

Production and Marketing of Organic Vegetables on a CV. Rahayu in Sidera Village, Sigi Biromaru District, Sigi Regency

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ABSTRACT

Organic vegetable production in Indonesia is experiencing rapid development. The global market demands organic products to meet safety for consumption, have high nutrition, and are environmentally friendly. Various kinds of organic vegetables are widely cultivated, especially in tropical climates. What factors affect the production of organic vegetables, and how is the marketing margin of organic vegetables between CV. Rahayu and Carrefour Based on the description of the discussion above, it can be concluded that: The factors of organic vegetable production include: labor, use of fertilizers, use of pesticides, use of seeds and irrigation costs, and marketing of organic vegetable CV. Rahayu is marketed to the modern market, with an average marketing margin of 19.43% or an average of Rp. 1,070.

Keywords – Production; Marketing; Organic Vegetables

INTRODUCTION

In increasing horticultural production, especially vegetables in Indonesia, they are still using conventional farming systems with external inputs. The higher the production, the higher the input of external inputs such as pesticides and fertilizers. The Program to increase horticultural production that has been implemented so far has not been holistic or based on resources but is still partially or based on commodities that are generally more profitable for land resource productivity, with inputs of inorganic production facilities (fertilizers and pesticides) into agricultural agroecosystems which are quite high. From the magnitude of the negative impact, innovation in safe farming techniques is very much needed for the environment and humans. This gave birth to organic farming techniques or organic farming (1).

The existence of great attention to the fulfillment of human needs in the long term and sustainable environmental sustainability is also the basis for the transition of the current agricultural system from conventional to organic farming systems. This is indicated by the participation and role of the government in supporting organic agriculture, namely

through the Ministry of Agriculture launching the "Go Organic 2010" Program in 2001. The government also realizes economic independence by driving strategic sectors of the domestic economy, with the sub- agenda of increasing food sovereignty. One of the targets is to build 1,000 organic farming villages (2). In the "General Guidelines for the Development of 1,000 Organic Farming Villages" compiled by the Ministry of Agriculture, there is no alternative for ensuring integrity except submitting the certification to private certification bodies by optimizing the health and productivity of agroecosystems naturally to produce sufficient, high-quality food and fiber. And sustainable (3).

Organic vegetable production in Indonesia is experiencing rapid development; this is inseparable from the demands of the global market for agricultural products, including meeting safety for consumption, meeting high nutrition, and being environmentally friendly (4).

Organic vegetable production in Indonesia is experiencing rapid development; this is inseparable from the demands of the global market for agricultural products, including meeting safety for consumption, meeting high nutrition, and being environmentally friendly (4). The development of organic products In Indonesia, many kinds of organic vegetables is cultivated, especially in tropical climates. Many organic vegetable producers have sprung up, one of which is CV Organic Agriculture. Rahayu, located in Bulu Pountu Hamlet, Sidera Village, Sigi Biromaru District, Sigi Regency where CV. This Rahayu has organic vegetables produced, amounting to 20 types of Organic vegetables. In addition to vegetable products, herbal products, and seasonal fruit are also produced by CV Organic Agriculture. Grace.

Of the various types of vegetables that have been produced by CV. Rahayu, five commodities are superior in that these commodities must always be present in every production. These vegetables are mustard greens, red spinach, green spinach, kale, and curly lettuce.

This study aims to determine what factors affect the production of organic vegetables in CV. Grace. And to know the marketing margin of organic vegetable products between CV. Rahayu and Carrefour.

METHOD

This research was conducted at CV Rahayu, located in Bolupontujaya Hamlet, Sidera Village, Sigi Biromaru District, Sigi Regency. Respondents were determined by directly interviewing the company's leadership and employees at CV. Grace. These respondents are called internal respondents, while external respondents are taken from several consumers—the data collection in this study through observation, interviews, questionnaires, and literature study.

The data analysis used in the implementation of this research uses two variables, namely the independent variable or the independent variable and the dependent or dependent variable. The independent variable consisted of land area, seeds/seeds, organic fertilizer, organic pesticide, labor, and irrigation costs, while the dependent variable was

the production of organic vegetables. To determine the factors that influence the production of organic vegetables, multiple linear regression analysis (Cobb-Douglas Production Function) was used. The tools used to process the data are using SPSS version 23.

Production function analysis is used to prove the hypothesis in this study. The analytical model used is the Cobb-Douglas production function analysis with the following equation:

$$Y = b_0 \sum_{i=1}^n X_i^{b_i} e^{\mu}$$

Or

$$Y = b_0 + X_1^{b_1} + X_2^{b_2} + X_3^{b_3} + \dots + X_n^{b_n} e^{\mu}$$

Where:

- Y = Production
- b₀ = constant
- X₁ = Labor Variables
- X₂ = Fertilizer Variable
- X₃ = Pesticide Variable
- X₄ = Seed Variable
- X₅ = Variable Irrigation Cost

As for marketing, marketing margin analysis is used as follows:

$$MP = Pr - Pf$$

Where:

- MP = Marketing Margin
- Pr = Prices at retail level
- Pf = Prices at Producer/Farmer level

RESULTS

Marketing channel

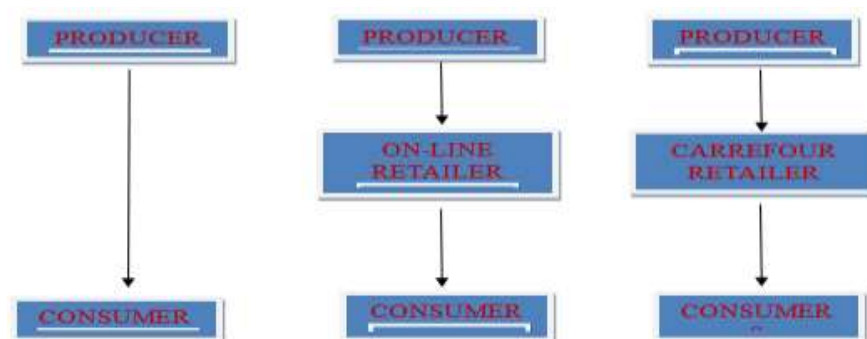


Figure 1. Marketing Channels

They are partnering with supermarkets that, in their marketing, sell various types of vegetables, whereas Mr. Ariwibadi chose Carrefour as a partner that has been carried out so far. For now, the request to partner with this organic vegetable supplier comes from a supermarket currently growing rapidly with its construction, namely Alfamidi mart. However, the supplier has not been able to fulfill this request because of the CV. Rahayu is still focused on serving the demand for organic vegetables for Carrefour.

Using advanced technology by selling online is one of the strategies taken by CV—Rahayu, where consumers can order vegetables directly via the internet, either for personal consumption or for companies.

The need for consumption and the desire to live healthier is one of the CV factors. Rahayu uses an off-line sales strategy, where this strategy invites the public as consumers to ensure that organic vegetables are produced by CV. Rahayu is a completely organic product and free from chemical fertilizers and pesticides. In addition, consumers who come to buy organic vegetables can immediately see demonstration plants of all types of vegetables produced by this company. In addition, consumers can see and, simultaneously, add knowledge about the manufacture of organic fertilizers.

Cobb-Douglas Production Function Analysis

Based on the results of data collection that has been carried out during the research process and then the data is processed using SPSS version 23 so, and the following results are obtained:

The regression analysis results showed an R Square value of 0.932, which explained that the variables from the analysis model above could explain the production amount of 93.2%, with the remaining 6.8% being explained in other models not listed in this study. The F value also shows a value of 0.000 which means that the above model significantly affects CV Rahayu's organic vegetable production. The above values can be seen in the appendix.

The results of the analysis above show that the model from the CV can also be concluded. Rahayu in producing organic vegetables, namely:

$$Y = 82.333 + 966.921X_1 + 8.891 X_2 + 84.57 X_3 - 509.65 X_4 - 0.048 X_5$$

Information:

Y	=	Production
B0	=	constant
X1	=	Labor Variables
X2	=	Fertilizer Variable
X3	=	Pesticide Variable
X4	=	Seed Variable
X5	=	Variable Irrigation Cost

The analysis model above explains that for every ten units of production factors, organic vegetable production from CV rahayu will produce 5,589,173 kg, which indicates

that CV rahayu production factors have a positive effect on total organic vegetable production. Apart from the Seed and Irrigation variables that hurt CV Rahayu's organic vegetable production, it can also be concluded that the use of seeds and irrigation costs can be reduced given the insignificant effect on total production.

Marketing Margin Analysis

Marketing margin analysis is carried out to determine the difference in unit prices at the farmer level with the retail level or each marketing chain. Marketing margin calculations are carried out. In addition, the marketing margin can also be determined by adding up the marketing costs with the profits from each marketing agency. Based on the data obtained from the results of direct interviews and the list of questions on the questionnaire sheet at the time of research with the leadership of CV. Rahayu as a producer and Carrefour as a retailer, the prices of only commodity vegetables are obtained with the following margins:

Table 1. Types of vegetables and price list of commodities/packs

NO	VEGETABLE TYPE	PRICE LIST/PACK		BIG MARGIN
		PRODUCER	CARREFOUR	
1	Mustard greens	5,500	6,250	750
2	Curly lettuce	6,000	7,500	1,500
3	Green Spinach	5,200	6,250	1,050
4	Red Spinach	5,500	6,500	1,000
5	Water spinach	5,200	6,250	1,050

Based on the table above, it can be calculated how much margin the retailer receives. The margin earned is:

Mustard greens

$$\begin{aligned}\text{Margin} &= \text{Retailer-level price} - \text{Producer price} \\ &= \text{Rp. } 6.250 - \text{Rp. } 5.500 \\ &= \text{Rp. } 750\end{aligned}$$

Based on the above calculations, it can be seen that the marketing margin of organic mustard greens CV. Rahayu, which Carrefour resells, is worth Rp. 750,- or 13.63% of the price at the producer level.

Green Spinach

$$\begin{aligned}\text{Margin} &= \text{Retailer-level price} - \text{Producer price} \\ &= \text{Rp. } 6.250 - \text{Rp. } 5.200 \\ &= \text{Rp. } 1.050\end{aligned}$$

Based on the above calculation, it can be seen that the marketing margin of organic green spinach CV. Rahayu, which Carrefour resells, is worth Rp. 1.050,- or 20.19% of the price at the producer level.

Red Spinach

$$\begin{aligned}\text{Margin} &= \text{Retailer-level price} - \text{Producer price} \\ &= \text{Rp. 6.500} - \text{Rp. 5.500} \\ &= \text{Rp. 1.000}\end{aligned}$$

Based on the above calculation, it can be seen that the marketing margin of organic red spinach CV. Rahayu, which Carrefour resells, is worth Rp. 1,000,- or 18.18% of the price at the producer level.

Water spinach

$$\begin{aligned}\text{Margin} &= \text{Retailer-level price} - \text{Producer price} \\ &= \text{Rp. 6.250} - \text{Rp. 5.200} \\ &= \text{Rp. 1.050}\end{aligned}$$

Based on the above calculations, it can be seen the marketing margin of organic kale CV. Rahayu, which Carrefour resells, is worth Rp. 1.050,- or 20.19% of the price at the producer level.

Curly lettuce

$$\begin{aligned}\text{Margin} &= \text{Retailer-level price} - \text{Producer price} \\ &= \text{Rp. 7.500} - \text{Rp. 6.000} \\ &= \text{Rp. 1.500}\end{aligned}$$

Based on the above calculations, it can be seen the marketing margin of organic kale CV. Rahayu, which Carrefour resells, is worth Rp. 1.500,- or 25% of the price at the producer level.

CONCLUSION

This study concludes that the marketing channel, CV. Rahayu entrusts Carrefour as a partner where all types of vegetables are produced by CV. Rahayu will be marketed to the modern market with mutually agreed terms. And a large marketing margin from CV vegetables. Rahayu an average of 19.43% or an average of Rp. 1,070.

SUGGESTION

Recommended suggestions to always innovate by bringing up new products and also having a market share that is in great demand.

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