

## **Analysis of Distribution Chain of Arabica Coffee in Semarang Regency in 2015**

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### **Article Information    Abstract**

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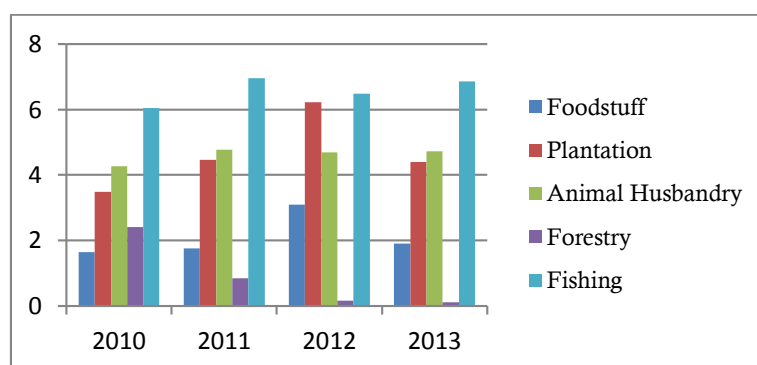
The research aims to determine the flow of distribution chain of Arabica coffee, the actors of distribution chain of Arabica coffee, and the profit margin enjoyed by each actor of distribution chain of Arabica coffee in Semarang Regency. A method used in this research is the mixed method. The location of research is taken in two Districts that have a high production of Arabica coffee those are Getasan District and Banyubiru District. The samples taken in this research consist of 44 coffee farmers, 5 collectors of coffee fruit, 2 wholesalers of coffee fruit, and 3 sellers of Arabica coffee. The data analysis method uses two approaches those are the interactive qualitative using the analysis of the supply chain system and the quantitative descriptive using the analysis of the marketing margin. Based on the research result from the three subject matters, there are three marketing patterns of Arabica coffee those are: (1) The distribution pattern of farming that is existing grows naturally and conforms to the development, needs and capabilities of the actors; the actors in this pattern are the farmers, collectors, wholesalers, retailers, and consumers; (2) The margin that occurs in a pattern growing naturally causes the price difference that is quite large in pattern I of margin about Rp 28,000.00, in pattern II about Rp 20,000.00, and in pattern III about Rp 10,000.00, and the biggest profit is in the collectors so the selling price of the farmers is lower than the market price.

## INTRODUCTION

The development of the agricultural sector in Indonesia is very useful through the development results that have been achieved all this time. It cannot be denied considering that Indonesia has a very great capital of natural resource wealth; thus it provides the potential and opportunities for the development of agricultural businesses including the plantation crops. The plantation crop production is one

source of foreign exchange agricultural sector (Sairdama 45: 2013).

The important role of plant and plantation sector is indicated by GDP at constant prices in 2013, in which the plantation dominated after the groceries, but the plantation sector fluctuated when there was an increase of 6.22% in 2012 but not followed by the next year. More information about the rate of GDP at constant prices in 2010 until 2013 can be seen in Table 1 below.



**Figure 1.** Growth Rate of Gross Domestic Product at Constant Prices in 2013 Based on Business Field (%), 2010-2013  
Source: Central Bureau of Statistics

One plantation crop commodity having an important role in the national economy is the coffee plant, which is one plantation commodity that is much cultivated by the farmers; besides, coffee is the leading export commodity. The livelihoods of 100 million people depend on coffee (Pendergrast 1999) dalam (Bunn et al., 2015). One area that has the area and land which conditions are suitable for the coffee plantation is Central Java Province among 34 provinces in Indonesia. The popularity and worldwide appeal of coffee, which stems from its unique flavour, make it currently one of the most desirable and frequently consumed beverages (Ayelign & Sabally, 2013). Central Java has 31 regions that develop the coffee commodity, and the largest land areas for the Arabica coffee are dominated by three regencies those are Temanggung with 10,768 hectares, Semarang with 3,668 hectares, and Wonosobo with 3,263 Ha. Semarang Regency is included in three regencies having the largest land areas in

Central Java, but there is a decrease in the coffee production, in which in 2012 Semarang Regency produced 60.00 tons but not matched in 2013 that decreased to be 57.28 tons. It happened to the price at which the margin is quite large between the farmers and the consumers, which is shown in table 1 below.

Table 1 about the importance of Arabica coffee commodity for the farmers will require a clear overview of the marketing process of Arabica coffee from the peasant producers to the final consumer. Sairdama (45: 2013) in a research entitled “Analysis of Arabica Coffee Farmers' Income and Marketing Margins in Kamu District, Dogiyai Regency” explains that the distribution chain of Arabica coffee involves several actors those are the farmers, the traders at the regional level, the traders at the provincial level, the retailers, and up to the consumers' hands. The distribution process of Arabica coffee from the production centers to the final consumer involves the marketing agencies, thus

it makes the marketing agencies try to make profits. The local coffee traders only sell at the central auction markets (Petit, 2007) in (Gelaw et al., 2016). The amount of profits of each marketing agency involved will affect the marketing margin of Arabica coffee. The parties involved in the distribution of Arabica coffee from the farmers to the consumers make the price received by farmers relatively lower than the price paid to the consumers, thus it needs to

know how the pattern of flow, the actors, and the marketing margin of Arabica coffee in Semarang Regency are. Therefore, it is necessary to conduct a research about "Analysis of Distribution Chain of Arabica coffee in Semarang Regency" that aims to determine the pattern of flow, the marketing actors, and how big the margin of distribution chain of Arabica coffee in Semarang Regency is.

**Table 1.** Price of Coffee Plantation Crops In Semarang Regency in 2015 (Rp)

Types of Crops	Price ( Rp/Kg ) at level		
	Farmers( Ose )	Wholesalers ( Ose )	Consumers ( Bubuk)
Arabica Coffee	24,500	25,500	40,000
Robusta Coffee	22,750	23,000	23,000

Source: Department of Plantation, Semarang Regency, 2015

## RESEARCH METHODS

To answer the problem formulation, the researcher uses the mixed method (Sarwono 2011: 2). Mixed method is a method that uses two or more methods that are taken from two different approaches those are the quantitative and qualitative approaches.

In this research, the locus taken is Getasan District and Banyubiru Districts, which have the largest value production of Arabica coffee in Semarang Regency.

The focus in this research is: (1) Distribution pattern of Arabica coffee in Semarang District; (2) Distribution value chain of Arabica coffee in Semarang Regency. The variable in this research is the marketing margin of Arabica coffee in Semarang Regency.

Types of data sources used in this research are the primary and secondary data. The sources of primary data are obtained through the interviews and observations with 44 coffee growers, 5 coffee fruit gatherers, 2 coffee fruit wholesalers, 3 Arabica coffee traders, and Arabica coffee consumers by using questionnaires. The secondary data is obtained from the institutions / agencies. The data collection technique uses the interview techniques and the snowball sampling.

The data analysis methods used in this research are: (1) The interactive qualitative using the supply chain system, which is to determine the flow pattern of the supply system in the Arabica coffee agro-industry. Supply chain is a system that connects the suppliers of the raw materials, the agro-industry, the traders, and the consumers. The relationship is expected that the agro-industrial activities may run smoothly and efficiently so the Arabica coffee can reach the consumers; (2). The quantitative descriptive using the analysis of marketing margin, which is used to measure the profits of each actor involved in the distribution process of Arabica coffee in Semarang Regency.

$$MP = Pr - Pf$$

Description: MP = marketing margin (Rp / kg)  
 Pr = consumer price (Rp / kg);  
 Pf = producer price (Rp / kg)

## RESULT AND DISCUSSION

### Distribution Chain Flow of Arabica Coffee

Figure 2 shows three marketing channels: Pattern I, Pattern II, and Pattern III. The marketing channel pattern I is mostly applied by

the Arabica coffee farmers in which the farmers sell their coffee to the collectors or middlemen, and then the collectors sell them to the wholesalers. The wholesalers distribute the

coffee to the retailers in the market. In this marketing channel pattern the traders or the retailers become the last ones before reaching the hands of consumers.

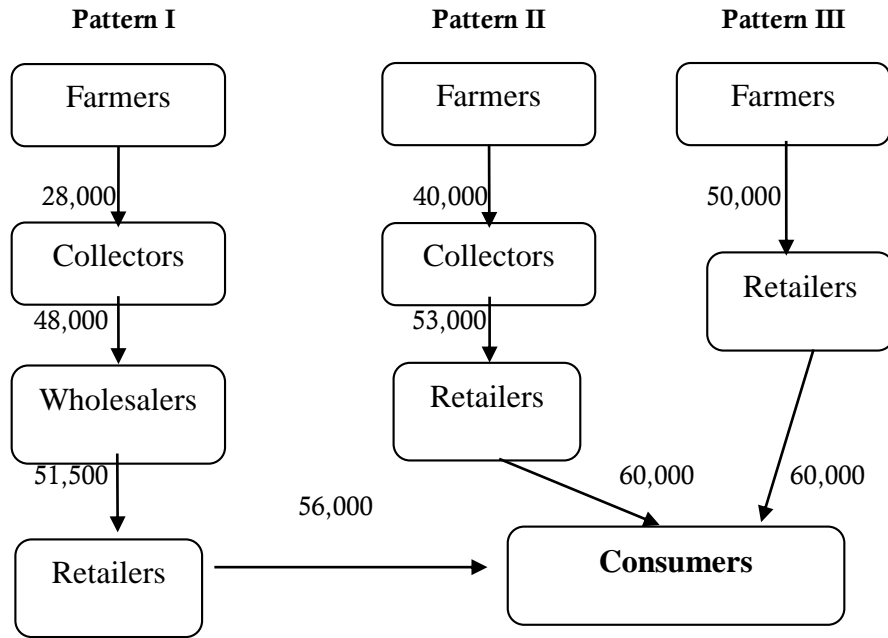


Figure 2. Distribution Chain of Arabica Coffee in Semarang Regency

The marketing channel pattern II is essentially the same as the marketing channel pattern I. The difference is that in the marketing channel pattern II the role of the wholesalers is not visible. In this marketing channel, the collectors sell the coffee directly to the traders or retailers in the market. This marketing channel is usually conducted by the farmers because the plantation location is closer to the market and the collectors. In this marketing channel, the role of the collectors is visible because they distribute the coffee directly to the traders or retailers in the market, then the traders or retailers sell them to the consumers. While in the marketing channel pattern III there is no involvement of the collectors and traders because the location of the farmers' land is close to the market. The farmers have contacts with the traders or retailers in the market and this channel is

dominated by the farmers who have quite large land. The important role of the farmers is very visible in this marketing channel. The farmers sell directly to the traders or retailers in the market then the retailers sell directly to the hands of consumers.

Based on the three patterns of distribution channels of Arabica coffee in Semarang Regency, it can be seen that the collectors have an important role in distributing the coffee to the hands of consumers, in which the collectors facilitate the farmers in selling their farming products. The collectors also distribute the Arabica coffee to the hands of wholesalers and retailers in the market. Besides participating in the sale and purchase, the collectors also perform the marketing functions such as sorting, drying, and delivering into the hands of wholesalers and retailers in Semarang.

**Marketing Margin of Arabica Coffee****Table 2.** Marketing Margin, Distribution Margin, Arabica Coffee  
In Semarang Regency, Pattern I

No	Components	Values Rp/Kg	Margin
1	<b>Farmers</b>		
	Farmers' price	28,000	
2	<b>Collectors</b>		
	Purchasing Price	28,000	
	Drying	3,000	
	Unloading & Loading	1,000	
	Transport	7,500	
	Sorting	1,500	
	Profit	7,000	
	Selling Price	48,000	20,000
3	<b>Wholesalers</b>		
	Purchasing Price	48,000	
	Packing	500	
	Profit	3,000	
	Selling Price	51,500	3,500
4	<b>Retailers</b>		
	Purchasing Price	51,500	
	Transport	1,000	
	Profit	3,500	
	Selling Price	56,000	4,500
5	<b>Consumers</b>		
	Purchasing Price	56,000	
	<b>Total</b>		<b>28,000</b>

Source: Data processed 2016

Table 2 above explains pattern I of the marketing margin. It is visible that the marketing margin between the farmers and collectors is large enough that is Rp. 20,000 / Kg of Arabica coffee. This is because the shaping change of the coffee itself that is originally in the wet form from the coffee farmers and the collectors try to change it to be more empowered to sell into Arabica coffee (ose) in the form of rice that has been dried and sorted. It is also because in pattern I the marketing channel is too long. This leads to the profits received by each marketing agency vary, in which the biggest share in pattern I is received by the collectors amounted Rp 7,000 / Kg. The wholesalers only get Rp 3,500 / Kg while the traders or retailers as the

last actors in this marketing channel only get Rp 4,500 / Kg. Table 3 above explains pattern II. It can be seen that the margin in pattern II is not much different from pattern I, but in pattern II the role of wholesalers is not visible. The collectors sell directly to the traders or retailers in the market because of being close to the market. The biggest profit is in the collectors amounted Rp 13,000 / Kg. It is because the collectors have an important role in distributing and also sorting in accordance with the quality expected by the traders or retailers before reaching the hands of consumers. While the traders or retailers as the last actors in the marketing channel pattern II before reaching the

hands of consumers only get the profit amounted Rp 7,000 / kg.

**Table 3.** Marketing Margin, Distribution Margin, Arabica Coffee In Semarang Regency, Pattern II

No	Components	Values Rp/Kg	Margins
1.	<b>Farmers</b>		
	Farmers' Price	40,000	
2.	<b>Collectors</b>		
	Purchasing Price	40,000	
	Unloading & Loading	1,000	
	Transport	1,000	
	Sorting	1,000	
	Profit	10,000	
	Selling Price	53,000	13,000
3.	<b>Traders</b>		
	Purchasing Price	53,000	
	Transport	1000	
	Packing	,500	
	Profit	6,500	
	Selling Price	60,000	7,000
4.	<b>Consumers</b>		
	Purchasing Price	56,000	
	<b>Total</b>		<b>20,000</b>

Source: Data processed 2016

In pattern III it can be seen that the farmers sell the coffee directly to the traders or retailers in the market so that there is a little difference in price between the farmers and the consumers. It is because there is no role of the

collectors and wholesalers like what happens in pattern I and pattern II. In pattern III there is only the traders or retailers in the market that enjoy the profit amounted Rp 10,000 / Kg. It can be shown by Table 4 below:

**Table 4.** Marketing Margin, Distribution Margin, Arabica Coffee In Semarang Regency, Pattern III

No	Components	Values Rp/Kg	Margin
1.	<b>Farmers</b>		
	Farmers' Price	50,000	
2.	<b>Traders</b>		
	Purchasing Price	50,000	
	Price	1,000	
	Sorting	500	
	Packing	8,500	
	Profit	60,000	10,000
3.	<b>Consumers</b>		
	Selling Price	60,000	
	<b>Total</b>		<b>10,000</b>

Source: Data processed, 2016

## CONCLUSIONS

The existing distribution pattern of farming grows naturally in accordance with the needs and development of the actors. The actors

who are present in this pattern are the farmers, collectors, wholesalers, retailers, and consumers. The selection of marketing channel depends on the followings: the land area, the amount of

production, transportation, facilities, and capabilities of the farmers. The farmers having few facilities and capability and being far from the market tend to choose pattern I because they do not have to deliver the goods. The farmers located closer to the market and tending to have a lot of production prefer pattern II and III because of their higher selling prices.

The longer the distribution chain pattern is, the higher the margins will be between the farmers and consumers.

Pruning the distribution pattern that has grown naturally should be conducted by restoring the function of farmers' groups in order to facilitate the activities related to the Arabica coffee plantation agriculture in Semarang Regency. With the return of the function of farmers' groups, the farmers can receive information on the market price and control the market price. The farmers' groups are expected to improve the market structure and manner and to manage the marketing network that is expected to increase the farmers' income.

The government should create a system of pure competitive market by shortening the chain of distribution pattern, improving the value-added products, and improving the bargaining position of the farmers.

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