Marketing efficiency of pepper order in Bukit Kemuning Village North Lampung

N Cahyati *
* Politeknik Negeri Lampung, Bandar Lampung, Indonesia
* niacahyati@gmail.com

Received : 14 August 2022  Revised : 16 August 2022  Accepted : 20 August 2022

ABSTRACT: Indonesia is the main supplier of black pepper to the United States market with shipments of 20,423 metric tons (47%), followed by Brazil 8,715 metric tons (20%), Vietnam 7,963 metric tons (20%) and India 5,600 metric tons (13%). The price of black and white pepper changes every year. In 2018 the price of black pepper was at the level of Rp. 29,500 and in 2019 it was Rp. 30,000. This paper is aimed at analyzing the effect of analyzing the efficiency of pepper trading in Bukit Kemuning Village, Bukit Kemuning District, North Lampung Regency. The data analysis research method used is analysis of trading efficiency consists of margin of trading, farmers share and efficiency of trading. The results obtained is pepper trading activities include farmers, village collectors, wholesalers, retailers and consumers. The pepper trading system has two channels. There are 25% of farmers who sell pepper on channel I, most of them (75%) sell on channel II. Trading system I channel is more efficient than channel II based on indicators of margin value, farmer share value, profit and cost ratio, and calculation of trading efficiency. The use of superior seeds, fertilizers and medicines in pepper GAP needs to be an important agenda for pepper farmers to increase pepper productivity. Intensive policy instruments of local government both in terms of output prices and input prices of pepper can spur the growth and productivity of Lampung pepper commodities.

Keywords: efficiency, farmer share, margin, marketing, pepper

INTRODUCTION

Indonesia is the main supplier of black pepper to the United States market with shipments of 20,423 metric tons (47%), followed by Brazil 8,715 metric tons (20%), Vietnam 7,963 metric tons (20%) and India 5,600 metric tons (13%). The price of black and white pepper changes every year. In 2018 the price of black pepper was at the level of Rp. 29,500 and in 2019 it was Rp. 30,000 (Nuni Anggraini, Yolandika, et al., 2022). Pepper agribusiness development faces problems that are not simple, including: the procurement of production facilities is not efficient, the availability of superior seeds and fertilizers is limited, cultivation technology is still conventional, processing technology is not hygienic, and the role of farmer institutions and marketing is not supportive. Integrated development in the commodity system starting from the subsystem of production facilities, farming (on-farm), processing and increasing value added (value added), business/production orientation to meet market needs (market driven-off-farm), supporting institutions, and other supports in an integrated manner. integrated and sustainable is an important agenda that must be carried out (Noer et al., 2018).

People's pepper plantations have several weaknesses, namely low pepper productivity, stem rot disease attacks, and seeds that are less than superior which causes the pepper planting area to tend to continue to decline. Institutional and lack of knowledge of farmers about the importance of the pepper agribusiness system also makes farmers less motivated to continue to run pepper farming and prefer to convert to other plantation crops such as coffee plants. Therefore, it is necessary to investigate the financial feasibility and efficiency of the pepper farming business system as information on profitable business research for farmers (Bakrie et al., 2022) (Yama, 2022).
METHOD

The object of this research is the analysis of financial feasibility and efficiency of the pepper trading system. The research was conducted in Bukit Kemuning Village, Bukit Kemuning District, North Lampung Regency. The research uses a quantitative design with case study research techniques (Natalia et al., 2022) (Natalia et al., 2022). Sampling for the financial feasibility of pepper farming was determined based on land ownership stratification of 0.5 ha, 1 ha and 2 ha, because the average type of pepper farming tended to be homogeneous so that the sample was taken by 2 farmers/hamlets (Anggara et al., 2022). There are 2 hamlets in Bukit Kemuning Village, namely hamlet I and hamlet II. The number of respondents in the trading system consisted of 12 farmers, 2 collectors, 1 wholesaler, 3 Bukit Kemuning retailers, 2 Bandar Lampung retailers and 20 final consumers. According to (Hardiyanti, 2022), analysis of the level of profit and financial feasibility of pepper farming, with investment feasibility criteria. Analysis method that is used was indicators of trading efficiency (Cahyati et al., 2022)(Hutsoit, 2022).

a. Trading margin
The total trading system margin obtained by the trading system involved in the trading system is formulated as \( M_{ji} = m_{ji} \). The distribution of trading margins can be seen based on the percentage of profit to trading costs (Ratio Profit Margin/RPM) in each trading system (Wulandari & Warningsih, 2022).

b. Farmer's Share
Farmer's Share analysis is useful for knowing the share of prices received by farmers from prices at the consumer level expressed in percentages (%)(Natalia et al., 2022).

c. Trading efficiency
Efficiency of the trade system is a comparison between the overall cost and the value of the overall product being marketed (Nuni Anggraini, Anggara, et al., 2022).

RESULT AND DISCUSSION

Trading system analysis
The price that applies in Bukit Kemuning District at the time of data collection is Rp. 35,000, such a price is highly dependent on the quality of pepper produced by farmers. At the pepper farmer level, the costs incurred include maintenance, harvesting, cleaning and transportation activities which are assessed based on the selling price of pepper. The costs include (Yama & Unreawati, 2022):

1. Activities at farmer level
   Pepper farmers in Bukit Kemuning Subdistrict have a diversified farming business which includes coffee and lowland rice farming. This level of diversification greatly affects the pepper trading system, because time, energy, and capital are not fully used for the pepper trade system, so that the farmers' activities in the trade system are harvesting and selling (Clara Yolandika et al., 2017b).

2. Activities at the level of collectors and wholesalers
   Collector traders carry out pepper transactions in warehouses where collectors or traders come to pepper farmers' houses. Pricing at the farm level depends on the availability of pepper. Collectors buy high prices when the availability of pepper is small and vice versa (Nuni Anggraini, Yolandika, et al., 2022).

3. Activities at the retail level
   Retailers are generally located in the sub-district market and in making purchases only from collecting traders, so that retailers do not buy directly from farmers because retailers do not buy in one location only, some even come from outside the sub-district (Clara Yolandika et al., 2015).

4. Trading Pattern
In Figure 1 it can be seen that there are 2 channels of trading system, starting with farmers selling their products to village collectors with a total selling volume of 15,000 kg. In channel I, farmers sell 15,000 kg of pepper to village collectors, selling 25% of the total to Bukit kemuning retailers to consumers. In channel II as much as 75% of pepper from farmers to village collectors and distribution to wholesalers, and wholesalers distribute again to retailers in Bandar Lampung and consumers (Utoyo & Yolandika, 2018a) (Utoyo & Yolandika, 2018b) (Sofyani & Yolandika, 2021).

Details:

a) Channel I = 1-2-4-6 (25%)
b) Channel II = 1-2-3-5-6 (75%)

Figure 1. Pepper marketing channels on Bukit Kemuning Village

Margin, share and efficiency of trading
The details of the trading margin, share and efficiency of the trading system are as follows:

| Information                      | Cost (Rp/kg) | Share % |
|----------------------------------|--------------|---------|
| Farmer's selling price           | Rp 35,000    | 63.64   |
| Collector merchant               |              |         |
| Purchase price                   | Rp 35,000    | 63.64   |
| Transportation costs             | Rp 167       | 0.30    |
| Labor costs                      | Rp 333       | 0.61    |
| Packing fee                      | Rp 167       | 0.30    |
| Trading margin                   | Rp 5,000     | 9.09    |
| Profit                           | Rp 4,333     | 7.88    |
| Rpm                              | 12           | 0.02    |
| Selling price                    | Rp 40,000    | 72.73   |
| Yellow hill retailer             |              |         |
| Purchase price                   | Rp 40,000    | 72.73   |
| Transportation costs             | Rp 1,000     | 1.82    |
| Packing fee                      | Rp 1,000     | 1.82    |
| Trading margin                   | Rp 15,000    | 27.27   |
| Profit                           | Rp 13,000    | 23.64   |
| Rpm                              | 7            | 0.01    |
| Selling price                    | Rp 55,000    | 100.00  |
| Consumer                         | Rp 55,000    |         |
| Total cost                       | Rp 2,667     |         |
The pepper trade system in channel I is presented in Table 5, the respondent farmers sell pepper to village collectors at a price of Rp. 35,000/kg and share 63.64%. Village collectors sell back to Bukit Kemuning retailers at a price of Rp. 40,000/kg and share 72.73%. Bukit Kemuning retailers resell to consumers at a price of Rp. 55,000/kg (Utoyo et al., 2018)(Clara Yolandika et al., 2021). The RPM obtained by village collectors is Rp. 12.00 means that for every Rp. 1.00 spent, you will get a profit of Rp. 12.00. The RPM obtained by the Bukit Kemuning retailer is Rp. 7.00 means that for every Rp. 1.00 spent, you will get a profit of Rp. 7.00. The total cost on channel I is Rp. 2,667/kg, the total profit is Rp. 17,333/kg and a total margin of Rp. 20,000/kg and a large trading efficiency of 20.63% (Sutarni et al., 2019)(Handayani et al., 2018). The details of the trading margin, share and efficiency of the trading system are as follows:

The pepper trade system in channel II which is presented in Table 6, the respondent farmers sell pepper to village collectors at a price of Rp. 35,000/kg and share 46.67%. Village collectors sell back to wholesalers at a price of Rp. 40,000/kg and 53.33% share. Wholesalers resell to retailers in Bandar Lampung at a price of Rp. 60,000/kg and share 80.00%. Bandar Lampung retailers resell to consumers at a price of Rp.
Marketing efficiency of pepper order in Bukit Kemuning Village North Lampung
N Cahyati

75,000/kg. The RPM obtained by village collectors is Rp. 6.00 means that for every Rp. 1.00 spent, you will get a profit of Rp. 6.00. The RPM obtained by wholesalers is Rp. 21.00 means that for every Rp. 1.00 spent, you will get a profit of Rp. 21.00 and the RPM of retailers in Bandar Lampung is Rp. 10.00 means that for every Rp. 1.00 spent, you will get a profit of Rp. 10.00. So, the total cost on channel II is Rp. 2,900, total profit of Rp. 37,100 and a total margin of Rp. 40,000 and the efficiency of the trade system is 25.86% (C Yolandika et al., 2021).

Table 7. Efficiency values in each pepper trading system

| Channel | Profit (Rp/Kg) | Total cost (Rp/Kg) | Margin (Rp) | Farmer share (%) | Ratio profit margin | EP (%) |
|---------|----------------|-------------------|------------|------------------|---------------------|-------|
| I       | 17.333         | 2.667             | 20,000     | 63.64            | 18,00               | 20.63 |
| II      | 37.100         | 2.900             | 40,000     | 46.67            | 34,00               | 25.86 |

The channel pattern of the pepper trade in Bukit Kemuning District can be seen in the channel pattern in several ways based on the results of the analysis that has been carried out, namely as follows:

1. Knowing the value of the margin of trade in each channel of the trade system of each of the institutions involved in the trade system. The pepper trading channel in Bukit Kemuning District which has the lowest margin value is found in the pattern I trading channel with a margin value of IDR 20,000. The low margin in the first trading system illustrates that this trading system is a short trading system, or in other words, the trading system I channel only involves a few collecting traders and retailers. When viewed from the side of the margin obtained from each channel, the first trade system can be said to be more efficient than the second trade system (Hendrik et al., 2021).

2. Knowing the value of farmer share in each channel of the trade system. The pepper trading channel in Bukit Kemuning District which has the highest farmer share value is found in the first trading system with a value of 63.64% and the second trading channel with 46.67%. If viewed from the side of the value of the margin and farmer share obtained from each channel, the trade system I channel can be said to be more efficient than the trade system II channel. If the share received by producers is greater than 50%, then the trade system channel is classified as efficient, whereas if the trade system channel is smaller than 50%, then the trade system channel is not classified as efficient (Bathara et al., 2021).

3. Knowing the value of the ratio of profits and costs in each channel of the trade system. The pepper trading channel in Bukit Kemuning District which has the highest profit and cost ratio value is in the second trade system of IDR 37,100 with the ratio value of each institution being 18 and 34 respectively, between collectors and wholesalers. When viewed from the ratio of the trade channel II, it has not been able to provide a fair share of the overall price paid by consumers, even though the overall value of the profit and cost ratio is the highest. Wholesalers generally get a higher profit ratio because there are fewer costs compared to collectors and retailers (N Anggraini, Berliana, et al., 2022).

The trade system channel I technically involves a few trade system institutions compared to the trade system channel II. The first trade system involves two trading institutions, namely collectors and retailers in Bukit Kemuning, while the second trade system involves three trading institutions, namely collectors, wholesalers and retailers in Bandar Lampung. The efficient value of the trading system I and II in Bukit Kemuning District is 20.63% and 25.86%, respectively (Hendri et al., 2022).

According to (Handayani et al., 2017), it is stated that the rules of trading decisions are said to be efficient if the EP value = 0-25%. The results of this study indicate that the calculation of the efficiency of the trade system from each channel of the trade system is different. In channel I it can be said to be efficient because the EP is 20.63%, but in channel II it is not said to be efficient because the EP is 25.86% (Berliana et al., 2018). So, it can be concluded that the trade system I channel is more efficient than the trade system II channel. This refers to previous research that has been carried out, namely the research of (Clara Yolandika et al., 2021).
et al., 2016), which states that an efficient trade system channel is the channel with the least percentage value.

The pepper trading channel that has been formed in Bukit Kemuning District has two trade system patterns, the most efficient trade system channel from the two channels based on indicators of margin value, farmer share value, profit and cost ratio, as well as calculations using the formula for efficiency of trade system, then the trade system channel is pattern I, it can be said to be efficient and the pattern II trade channel is inefficient. Basically, a trade system can be said to be efficient or not, so it is not only seen in terms of efficiency values, there is not a single standard determination to state that the trade system channel is efficient due to the complex variables of a trading system itself (Clara Yolandika, 2016).

CONCLUSION

Pepper trading activities include farmers, village collectors, wholesalers, retailers and consumers. The pepper trading system has two channels. There are 25% of farmers who sell pepper on channel I, most of them (75%) sell on channel II. Trading system I channel is more efficient than channel II based on indicators of margin value, farmer share value, profit and cost ratio, and calculation of trading efficiency. The use of superior seeds, fertilizers and medicines in pepper GAP needs to be an important agenda for pepper farmers to increase pepper productivity. Intensive policy instruments of local government both in terms of output prices and input prices of pepper can spur the growth and productivity of Lampung pepper commodities.

REFERENCE

Anggara, R. W., Anggraini, N., Lurrohman, K., Sitanggang, R., & Fransiska, W. F. (2022). Marketing and financial aspects of balado banado chips processing business in Bandar Lampung city. Economic Management and Social Sciences Journal (ECOMANS), 1(1), 1–7. https://doi.org/10.56787/ecomans.v1i1.4

Anggraini, N, Berliana, D., & Yolandika, C. (2022). The Strength of Motives in Food Choosing Behaviour in Fishermen Based on Social Layers in the Coastal area of Bandar Lampung, Indonesia. IOP Conference Series: Earth and Environmental Science, 1012(1), 012007. https://doi.org/10.1088/1755-1315/1012/1/012007

Anggraini, Nuni, Anggara, R. W., Lurrohman, K., Sitanggang, R., & Fransiska, W. F. (2022). Production Management of Balado Banado Chips Processing Business in Bandar Lampung City. Economic Management and Social Sciences Journal (ECOMANS), 1(2), 45–49. https://doi.org/10.56787/ecomans.v1i2.3

Anggraini, Nuni, Yolandika, C., Utoyo, B., & Irawati, L. (2022). Proses Pengambilan Keputusan Konsumen Dalam Pemelbian Produk Lada Di Provinsi Lampung. Jurnal Agriep, 23(1), 43–51.

Bakrie, C. R., Delanova, M. O., & Yani, Y. M. (2022). Pengaruh Perang Rusia Dan Ukraina Terhadap Perekonomian Negara Kawasan Asia Tenggara. Jurnal Caraka Prabu, 6(1), 65–86.

Bathara, L., Nugroho, F., Yolandika, C., & Hamzah, G. (2021). Livelihood Assets of Small-Scale Fisherman in Tanah Merah District, Indragiri Hilir Regency, Riau Province, Indonesia. IOP Conference Series: Earth and Environmental Science, 934(1), 012042. https://doi.org/10.1088/1755-1315/934/1/012042

Berliana, D., Yolandika, C., & Anggraini, N. (2018). Supply Chain Performance of Banana Chip Industry in Bandar Lampung. International Journal of Sustainable Biomass and Bioenergy, 2(1), 1–6.

Cahyati, N., Fitriani, Berliana, D., & Fatih, C. (2022). Financial Feasibility Pepper Order in Bukit Kemuning Village North Lampung. Economic Management and Social Sciences Journal (ECOMANS), 1(2), 55–59. https://doi.org/10.56787/ecomans.v1i2.6

65 | Economic, Management, and Social Sciences Journal (ECOMANS)
Handayani, S., Anggraini, N., & Yolandika, C. (2018). Efisiensi Usahatani Padi Organik di Kecamatan Candipuro Efficiency of Organic Rice Farming in Candipuro Districts. 19–24.

Handayani, S., Fitriani, & Yolandika, C. (2017). Pengantar Koperasi untuk Perguruan Tinggi (Edisi ke 1). UB Press.

Hardiyanti, F. (2022). Management and procurement of sweet orange production input research center for orange plants and subtropical fruit (Balitjestro), Batu city, East Java. Economic Management and Social Sciences Journal (ECOMANS), 1(1), 8–14. https://doi.org/10.56787/ecomans.v1i1.1

Hendri, R., Yulinda, E., & Yolandika, C. (2022). Halal Practices on the Shrimp Paste Processing Industries for Business Development in Rokan Hilir, Riau Indonesia. International Journal of Halal Research, 4(1), 14–18.

Hendrik, H., Hendri, R., & Yolandika, C. (2021). Impact of the Covid-19 Pandemic on Activities Socio-Economic Floating Net Cages (FNC) Business in the Koto Panjang Hydropower Reservoir, Riau Province IOP Conf. Ser. Earth Environ. Sci. 934(1), 012037. Impact of the. https://doi.org/10.1088/1755-1315/934/1/012037

Hutasaikt, M. F. (2022). Human Resource Management of Pt. Nestle Indonesia Panjang Factory Lampung, Indonesia. Economic Management and Social Sciences Journal (ECOMANS), 1(2), 36–44. https://doi.org/10.56787/ecomans.v1i2.2

Natalia, D., Pratiwi, E. H., Andika, M. G., Nur Rahmah, S., & Ivana, V. W. (2022). Cost analysis of semi organic spinach (Ipomoea aquatica L) cultivation in Lampung State Polytechnic Agricultural Land. Economic Management and Social Sciences Journal (ECOMANS), 1(1), 21–25. https://doi.org/10.56787/ecomans.v1i1.10

Noer, S. R., Zakaria, W. A., & Murniati, K. (2018). Analisis Efisiensi Produksi Usahatani Padi Ladang Di Kecamatan Sidomulyo Kabupaten Lampung Selatan. Jurnal Ilmu-Ilmu Agribisnis, 6(1), 17. https://doi.org/10.23960/jiia.v6i1.17-24

Sofyani, T., & Yolandika, C. (2021). Tingkat Kesejahteraan Rumah Tangga Generasi Kedua Pemukim Kembali di Desa Koto Mulyid Kecamatan Kampar Provinsi Riau. 2(April), 1–6.

Yama, N. N. S. (2022). Quality Control and Production Targets At the Research Center for Orange and Subtropical Fruit City of Batu, East Java. Economic Management and Social Sciences Journal (ECOMANS), 1(2), 50–54. https://doi.org/10.56787/ecomans.v1i2.5

Yama, N. N. S., & Unteawati, B. (2022). Production Activities and Procurement of Input Research Center for Orange and Subtropical Fruit City of Batu, East Java. Economic Management and Social Sciences Journal (ECOMANS), 1(2), 32–35. https://doi.org/10.56787/ecomans.v1i2.1
Marketing efficiency of pepper order in Bukit Kemuning Village North Lampung
N Cahyati

Yolandika, C, Anggraini, N., & Berliana, D. (2021). Food Security Level of Fisherman Household in Bandar Lampung, Indonesia. *IOP Conference Series: Earth and Environmental Science, 934*(1), 012047. https://doi.org/10.1088/1755-1315/934/1/012047

Yolandika, Chaterine. (2022). Social Concepts of Traditional Justice and Methods of Settlement of Traditional Law in Aceh, Indonesia. *Economic Management and Social Sciences Journal (ECOMANS), 1*(1), 15–20. https://doi.org/10.56787/ecomans.v1i1.8

Yolandika, Clara. (2016). *Analisis Supply Chain Management Brokoli CV. Yan’s Fruits and Vegetable di Kabupaten Bandung Barat*. IPB University.

Yolandika, Clara, Berliana, D., & Anggraini, N. (2021). Efisiensi Rantai Pasok Ikan Patin di Pringsewu, Lampung Pangasius Supply Chain Perfomance Efficiency in Pringsewu, Lampung. *Journal of Food System & Agribusiness, 5*(2), 107–115.

Yolandika, Clara, Lestari, D. A. H., & Situmorang, S. (2015). Keberhasilan Koperasi Unit Desa (KUD) Mina Jaya Kota Bandar Lampung Berdasarkan Pendekatan Tripartite. *Jurnal Ilmu-Ilmu Agribisnis, 3*(4), 385–392.

Yolandika, Clara, Nurmalina, R., & Suharno. (2016). Marketing Analysis of Broccoli in Lembang West Java Indonesia (Case Study: CV. Yan’s Fruits and Vegetables, Lembang, West Java). In A. Rifin, M. P. van Dijk, D. P. de Boer, H. Mudde, J. van Rooyen, & S. Jahroh (Eds.), *Strengthening Indonesian Agribusiness: Rural Development and Global Market Linkages* (pp. 241–250). IPB University. http://agribisnis.ipb.ac.id/wp-content/uploads/2017/04/Husnul-Khotimah-Stefan-Von-Cramon-Taubadel-dkk-VERTICAL-MARKET-INTEGRATION-PERFORMANCE-OF-INDONESIAN-RICE-MARKET-CHAIN.pdf

Yolandika, Clara, Nurmalina, R., & Suharno, S. (2017a). Analisis Nilai Tambah Brokoli Kemasan Cv. Yan’S Fruits and Vegetable Di Kecamatan Lembang Bandung Barat. *Journal of Food System & Agribusiness, 1*(1), 30–37. https://doi.org/10.25181/jofsa.v1i1.84

Yolandika, Clara, Nurmalina, R., & Suharno, S. (2017b). Rantai Pasok Brokoli di Kecamatan Lembang Kabupaten Bandung Barat dengan Pendekatan Food Supply Chain Networks. *Jurnal Penelitian Pertanian Terapan, 16*(3), 155–162. https://doi.org/10.25181/jppt.v16i3.93