

ORGANIC RICE MARKETING IN PURWOREJO REGENCY, CENTRAL JAVA PROVINCE

Arinda Dwi Yonida¹, Suhatmini Hardyastuti², & Masyhuri²

^{1,2}Department of Agricultural Socio-Economics, Faculty of Agriculture, Universitas Gadjah Mada
Corresponding author: masyhuri@ugm.ac.id

Received : 15 July 2021

Accepted : 15 January 2022

Published : 25 March 2022

ABSTRACT

This study aimed to (1) find out the marketing channels of organic rice, (2) compare marketing margins in the organic rice marketing channels, (3) compare the farmer's share marketing in the organic rice marketing channel, and (4) compare marketing efficiency in the organic rice marketing channels. The primary method of research uses a descriptive-analytical method. Sampling was conducted using the snowball sampling method with a sample of 30 farmers and eight traders. The method of analysis used to find out the marketing channel is by looking at the product flow from the producer to the final consumer; the marketing margin by looking at the difference in prices at the farmer and the final consumer; farmer's share by comparing the percentage of prices at the farmer level and the end consumer; and the marketing efficiency determined of the marketing margin and farmer's share. The results showed that the most channels with the highest margin of organic rice marketing channels were the longest channel, the shortest organic rice marketing channel had the lowest value of the marketing margin. Moreover, the longest organic marketing channel had the smallest farmer's share value, and the shortest organic marketing channel had the most efficient marketing efficiency.

Keywords: channel, efficiency, farmer's share, margin, marketing

INTRODUCTION

Purworejo Regency is one of the regions that pay attention to organic agriculture in the Central Java region. In implementing organic rice farming, the local government has long launched a program to increase food security through organic farming by farmers by implementing the Rice of Intensification (SRI) System. Purworejo Regency is also an area with high organic rice productivity since farmers are encouraged to cultivate organic rice farming.

Due to the high demand for organic products, organic rice marketing is crucial as it involves customer satisfaction. Organic rice marketing is a series of activities between institutions involved in distributing products or services from producers to consumers. These related institutions will be interconnected and create consumer demand (Pujawan and Mahendrawati, 2016).

There are many long marketing channels in agricultural commodities, including organic rice, so many marketing actors are involved. It can cause much profit from each marketing actor to affect the level of prices received by farmers as producers and paid by end consumers or known as farmers' share and the level of marketing efficiency. If the chain is too long, the producer farmers' price level will be lower and inefficient (Prayitno et al., 2013).

The marketing channel is a series of interdependent organizations and is involved in making a product or service ready for consumption (Rhodes, 1987). In the marketing channel, there are often intermediary institutions, both from producers and end consumers. Intermediaries have roles, including helping to distribute products from producer to end-level consumers.

Marketing margin represents marketing costs and profits received by intermediaries in the marketing system. The marketing margin can also be interpreted as the difference between producers' prices and those paid by consumers. The calculation of marketing margin can use the formula (Pakpahan et al., 1992):

$$M_p = P_r - P_f \dots \dots \dots (1)$$

in which:

- M_p = marketing margin on farmer level (Rp)
- P_r = price on marketing institution level (Rp)
- P_f = price on farmer level (Rp)

Farmer's share analysis is used to determine the share of farmers' prices from the price at the consumer level, expressed as a percentage. Farmer's share can be formulated as follows (Rhodes, 1978):

$$S_m = \frac{P_f}{P_r} \times 100\% \dots \dots \dots (2)$$

in which:

Sm = farmer's share (%)

Pf = price on farmer/retailer level (Rp)

Pr = purchase price on trader/retailer level (Rp)

According to Pakpahan et al. (1992), marketing efficiency is influenced by the size of the marketing margin and the farmer's share. According to Downey and Erickson Cit. Putri et al. (2014), the category of marketing efficiency can also be seen from the criteria for farmer's share in each marketing channel. If the farmer's share value is equal or greater than 40%, the channel is efficient, and if the farmer's share value is less than 40%, then the channel is said to be inefficient.

Ariwibowo's research (2013) shows three marketing channels for organic rice farmers: a short channel that goes directly to consumers, a medium channel with one marketing agency, and a long channel with two marketing agencies. The marketing channel through which most farmers go is the long one.

In Fitriadi research and Nurmalina (2008), there are four types of marketing channels in the marketing of organic rice, wherein the channel IV is the most marketing channels through which the farmers are farmers of the area-collectors-wholesaler-retailer area outside the end-consumer. The most extended channel has the most extensive marketing margin with the farmer's smallest share and the most efficient marketing efficiency.

The marketing mechanism for organic rice that has not been smooth is evident from farmers' low share (this sentence needs to be improved). It happens because most of the farmers pass the longest marketing channel, namely bypassing three marketing agents. The smallest share in this study occurs in the longest channel, namely in the three marketing institutions (Sari and Nurmalina, 2013).

METHOD

The primary method used is a descriptive method or describing an object from the field. The steps of this method are data collection, data analysis, and interpretation of the analysis results. Data collection was carried out using direct survey techniques at the research location, and interviews were conducted with organic rice farmers.

1. Marketing Channel Mechanism

There will be a product flow to reach the consumer in the marketing channel system of a product. Marketing channels can be categorized into four based on their accessibility to the end consumer, as follows:

1. Zero level channel: producer – consumer

2. Channel level one: producer – retailer – consumer

3. Channel level two: producer – wholesaler – retailer – consumer

4. Channel level three: producer – wholesaler – contractor – retailer – consumer

2. Calculation of Marketing Margin

The data used in the analysis of marketing margin in organic rice marketing is the price at the farmer level as a producer and the price at the marketing agency level, so the calculation of marketing margin can use the formula:

$$Mmp = Pr - Pf$$

$$Mp = Ps - Pb \text{ (marketing margin each level of marketing institution)} \dots\dots\dots(3)$$

in which:

Mp = marketing margin on farmer level (Rp)

Pr = price on marketing institution level (Rp)

Pf = price on farmer level (Rp)

The concept of unit measurement in this analysis is as follows:

1. The marketing margin is calculated based on the difference between the purchase price and the rupiah's selling price per kilogram of organic rice.
2. The purchase price level is calculated based on the average purchase price per kilogram of organic rice.
3. The selling price level is calculated based on the average selling price per kilogram of organic rice.

3. Calculation of Farmer's Share

Farmer's share analysis is used to determine the share of farmers' prices from the price at the consumer level, expressed as a percentage. Farmer's share in organic rice marketing can be formulated as follows:

$$Sm = \frac{Pf}{Pr} \times 100\% \dots\dots\dots(4)$$

in which:

Sm = farmer's share (%)

Pf = price on farmer/retailer level (Rp)

Pr = purchase price on trader/retailer level (Rp)

4. Calculation of Marketing Efficiency

According to Downey and Erickson Cit. Putri et al. (2014), the marketing efficiency category can also be seen from the criteria for farmer share in each marketing channel. If the farmer's share value is greater than equal to 40%, the channel is said to be efficient, and if the

farmer's share value is less than 40%, then the channel is said to be inefficient.

5. Simple Correlation Analysis

Correlation analysis is used to measure the strength of the relationship between variables without showing a causal relationship. The strength of the relationship between the dependent and independent variables can be demonstrated by simple correlation analysis. The relationship's strength can be denoted by the symbol r, the tested variable's correlation coefficient. The correlation coefficient value is between -1 and +1. The correlation coefficient can be calculated with the following formula (Jumiati, 2013):

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{\{n\sum x^2 - (\sum x)^2\} \{n\sum y^2 - (\sum y)^2\}}} \dots\dots\dots(5)$$

in which:

- r = correlation coefficient
- n = total of data pair and marketing channel length
- $\sum X$ = sum of variable
- $\sum Y$ = sum of marketing channel length
- $\sum X^2$ = square of variable sum
- $\sum Y^2$ = square of marketing channel length sum
- $\sum XY$ = variable sum times marketing channel length sum

RESULTS AND DISCUSSION

1. The Marketing Channel

Marketing channels can be divided into many levels. Based on the research results, the organic rice marketing channels in Purworejo Regency consist of three types, namely:

1. Farmer – Consumer (short channel)
2. Farmer – Retailer – Consumer (medium channel)
3. Farmer – Wholesaler – Retailer – Consumer (long channel)

The interpretation of the correlation coefficient results is determined by the value of r, which is positive, which means that the relationship between x and y is unidirectional. In contrast, the value of r, which is negative, means

that the relationship is the opposite. In measuring the level of relationship, the following guidelines are used (Sugiyono, 2012):

- 0.00–0.199 = very low
- 0.20–0.399 = low
- 0.40–0.599 = medium
- 0.60–0.799 = strong
- 0.80–1.00 = very strong

Table 1. The Type and Percentage of Organic Rice Marketing Channel 2018

| Channel Type | Total | Percentage (%) |
|--------------|-----------|----------------|
| Short | 5 | 16.6 |
| Medium | 11 | 36.7 |
| Long | 14 | 46.7 |
| Total | 30 | 100.0 |

Source: Primary Data Analyzed in 2018

Based on Table 1, it can be concluded that most marketing channels for organic rice are medium and long channels. Only 16.6% of farmers choose to market their organic rice through short channels, 36% of farmers who go through medium channels, and 46% of farmers who go through long channels. The type of channel a farmer uses will determine how marketing agencies passed through and will later affect marketing margin, farmer's share, and marketing efficiency.

2. Marketing Margins

To find out the marketing margin value, one can first analyze the marketing channel. There will be a marketing agency in each marketing channel that has a specific function and determines its profits, except in zero level marketing channels.

Based on Table 2, it can be concluded that the longer the marketing channel, the greater the marketing margin. There is no marketing margin in the short channel because farmers market their organic rice directly to consumers. In the medium channel, there is an average total marketing margin of Rp. 5,863.64, and in the long channel, there is an average total marketing margin of Rp. 7,031.25. It proves that if more and more marketing agencies are involved in the marketing channel, it will increase their marketing margins.

Table 2. Organic Rice Marketing Margin Analysis 2018

| Marketing Institution | Marketing Channel | | | Average |
|------------------------|-------------------|-----------|-----------|-----------|
| | Short | Medium | Long | |
| Farmer | | 111 | | |
| Sale Price (Rp/Kg) | 17,200.00 | 12,636.36 | 12,468.75 | 14,101.10 |
| Wholesaler | | | | |
| Purchase Price (Rp/Kg) | | | 12,468.75 | 12,468.75 |

Source: Primary Data Analyzed in 2018

The correlation analysis results can be determined by calculating the correlation coefficient, where x is the marketing channel variable, and y is the marketing margin variable. Based on the calculation, it can be seen that the value of $r = 0.899$, which means there is a positive relationship between the marketing channel and the marketing margin. The value of the correlation result is positive so that the relationship between the marketing channel and the marketing margin is also positive, or if the marketing channel is getting longer, then the marketing margin obtained will be even greater and vice versa. The correlation test value of 0.899 indicates a solid relationship between the marketing channel and the marketing margin value.

Farmer's share is an analysis to determine the percentage of farmers' prices from the consumer level. The smaller the farmer's share value in the marketing channel, the smaller the share of farmers' price, and vice versa.

Based on Table 3, it can be concluded that the longer the marketing channel, the smaller the farmer's share value obtained by farmers and vice versa, if the shorter the marketing channel, the greater the farmer's share value obtained by farmers. The largest farmer's share value is in the short channel, which is 100%, which means that farmers' price is the same as the consumer level. In the medium channel, the farmer's share value is 68.30%, which means that the farmer gets 68% of the price at the consumer level, and in the long channel has a farmer's share value of 63.94%, which means that the farmer gets 63.94% of the price at the consumer level.

3. Farmer's Share

Table 3. Rice Organic Farmer's Share Analysis 2018

| Channel Type | Farmer's Share | Value (Rp) |
|----------------|---------------------------|---------------|
| Short Channel | Farmer Price (Rp/Kg) | 17,200.00 |
| | Consumer Price (Rp/Kg) | 17,200.00 |
| | Farmer's share (%) | 100.00 |
| Medium Channel | Farmer Price (Rp/Kg) | 12,636.36 |
| | Consumer Price (Rp/Kg) | 18,500.00 |
| | Farmer's share (%) | 68.30 |
| Long Channel | Farmer Price (Rp/Kg) | 12,468.75 |
| | Consumer Price (Rp/Kg) | 19,500.00 |
| | Farmer's share (%) | 63.94 |

Source: Primary Data Analyzed in 2018

Based on Table 3, it can be seen that if the longer the marketing channel, the smaller the farmer's share will be obtained by farmers and vice versa. The correlation analysis results can be seen by calculating the correlation coefficient formula where x is the marketing channel variable, and y is the farmer's share variable. Based on the calculation, it can be seen that the value of $r = -0.878$, which means there is a negative relationship between the marketing channel and the value of the farmer's share. The value of the correlation results is negative so that the relationship between the marketing channel and marketing margin is also negative or if the marketing channel is more extended, the farmer's share value obtained will be smaller and vice versa. The correlation test value of -0.878 indicates a robust relationship between the marketing channel and the farmer's share value.

4. Marketing Efficiency

According to Downey and Erickson cit. Putri et al. (2014), the marketing efficiency category could also be seen from the criteria for farmer share in each marketing channel. If the farmer's share value is greater than 40%, then the channel is efficient, and if the farmer's share value is less than 40%, then the channel is inefficient. It can be seen from Table 3, the farmer's share value in each marketing channel is more than 40%, which means that all marketing channels are said to be efficient.

Efficient marketing in all organic rice marketing channels is included in the efficient category. It indicates no severe problems related to organic rice marketing, even though various marketing channels are available. The existing marketing margin and farmer's share still show that organic rice marketing is efficient, but it would be nice to increase farmers' role to get higher profits.

CONCLUSIONS

The conclusions of the research that have been carried out are as follows:

1. The most marketing channel for organic rice is the longest channel.
2. The shortest marketing channel for organic rice has the lowest marketing margin.
3. The longest marketing channel for organic rice has the smallest farmer's share.
4. The shortest organic marketing channel has the most efficient marketing efficiency.

REFERENCES

Ariwibowo, A. 2013. Analisis rantai distribusi komoditas padi dan beras di Kecamatan

- Pati Kabupaten Pati. *Economics Development Analysis Journal*. 2:1-9
- Fitriadi, F dan R. Nurmalina. 2008. Analisis pendapatan dan pemasaran padi organik metode System of Rice Intensification (SRI). *Jurnal Pengkajian dan Pengembangan Teknologi Pertanian*. 11:94-103.
- Jumiati, E., D. H. Darwanto., S. Hartono., Masyhuri. 2013. Analisis saluran pemasaran dan margin pemasaran kelapa dalam di daerah perbatasan Kalimantan Timur. *Jurnal AGRIFOR*. 12:1-10
- Pakpahan, A., M. Gunawan., A. Djauhari., S. M. Pasaribu. 1992. *Cassava Marketing in Indonesia*. Binalaksana Offset, Bogor.
- Prayitno, A.P., A. I. Hasyim, S. Situmorang. 2013. Efisiensi pemasaran cabai merah di Kecamatan Adiluhung Kabupaten Pringsewu Provinsi Lampung. *Jurnal Agribisnis Fakultas Pertanian Universitas Lampung*. 1:52-59
- Pujawan, N. dan Mahendrawati. 2016. *Supply Chain Management Edisi 3*. Penerbit Andi. Yogyakarta.
- Putri, Y. R., Santoso, S.I., Roessali, W. 2014. Farmer's share dan efisiensi saluran pemasaran kacang hijau (*Vigna radiata*) di Kecamatan Godong Kabupaten Grobogan. *Jurnal Agri Wiralodra* 6:28-35
- Rhodes, V. J. 1978. *The Agriculture Marketing System*. Wiley. New York.
- Sari, P. N. dan R. Nurmalina. 2013. Pemasaran berjaring beras organik. *Jurnal Pengkajian dan Pengembangan Teknologi Pertanian*. 3: 1-18
- Sugiyono. 2012. *Metode Penelitian Kombinasi (Mixed Methods)*. Alfabeta, Bandung