

The Distribution Pattern and Marketing Efficiency of Robusta Coffee At Tanggamus Regency

Apip Gunaldi Dalimunthe^{✉1}

¹Department of Agriculture, Medan Area University, Kolam Street No. 1, Medan, 20223, Indonesia, apipgunaldi@gmail.com

[✉]Corresponding Author: apipgunaldi@gmail.com | Phone: +6285335865440

Abstract

Coffee is one of the plantation commodities in Indonesia which has important economic value as a source of income for the country. Marketing is one of the most essential sub-systems to ensure the successfulness in agriculture. This research aims to know the pattern of marketing channels of robusta coffee and make analysis of efficiency level of robusta coffee marketing at Tanggamus Regency. The main problem in this research is the formed marketing channels will affect the final price of a robusta coffee product in the market. The method used in this research was descriptive analysis using snowball sampling technique with 68 farmers and 4 traders as respondents. The analysis of marketing margin was used to know the gap of selling price in the level of producers and the selling price in the level of consumers. Farmer's share was used to know the price for farmers. The result of this research shows that there are 3 patterns of marketing channel, they are: (1) Farmers to big collective traders to exporters, (2) Farmers to big traders to exporters, (3) Farmers to small collective traders to big traders to exporters. The efficient marketing channel is in the first channel because it has the smallest marketing margin whose margin is Rp. 1.520/Kg and the highest farmer's share which reaches 93,42%.

Keywords : Marketing Efficiency; Robusta Coffee; Marketing Channel.

Introduction

Coffee is a tropical commodity traded in all over the world and contributes to the half of total export of tropical commodities. Popularity and attractiveness of the world towards coffee, mainly because of its unique taste and also supported by some factors such as history, tradition, social and economy historical factor, tradition, social and economy (Ayelign *et al.*, 2013).

Robusta coffee dominates production of coffee in Indonesia at 2016. From the production of coffee as much 663.871 ton, 71,40% or 474.037 ton are robusta and the rest as much 28,60% or 189.834 ton is Arabica. The centers of production of robusta coffee in Indonesia at 2016 are South Sumatera, Lampung, Bengkulu, East Java, and Central Java. Then, the centers of production of Arabica coffee are North Sumatera, South Suawesi, West Sumatera, and West Java (Ministry of Agriculture of Republic of Indonesia, 2017).

Robusta coffee has high value market, so in some regions with suitable climate, such as Tanggamus regency, this type of coffee becomes main commodity. As the development of regional potency, robusta coffee as the main commodity in the market is expected to support the improvement of economy. It is supported by the research conducted by Kusmiati & Windiarti (2011) which states that coffee as a commodity in the market gives contribution especially as an additional point for the base area and finally makes this commodity is able to support the development of plantation activity in Indonesia.

Marketing efficiency is one of aspects in distributing products from producer to consumer because through the marketing efficiency, the difference of prices accepted by farmers with the price paid by final consumers can be known. Marketing institutions have essential roles in distributing coffee until reaching the final consumers. The role of marketing institution is appropriate with the production cost where it causes different marketing functions. Because of the difference of the production cost and profit, the marketing conducted is different in every marketing institution (Zuraida, 2015). The efficient marketing channel is a marketing channel which can satisfy and give advantage to producers, marketing doers, and consumers. The most efficient marketing pattern is the pattern which has the smallest margin value and the biggest farmer's share terbesar (Cahyono, 2013).

Coffee becomes the major livelihood of people in Tanggamus Regency and this commodity is very essential for them. The production of coffee produced will be sold by farmers to collective traders or other marketing institutions and makes farmers should pay extra cost and then farmers will get income from the selling. High or low the price of coffee accepted by farmers affects their income (Lestari, *et al.*, 2017).

Marketing is one of sub-systems which is very essential to ensure the successfulness in agriculture. Marketing institution or broker eases farmers to distribute their product from producer to consumer. The cost and time of marketing depends on the length of marketing chain. The main problem faced is the length and the short of the chain which is influenced by the numbers of brokers who form that channel. The longer the marketing channel will cause the higher marketing margin and also can improve the price of products in the level of final consumers so the marketing efficiency occurs. This research aims to know the pattern of coffee's marketing channel and also to identify the level of efficiency of marketing using the marketing margin indicator and *farmer's share* at Tanggamus Regency.

Materials and Methods

Methods

This research was conducted at Tanggamus Regency as one of the centers of robusta coffee. The sample collection was conducted at District of Ulu Belu which observed 37 farmers and 3 traders and at District of Sumberejo there are 31 farmers and 1 trader as the sample. The analysis used in this research was descriptive analysis by explaining and describing the pattern of coffee's marketing channel formed and also to know the level of efficiency of coffee's marketing in those places. The sampling selection according to Soewadji (2012) can be conducted by using Slovin formula as shown in Equations (1).

$$n = \frac{N}{1 + N(e)^2} \quad (1)$$

N = The population of coffee farmers

n = The sample of respondents taken

e = Degree of accuracy using ($\alpha = 10\%$)

Furthermore, to the selection of respondents, traders, and final consumers is taken by using snowball sampling technique and following the distribution of coffee until reaching consumers.

The Analysis of the Marketing Pattern

The method used to answer the first purpose is descriptive-analysis method. This method describes the direct observation's result in the field from farmers about the marketing channel. The pattern of marketing channel can be known by tracking the distribution path of robusta coffee seeds from producers to final consumers through the marketing institutions.

The Analysis of Marketing Efficiency

Marketing efficiency is a terminology which is frequently used in assessing performance of the marketing process. It reflects the consensus that the implementation of marketing process should be efficiently conducted. The indicators used in deciding the efficiency is marketing margin and farmer share. To find out the marketing margins of each marketing institution each can be determined using formula as shown in Equation (2).

$$MP = Pr - Pf \quad (2)$$

Where:

MP = Marketing Margin (Rp)

Pr = Price at final consumers (Rp)

Pf = Price at farmers (Rp)

To find out the Farmer's share received by farmers as producers, it can be using formula as shown in Equation (3).

$$FS = \frac{P}{K} \times 100\% \quad (3)$$

Where:

FS = Farmer's Share

P = Price at producers

K = Price which is paid by final consumers

Results and Discussion

Description of Respondent

The identity of farmer describes farmers' characteristic which can affect the farming management conducted by farmers. In this research, the characteristic of respondents consists of age, education level, experience and the numbers of dependent in family. Respondents taken in this research are the farmers at robusta coffee plantation which sells the product in the form of seed packaging.

Table 1. Profile Of Respondents

Item	Description	Quantity (Person)	Percent (%)
Age	20 - 30 years old	7	10,29
	31 - 40 years old	29	42,65
	41 - 50 years old	23	33,82
	>51 years old	9	13,23
Education	Elementary School	18	26,47
	Junior High School	27	39,71
	Senior High School	19	27,94
	University	4	5,88
Experience	1 - 10 years	13	19,12
	11 - 20 years	40	58,82
	21 - 40 years	15	22,05
Numbers of Family	2	6	10,16
	3-5	59	86,76
	>5	3	4,41

Source: Analysis of Primary Data, 2018

Based on the research, the biggest group of respondents is in the age 31 - 40 years old with the education level of junior high school. Age and education level significantly affect the performance and the successfulness of a business. The farmers who are in productive age will be more intensive in managing their field. The higher the education level of the farmers, the easier they will adopt information and new technology. It will influence the quality of farming usiness conducted by farmers in long term.

Experience is the periode of farmers in managing their field and agricultural activity. The biggest group of respondents is the farmers who have experience for 11 - 20 years. The more experiences possessed by farmers will influence their behavior in taking action and decision when facing problems.

The the average of family members is 3-5 persons. The numbers of family show the economic burden which should be managed by the head of family.

Description of Trader

The identity of coffee trader describes the characteristic of trader which can affect the management of trading conducted by traders. In this research, characteristics of respondent consist of age, education level, trading experience, and the numbers of family. The respondents taken as the sample in this research were traders at robusta coffee plantation which sell coffee to the final consumers (exporter).

Table 2. Profile Of Traders

Item	Description	Quantity (Person)	Percent (%)
Age	20 - 40 years old	0	0,00
	41 - 50 years old	1	0,00
	51 - 60 years old	3	100,00
Education	Elementary School	2	50,00
	Junior High School	0	0,00
	Senior High School	2	50,00
	University	0	0,00
Trading Experience	11 - 20 years	1	25,00
	21 - 30 years	2	50,00

Numbers of Family	31 - 40 years	1	25,00
	2	0	0,00
	3-5	3	75,00
	>5	1	25,00

Source: Primary Data Analysis, 2018

Based on the research, the biggest group of respondents is the group of traders who are in the range of age 51 - 60 years old with education level consists of junior high school. age and education level significantly affect the performance and successfulness of a business. Age also affects the work productivity of traders in marketing their products. The higher the education level of traders, it can help them to have better thinking pattern and broad knowledge.

Trading experience is the period of traders do their trading activities. Trading experience of respondents obtained is in the range of age 21-30 years. The longer trading experience they have, the bigger knowledge about the problems and solutions in trading they get, so traders' knowledge about obstacles and how to maximize the profits of robusta coffee trading will be bigger.

Averagely, the numbers of traders' family are 3-5 persons. The numbers show economical burden that should be managed by farmers. The more family members will cause the bigger total outcome.

The Pattern of Marketing Channel of Robusta Coffee at Tanggamus Regency

Marketing channel is the distribution of product in the form of thing and service from producer to consumer through the marketing institution which conducts marketing functions. There are three patterns of marketing channel of robusta coffee which are formed as following :

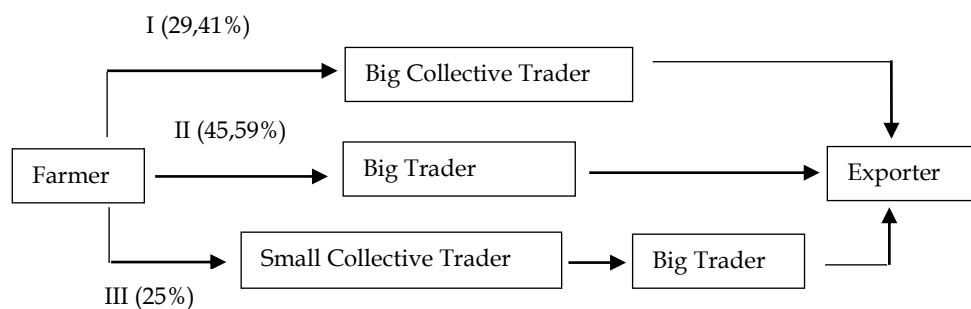


Figure 1. Marketing Channel Pattern of Robusta Coffee in Tanggamus Regency

Note :

Channel 1 : Farmer → Big Collective Trader → Exporter

Channel 2 : Farmer → Big Trader → Exporter

Channel 3 : Farmer → Smal Collective Trader → Big Trader → Exporter

- The first marketing channel, 29,41% of farmers use this channel in selling their robusta coffee. Farmers sell coffee for Rp. 21.580/Kg to big collective traders. Processing carried out by big collective traders is only mixing coffee that has high water content with coffee that has low water content which is then sold to exporters at a price of Rp. 23.100/Kg.
- The second marketing channel, 45,59% of farmers distribute coffee because of cooperation between farmers and traders in terms of sale. In this channel, big traders have dryer machine of coffee beans so that the robusta coffee beans produced are coffee that has low water content.
- The third marketing channel, 25% of farmers use this channel in selling their robusta coffee. The farmers who use this channel are the farmers who consider the easiness of selling transaction and commonly have close relationship to small collective traders. Furthermore, the coffee collected will be sold to big trader and then sold to exporters.

The marketing system of robusta coffee involves some mediator institutions, such as: small collective trader, big collective trader, and big trader. It is in line with the research conducted by Sugiarti (2010) where generally the marketing channel involves the village collective trader, big trader and consumer.

Farmer as the producer is free to choose their business partner in selling their products. Farmers sell the coffee to various marketing institutions with various factors to be considered, such as: distance, selling price, and the accessibility.

A research conducted by Listyati, *et al.*, (2017) also found that farmers in selecting the marketing channel generally based on some considerations such as distance, easiness, the relation of economical factors (capital) and relationship.

Marketing Margin

The marketing margin value in each channel is different depends on the marketing functions conducted by ever marketing institution. In this research, the marketing margin value of robusta coffee is obtained from the price gap paid by exporters as the final marketing institution with the price accepted by farmers as the producer. The marketing margin of robusta coffee at each marketing institution can be seen as shown in the table 3 below:

Table 3. The Comparison Of The Average Of Robusta Coffee’s Marketing Margin Found In Each Marketing Institution At Tanggamus Regency

Marketing Institution	Marketing Channel (Rp/Kg)		
	I	II	III
Farmers’ Selling Price	21.580	20.806,45	21.705,88
Small Collective Traders			
a. Buying Price			21.705,88
b. Marketing Cost			322,60
c. Profit			271,52
d. Margin			594,12
e. Selling Price			22.300
Big Collective Traders			
a. Buying Price	21.580		
b. Marketing Cost	255,83		
c. Profit	1.264,17		
d. Margin	1.520		
e. Selling Price	23.100		
Big Trader			
a. Buying Price		20.806,45	22.300
b. Marketing Cost		725,29	725,29
c. Profit		1.968,26	474,71
d. Margin		2.693,55	1.200
e. Selling Price		23.500	23.500
Total Margin	1.520	2.693,55	1.794,12

Source: Primary Data Analysis, 2018

The comparison of the average of marketing margin shows the differences of coffee’s price sold by farmers. The difference of coffee’s price is caused by each marketing institution has different marketing functions. In her research, Yuniarti (2017) states that selling price of every marketing institution will determine the marketing margin. It is also supported by a research conducted by Nasution (2014) which states that every marketing channel has different share margin and it depends on the changing of marketing cost, broker’s pprofit, price which is paid by seller and the price which is accepted by farmer.

The biggest margin is the second channel whose the margin is Rp. 2.693,55/Kg. Whereas, the smallest marketing margin is found in the first channel whose marketing margin is 1.520/Kg. This big margin occurs because in the second marketing channel, big traders have dryer machine of coffee seeds. When they get coffee seeds from farmers with high water content, they will make farmers’s income is lower because selling coffee seeds with lower water content. Every coffee seed accepted by traders with high or low water content will be entered into the dryer machine and then the marketing cost spent by traders is quite big for every kilogram of coffee beans produced. It is supported by a research conducted by Mau, *et al.*, (2018) which shows that the longest channel is not always has big margin.

In the first marketing channel, the margin value is Rp. 1.520/kg. That value is the smallest margin between second margin and third margin. In the first channel, farmers sell their robusta coffee seeds with the low water content if it is compared to the big traders. It causes the products offered by big collective traders are bigger than the products offered by big traders. The marketing cost spent by big collective traders is smaller than the marketing cost spent by second marketing channel and third marketing channel. The profit of marketing cost spent by big collective traders is in the processing of robusta coffee seeds. The processing conducted by big

collective traders is only by mixing robusta coffee seeds accepted from farmers in every condition of water content and then directly packaged and sent to exporters.

Farmer's Share

The value of farmer's share depends on the price in the level of farmers and in the level of the final marketing institution. Farmer's Share is categorized as having small value if it is less than or equal to 50% and it is stated as having big value if it is more than 50%. The higher the value of farmer's share can show that those marketing activities are more efficient. Therefore, the value of farmer's share in every marketing channel can be seen as shown in the table 4 below:

Table 4. Farmer's Share of the Marketing of Robusta Coffee at Tangamus Regency

Marketing Channel	The Price in the Level of Farmers (Rp/Kg)	The Price in the Level of Consumers (Rp/Kg)	FS (%)
Channel I	21.580,00	23.100,00	93,42
Channel II	20.806,45	23.500,00	88,54
Channel III	21.705,88	23.500,00	92,37

Source: Primary Data Analysis 2018

That the lowest value of farmer's share is found in the second channel with 88,54%. Meanwhile, the values of farmer's share of the first channel and third channel consecutively are 93,42% and 92,37%. The value of farmer's share which is higher shows the efficiency of those marketing channels is higher. It is supported by a research conducted by Desiana (2017) which explains that the higher the value of farmer's share so the price accepted by farmers will be bigger and makes the profit that they will get as the producer will be bigger too. The analysis of this research shows the highest value of farmer's share among those three marketing channels is found in the first channel. Therefore, it can be concluded that the first marketing channel is more efficient than the second marketing channel and third marketing channel.

Conclusion

This research finds that there are three patterns of marketing channel in term of the analysis of the efficiency of robusta coffee marketing at Tangamus Regency such as: channel 1 : farmers sell their products to big collective traders, then big collective traders sell the products to exporter, channel 2 : farmers sell their products to big traders, and then big traders sell the products to exporter, channel 3 : farmers sell their products to small collective traders, then small collective traders sell the products to big traders, and then finally big traders sell the products to exporter. The most efficient channel is the first channel based on the smallest marketing margin value and the biggest value of farmer's share.

Recommendations

The farmers of robusta coffee are suggested to choose the most beneficial marketing channel in order to gain big income. Also, farmers should always looking for related information about the market value of coffee so they can have good bargaining position in the market system.

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