Conference Paper

Supply-chain Analysis and Commodity Marketing of Chilli in Subosukowonosraten

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Abstract

Typical characteristics of agricultural products cause the complexity of supply chain problems to increase. This research aims to analyse and map chain distribution and marketing of chilli in Subosukowonosraten. This research used descriptive quantitative research design. Data processing methods used Producer Share, Margin and Profit Margin Ratio (PMR). The results show that supply chain of chill consisted of four types of chilli: red chilli type A, red chili type B, green chilli pepper, and red chilli pepper. The biggest chilli selling centre in the region of Surakarta ex-residency is Legi market. The biggest suppliers were from Boyolali, Klaten, Wonogiri, Sukoharjo and Karanganyar. In addition, suppliers outside of Surakarta were from Lumajang, Mojokerto, Pemekasan, Sumenep, Pare, Madura, Banyuwangi. Distribution chain of chilli trading in the region of Surakarta ex-residency consisted of farmers, collectors, big traders, wholesalers, retailers, and final consumers spread across seven regions including Sragen Regency, Wonogiri, Karanganyar, Sukoharjo, Klaten and Boyolali. Based on the analysis of producer share, the mean of market share was very good seen from farmer's side. Market margin at each level of business actor shows that the highest market margin for red pepper was at direct selling from farmers to final consumers by the mean of market margin was Rp 12.000,00. The highest marke margin for red bird's eye chilli pepper commodity was Rp 9.000,00 through marketing channel from collectors to small traders. The mean of the highest market margin was at collector level by Rp 4.000/kg. The highest profit margin ratio was at collector level by 1.58.

Keywords: chain distribution, marketing

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1. Introduction

The number and size of sales distribution can affect the price as measured by market power. Market power is the company's ability to influence market prices and or beat

competitors. The amount of sales affects the form of the market that is: perfect competition market, monopolistic competition, oligopoly, or monopoly. This will affect the size of the distribution of sales that is reflected by the amount that is in the market. And the number of sellers can influence behavior, because the number of sellers affects the company's expectations of the behavior of its competitors.

Market share is an indicator in determining the level of market power of a company. Market share is a comparison between a company's sales with total sales in an industry. Market share can be measured through a large ratio of assets to total assets within the company. The higher the market share of a company, the higher the market power it has. It has an effect on the behavior of the company and the behavior of the competing company.

According to Sheperd (1989), what is meant by the concentration level is the combination of market share of market leader companies, where the amount should not be less than two and more than eight. Industries with high concentrations tend to have poor performance. This is because companies in the industry can not efficiently allocate their resources. Meanwhile, industries with low concentration levels are more likely to be able to allocate their resources efficiently to create good performance.

Another theory proposed by Burgerss (1989) states that the level of concentration is influenced by two factors. First, the number of companies or sellers in the industry. Second, the size of the company in the industry commonly referred to as market share. The level of concentration reflects the market share and the cumulative number of companies of all firms in the industry.

By looking at the extreme point of the industrial nature, the monopolist industry will have the highest concentration level (100% of the market is produced by one company). While industries with perfect competitive nature will have the lowest level of concentration (100% of the market is produced by the number of companies in the market). The conclusion is that the concentration level is a function of the number of companies and units of the inequality of the size of each company.

According to Heizer and Render (2001) Supply Chain covers all interactions between suppliers, manufacturers, distributors, and customers. This interaction is also related to transportation, scheduling information, credit and cash transfers, as well as raw material transfers between the parties involved. In Levi, et.al (2000) defines Supply Chain Management as an approach used to achieve efficient integration of suppliers, manufacturers, distributors, retailers, and customers. The definition is based on several things: Supply Chain Management needs to consider that all activities ranging from

suppliers, manufacturers, warehouses, distributors, retailers, to retailers impact the cost of manufactured products that meet customer needs. The objective of Supply Chain management is that the total cost of all parts, from transport and distribution of raw material inventory, process goods, and finished goods to more effective and efficient, thus reducing costs. Supply Chain Management revolves around the efficient integration of suppliers, manufacturers, warehouses, distributors, retailers and retailers across all corporate activities, from the strategic level to the operational tactics level. Siagian (2005) states there are two important things in Supply Chain management. First, Supply Chain Management is a collaborative effort between each part or process within the product cycle. Second, Supply Chain management should cover all product cycle activities.

The main purpose of the implementation of this supply chain in order to win the competition with similar companies is not too complicated, yakninya only trying to create a cheap, quality, timely and varied. So that will eventually provide added value for the end consumer, and finally get its own positioning in the consumer. Many studies have proved that good supply chain input will be positively correlated with the level of competitiveness of the company [17].

In principle, the agricultural supply chain has two types, namely fresh products and processed products. Fresh produce can be fruits, vegetables, and the like that do not require special processing or chemical transformation processes. Processed agricultural products require a chemical transformation process or a change of shape. The supply chain for processed agricultural products will involve several players, including farmers or planters, processors or manufacturers, distributors, and retailers. Each company is positioned in a network layer and engagement. at least one supply chain. In the agricultural supply chain, more than one supply chain and more than one business process can be identified. At one time, parallel and sequential processes can occur in the agricultural supply chain [23].

The discussion of the agricultural supply chain has not been widely implemented because the study of supply chains is generally done by researchers with a background of management science or engineering that is metal based. Some studies that examine the scope of agricultural supply chains include Zulkifli (2017), Schiefer (2002), Haan and Diaz. (2016), Praswati and Aji (2017), Zee and Vorst (2005), Aramyan et al. (2006), Vorst (2006), and Yandra et al. (2007). For the supply chain of horticultural products, several studies have been undertaken by Vorst (2000), Top and Rijgersberg (2003), Buurma and Saranark (2006), Araki et al. (2006), Rastoin et al. (2006), Dimyati and Muharam

(2006), Hart et al. (2007), and Marimin (2008). The very characteristic characteristics of agricultural products cause the complexity of supply chain problems to increase.

According to Saptana and Nuryanti (2013) who have conducted a beef trading analysis in Indonesia, stated that there are some actors in the upstream trade of beef ie village retailers, market retailers, meatshop, supermarkets, wholesalers and collectors. Each actor has their own purchase source. For example; the source of purchase of beef for village retailers, market retailers, and supermarkets, the majority are wholesale and RPH. As for wholesalers and collectors, the majority of the source of purchase of beef comes from RPH and breeders. An average of over 75 percent of the beef trade transactions took place within the district. Downstream trade flows are carried out by actors such as village retailers, market retailers, wholesalers and collecting dealers with the majority of end-to-end sales goals to households, hospitals and industries.

According to Heizer and Render (2001) the supply chain covers all interactions between suppliers, manufacturers, distributors, and customers. This interaction is also related to transportation, scheduling information, credit and cash transfers, as well as raw material transfers between the parties involved. Siagian (2005) states that supply chain management is directly related to the complete cycle of raw materials from suppliers to production, warehouses, and distribution then to customers. While venture enhances their competitive ability through product adjustment, high quality, cost reduction, and market-reaching speed are given additional emphasis on the supply chain.

The implementation of SCM includes the introduction of the members of the supply chain with whom it relates, what processes need to be associated with each core member and what type of incorporation is applied to each process of the relationship. The goal is to maximize competition and profit for the company and all its members, including end customers. Supply chain members include all corporations and organizations dealing with core companies either directly or indirectly through suppliers and customers from point of origin to point consumption. Primary members are all companies or business unit strategies that actually carry out operational and managerial activities in business processes designed to generate a specific outcome for customers or markets. Secondary members are companies that provide resources, knowledge, utility or assets to the primary members. Through the definition of primary members and secondary members is obtained the sense of the point of origin of the supply chain is the point where there is no primary supplier. All suppliers are secondary members, while the point consumption is the point where there are no major customers (Miranda

and Tunggal, 2005). The purpose of this research is to analyze and map distribution chain and marketing of chilli and beef in Surakarta residency area.

2. Method

2.1. Research design

This study uses a quantitative survey, design survey and qualitative structured interviews. Survey research design is used to analyze data about cost structure, profit level and delivery time of each institution in supply chain. Qualitative design with structured interviews is used to analyze the behavior of intermediary institutions in the supply chain.

2.2. Sample and population

The population of this study were all parties involved in the chili supply chain in the Subosukowonosraten region. The basis of the analysis unit used includes collecting merchants, parent / traditional markets, supermarkets, and retailers, whether stalls or vegetable vendors. This research uses combination sampling method from purposive random sampling and quota sampling for survey. The special characteristics of the respondents are they are farmers, traders, distributors and business consumers with medium to large business scale. Quota sampling is related to the spatial condition of Surakarta residency that has diverse characteristics. 7 districts / cities in this region respectively 36 respondents, so the total number of respondents is 252 respondents. Determination of respondents as a resource interview structured by using snow ball sampling that is one key respondents provide information about other key respondents in one supply chain path

2.3. Data and data source

There are two types of data to be used in this study, primary data and secondary data.

1. Primary Data. Primary data were obtained from direct survey (interview) to distributors, traders, and farmers, such as commodity price data, distribution channels, margins (using questionnaires).

2. Secondary Data. Secondary data will be obtained from goverment in Subosukowonosraten area, which includes data of pepper commodity price, distributor, merchant and chilli center in each region.

2.4. Analysis tools

Tools that we used to analyze this research are:

2.4.1. Analysis of producer share, margin, and profit margin ratio

The share of producer or producen share (PS) is useful to know the part of the price received by the producer. If the PS are higher the better the market performance from the producer side. The share of producers is defined as:

$$PS = \frac{Pf}{Pr} \times 100\% \quad (1)$$

Where:

Ps =Parts of commodity prices received by producers

Pf = Commodity prices at the producer level

Pr = Commodity prices at the consumer level

The marketing margin is the price difference paid by the consumer at the price the producer receives. Mathematically, the calculation of marketing margins can be written as:

$$m_{ji} = P_{si} - P_{bi} \quad \text{atau} \quad m_{ji} = b_{ti} - \pi_i \quad (2)$$

Margins marketing totals (Mji) are:

$$M_{ji} = \sum_{i=l}^{n} m_{ji} \quad \text{atau} \quad M_{ji} = Pr - Pf \quad (3)$$

Profit margin ratio is the ratio between the profit level obtained by the marketing agency and the costs incurred by the marketing agency (Azzaino, 1982). Mathematically, the calculation of the profit margin ratio (RPM) can be written as:

$$\text{RPM} = \frac{\pi_i}{b_{ti}} \quad (4)$$

m_{ji} = i-level marketing margin

P_{si} = the selling price of the i-level marketing agency

P_{bi} = the purchase price of the i-level marketing agency

b_{ti} = total cost of the i-level marketing agency

π_i = profit of the i-level marketing agency

M_{ji} = total marketing margin

Pf = price at the farm / producer level

Pr = prices at the retail / consumer level

i = 1,2,3, ……..,n

3. Chain Distribution Analysis

Chili is one of the agricultural commodities that contribute greatly to the inflation rate due to frequent price fluctuations. The price of national chili based on data of Directorate General of Domestic Trade Kemendag dated December 17, 2015 reached 33.895,-/kg. Chili can be obtained through the cultivation in monoculture or intercropping with other plants. Chili plants were first harvested at 80-90 days depending on the species. In one planting period, chili can be harvested several times; when the season and good maintenance can be harvested 15-17 times, but generally as much as 10-12 times. Weather, pest and distribution channels are the dominant factors that often influence the price level of chili on the market.

The supply of chili peppers traded in this supply chain consists of four types of chilli namely red chili type As, red chili type Bs, green cayenne pepper and red chili pepper. The largest chilli selling center in the Surakarta residency area is in the Legi market. Chilli suppliers come from outside and within the Subosukowonosraten area. The biggest suppliers are Boyolali, Klaten, Wonogiri, Sukoharjo and Karanganyar. Meanwhile, from outside Surakarta namely Lumajang, Mojokerto, Pemekasan, Sumenep, Pare, Madura, Banyuwangi. Channel trade distribution channels in Subosukowonosraten Region come from local and local farmers, local and regional collectors, local wholesalers, wholesalers / small and end consumers. Distribution patterns of each region are linked in the supply chain. Chain trade distribution chain in Subosukowonosraten region consists of farmers, collectors, wholesalers, wholesalers, retailers, and end consumers scattered from seven areas of Sragen, Wonogiri, Karanganyar, Sukoharjo, Klaten and Boyolali.

From the distribution distribution scheme it is known that the largest chili trade is in the Solo legi market. The supply of chili in the legion market is obtained from farmers Batan Baturetno Wonogiri and Cepogo Boyolali farmers. Besides supplying to Legi Market, Baturetno farmers also supply Wonogiri market. In addition to the legion market

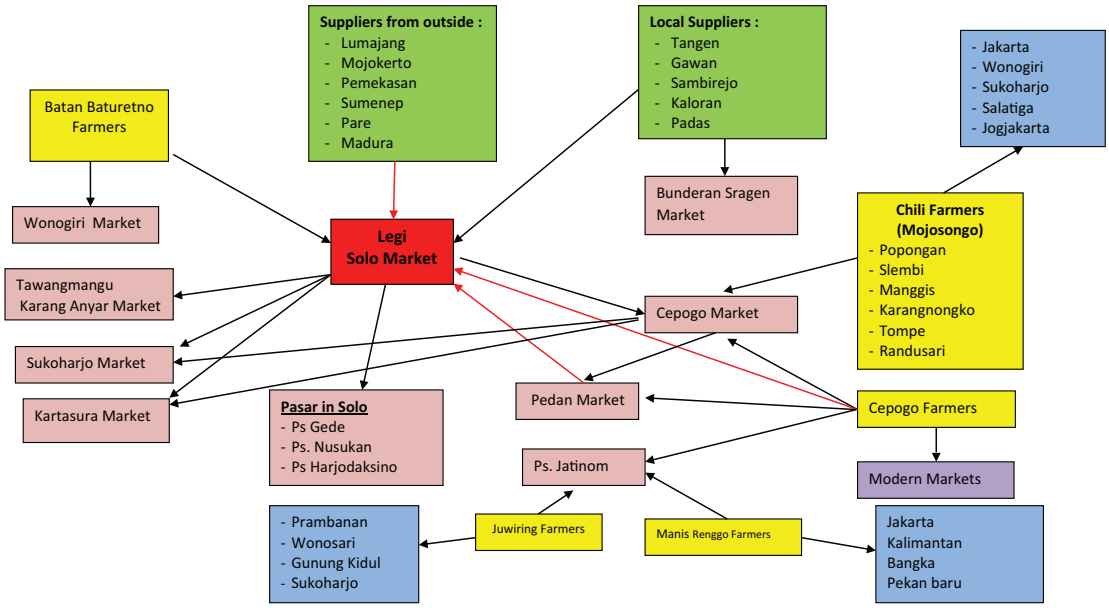

Figure 1: Skema Alur Distribusi Cabai.

Table 1: The average of Lowest and Highest Buy Prices During the Harvest Season.

Agen	Red Chili Type A		Red Chili Type B		Green Chili Paper		Red Chili Paper	
	Lowest price	Highest Price	Lowest price	Highest Price	Lowest price	Highest Price	Lowest price	Highest Price
Collectors level	5.550	34.900	6.700	42.500	6.250	31.950	6.700	71.550
Wholesaler level	7.500	35.500	7.500	42.400	7.800	35.500	9.900	67.000
Small traders	10.400	30.050	11.250	35.400	12.125	36.600	12.750	56.400
End consumers	8.500	45.575	10.500	31.675	9.800	53.200	11.300	52.850

chilli cepogo farmers distribute chili to Cepogo Market and Jatinom Market and Klaten Pedan Market. Although in Pedan Market itself most of the supply of chili is obtained from Juwiring farmers, while Jatinom Market is supplied partly from Manisrenggo and Juwiring farmers.

Most of the sweet chili farmers distribute chili to outside areas such as Jakarta, Kalimantan, Bangka, and Pekanbaru, while Juwiring farmers distribute their chili to the south of Prambanan, Wonosari, Gunungkidul and Sukoharjo. While in Cepogo market apart from local farmers cepogo chili supply supplied partly from Mojosongo Boyolali farmers, while MojosongoBoyolali farmers more distribute chili out of town such as Salatiga, Jakarta, Sukoharjo, Wonogiri, and Yogyakarta.

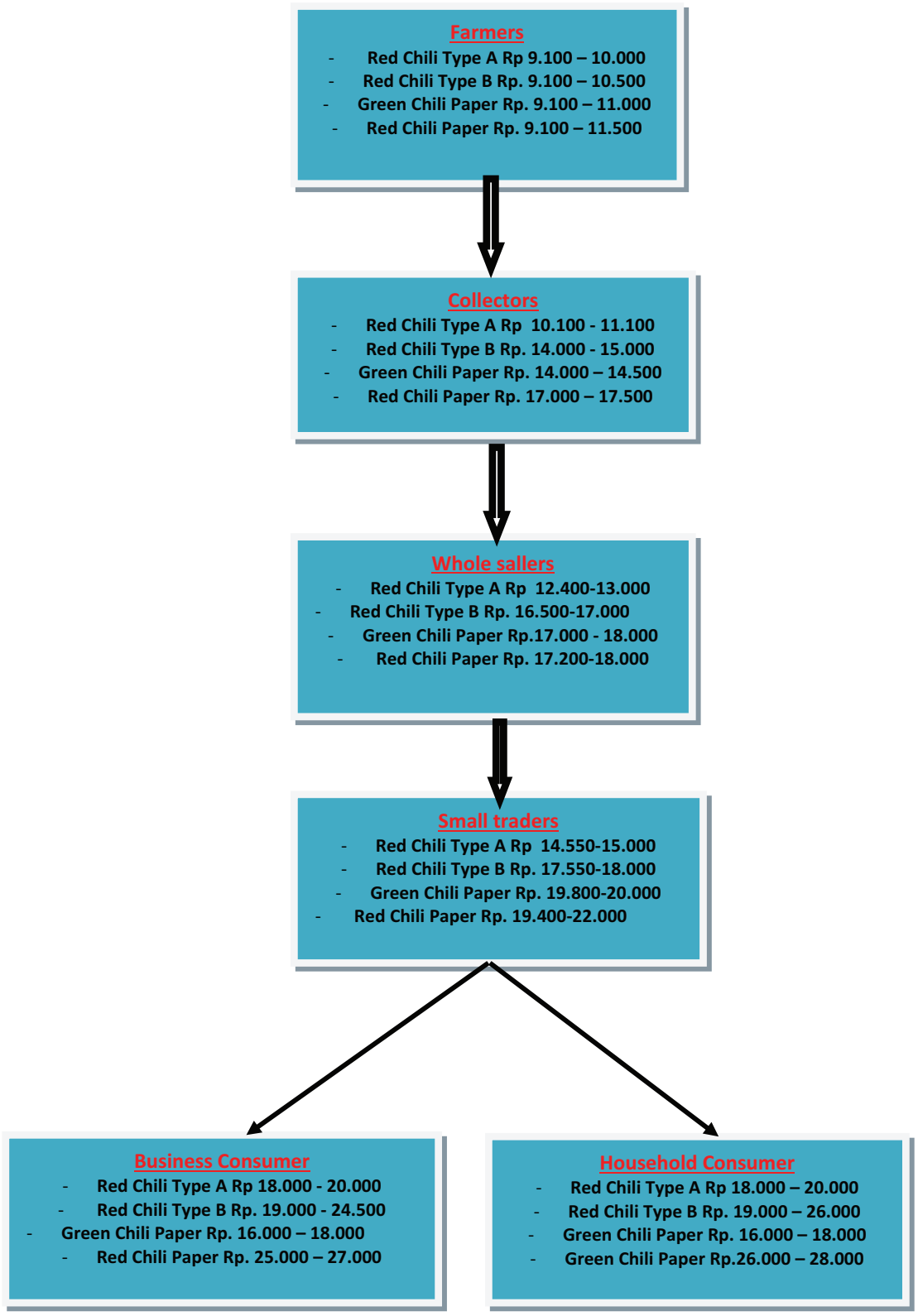

Figure 2: Scheme of chili commodity prices.

The average price of local farmers ranges from Rp. 9.100 -10.000 / kg for Red Chili Type A, Rp. 9.100-10.500 / kg Red Chili Type B, Green Chili Paper per kilo Rp.9.100-11.000, and Red Chili Paper Rp.9.100-11.500 / kg. The price is determined by the collectors who directly take the harvest from the farmers, while the farmers themselves can not determine the selling price. To produce chili the farmers on average spend an operational cost of Rp. 2000,000 to Rp. 10,000,000 in one harvest time, such costs include the cost of seed procurement, land preparation costs, fertilizer costs, the cost of anti-pest drugs, labor costs, transportation costs and other costs other than production costs.

Transportation costs incurred in accordance with the destination of the distribution area, the average distribution destination area is local Solo and surrounding areas such as Sukoharjo, Klaten, Boyolali, Karanganyar, Wonogiri, Sukoharjo, while the destination outside distribution such as to Salatiga, Jakarta, Yogyakarta, Bantul, Kalimantan, Pekanbaru, Bangka. The average of farmers respondents in this study cost about Rp. 5.700.000,00. Average turnover of farmers in a single harvest time of about Rp.6.500.000. Determination of prices at the farm level is largely influenced by the season, weather, quality of chilli, and transportation.

Apart from the farmers, the supply of chillies in the legion market is obtained from outside suppliers from Lumajang, Mojokerto, Pemekasan, Sumenep, Pare, Kediri, Madura and Banyuwangi, while local suppliers from Sragen are from Tangen, Gawan, Sambirejo, Kaloran, Padas, and Benagung. Chili supply is also obtained from collectors from the pedan market.

The collectors themselves set prices according to the supply of chilli in the market is at harvest time, the price of buy to the lowest farmers average around Rp. 5,550 / kg for red chili type A, Rp. 6,700 / kg for red chili type B, green chili pepper per kilo Rp. 6,250, and red pepper Rp 6.750 / kg. While at the time of rare chilli in the market, the collectors set the highest purchase price to the farmers is Rp. 34.900 / kg for red chili type A, Rp. 42.400 / kg for red chili type B, green chili pepper per kilo Rp. 31.950, and red chili pepper Rp. 71.500 / kg. For now the price of buying collectors to farmers on average ranges from Rp. 10.100-11.100 / kg for red chili type A, Rp. 14.000-15.000 / kg for red chili type B, green chili pepper per kilo Rp. 14.000-14.500, and red chili pepper Rp. 17,000-17,500 / kg, while the selling price in the market from the average collectors ranges from Rp. 12,800 / kg for red chili type A, Rp. 16,800 / kg for red chili type B, green chili pepper per kilo Rp. 17.900, and red chili pepper Rp. 20.150 / kg.

The operational costs incurred by the suppliers / collectors averaged Rp. 9,500,000 in the harvest season, consisting of labor costs, transportation costs (transportation), storage costs, miscellaneous costs. In addition to supplying the legion market all of the suppliers, both local and outside, also provide supplies to the secondary market of Sragen. Bunder Market is the largest market in Sragen and is part of the crossing out of trade both from outside and inside. Based on information from wholesalers that the most crowded cycle for outside suppliers is from February to August, while the lonely month is from September to January (turn of year). In determining the selling price at the level of the collectors are affected by the harvest season, demand, quality of chilli and supplies in the market.

Supply of chili in wholesale market traders is then distributed to small traders located in traditional markets of each Subosukowonosraten region. The selling price from a wholesaler to a small trader averages around Rp. 14.300 / kg for red chili type A, Rp. 18.300 / kg for red chili type B, green chili pepper per kilo Rp. 20.000, and red chili pepper Rp. 19.900 / kg. Big traders buy chili pepper from the current collectors on average around Rp. 12.400-13.000 / kg for red chili type A, Rp. 16.500-17.000 / kg for red chili type B, green chili pepper per kilo Rp. 17.000-18.000- and red chili pepper Rp. 17.200-18.000 / kg. While the selling price at the level of wholesalers currently on average around Rp. 14.300 / kg for red chili type A, Rp. 18.300 / kg for red chili type B, green chili pepper per kilo Rp. 20.000, and red chili pepper Rp. 19.900 / kg. Monthly operating expenses incurred by large traders averaged Rp. 4.200.000, consisting of Labor Cost, transportation cost (freight), storage cost, miscellaneous cost.

At the harvest season abundant traders get the lowest price from the average collectors of Rp. 7.500 / kg for red chili type A, Rp. 7.500 / kg for red chili type B, green chili pepper per kilo Rp. 7,900, and red chili pepper Rp. 9.900 / kg. At a time when the stock of chillies in the market slightly due to crop failures due to weather and pests disease purchase price of the highest reaches Rp. 35.000 / kg for red chili type A, Rp. 42.300 / kg for red chili type B, green chili pepper per kilo Rp. 35.500, and red chili pepper Rp. 67.000 / kg. Determination of the selling price by the wholesalers based on the condition of the market inventory of the collectors, the quality of chili, the amount of demand, and transportation. Distribution time at the merchant level is everyday, with local destinations such as Surakarta, Sukoharjo, Wonogiri, Klaten, Boyolali, Karanganyar and Sragen.

In the next chili supply chain are small traders in traditional markets spreading in solo areas such as Gede Surakarta market, Nusukan market, Harjodaksino market,

Tawangmangu market, Kartasuro market, and Sukoharjo market town and Cepogo market, mostly getting supply of chili of wholesalers in the legi market with the lowest purchase price ever earned is Rp. 10.350 / kg for red chili type A, Rp. 11,200 / kg for red chili type B, green chili pepper per kilo Rp. 12.125, and red chili pepper Rp. 12.700 / kg. The highest purchase price of an average wholesaler is Rp. 30,050 / kg for red chili type A, Rp. 35.500 / kg for red chili type B, green chili pepper per kilo Rp. 36.550, and red chili pepper Rp. 56.400 / kg. Currently the selling price of chillies in the market from small traders averages around Rp. 16.850 / kg for red chili type A, Rp. 21.150 / kg for red chili type B, green chili pepper per kilo Rp. 22.275, and red chili pepper Rp. 22.600 / kg.

While the purchase price of small traders from the current large traders is Rp. 14.550-15.000 / kg for red chili type A, Rp. 17.550-18.000 / kg for red chili type B, green chili pepper per kilo Rp. 19.800-20.000, and red chili pepper Rp. 19.400-22.000 / kg. In carrying out its business the small traders spend on operational costs such as Labor Costs, transportation costs (transportation), storage costs, other costs, average cost incurred an average of Rp. 1,300,000 per month. The consideration in determining the selling price is based on the supply of chilies in the market, the quality conditions of chili, season, and price of the wholesalers. The distribution objectives of small traders are local consumers of the local area. The time of distribution at the merchant level is daily.

The final consumers on this pepper distribution line are business consumers such as restaurants, restaurants, and household consumers. There are different patterns of business and household customers. In the business consumer, the supply of chili is partly obtained directly by small traders in the legi market and modern market, while for household consumers obtain products from small traders / retailers in the market and around the neighborhood. The price at the end consumer level for business consumers is different from that of household consumers due to the quantity of purchases made by more business consumers.

For business consumers the current purchase price averages around Rp. 18,000-20.000 / kg for red chili type A, Rp. 19.000-24.500 / kg for red chili type Bs, green chili pepper per kilo Rp. 16.000-18.000, and red chili pepper Rp. 25,000-27.000 / kg. As for household consumers the current purchase price averages around Rp. 18,000-20.000 / kg for red chili type A, Rp. 19.000-26.000 / kg for red chili type B, green chili pepper per kilo Rp. 16.000-18.000, and red chili pepper Rp. 26,000-28.000 / kg

4. Analysis of Producer Share, Marketing Margin and Profit Ratio of Chili Commodities

4.1. Share of manufacturers

The share of producers for large red chili farmers by 50%, while the share of producers for Chili pepper farmers 70%, green chili farmers by 62%, and the share of producers of cacao pepper 70% red. Based on the analysis of the share of producers shows that the average market share is very good from the side of Chili farmers.

4.2. Market margin

The results of marketing margin analysis calculation obtained results as follows:

Table 2: Marketing Margin of Chilli Commodity.

The average of marketing margin	Red Chili Type A	Red Chili Type B	Green Chili Paper	Red Chili Paper
Collectors	Rp. 2.000	Rp. 2.000	Rp. 3.000	Rp. 4.000
Wholesaler	Rp. 2.000	Rp. 2.000	Rp. 2.000	Rp. 2.000
Small traders	Rp. 2.000	Rp. 2.000	Rp. 2.000	Rp. 3.000
Marketing margin total	**Rp. 6.000**	**Rp. 6.000**	**Rp. 7.000**	**Rp. 9.000**
Marketing margin total (farmerto end consumers)	**Rp. 12.000**	**Rp. 6.000**	**Rp. 8.000**	**Rp. 6.000**
Sumber: Data Primer yang diolah, (2018)				

Based on the table above it is known that the marketing margin at each business actor level shows that for the big red chili type A the highest marketing margin direct sales from farmers to final consumers with average total marketing margin of Rp.12.000, while total marketing margin through collectors to consumers averaged Rp.6,000, while for red chili type B the average marketing margin was equal to Rp. 6.000, for the green chili pepper total of highest marketing margin occurs in the direct sales of farmers to consumer is an average of Rp. 8,000, while the total difference through the distribution channel of Rp.7.000. For the red chili commodity total of highest marketing margin of Rp.9.000 is through marketing channels from collectors to small traders. The highest marketing margin average is at the level of collectors that reach Rp 4,000 / kg.

4.3. Marketing margin ratios

The calculation results of Marketing Margin ratio analysis are as follows:

Table 3: Rasio Profit Marjin.

Profit Margin ratio	Chili Commodity
Farmer level	1.23
Collectors level	1.58
Wholesaler level	0.03
Small traders level	0.07
Source: from processed Primer data(2018)	

5. Discussion

The highest margin profit ratio is at the level of collectors which is 1.58, then the farmer level is 1.23, whereas at the level of wholesalers and small traders the profit ratio ratio is only 0.07 for small traders and 0.03 on the wholesalers. Chain distribution distribution in Ex-residency consists of farmers, collectors, wholesalers, retailers and business consumers. The supply of chili peppers traded in this supply chain consists of four types of chilli namely red chili type As, red chili type Bs, green chili pepper and red chili pepper. The largest chilli selling center in the Surakarta Residency area is in the Legi market. Supplier of chilli pods in Surakarta Karisidenan Region comes from outside and within the territory of former Karisedenan Surakarta. The biggest suppliers are Boyolali, Klaten, Wonogiri, Sukoharjo and Karanganyar areas. Meanwhile, from outside Surakarta namely Lumajang, Mojokerto, Pemekasan, Sumenep, Pare, Madura, Banyuwangi. Chili trade distribution channels in Subosukowonosraten region are from local and local farmers, local and regional collectors, local wholesalers, wholesalers / small and end consumers.

Determination of the price of chili commodities is determined by the collectors. Prices from local farmers ranged from Rp. 11,750 / kg for red chili type A, Rp. 14.600 / kg for red chili type B, green chili pepper per Kg Rp. 12.600, and red chili pepper Rp. 12,500 / kg. Price determination at farm level is largely influenced by season, weather, chili quality, and transportation.

Share of producers for large red chili farmers by 50%, while the share of producers for the pepper farmers 70%, green chili farmers by 62%, and the share of producers

of red chili pepper 70%. Based on the analysis of the share of producers shows that the average market share is very good from the side of chilli farmers.

Marketing margins at each level of business actor indicate that for red chili type A the highest marketing margin is direct sales from farmers to end consumers with an average total marketing margin of Rp.12,000, while total marketing margin through collectors to consumers is on average, average of Rp.6,000, while for total curry chips the average marketing margin is equal to Rp. 6.000, for green chili pepper total marketing highest margin occurred at direct sales of farmer to end consumer that is average Rp. 8,000, while the total difference through the distribution channel of Rp.7.000. For the total red chili commodity, the highest marketing margin of Rp.9.000 is through marketing channels from collectors to small traders. The highest marketing margin average is at the level of collectors that reach Rp 4,000 / kg. The highest margin profit ratio is at the level of Trainer which is 1.58, then the farmer level is 1.23, whereas at the level of wholesaler and small trader the profit ratio is only 0.07 for the small trader and 0.03 for the wholesaler.

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