Commodity Marketing Supply Chain Analysis Arabic Coffee

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Abstract: Based on the results of the study, it was shown that one of the goals was to analyze the supply chain for marketing Arabica coffee commodities in Rumbia District, Jeneponto Regency. The sampling technique in this study was purposive sampling, namely from CV. Reski Ilahi consisted of 6 informants (1 owner, 2 cafe employees, 3 picking employees) and 7 Arabica coffee farmers so that the total sample size was 12 people. The type of data used in this study is quantitative data in the form of primary and secondary data. The data analysis used is margin analysis and marketing efficiency. The results of this study indicate that the supply chain for marketing Arabica coffee commodities, namely: the first supply chain channel consists of Farmers–CV. Reski Ilahi–Consumers and the second supply chain channel starting from CV. Reski Ilahi–Retailer–Consumer. Channel I efficiency value is 0.17 which means efficient. While the Channel II Efficiency Value is 0.06, which means efficient. Because the efficient value < 1 which means efficiency if the efficient value is > 1 which means it is not efficient.

Keywords: Arabica coffee; Efficiency; Margin; Supply chain

Introduction

Coffee is a plantation crop that has long been a cultivated plant. The coffee plant is a source of income for the people and also increases the country's foreign exchange through the export of raw and processed coffee beans. The coffee plant is a plant originating from Africa and South Asia, belonging to the Rubiaccea family with a height of up to 5 meters. The coffee plant has leaves 5-10 cm long and 5 cm wide with white coffee flowers and green-yellow-black coffee pods. Coffee beans are ready to be picked when they are 7 to 9 months old (Najiyati & Danarti, 1997; Rahardjo, 2012).

Budiman (2012) the coffee groups that are known to have economic value and are widely traded are Arabicia and Robusta types. This type of Arabica coffee has a very high quality taste and lower caffeine content compared to the Robusta type so that Arabica coffee has a higher price (Rahardjo, 2012). According to data from AEKI (2010) Indonesia's coffee consumption reached 800 grams per capita with a total coffee demand of 190 thousand tons. Meanwhile, in 2014, Indonesia's coffee consumption reached 1.03 kilograms per capita with coffee needs reaching 260 thousand tons (AEKI, 2014). Starting from the many variations given to coffee drinks,

it will make it easier for people to choose coffee drinks for consumption (Siswoputranto, 1993).

Businessman H. Nasrum is one of Jeneponto's sons who has an interest in developing a business in the coffee plantation sector because rumbia coffee has a distinctive taste that no other has. Even now, he already has the Rumbia Arabica Coffee Gallery which he built since 2016 which is now based on CV. Reski Ilahi, in starting a business in 1980 Arabica coffee began to be planted in Jenetallasa Village, located in Rumbia District, with the process of planting, maintaining and processing which was still very simple.

Coffee is one of the superior products that can support people's lives where in 2016, the area of coffee plantations in Jeneponto is 2,467 ha with a production of around 674 tons for Arabica coffee varieties. This Rumbia Jeneponto coffee does have a distinctive taste and aroma. The low degree of acidity and the taste of honey are the advantages of this coffee.

Knowing the quality of the coffee itself need not be doubted because researchers from Japan had conducted research on the taste of coffee in Ujung Bulu Village several years ago. The Japanese researcher also admitted that the coffee in Jeneponto was very special, which did not exist anywhere else. Coffee from Ujung Bulu has a

coffee plant care method that is different from other regions. Honey coffee itself is created as a result of the drying process, there are honey bees that perch on the coffee grains. The marketing channel in Jeneponto starts from farmers to consumers, farmers sell their coffee to retailers then from retailers it sells it to consumers, namely coffee connoisseurs. Sales are carried out by farmers directly by way of industry players or visiting traders' houses. This coffee is then processed into powder. The price for 1 kg is IDR 15,000/kg.

Table 1. Production of Coffee Plantation Plants by Rumbia District in Jeneponto Regency (Ton), 2018

Subdistrict	Production (Tons)
Bangkala	0.00
West Bengal	0.00
Tamalatea	0.00
Bontoramba	0.00
Binamu	0.00
Turatea	0.00
Stem	0.00
Arungkeke	0.00
Tarowang	0.00
Kelara	0.12
Rumbia	2.32
Jeneponto	2.47

Method

Location

This research was conducted at the company CV. Reski Ilahi, Rumbia District, Jeneponto Regency, South Sulawesi Province.

Sampling Technique

The technique of determining the sample using a random research method (purposive sampling), namely from CV. Reski Divine consisted of 6 informants (1 owner, 2 cafe employees, 3 picking employees) and 7 Arabica coffee farmers so that the total sample size was 12 people.

Data Types and Sources
Primary Data

Primary data is data taken directly by the researcher to the source without any intermediaries. Researchers searched for and found data from informants, both interviews and direct field observations through the combined efforts of seeing, listening and asking questions (Vredentbregt, 1979).

Secondary Data

Secondary data is an indirect resource capable of providing additional and strengthening research data. Sources of data in this qualitative research apart from

words, language and actions from informants can also be obtained through literature studies using books and internet media to support analysis and discussion.

Data Collection Technique
Observation

Observations were made by observing the conditions of the research location, especially at CV. Reski Ilahi in Jenetallasa Village, Rumbia District, Jeneponto Regency.

Interview

Interview is data collection that is done by asking directly to the business owner CV. Divine Reski to obtain information from sources interviewed by using a list of questions (questionnaire).

Documentation

The documentation in this study is photographs and archives regarding a series of activities carried out by researchers while in the field.

Data Analysis Technique

Analysis of the data used in this study is the analysis of marketing channels, marketing margins and marketing efficiency (Hartatri & Rosari, 2011).
Formula for calculating the marketing cost

$$B = \sum_{i=1}^{n} Bi \qquad (1)$$

Description:
B = Marketing Cost (Rp)
Bi = Cost I (i is the cost of transportation, processing, equipment depreciation and labor wages)
n = Number of date

Margin Analysis

To find out the marketing margins of Arabica coffee using the formula:

$$M = Hp - Hb \qquad (2)$$

Description:
M = Marketing Margin (Rp/Kg)
Hp = Sales Price (Rp/Kg)
Hb = Purchase Price (Rp/Kg)

Marketing Efficiency

To determine the efficiency of the marketing channel used the formula (Irghandi, 2008; Downey & Erickson, 1992):

$$EP = \frac{BP}{NP} \times 100\% \qquad (3)$$

Description:
EP = Marketing Efficiency (%)
BP = Total Marketing Cost (Rp/Kg)
NP = Total Marketed Cost (Rp/Kg)
If the lowest EP value = 2.5, it is the most efficient.

Result and Discussion

Arabica Coffee Supply Chain at CV. Divine Receipt

Arabica Coffee Supply Chain at CV. Reski Divine describes the flow of products, financial flows and information flows that occur between members of the chain (Indrajit, 2002; Turban et al., 2004; Pujawan, 2005; Hatani, 2008). In the Arabica coffee supply chain, there are three channels in the supply chain as follows:

Channel I: Farmers- CV. Reski Ilahi - Consumers

The first supply chain channel consists of Farmers-CV. Reski Ilahi Consumer. Clearly the form of flow that occurs in the supply chain channel I can be seen in Figure 1.
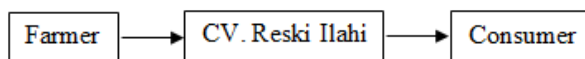

Figure 1. The products that occur in the first channel are from farmers who cultivate coffee selling to CV. Reski Ilahi, where CV. Reski Ilahi also acts as a producer, then CV. Reski Ilahi carries out production process activities by processing coffee beans into powder (picking - processing - selling). Then sold to consumers

Product Flow

The product flow that occurs in channel I is that some wet coffee farmers or still in the form of rice sell their crops to CV. Reski Divine by bringing it directly to the company or owner of the CV. Reski Ilahi visited the farmers, and some farmers also sold their coffee crops to traders in Gowa Regency. Then CV. Reski Ilahi processes it into powder by carrying out the production process, namely sorting, drying, peeling, roasting, cooling, grinding/pulverizing and packaging. Furthermore, packaged Arabica coffee is sold directly to consumers.

Financial Flow

The financial flow in channel I is from Farmers to companies. CV. Reski Ilahi then goes to consumers sell coffee beans to CV. Reski Ilahi of Rp. 15,000/kg where coffee farmers sell an average of 50 kg of coffee with a total of 6 producers, the total purchase of coffee from producers is 300 kg. Then CV. Reski Ilahi processes Arabica coffee into powder which is then packaged with a net weight of 0.2 Kg and produces 3 products namely specialty, premium and inferior coffee. Where is the special price of Rp. 275,000/kg, the premium coffee price is Rp. 225,000/kg and the price of inferior coffee is Rp. 200,000/kg. For the supply chain of the first channel there is a cooperation contract agreement that is binding both in terms of price and quantity of coffee, so it can be concluded that the supply chain of the first channel is running well.

Information Flow

Information flow in channel I includes quantity, quality and price information. CV. Reski Ilahi contacted the farmers via telecommunication media (telephone) to ensure the need for the required raw materials, after obtaining confirmation of the request, the farmers delivered directly to the processing site, then CV. Reski Ilahi performs the production process. After the product is ready to be marketed, consumers come directly to the company or contact the company. After obtaining certainty about demand, the company delivers the goods directly to where the consumer is or the consumer comes directly to the company (Soekartawi, 2002; Sudiyono, 2002).

Channel II: CV. Reski Ilahi –Retailer- Consumer

Supply chain channels starting from CV. Reski Ilahi - Retailers - Consumers. Clearly the shape of the flow that occurs in the supply chain channel can be seen in Figure 2:
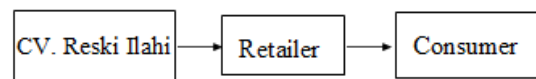

Figure 2. Channel II in Rumbia District, Jeneponto Regency

Based on Figure 2, shows that the flow of goods starts from the CV. Reski Ilahi who acts as a producer, retailer who takes ground coffee in CV. Reski Ilahi to be resold and then sold to consumers. The communication system has been integrated between members of the supply chain, this flow is netted from companies to retailers and consumers regarding price information (Chopra, 2001; Chopra & Meindl, 2001; Adisapturo, 2014).

Product Flow

The company maximizes the number of products that will be marketed to retailers so that companies are free to market their products at any time with maximum volume. Coffee that has been harvested will go through several processes before being marketed such as sorting, drying, peeling, roasting, cooling, grinding/pulverizing and packaging.

After packing the CV. Reski Ilahi will market its products at the marketing location, namely at its Caffe shop, already working with several shops or cafes in

Makassar. Retailers take products with 3 varieties namely special, premium and inferior to be resold to consumers.

Financial Flow

Mechanism of financial flow from CV. Reski Ilahi to retailers, for retailers to consumers using a direct transaction system. The purchase price by the retailer to CV. Reski Ilahi for each product, namely: Special price of Rp. 275,000/kg, the premium coffee price is Rp. 225,000/kg and the price of inferior coffee is Rp. 200,000/kg. Then the retailer sells to consumers at various prices, namely the special price of Rp. 290,000/kg, the premium coffee price is Rp. 240,000/kg, and the price of inferior coffee is Rp. 215,000/kg.

Information Flow

Information flow in channel II includes quantity, quality and price information. CV. Reski Ilahi first informs retailers via telecommunication media (telephone) to ensure consumer needs. After obtaining certainty about demand, the company delivers the goods directly to the retailer or the retailer himself directly to the company using private transportation. For price information agreed between CV. Reski Ilahi to retailers with a fixed price determined by the company and the number of requests from consumers. This is done so that when the process of buying ground Arabica coffee is obtained in good condition and quality.

Marketing Margins

Marketing margin is the difference between the price paid by consumers and the price received by producers. To find out the size of the margin, marketing costs and marketing profits for the Arabica coffee marketing channels involved, it can be seen in Tables 1 and 2.

Based on Table 2, the value of the marketing margin on the arabica coffee channel in wet form or still in the form of rice sold by producers to CV. Reski Ilahi of Rp. 15,000/kg. The value of this marketing margin is obtained from the difference between the price paid by consumers and 3 varieties of coffee that have been processed into powder, namely specialty at a price of Rp. 275,000/kg, premium at a price of Rp. 225,000/kg, and the inferior is priced at Rp. 200.00/kg at the producer level price of Rp. 15,000/kg. One marketing channel only involves one marketing agency, so this marketing channel is referred to as a one-level channel.

In marketing channel II, CV. Reski Ilahi with a total expenditure of Rp. 8,576,000, the selling price for one kilogram of Arabica coffee in powder form with 3 coffee varieties that have been processed into powder, namely specialty, is Rp. 275,000/kg, premium is Rp. 225,000/kg, and the inferior is priced at Rp. 200.00/kg, a marketing

margin of Rp. 125,000. Then the income earned from CV. Reski Ilahi, which is Rp. 1,706,833. One level marketing channel only involves one marketing agency, so this marketing channel is referred to as a one level channel (Said & Intan, 2001; Tjiptono, 2008).

Table 2. Margins, Marketing and Marketing Profits of Channel I Arabica Coffee in Jenetallasa Village, Rumbia District, Jeneponto Regency

Marketing Agency and Margin Components	Price (Rp/Kg)
Coffee Farmers (Producers)	
Selling price	15,000
Total	15,000
CV. Divine Receipt	
Selling price	
Specialty	275 000
Premium	225,000
Imperial	200,000
Total	700,000
Purchase of Raw Materials	4,500,000
Transportation	250,000
Promotion	125,000
Electricity Payment	360,000
Water Payment	150,000
Production cost	1,167,000
Miscellaneous expense	209,000
Employee salary	1,800,000
Total	8,576,000
Marketing Margins	125,000
Total	125,000
Income/month	1,706,833
Total	1,706,833
Consumer	
Purchase price	
Specialty	275 000
Premium	225,000
Imperial	200,000
Total	700,000

To find out the size of the margin, marketing costs and marketing profits for the second coffee marketing channel involved, it can be seen in Table 3. Table 3 shows that on channel II, the marketing agency involved is CV. Reski Ilahi and retailer. CV. Reski Ilahi buys coffee from producers and then processes it into Arabica coffee powder and then sells it to retailers. Retailers sell ground Arabica coffee to consumers or connoisseurs of Arabica coffee. There are 3 varieties of Arabica coffee namely specialty, premium and inferior.

CV. Reski Ilahi sells Arabica coffee to retailers at a special selling price of IDR 275,000/kg, premium at a price of IDR. 225,000/kg, and the inferior is priced at Rp. 200.00/kg, buy Arabica coffee at a special price of Rp. 275,000/kg, the premium price is Rp. 225,000/kg and the inferior price is Rp. 200,000. Then the retailer sells to consumers at a special price of Rp. 290,000/kg, the

premium price is Rp. 240,000/kg and the inferior price is Rp. 215,000/kg.

Table 3. Marketing Margins and Marketing Profits on channel II Arabica Coffee in Jenetallasa Village, Rumbia District, Jeneponto Regency

Marketing Institute	Price (Rp/Kg)
CV. Divine Receipt	
Selling price	
Specialty	275 000
Premium	225,000
Imperial	200,000
Total	700,000
Retailer	
Purchase price	
Specialty	275 000
Premium	225,000
Imperial	200,000
Total	700,000
Marketing Margins	45,000
Total	45,000
Consumer	
Specialty	290,000
Premium	240,000
Imperial	215,000
Total	745,000

Table 4 shows that the efficiency value of the marketing agencies involved in retailer marketing (CV. Reski Divine) to find out the efficient value or not is by the marketing cost formula: total marketing costs Rp. 125,000 : Rp. 1,706,833 = 0.17 which means efficient. Because the efficient value < 1 which means efficiency if the efficient value is > 1 which means it is not efficient.

Table 4. Analysis of the Efficiency of Marketing Channel I of Arabica Coffee in Jennetallasa Village, Rumbia District, Jeneponto Regency

Marketing Institute	Marketing Expenses (Rp/Kg)	Selling price (Rp/Kg)	Efficiency Value
Coffee Farmers	-	15,000	-
CV. Divine Receipt	125.0000	700,000	0.17
Consumer	-	700,000	-

Table 5. Analysis of the Efficiency of Marketing Channel II of Arabica Coffee in Jennetallasa Village, Rumbia District, Jeneponto Regency

Marketing Institute	Marketing Cost (Rp/Kg)	Selling Price (Rp/Kg)	Efficiency Value
CV. Divine Receipt	125.0000	700,000	0.17
Retailer	45,000	700,000	0.06
Consumer	-	745,000	-

Price efficiency is determined by marketing margins, marketing profits and the total product value of marketing agencies in Table 5 (Novianti, 2007). Table 5 shows that the efficiency value of the marketing agencies involved in retailer marketing (CV. Reski Ilahi) to determine whether or not the efficient value is by the marketing cost formula: total marketing costs Rp. 45.0000 : Rp. 700,000 = 0.06 which means efficient. Because the efficient value < 1 which means efficiency if the efficient value is > 1 which means it is not efficient. Price efficiency is determined by marketing margins, marketing profits and the total product value of marketing agencies (Widianingsih, 2008; Harviyantho et al., 2021; Miftah et al., 2022).

Conclusion

Based on the results of the study it can be concluded that Arabica coffee commodity marketing supply chain at CV. Reski Divine, Rumbia District, Jeneponto Regency, is the first supply chain channel consisting of Farmers - CV. Divine Reski – Consumers and the second supply chain channel starting from CV. Reski Ilahi – Retailer -Consumer. Channel I efficiency value is 0.17 which means efficient. While the Channel II Efficiency Value is 0.06, which means efficient. Because the efficient value < 1 which means efficiency if the efficient value is > 1 which means it is not efficient.

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