Marketing

Marketing is the process of planning and implementing the conception, pricing, and distribution of goods, services, and ideas to realize exchanges that meet individual or organizational goals (Mahmud, 2007). Marketing is very important after the completion of agricultural production. Marketing conditions produce a cycle or market environment for a commodity. If the marketing is not smooth and does not provide a reasonable price for farmers, then this condition will affect the motivation of farmers, as a result the supply will decrease, the lack of supply will increase the price. After the price rises, the motivation of farmers will increase, causing prices to fall again / *Ceteris paribus* (Maulia, 2021).

In this marketing, goods flow from producers to final consumers accompanied by additions to form through the processing process, to place through the transportation process and to time through the storage process of marketing management as a science and to select target markets, to get them, and to grow customers through creation, delivery and communicating super customer value. Marketing is an activity in the economy that helps in creating economic value. Economic value itself determines the price of goods and services, and the most important factors in creating that value are production, marketing and consumption where marketing is the link between production and consumption activities (Yanti, 2021).

Marketing is considered efficient if it fulfills two conditions, namely being able to deliver the results of producers to consumers as cheaply as possible, and being able to hold a fair distribution of the total price paid by the final consumer to all parties who participate in the production and trading activities of the goods. (2018).

## Marketing channel

A marketing channel is a number of interdependent organizations involved in the process of making a product or service available for consumption. Marketing channel decisions are among the most important decisions consumers face. The channel chosen greatly influences other marketing decisions. Marketing channels carry out the task of moving goods from producers to consumers. It overcomes the time, place, and ownership gaps that separate goods and services from those who need or want them (Faisal, 2015).

## Marketing Efficiency

Efficiency is an important element to achieve success in marketing activities. Research related to efficiency has been carried out by many researchers with the aim of seeing how marketing channels, marketing margins, farmer's share value, and the magnitude of the input output ratio are. However, efficiency can also be measured by looking at the ratio between the output (output) or input (input) used in marketing activities, so that the value of the ratio of marketing profits to marketing costs is also used as an indicator in seeing marketing efficiency (Annisa et al, 2018).

Marketing efficiency can be analyzed through operational efficiency and price efficiency. As for the size indicators in determining operational efficiency that are commonly used in several previous studies, namely the amount of marketing margin, the share received by the farmer or farmer's share, as well as the costs and benefits of marketing efficiency or often referred to as the ratio of profits to costs. While the price efficiency analysis indicator uses the level of market integration or integration. Market integration is often associated with price transmission (Annisa et al, 2018).

The more marketing actors involved, the more remuneration or marketing benefits that must be taken by these marketing actors, so that the price level received by producer farmers is lower. The relatively large difference in marketing prices (margins) is one of the marketing barriers that are often encountered in the marketing of agricultural commodities. Weaknesses in agricultural systems in developing countries are generally the same, namely the lack of attention in the field of marketing. Marketing functions often do not work as expected so that marketing becomes less efficient (Prayitno et al, 2013).

## Research Method

### Determination of Research Location

Determination of the research location is done intentionally or purposively, namely selecting subjects based on certain characteristics or traits that have been previously known and selected based on certain considerations. Based on this, the research location was chosen in Dendang Village, Stabat District, Langkat Regency. Taking into account that Dendang Village is also one of the producers of agarwood in Langkat Regency.

### Data Types and Sources

The research methodology is a necessary stage in problem solving, so that it is known that the right one in dealing with the problem. The data collected from this research consists of:

#### 1. Primary Data

In this study, data collection was carried out by direct interviews with the respondents through a list of questions (Questionnaires) that had been prepared in advance.

#### 2. Secondary Data



Secondary data collection carried out in this study is from the relevant agencies related to this research.

### Determination and Sampling Method

The population in this study were partner farmers CV. Cahaya Gaharu in Dendang Village, Stabat District, Langkat Regency. Based on data from CV. Cahaya Gaharu then obtained 20 farmers who became the sample that determines the efficiency and whether or not the marketing of agarwood in CV. Agarwood Light.

### Data Analysis Method

#### a. Knowing the Marketing Channel Pattern

To find out the pattern of marketing channels and intermediaries of agarwood institutions in Dendang Village, Stabat District, Langkat Regency using descriptive methods.

#### b. Marketing Margin

The amount of marketing margin can be calculated by the following formula:

$$Mp = Pr - Pf \quad (1)$$

Description:

Mp = Marketing Margin (Rp/kg)

Pr = Price at consumer level (Rp/kg)

Pf = Price at producer level (Rp/kg)

#### c. Marketing Efficiency

To calculate marketing efficiency using the formula:

$$EP = \frac{TB}{TNP} \times 100\% \quad (2)$$

Description:

EP = Marketing Efficiency

TB = Total Marketing Cost

TNP = Total Product Value

Efficient marketing efficiency if marketing costs are lower than the value of the product being marketed, the lower the cost of marketing from the value of the product being marketed, the more efficient it is to carry out marketing. With decision rules (Nurmalina, 2018).

a. 0 – 33% = Efficient

b. 34 – 67% = Less Efficient

c. 68 – 100% = Inefficient

## Results and Discussion

### Identification of Marketing Agencies

The agarwood marketing system is related to the roles of the groups and individuals involved, namely farmers as producers, traders, and final consumers. The following is a description of the role of the marketing agency:

1. Farmers are marketing institutions at the lowest level that carry out agarwood farming activities.
2. Merchants are individual marketing agencies that sell to final consumers.

### Analysis of Agarwood Market Institutions and Channels

Marketing is responsible for distributing goods from producers to final consumers. Final marketing requires several things, namely time, space and ownership that deliver goods or services from consumers to users. Marketing members perform a number of important tasks: information, promotion, ordering, negotiation, financing, physical picking, payment, and ownership.

The marketing process for agarwood involves the marketing department, namely 10 traders who actually distribute agarwood but in the form of whole wood that is ready to be purchased by consumers. Based on the research conducted, the agarwood business in CV. Cahaya Gaharu in Dendang Village there is a marketing process carried out by marketing agencies that creates marketing channels.

Marketing channel I is carried out by farmers in partnership with CV. Cahaya Gaharu. Transactions made between CV. Cahaya Gaharu with farmers, namely CV. Cahaya Gaharu comes to the agarwood farmer's place and buys it according to the price that has been set for CV. Cahaya Gaharu, then CV. Cahaya Gaharu sells it or markets it in the country or abroad. CV. Cahaya Gaharu is a marketing agency that can buy agarwood from partnered farmers. Several marketing agencies generally sell agarwood to CV. Cahaya Gaharu because of the cooperation and subscriptions between marketing agencies.

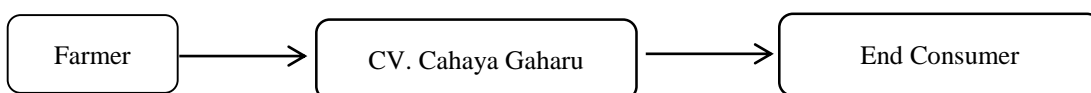


Figure 2. Types of Marketing Channels I

Agarwood business at CV. Cahaya Gaharu in Dendang Village, there is a marketing process carried out by marketing agencies that creates marketing channels and is the same as previous research where there is also channel one type. According to (Iriana et al., (2014) also stated that gaharu-seeking farmers in Atsj District and Akad District are bound gaharu-seekers, where they sell their gaharu-seeking results to collecting traders who seek capital from them and collector traders will sell their gaharu-earned results to wholesalers. /plasma that has received a quota permit from the Natural Resources Conservation Agency. After that, the plasma will send the gaharu out of the island by ship. Therefore, the marketing channel for this agarwood business has only one type of channel, namely farmer collectors, collector traders and traders plasma.

The purchase volume of agarwood in this marketing channel is 2 kg/month. The average price received by farmers through sales per month is IDR 7,000,000/kg. In this channel, it is the traders who bear the costs of labor, transportation, grading and security costs. Transportation used by CV. Cahaya Gaharu is a truck with a cost of IDR 500,000/kg. Then the grading fee is Rp. 300,000/tree, and the labor cost is Rp. 1,500,000/person. The average selling price obtained by



CV. Cahaya Gaharu to final consumers on marketing channel I is a maximum of Rp 12,000,000. At the end consumers, gaharu wood purchased by end consumers can be directly used as incense and is beneficial for those who need it. Sales volume of agarwood in marketing channel I can be seen in the following table.

**Table 1. Sales Volume of Agarwood Per Month**

Sampel	Volume Purchase (KU)	Price Buy (Rp/Kg)	Labor Cost (Rp/person/month)	Cost Security (per month)	Trans Port (Rp/Kg)	Cost grading (Rp tree)	Total Cost per (Rp/kg)	Price sell (Rp/kg)
Trader I	2	20.000	1.500.000	500.000	500.000	300.000	2.800.000	7.000.000
Jumlah	2	20.000	1.500.000	500.000	500.000	300.000	2.800.000	7.000.000

### Marketing Cost and Share Margin of Agarwood

Agarwood marketing margin is the difference between the price at the producer or farmer level and the price at the trader level. Or the comparison between the selling price of farmers with the purchase price of consumers. This can be defined as follows:

- The difference between the price paid by consumers and the price obtained by producers or farmers.
- Marketing costs or all costs incurred during the marketing process, marketing costs themselves consist of labor costs, transportation, grading and security costs.

**Table 2. Marketing Costs and Share Margin Marketing of Agarwood**

No	Institutions and components of marketing costs	Margin Marketing	Selling fee (KG)	Marketing costs	Share Margin (%)
1	Channel I				
	1. Farmer's selling price		20.000		0,29%
	2. retail marketing cost				
	a. merchant purchase price		20.000		
	b. labor cost			1.500.000	
	c. security cost			500.000	
	d. transport cost			500.000	
	e. grading cost			300.000	
	f. total cost			2.800.000	

g. sele price	7.000.000	
h. sales profit		4.200.000
i. final consumer purchase price	7.000.000	99,71%
j. margin	6.980.000	

Source: Primary Data 2020

From the table above, it can be seen that the share margin received is 0.29% in channel I at the farmer level while the remaining 99.71% at the end consumer level. Furthermore, in channel I institutions, the share margin is obtained because farmers sell directly to traders who sell agarwood products at home and abroad. The cost of each marketing agency is different, based on the table above, which consists of labor costs, transportation, grading and security costs. In this activity, the cost of traders in marketing channel I to buy agarwood with a volume of 2 kilograms from farmers for each shipment with a purchase price of Rp. 7 million per kilogram, the transportation costs used are Rp. 500,000/ku. Then the grading fee is Rp. 300,000/tree, and the labor cost is Rp. 1,500,000/person.

### Efficiency of Agarwood Marketing Channel

The marketing aspect is a very crucial aspect of research if this aspect goes relatively well, then all will benefit. This means that good marketing will have a positive influence on farmers, traders and consumers.

Efficient marketing efficiency if marketing costs are lower than the value of the product being marketed, the lower the marketing cost from the value of the product being marketed, the more efficient it is to carry out marketing (Nurmalina, 2018).

- 0 – 33% = Efficient
- 34 – 67% = Less Efficient
- 68 – 100% = Inefficient

The calculation of the marketing efficiency of agarwood can be seen in the following table:

**Table 3. Agarwood Marketing Efficiency on Channel I**

Marketing Channels Marketing	efficiency (EP)
Channels I	$= (2.800.000 : 7.000.000) \times 100\%$ $= 0,4 \times 100\%$ $= 40\% \text{ (Kurang Efisien)}$

From the table above, it can be seen that the marketing cost of channel I is Rp. 2,800,000, by comparing the total marketing cost with the production value of agarwood which is marketed at Rp. 7,000,000. If the efficiency value (EP – Efficiency Point) is less than 33%, the marketing system is considered efficient. The calculation of the efficiency of the agarwood business can be seen in the table above. From the data above, it can be seen that the efficiency level in the marketing channel is 40%. This indicates that the marketing channel is less efficient.

The lack of efficiency of this business process is due to the many challenges faced. The costs incurred are not proportional to the predetermined selling price, even though they experience a profit. First, the cost that affects and has the potential to increase is the cost of transportation from farmers to CV. Agarwood Light. The price of fuel that always rises every year, makes the company spend more money to buy gasoline every day, for the smooth distribution process of agarwood. Second, because CV. Cahaya Gaharu must receive wood from farmers every harvest time, CV. Cahaya Gaharu does not know whether the wood distributed from the farmers is of good quality or not, because the grading process or wood assessment is carried out after distribution. This can result in unnecessary costs as it can transport non-standard timber. Because this research focuses on agarwood only, other products produced by CV. Gaharu light from agarwood derivatives such as tea, coffee, perfume and others, the researchers did not count.

Furthermore, since harvesting agarwood takes a long time, up to 7 years, there is uncertainty about harvesting agarwood which can worsen supply (Wuysang et al., 2015). The uncertainty in the supply of agarwood is caused by uncertain weather conditions. For example, if the weather is entering the heavy rainy season, the gaharu tree will be susceptible to fungus and this fungus causes the death of the tree, otherwise if the climate is too hot, the tree will dry up and die. Not only that because it is not efficient but because CV. Cahaya Gaharu does not focus on wood only but also on the whole so that many of its derivative products can also make a profit for C.V. Agarwood light.

## Conclusion

Based on the analysis that has been done, it can be concluded as follows:

1. Agarwood marketing channel consists of only one marketing channel, namely: from farmers to traders to final consumers. Marketing institutions involved in marketing consist of two individuals or groups involved, namely: farmers and traders.
2. The marketing margin obtained from these marketing channels is Rp. 6,980,000 per kilogram of wood, the share margin received is very small, namely 0.29%, inversely proportional to the level of final consumers, which is 99.71%. This is because final consumers sell directly to retailers who sell agricultural products domestically and abroad.
3. Based on the analysis of marketing efficiency that has been done, the efficiency is 40% and is categorized as efficiency where the result is more than 33%, so that the parties in the marketing channel are not good at managing their marketing costs.

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