

## **Supply Chain Analysis and Marketing of Arabica Coffee Rejang Lebong (case study: Bermani Ulu Raya District)**

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### **Abstract**

Coffee is one of the leading commodities in Rejang Lebong Regency. Arabica coffee is one of the coffee commodities that is being intensively developed in Rejang Lebong Regency. Supply Chain of agricultural products is closely related to the income earned by farmers. It is against this background that coffee farmers as producers must quickly adapt to novelty and have innovations in marketing their agricultural products. Therefore, it is necessary to conduct research on the chain analysis of Arabica coffee trade and marketing in Rejang Lebong Regency. The implementation of this study aims to analyze the chain of trade and marketing of Arabica coffee beans in Rejang Lebong Regency. In addition, for knowing what factors influence Arabica coffee farmers in marketing their products. This research was conducted in Bermani Ulu Raya district, Rejang Lebong Regency. This location selection is done purposively. The method used in this research is a survey method. Determination of the sample in this study using purposive sampling method. Data processing uses the Analytic Hierarchy Process (AHP) program to determine the value of the factors that influence the marketing of Arabica coffee beans. From the research, it can be seen that there is 1 Arabica coffee trading system in Rejang Lebong Regency. In addition, the determinants of the right marketing channel chosen by coffee farmers are influenced by several factors, namely: production (0.9539), quality (1.9653), and price (0.2717).

**Keywords:** Arabica Coffee; Supply Chain; Marketing;

### **INTRODUCTION**

The plantation sector is part of the driving force of economic development in Indonesia. One of the most important plantation commodities for Indonesia is coffee plantations. Coffee plantations are commodities that are able to enter the international market as one of the export commodities that are in demand by various countries in the world. Indonesian coffee has an export volume of 350 tons in one year with exports of robusta coffee as much as 85 percent and arabica coffee exports as much as 15 percent. Indonesian coffee plantations contribute 33.67 percent of Indonesian plantation commodities exports (ICO, 2019).

Coffee plantations are cultivated in most provinces in Indonesia. Coffee plantations are cultivated in most provinces in Indonesia. Rejang Lebong is one area that has a major contribution to coffee production in Bengkulu province. The types of coffee that are widely cultivated in Rejang Lebong Regency are Robusta and Arabica coffees. Arabica coffee is a type of coffee that is currently being promoted to be cultivated in Rejang Lebong Regency. Because Arabica coffee has a much higher price than Robusta coffee, the world's coffee demand is currently dominated by Arabica coffee. When viewed from the requirements for Arabica coffee cultivation, many areas in Rejang Lebong Regency meet the criteria for Arabica coffee cultivation.

According to (Anindita, 2019) Supply Chain Management is a series of activities needed in planning, controlling, and carrying out the flow of products or production results efficiently and at low costs. Meanwhile, according to Ballou in (Riadi, 2017) Supply Chain Management is a relationship of various organizations that need each other and work together to regulate, supervise, and improve the flow of commodities and information from the point of supplier to the end user.

The ultimate goal of all Supply Chain Management is to maximize the value generated as a whole and comprehensively. Integrated Supply Chain Management can increase the overall value generated. In addition, Supply Chain Management functions as a way of coordination starting from production, information, and financial flows (Dwiyangtri and Hidayatuloh, 2012).

Currently, there are still many farmers who do not want to switch to start cultivating Arabica coffee because they are still very unfamiliar with Arabica coffee cultivation. In addition, there is also a lack of knowledge about the marketing of Arabica coffee in Rejang Lebong Regency and the lack of education about the market chain and the price of Arabica coffee which is much higher than Robusta coffee. Therefore, an initial study must be carried out that can be used as education or information for farmers to find out the marketing flow of their agricultural products.

## RESEARCH METHODOLOGY

This research was conducted in Bermani Ulu Raya District, Rejang Lebong Regency, Bengkulu Province. This location determination was carried out purposively by considering the absence of research on Supply Chain Management in the area, and in this area there are already quite a number of Arabica coffee farmers.

The Data used in this study are primary data and secondary data, primary data is done by interviewing respondents. Secondary data is obtained from literature related to research such as journals, data from the Central Bureau of Statistics and other documents. The method used to obtain data in accordance with the research objectives was direct interviews with 15 Arabica coffee farmers in Bermani Ulu Raya district.

All data collected at the initial stage is validated and then analyzed in 3 stages, namely data relating to factors that influence the marketing of coffee beans processed using the Analytic Hierarchy Process (AHP) software, then the marketing of Arabica coffee beans is analyzed with inter-institutional coordination variables that play a role. The last stage is that costs are based on measured data so that farmers or aspects involved in Supply Chain Management can make the right decisions.

## FINDINGS AND DISCUSSION

### Factors Affecting Coffee Bean Marketing

Curup is the capital of Rejang Lebong Regency, with an area of 1,515.76 km and an altitude of 500–2,000 m above sea level. Curup is located 81.40 km from the capital city of Bengkulu Province. Administratively, Rejang Lebong Regency is divided into 15 sub-districts with 156 villages/kelurahan, including 29 sub-districts, 102 self-help villages, and 25 underdeveloped villages. The majority of the population works in the agricultural sector (52.62%), the mining sector (0.9%), industry (4.08%), drinking water (0.2%), construction (4.91%), trade (17.19%), transportation and communication (2.89%), banking and other financial institutions (1.46%), and services/others (15.75%) Coffee is a source of income for 17,115 families (KK) coffee farmers Robusta and 287 families of Arabica coffee farmers. As an illustration of the state of the coffee plantations in Rejang Lebong,

Rejang Lebong Regency is one of the largest Robusta coffee producing areas in Bengkulu Province and its production is increasing from year to year. Some areas of Rejang Lebong Regency also have geographical criteria that meet the requirements for growing Arabica coffee commodities. The Rejang Lebong Regency Government is currently directing farmers who have land that meets the criteria for growing Arabica coffee to start replacing or modifying their Robusta coffee plants with Arabica coffee. This is done because the price of Arabica coffee beans is much higher than that of Robusta coffee beans. Of course, with high prices, farmers' incomes will increase, the welfare of

coffee farmers will be felt.

The increase in Arabica coffee production is expected to increase every year. Although in fact there are still quite a lot of problems faced by coffee farmers in Rejang Lebong Regency, whether it's a lack of knowledge about technology, good and correct cultivation methods or a lack of knowledge about marketing and products added value. So this causes the quality or product quality is still bad and the price received by farmers is not feasible. This will certainly affect the enthusiasm and motivation of farmers to develop their agricultural products. Supply chain management has a very important function for farmers in increasing competitiveness.

These activities can be carried out by maximizing existing resources with optimal chain management from upstream to downstream. Gaps and income inequality in each member of the supply chain tend to occur frequently in the coffee industry. By knowing the supply chain of an agricultural product, farmers can evaluate can evaluate products deficiencies. From the evaluation carried out, it will be obtained a reasonable product price for coffee farmers.

Bermani Ulu Raya district is one of the sub-districts in Rejang Lebong Regency which has great potential for Arabica coffee commodities. The geographical conditions of this sub-district meet the requirements for growing Arabica coffee, which is very suitable when planted at an altitude of 1000-2100 meters above sea level. The higher the location of Arabica coffee plantations, the better the taste of the coffee produced, good rainfall for Arabica coffee is 1500 – 3500 mm per year, with a dry month (rainfall <60 mm/month) a maximum of 3 months. Coffee plants want a loose soil structure, good drainage, and sufficient water availability, as well as adequate nutrients such as potassium (K), there must be sufficient availability of organic matter (> 3%) with an ideal degree of acidity (pH) ranging from 5.5 – 6.5 and the effective depth is deep enough

Arabica coffee farmers in Bermani Ulu Raya district market their products or agricultural products through companies that directly receive Arabica coffee in the form of coffee beans. The price set in the marketing of Arabica coffee beans is based on several criteria of the Arabica coffee beans being marketed. Of course there is a price level accepted by Arabica coffee farmers. Based on data analysis using the Analytic Hierarchy Process (AHP) program, it can be concluded that several important factors in the Arabica coffee marketing process are production factors, coffee bean quality and price. From the analysis carried out, the results are shown in Figure 1. Below.

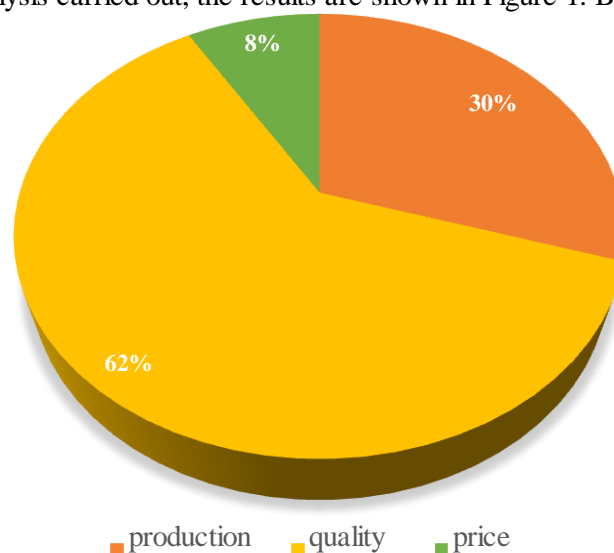


Figure 1. Factors Affecting Coffee Bean Marketing

Based on the results of data analysis using AHP, it can be seen that the factor that most influences marketing is quality with a percentage of 62% with a weighted value (1.9653), meaning that in the marketing process consumers can provide high product prices if the quality of the coffee beans sold by farmers is good. This quality is closely related to the shape of the coffee beans, the uniformity of the shape of the beans, the level of dryness and the coffee processing process at post-

harvest. The next factor is production with a percentage of 30% with an evaluation weight (0.9539) meaning the amount of Arabica coffee bean production will also affect marketing. The price factor also affects marketing with a percentage of 8% with an evaluation weight value of (0.2717).

### Arabica Coffee Marketing Margin

Marketing margin is the difference between the price paid by consumers for a product and the price given by the producer in the process of marketing the product. Price margin can be used as an indicator in calculating the efficiency of a product's trading system (Wulandari, 2015). Analysis of marketing is carried out in order to obtain information about the distribution of marketing margins. Types of additional costs incurred by producers include the cost of packaging seeds, transportation costs, loading costs or transportation costs. In Table 1 below, information about the market margin received by Arabica coffee farmers in Bermani Ulu Raya district, Rejang Lebong Regency will be presented.

**Table 1. Arabica Coffee Marketing Margin**

	Sell to arabica coffee company (Rp/Kg)
<b>Selling price</b>	<b>50.000,-</b>
Seed Packing Fee	500,-
Transportation costs	500,-
Post Harvest Handling	1000,-
Total cost	2,000,-
Farmer's Profit	<b>48.000,-</b>

From the table above, it can be seen that the profit obtained by Arabica coffee farmers is Rp. 48,000 with a total marketing margin of Rp. 2000, - This selling price is the highest retail price of coffee beans in Rejang Lebong Regency in 2021.

### Arabica Coffee Commodity Supply Chain

The supply chain is a very important component for farmers as Arabica coffee producers. A long supply chain will certainly reduce the profits that will be received by farmers. Conversely, if the supply chain of a product is short, the total profit received by farmers will also be large. The supply chain in the marketing of arabica coffee beans in Bermani Ulu Raya district, Rejang Lebong regency, has 1 supply chain. In general, the supply chain consists of three flows, namely the flow of goods, the flow of information and the flow of money. The flow of goods starts from upstream to downstream, starting from producers of raw materials (farmers) who are sold to traders or factories. The flow of money starts from downstream to upstream, for example traders looking for products directly to farmers or factories looking for products to traders. Information flows can start from downstream to upstream or upstream to downstream (Taib, 2019). The Arabica coffee bean supply chain studied can be seen in Figure 2 below.



Figure 2. Arabica Coffee Supply Chain

Results From research conducted by the Arabica coffee supply chain in Bermani Ulu Raya

district, Rejang Lebong regency, there is one marketing channel, namely Arabica coffee farmers process their agricultural products from the harvested coffee, then the coffee cherries are dried to dry, after the dried coffee cherries the farmers put the coffee into the machine. miller to separate the coffee husk from the coffee beans, until the coffee beans are clean and dry and ready to be marketed. The coffee beans that are ready to be marketed are sold directly to the Arabica coffee collecting company, this company will immediately conduct a quality classification, then the Arabica coffee beans will be marketed in the national market by auction and also directly exported abroad.

## CONCLUSION

Based on research conducted on the Arabica coffee trade and marketing chain in Bermani Ulu Raya district, Rejang Lebong Regency, it is known that the factors that influence the marketing of Arabica coffee beans processed with the Analytic Hierarchy Process (AHP) program are production factors, coffee bean quality and also price. In addition, the marketing margin of Arabica coffee beans is Rp. 2000, - and the farmer's profit is Rp. 48.000, -. There is one marketing channel for Arabica coffee, namely from farmers to Arabica coffee companies and ends at auction or export.

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