Analyzing the amount of banana Kepok marketing margin

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Abstract: Marketing margin is the price difference between the price paid by consumers and the price received by farmers. This study aims to determine the marketing channels of Banana kepoks, analyze the magnitude of marketing margins of Banana kepoks. The study was conducted in Marannu Village, Mattiro Bulu District, Pinrang Regency, South Sulawesi. This research was conducted using a random sampling method (simple random method) with the number of samples used at the farm level as many as 30 people. Whereas samples at the marketing agency level were taken using the snowball sampling method. The results of this study indicate, (1) there are two marketing channels of Banana kepoks is Marketing Channel I are Farmers, Collectors, Wholesalers, Retailers, Latest consumers. Marketing Channels II are Farmers, Collectors, Wholesalers, Latest consumers. The marketing margin shows that the largest total marketing margin is in Marketing Channel I, with a total margin of Rp. 2,320/kg, while the smallest total marketing margin is in Marketing Channel II, which is Rp. 2,000/kg.

1. Introduction

The agricultural sector has a very large role in the economic growth of countries, especially agrarian-style countries like Indonesia. Economic development focuses on agriculture and agriculture-based industries. The agribusiness system consists of input subsystems (upstream agro-industry), farming (agriculture), output systems (downstream agro-industry), marketing, and support [1].

One of the targets of agricultural development is agricultural development, which includes increasing agricultural production of food crops through various businesses. The development of the horticultural crops subsector is one of the important parts of agricultural development. One of the horticultural crops that is much favored by the community is the banana. In the past, bananas were generally a side crop to fill vacancies in the fields or fields and were rarely cultivated intensively [2].

As one of the primary banana center countries, Indonesia has more than 200 types of bananas. This high diversity provides an opportunity for Indonesia to be able to utilize and choose the types of commercial bananas needed by. When viewed from the average per capita fruit consumption data (PUSDATIN Agriculture, 2016), the average consumption of bananas compared to other fruits is still relatively high at 0.119 kg/capita/week while other fruits such as oranges, mangoes, avocados, snake fruit, watermelon, papaya, and jackfruit only average below 0.1 kg/capita/week. The conditions above indicate that bananas are still the belle of Indonesia [3].

The potential of banana plants is very high to be developed intensively. Currently, bananas have become an export and import commodity in the international market. Domestically, there are quite a lot of industries that need bananas as their raw material so that it is considered that banana agribusiness has a high economic and social potential, particularly in efforts to improve community nutrition, expand employment, and increase farmers' income [4].

Bananas are one of Indonesia's leading commodities. Banana farming can provide substantial benefits in a relatively short time (1-2 years). Banana production contributes between 40-45% of national fruit production and diversity of uses such as fresh fruit consumption, processed industrial raw materials, and diversity of varieties that have a wealth of approximately 300 varieties with 14 economic varieties [5].

Banana is a horticultural commodity that is widely cultivated by the community. Banana (Musa prasidiaca L) is one type of fruit favored by most of the population. This fruit is popular because it has a good taste, high nutritional content, easy to obtain, and the price is relatively low. This banana is derived from a herbaceous plant whose life is chronic, has very many types. If counted, there are about hundreds of types. However, in general, it can be grouped into three types, is banana fiber, ornamental bananas, and fruit bananas. Banana is one of the tropical fruits that has a high enough potential to be agribusiness-oriented intensive research. Nowadays, bananas become export and import trade in the international market. Therefore, the development of banana agribusiness has high economic and social potential, especially in efforts to increase the income of farmers and the state, expansion of employment, and business [6].

The biggest banana producing area in South Sulawesi is Pinrang Regency with production centers located in Mattiro Bulu District. In 2015 Pinrang District produced 50,891 tons, in 2016 Pinrang District produced 47,064 tons of bananas [7], although it experienced a decline in production, Pinrang District still had the highest amount of banana production compared to other districts/cities in South Sulawesi.

The amount of production must be supported by good marketing patterns because marketing has a very important role in business continuity. Marketing activities in which there are various roles of marketing institutions, marketing mix, and distribution channels enable agricultural products to be delivered to consumers. This process requires marketing costs to be used to carry out marketing functions. This needs attention to the issue of marketing efficiency, so that banana kepoks reach the hands of consumers at reasonable prices and the marketing institutions involved are still able to carry out their marketing functions properly [3].

The amount of production must be supported by good marketing patterns because marketing has a very important role in business continuity. Marketing activities in which there are various roles of marketing institutions and distribution channels enable agricultural products to be delivered to consumers. With various roles of marketing institutions and marketing distribution channels, there is a difference in price received by farmers. For that, we need to analyze more deeply about marketing channels, marketing margins, and farmer's share.

2. Methods

This research was conducted in Marannu Village, Mattiro Bulu District, Pinrang Regency. Determination of the place of research carried out intentionally (Purposive Sampling) with consideration of this area is one of the banana production centers in South Sulawesi. The time of the research is from May to June 2018. Data analysis in this study uses two methods, is the qualitative analysis and quantitative analysis. Qualitative analysis by observing banana marketing channels from farmers to collectors while quantitative analysis is used to analyze marketing margins.

3. Results and Discussion

3.1. Marketing channels

Marketing channels are interdependent organizations involved in the processes that make products and services available for use or consumption by consumers. Based on the results of interviews using a questionnaire to respondent farmers in Marannu Village, Mattiro Bulu District, Pinrang Regency, all respondent farmers (30 people) sell Banana kepok, which they produce to the collector. The collector buys Banana kepoks in farmers by harvesting directly in the farmer's garden with the permission of the owner of the banana. After the Banana kepok has been harvested, the collector collects the banana to the side of the road to make it easier to transport. The costs for the harvesting process are borne entirely by the collecting collector.

In this marketing activity, there are two patterns of marketing channels formed at the research location. The marketing channel consists of:

1. Marketing Channel 1: Farmers - Collector Collector - Wholesalers - Retailers - Consumers
2. Marketing Channel 2: Farmers - Collector Collector - Wholesalers - Consumers

Next, the banana kepok Marketing Channel scheme is displayed in Marannu Village, Mattiro Bulu District, Pinrang Regency, based on respondents' data in 2018.
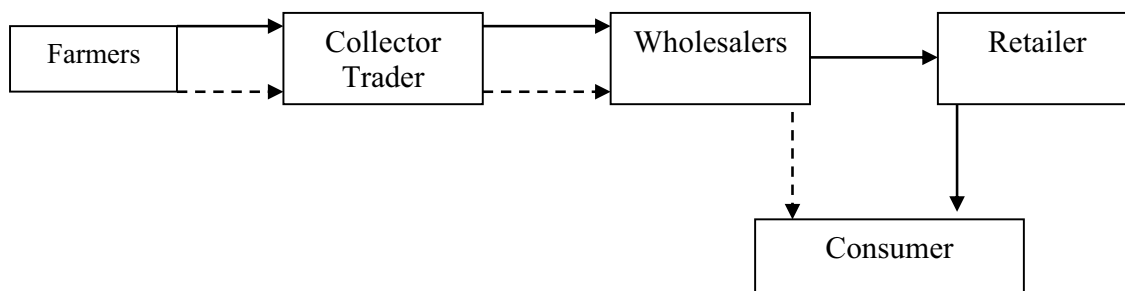
Explanation   :
⟶   : Marketing Channel I
----▸   : Marketing Channel II

Figure 1. Banana kepok Marketing Channel

1. Marketing Channel I

Marketing Channel I is a Marketing Channel which consists of farmers, collectors, wholesalers, retailers, and end consumers. Based on the research conducted, it was obtained that from 30 farmers who were respondents, all farmers (30 farmers) sold the banana kepok that they produced to the collector at a price of Rp. 1,200.00/kg. Farmers choose this marketing channel because farmers can easily distribute their harvests and save marketing costs, and also farmers do not need to work or hire workers to harvest and transport because the harvesters are collecting collectors. Then from the collecting collector directly sell their crops to a large collector in the city of Makassar for Rp. 1,600/kg. Furthermore, a large collector sells banana kepok to retailers using large collector waiting for retailers in the Traditional Market (Pasar Terong, Makassar) Banana kepoks are sold at the level of large collector for Rp.2,600/kg. Then the retailer sells back to the final customer Rp. 3,200-4,000/kg.

2. Marketing Channel II

In Marketing Channel II consists of farmers - collectors - wholesalers - consumers. Marketing Channel II is almost the same as Marketing Channel I; the difference lies in large collectors, where large collectors also act as retailers (wholesalers) who directly sell banana kepoks to end consumers. This happens because the profits derived are greater than other profits, therefore a large trader sells a portion of the final document to the kepoks banana (located in Makassar City) at a price of Rp3,200 / kg.

3.2. Marketing margin

The difference in selling prices among marketing institutions is caused by the existence of marketing functions performed by each institution involved to increase the economic value and selling value of bananas. The difference in prices at the consumer level with the prices received by producers obtained in units of rupiah per one hand of banana kepok. Mathematical marketing margin calculation can be formulated as follows:

$$MP = Pr - Pf \tag{1}$$

For one level of marketing, margin collector is calculated using the formula:

$$M = Bp + Kp \tag{2}$$

Information :

M   : Margin
Pr   : price at the consumer level (Rp)
Pf   : price at producer level (Rp)
KP   : marketing advantage
BP   : marketing costs
KP   : MP - BP
BP   : MP - KP

1. Marketing Channel Margin I

Marketing institutions involved in Marketing Channel I consist of farmers, collectors, wholesalers, and retailers. Marketing Channel I have a channel that is longer than the other marketing channels because it involves four marketing agencies.

Farmers sell banana kepoks to collectors at an average selling price of Rp. 1,200.00/kg. Collecting collector get an average marketing margin of Rp.400.00/kg, by selling large collector an average of Rp. 1,600.00/kg. Large collector sells to retailers at an average price of Rp. 2,600.00/kg to obtain an average margin of Rp. 1,000.00/kg. The retailer sells the final consumer at an average price of Rp. 3,520.00/kg, and obtained an average margin of Rp. 920.00/kg.

Marketing costs incurred by collectors are labor costs, transportation costs, storage costs, and depreciation costs. Labor costs incurred an average of Rp. 90.00 / kg, the average transportation cost is Rp. 187.5/kg, for the cost of storing collectors, the costs of Rp. 53.5 / kg while the average depreciation expense is Rp.15/kg.

Marketing costs are also incurred by large collector where these costs include loading and unloading costs, while the costs incurred are an average of Rp.77.50/kg, for the average labor costs of Rp.89.00/kg, for the average retribution fee average of Rp. 48.50 / kg. The large collector also incurs storage costs and depreciation costs of each of these costs amounting to Rp.97 / kg and Rp.9/kg. Transportation costs and

fees are also incurred by retailers. The average transportation cost is Rp.85.00/kg, while the levy fee is Rp.77.50 / kg. The total Channel I Marketing Margin is Rp. 2,320, the total profits obtained by the intermediary collector is Rp. 1,442.00/kg.

Table 1. Distribution of banana kepok marketing margin in marketing channel I

Marketing Institute	Rp/Bunch	Rp/Kg
Farmers		
Selling price	3,000.00	1,200.00
Collector		
Purchase price	3,000.00	1,200.00
Selling price	4,000.00	1,600.00
Transportation price	469.00	187.50
Cost of the Labor	225.00	90.00
Cost of storage	134.00	53.50
Cost of depreciation	37.50	15.00
Margin	1,000.00	400.00
Profit	134.76	54.00
Total cost	865.50	346.00
Wholesalers		
Purchase price	4,000.00	1,600.00
Selling price	6,500.00	2,600.00
Cost of the Labor	223.00	89.00
Cost of storage	243.00	97.00
Cost of loading and unloading	194.00	77.50
Cost of depreciation	22.50	9.00
Retribution fee	121.50	48.50
Margin	2,500.00	1,000.00
Profit	1,697.00	679.00
Total cost	804.00	321.00
Retailers		
Purchase price	6,500.00	2,600.00
Selling price	8,800.00	3,520.00
Transportation costs	213.00	85.00
Storage fee	115.00	46.00
Cost of depreciation	8.00	3.00
Retribution fee	191.00	76.50
Margin	2,300.00	920.00
Profit	1,773.00	709.00
Total cost	527.00	210.50
Total marketing costs	**2,196.50**	**877.50**
Total profit	**3,604.75**	**1,442.00**
Total marketing margin	**5,800.00**	**2,320.00**

* The price of conversion to kilograms with per/bunch banana kepok is of the same level to 2.5 kg

2. Marketing Channel Margin II

In Marketing Channel II, the intermediary collector involved are farmers, collectors, wholesalers, and the latest consumers. Based on Table 2, marketing costs that must be incurred by collecting collectors consist of transportation costs and labor costs, while costs incurred by large collectors include loading and unloading costs, labor costs, and retribution fees.

Table 2. Distribution of Banana kepok Marketing Margins in Marketing Channel II

Marketing Institute	Rp/Bunch	Rp/Kg
Farmers		
Selling price	3,000.00	1,200.00
Collector		
Purchase price	3,000.00	1,200.00
Selling price	4,000.00	1,600.00
Transportation price	469.00	187.50
Cost of the Labor	225.00	90.00
Cost of storage	134.00	53.50
Cost of depreciation	37.50	15.00
Margin	1,000.00	400.00
Profit	134.76	54.00
Total cost	865.50	346.00
Wholesalers		
Purchase price	4,000.00	1,600.00
Selling price	8,000.00	3,200.00
Cost of the Labor	276.00	110.50
Cost of storage	309.50	124.00
Cost of loading and unloading	248.00	99.00
Cost of depreciation	20.50	8.00
Retribution fee	155.00	62.00
Margin	2,991.00	1,600.00
Profit	2,991.00	1,196.00
Total cost	1,009.00	403.50
Total marketing costs	**1.870.50**	**748.50**
Total profit	**3,125.50**	**1,250.50**
Total marketing margin	**5,000**	**2,000**

* The price of conversion to kilograms with per/bunch banana kepoks is of the same level to 2.5 kg

Farmers sell banana kepoks to collectors for Rp. 1,200.00/kg. Then the collector sells banana kepoks to wholesalers for Rp. 1,600.00/kg. With this, the collector gets marketing margins of Rp.400.00/kg. Transportation costs incurred by collectors are Rp. 187.50/kg, labor costs are Rp. 90.00/kg while the average storage cost is Rp. 53.50/kg and for the average depreciation expense of Rp. 15.00/kg, Trader gatherers get a profit of Rp. 54.00/kg.

Furthermore, a large collector sells the final consumers at an average price of Rp.3,200.00/kg. And get an average margin of Rp. 1,600/kg. Costs incurred for loading and unloading costs and cost of the labor of Rp. 99.00/kg and Rp. 110.50/kg. As for fees, storage, and depreciation of Rp.62.00/kg, Rp.123/kg, and Rp.8/kg, respectively. The total profit received is Rp. 1,196.00/kg.

Based on the description above, it can be seen that the largest total marketing margin is in Marketing Channel I with a total margin of Rp.2,320/kg. While the smallest total marketing margin is in the Marketing II channel, which is Rp.2,000/kg.

3.3. Farmer's Share

To answer the formulation of the third problem that is used in the analysis of farmer share can be calculated with the following formula:

$$Sf = \frac{Pf}{Pr} \times 100\% \qquad\qquad (3)$$

Information :

Sf: share price received by farmers

Pf: farm gate price

Pr: price at the end consumer level

Table 3. Farmer's share in each banana kepok marketing channel

Marketing Channel	Prices at the Farmers Level (Rp/Kg)	Price at The End Consumer Level (RpKg)	Farmer's Share (%)
I	1,200	3,520	34.00
II	1,200	3,200	37.50

The portion received by farmers in Marketing Channel I is 34%, the share received by farmers in Marketing Channel II is 37.0%, while for Marketing Channel II, which is the shortest Banana kepok marketing channel with the portion received by farmers is 37.50%. From these two marketing channels, we can know that Marketing Channel II is the most profitable marketing channel for the marketing institutions involved. In this case, marketing institutions can use this information as an alternative to marketing their bananas if they want to get greater profits.

4. Conclusion

There are 2 (two) banana kepok marketing channels in Marannu Village, Mattiro Bulu District, Pinrang Regency, is Marketing Channel I: Farmers, Collector, Wholesalers, Retailers, Latest Consumers. Marketing Channel II: Farmers, Collectors, Wholesalers, Latest consumers. In the Marketing Channel I the total marketing margin in marketing institutions is Rp. 2,320/kg and marketing II total marketing margins of Rp. 2,000.00/kg.

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