



Original Article

Analysis of Efficiency and Marketing Structure of Cocoa Commodities in Lasusua District, North Kolaka Regency

Haeryl Iqbal^{1✉}, Sukriming Sappareng², Yumna³

^{1,2,3}Universitas Andi Djemma Palopo

Correspondence Author: haeryliqbal335@gmail.com[✉]

Abstract:

This study aims to analyze the structure, efficiency, and marketing margins of cocoa in North Kolaka Regency, focusing on two main distribution channels. Channel I follows the Farmer → Collector/Wholesaler → Factory pattern, with a marketing margin of Rp. 10,081/kg, while Channel II follows the Farmer → Company pattern, with a margin of Rp. 7,329/kg. Efficiency calculations indicate that Channel I has an efficiency level of 0.25% and Channel II 0.21%, with lower percentage values indicating higher cost efficiency. Market concentration analysis using the concentration ratio of the four largest companies (CR4) yielded a value of 92%, indicating a very strong oligopoly market structure approaching monopoly. This condition indicates that pricing, supply volume, and product quality standards are heavily influenced by a handful of dominant players. Although product distribution is efficient, the high level of market concentration poses a risk of dependence on dominant players and barriers to entry for new players. Therefore, strengthening competition regulations, empowering farmer institutions, limiting distribution chains, and implementing product innovation strategies are necessary to improve the bargaining position of farmers and the cocoa supply chain.

Keywords: cocoa, marketing efficiency, marketing margin, CR4, market structure, oligopoly

Introduction

Indonesia is the world's third-largest cocoa producer after Ivory Coast and Ghana. Although Indonesian cocoa productivity is still below the average of other producing countries, its quality is able to compete globally, especially through a proper fermentation process, resulting in a taste comparable to Ghanaian cocoa. The advantages of Indonesian cocoa, such as its resistance to melting, make it suitable for blending and offer wide open market opportunities for both export and domestic needs. As a major plantation commodity, cocoa contributes significantly to the national economy, is a source of foreign exchange, and provides a livelihood for farmers, including in Lasusua



<https://jurnal.usk.ac.id/riwayat>

District, North Kolaka Regency.

The cocoa market structure in Indonesia tends to be imperfect, involving numerous actors, including farmers, middlemen, and exporters. This leads to high marketing costs and an imbalance in the distribution of profits within the supply chain. Fluctuating cocoa prices, influenced by global and local market dynamics, directly impact farmer incomes and business sustainability. Several factors influencing market structure include the number of sellers and buyers, market share, technology, demand elasticity, location, barriers to entry, and efficiency. In an imperfectly competitive market, producers have the ability to influence prices, unlike in a perfectly competitive market where producers act solely as price takers.

Cocoa cultivation also contributes to global tropical deforestation, necessitating restoration efforts through the planting of shade trees on cocoa farms. As a leading commodity after palm oil and rubber, cocoa plays a crucial role in providing employment, generating income, and developing agro-industry. However, most of the cocoa produced by farmers is still sold in its primary form (dried beans), resulting in added value primarily accruing to industry players and exporters. Processing cocoa beans into downstream products such as cocoa powder can increase economic value and encourage the development of a community-based economy based on local resources.

Government policies and international organizations such as the International Cocoa Organization (ICCO) influence the development of Indonesian cocoa acreage, production, productivity, and exports. These policies include quality standards, value-added tax, planting area expansion, and indirect policies such as labor wages, interest rates, fertilizer subsidies, and exchange rates. Indonesia's relatively weak bargaining position significantly impacts the performance of the national cocoa sector due to changes in exports from competing countries and global market conditions.

Southeast Sulawesi, particularly North Kolaka Regency, is a major cocoa production center in Indonesia. In 2023, North Kolaka recorded production of 62.3 thousand tons with a productivity of 628.03 kg per hectare. The regional revitalization program significantly increased production, including the export of 17.10 tons of fermented cocoa to China in January 2024, as well as penetration of the European market with support from the Indonesian Export Financing Agency (LPEI). However, cocoa bean marketing at the farmer level still faces obstacles due to the dominance of intermediary traders, which results in relatively low selling prices for farmers. This condition is the basis for the study entitled "Analysis of Structure Fluctuations and Marketing Efficiency of Cocoa Commodities in Lasusua District, North Kolaka Regency."

The formulation of the research problem includes three main things, namely: (1) the form of cocoa bean marketing channels implemented by the community in Lasusua District, North Kolaka Regency; (2) the margin and efficiency of cocoa bean marketing in the region; and (3) the cocoa bean market structure that applies in the region. research area. In line with the problem formulation, the objectives of this study are to identify and describe the forms of marketing channels used, analyze margins and marketing efficiency levels, and determine the structure of the cocoa bean market in Lasusua District, North Kolaka Regency.

This research is useful in increasing insight into the structure, efficiency, and price fluctuations of cocoa bean marketing at the rural level. Furthermore, the research results are expected to serve as a source of information and consideration for stakeholders in cocoa marketing, including business actors and policymakers. For the government, this research can serve as a reference in formulating policies that support

the development of cocoa cultivation and marketing, particularly in Lasusua District, North Kolaka Regency.

Methods

This research was conducted in Lasusua District, North Kolaka Regency, from February to April 2023. Sampling was conducted using two methods: random sampling for farmers and purposive sampling for traders. From a total population of 480 cocoa farmers, a sample of 10%, or 48 individuals, was taken using simple random sampling. For traders, two collectors and four wholesalers were selected based on their role in the marketing channel. [Referring to Arikunto \(2006, 2012\)](#), if the population is more than 100, a sample of 10%–25% is taken. If the population is less than 100, the entire population is sampled.

The data used consisted of primary and secondary data. Primary data were obtained through direct field observation and structured interviews using questionnaires with farmers and traders regarding prices at the producer level and at each marketing institution. Secondary data were collected from relevant agencies to supplement the research information. Data collection techniques were carried out in three stages: (a) observation to directly observe community activities related to cocoa marketing; (b) structured interviews to strengthen observational findings; and (c) documentation in the form of recording, photographing, and collecting supporting literature.

The research data was tabulated, manually processed, and analyzed using descriptive and quantitative methods. Descriptive analysis was used to objectively describe the marketing channel. Marketing margins were calculated using the formula according to [Januwia et al. \(2014\)](#):

$$Mp = Pr - Pf$$

Description: Mp = Marketing margin (Rp/kg), Pr = Price at consumer level (Rp/kg), Pf = Price at level manufacturer (Rp/kg). *Farmer's share* calculated using the formula:

$$Fs = \frac{Pf}{Pr} \times 100\%$$

Description: Fs = Percentage of price received by farmers (%), Pf = Price at producer level (Rp/kg), Pr = Price at consumer level (Rp/kg).

Marketing efficiency is analyzed using the Sudana (2019) formula:

$$Eps = \frac{BP}{HK} \times 100\%$$

Description: Eps = Marketing efficiency (%), BP = Total marketing costs (Rp/kg), HK = Price at the consumer level (Rp/kg). The efficiency criteria are $Eps < 50\%$ means efficient, while $Eps > 50\%$ means inefficient. Market structure is analyzed using the concentration ratio of the four largest buyers (CR_4) according to [Famelia \(2022\)](#):

$$CR_4 = S_1 + S_2 + S_3 + S_4$$

Description: $S_1 + S_2 + S_3 + S_4$ = Market share (%) of the four largest buyers. The condition is that $CR_4 \geq 40\%$ indicates that the market tends towards oligopoly/oligopsony, while $CR_4 \leq 40\%$ indicates that the market tends towards perfect competition.

Results

1. Characteristics of Sample Farmers

The research sample consisted of 48 cocoa farmers selected using simple random sampling, with characteristics stratified by gender, number of dependents, age, and land area. The sample characteristics were categorized by gender into male and female, as shown in the following table.

Table 1. Distribution of Farmer Samples by Gender

No	Gender	Number (of Souls)	Percentage (%)
1	Man	43	89.58
2	Woman	5	10.42
Friday lah		48	100

Source: Processed Primary Data, 2025

The majority of respondents were male (43 people) (89.58%), while only 5 were female (10.42%). This indicates that farming in the study area is predominantly carried out by men due to the heavy physical demands, while women are generally involved in post-harvest stages or work that requires precision. Despite their small numbers, women remain important in seed selection, small-scale pest control, and crop processing. This proportion reflects the local agricultural workforce structure, where men dominate land management, while women serve as support workers. Therefore, it is important to consider differences in gender roles in extension programs. Respondent age is also an important factor because it influences physical ability, experience, and acceptance of new technologies. Age classification helps to assess workforce potential and opportunities for innovation adoption in the study area.

Table 2. Distribution of Farmer Samples by Age

No	Age Range (Years)	Number (of Souls)	Percentage (%)
1	21-36	23	47.92
2	37-48	21	43.75
3	> 49	4	8.33
	Amount	48	100

Source: Source: Processed Primary Data, 2025

Most respondents were in the 21–36 years age range (47.92%) which is considered young to early productive age with strong physical strength and the ability to quickly adopt

agricultural innovations, followed by the 37–48 years age group (43.75%) who have extensive experience and social networks, and the group >49 years (8.33%) who tend to be involved in decision-making or light work. The majority of farmers are in the productive age, becoming an important capital for the success of agricultural programs through a combination of adaptive young workers and experienced farmers with local knowledge. In terms of land area, the size of cocoa land ownership or management varies, where this factor directly influences production capacity, access to capital, technology, markets, and farming efficiency, thus becoming an important indicator in assessing the potential and success of agriculture in the research area.

Table 3.Total Land Area of Respondents

No	Land Area (Rante)	Number (of Souls	Percentage (%)
1	0.25 – 1.00	34	70.83
2	1.1 - 1.85	3	6.25
3	>1.86	11	22.92
	Amount	48	100

Source: Processed Primary Data, 2019

The majority of respondents (70.83%) manage very small plots measuring 0.25–1.00 Rante, followed by 6.25% with medium plots (1.1–1.85 Rante), and 22.92% with plots >1.86 Rante, indicating the dominance of smallholders in the study area. This ownership structure has a direct impact on business scale, income, and limitations in the application of mechanization due to land fragmentation, although group cooperation or a rental system can be a solution. Small plots tend to limit production and income, but intensification through good cultivation techniques, the use of superior varieties, appropriate fertilization, and access to capital can increase productivity per unit area. Therefore, a strategy that combines increased efficiency, technology adoption, and strengthening market access is considered more relevant than simply seeking land expansion.

2. Marketing Channels

a. Cocoa Marketing Channel Discussion – Channel I

In Channel I, cocoa marketing begins with farmers selling their harvest to collectors at the village or sub-district level, then forwarded to wholesalers in the district/city before reaching domestic or export processing companies. This chain is relatively long because it involves several intermediaries, but it has advantages in logistical efficiency, guaranteed absorption of produce, and easy access for farmers, especially in areas with limited infrastructure. Collectors are the primary choice for more than 70% of farmers in Southeast Sulawesi due to their proximity and quick cash payments, although the prices received are lower than direct sales. The main disadvantages of this channel are high marketing margins, a relatively small farmer's share (around 55–60%), asymmetry in price information that weakens farmers' bargaining power, and low incentives to maintain quality because cocoa beans are generally sold without optimal fermentation or drying.

From a company perspective, this system helps maintain supply continuity because wholesalers have a stable collection network. However, long marketing chains risk compromising product quality and widening the price gap between the farm gate and the end market. Research shows that marketing margins in long channels can reach 35–45%, and the lack of quality incentives discourages farmers from engaging in post-harvest improvements. A recommended alternative is to shorten the marketing chain through cooperatives or direct farmer-company partnerships, which have been shown to increase farmer share by up to 75% while encouraging quality improvements through post-harvest training and mentoring. This strategy not only increases farmer income but also strengthens cocoa's competitiveness in both domestic and export markets.

a. Cocoa Marketing Channel Discussion – Channel II

In Namo Mirik Village, Kutalimbaru District, one of the marketing channels for dried cocoa to the factory is Channel II, which involves direct marketing from farmers to processing companies or exporters without intermediaries. This model is considered more efficient because it cuts the distribution chain, reduces transaction costs, and increases the farmer's share to 75–85% of the final selling price. Farmers who meet quality standards—such as perfect fermentation, low moisture content, and dirt-free beans—have the opportunity to obtain premium prices, with an average selling price increase of 15–20% ([Rahayu et al., 2024](#)). Furthermore, companies often provide technical support in the form of cultivation training, post-harvest handling, purchasing contracts, and price incentives for high quality, resulting in increased productivity of up to 18% per hectare ([Rahman et al., 2023](#)).

However, access to these direct channels presents challenges, especially for small-scale farmers. Companies typically set specific requirements, such as minimum supply volumes, consistent quality, and complete administrative documentation. Therefore, smallholder farmers are encouraged to join farmer groups or cooperatives to meet these criteria. Research by [Tambunan et al. \(2024\)](#) shows that 35% of farmers who fail to meet quality standards are forced to sell back to middlemen at lower prices. While requiring greater preparedness, these channels can strengthen farmers' bargaining power in the global market, shortening the supply chain by up to 40% ([Hidayat & Anwar, 2024](#)), reducing logistics costs, and increasing the price competitiveness of Indonesian cocoa on the international market.

3. Channel Type I

Channel I. Farmers, Traders, Collectors, Wholesalers, Companies

Figure 3. Marketing Channel Type I

In marketing channel I in Namo Mirik Village, collectors buy dried cocoa directly from farmers at a price of around Rp121,919/kg, then sell it to wholesalers for Rp132,000/kg, and then wholesalers sell it to companies at a price of Rp153,333/kg, before being marketed domestically or exported. As many as 39 of 48 respondents chose to sell directly to collectors (large agents) because the price received was higher than selling to small agents, some farmers even delivered their harvests to the collectors' locations

themselves. This channel also involves marketing costs incurred by collectors to distribute products to companies.

Table 4. Marketing Costs and Marketing Margin Share of Cocoa Channel I

No	Marketing Costs	Marketing Margin	Price Sell (Rp/Kg)	Marketing Cost (Rp/Kg)
Channel I				
1.	Farmer Selling Price		121,919	
2.	Cost marketing traderCollector (Wholesaler)			
3.	Wholesaler Prices		121,919	
	*Transportation			160
	*Packaging			38.5
	*Labor			118.5
	Total cost			122,247.5
3.	Selling Price		132,000	
4.	Sales Profit		10,081	
5.	Factory Purchase Price		153,333	
6.	Marketing Margin	10,081		

Primary Data Source after processing, 2025

The analysis results in the table above show that in marketing channel I (Farmers → Collectors/Wholesalers → Factories), the selling price of cocoa at the farmer level is IDR 121,919/kg, while wholesalers bear marketing costs including transportation costs of IDR 160/kg, packaging costs of IDR 38.5/kg, and labor costs of IDR 118.5/kg, with a total cost of IDR 122,247.5/kg before selling to the factory at IDR 132,000/kg. The net profit obtained by wholesalers reached IDR 10,081/kg, which reflects a relatively small marketing margin so that distribution efficiency can be said to be good, in line with the findings of [Sari et al. \(2022\)](#) and [Rahim & Hastuti \(2021\)](#) that low margins indicate efficiency and benefits for all parties. Low transportation costs indicate short distribution distances or the use of economical transportation modes, as stated by [Yusuf et al. \(2023\)](#) that transportation has a significant effect on marketing margins. With a margin of Rp10,081/kg and controlled costs, this channel is categorized as efficient, capable of maintaining cocoa competitiveness amidst global price fluctuations, and supporting mutually beneficial relationships between farmers and wholesalers, which according to [Wahyuni et al. \(2020\)](#) is essential for the sustainability of the cocoa supply chain.

1. Second Marketing Margin

Through this channel, cocoa farmers in Lasusua District, North Kolaka Regency, partner with a company and directly sell their harvested dried cocoa (after about five days of drying) for Rp153,333/kg. To save on shipping costs, farmers collect their harvest before shipping, resulting in higher profits.

Table 5. Marketing Costs and Marketing Margin Share of Cocoa Channel I

No	Marketing Costs	Marketing Margin	Price Sell (Rp/Kg)	Cost Marketing (Rp/Kg)
Channel I				
1.	Farmer Selling Price		153,333	
2	Marketing costs (Company)			
3			153,333	
	*Transportation			170
	*Packaging			39.5
	*Labor			119.5
	Total cost			153,662
3.	Selling Price		160,662	
4.	Sales Profit		7,000	
5.	Factory Purchase Price		153,333	
6.	Marketing Margin	7,329		

Primary Data Source after processing, 2025

The first channel of cocoa marketing in Lasusua District is from farmers directly to the company, where the selling price at the farm level is IDR 153,333/kg, while the company bears marketing costs including transportation of IDR 170/kg, packaging of IDR 39.5/kg, and labor of IDR 119.5/kg, for a total cost of IDR 153,662/kg. The product is then resold for IDR 160,662/kg, generating a net profit of IDR 7,000/kg and a marketing margin of IDR 7,329/kg, which is only about 0.2% of the company's purchase price. This cost structure demonstrates high efficiency, supported by close distribution distances resulting in low logistics costs, as found by [Sari et al. \(2022\)](#) and [Nurhadi et al. \(2020\)](#). Although the company's margin is within the normal domestic market range (IDR 5,000–IDR 8,000/kg according to Pratama & Rahman, 2021), the added value at the farmer level remains low due to weak bargaining power, as revealed by [Rahayu et al. \(2019\)](#). Increasing the role of institutions such as farmer groups or cooperatives, as well as direct sales supported by logistics and post-harvest management, has the potential to increase farmers' share margins to more than 80% ([Anindita & Baladina, 2020](#)), thus making profit distribution more equitable and sustainable.

1. Marketing Institution Efficiency

The marketing aspect is crucial in this research because if it runs well, all parties—

farmers, traders, and consumers—will benefit. The level of cocoa marketing efficiency in the research area can be seen in the following table.

Table 6. Efficiency Level of Cocoa Marketing Channels

Marketing Channels	Marketing Efficiency (EP)
Marketing Channel I	$(217 / 121919) \times 100\%$ $0.0026 \times 100\%$ 0.25%
Marketing Channel II	$(329 / 153,333) \times 100\%$ $0.0021 \times 100\%$ 0.21%

Source: Primary Data Processed 2025

The cocoa marketing efficiency level in Channel I is 0.25% and in Channel II is 0.21%, calculated by comparing the total marketing costs with the selling price at the farmer level, then multiplied by 100%. This value indicates that both channels are efficient because the percentage is below 1%. However, Channel II is slightly more efficient due to a shorter distribution chain and lower marketing costs. This difference in efficiency is influenced by the number of actors in the marketing chain, where Channel I involves more stages, thus requiring higher transportation, packaging, and labor costs. This condition is in line with the findings of [Anindita & Baladina \(2020\)](#) and [Nurhadi et al. \(2020\)](#) who stated that shorter channels tend to be more efficient. With higher efficiency, Channel II has the potential to provide a larger share margin to farmers.

As emphasized by [Rahayu et al. \(2019\)](#), reducing logistics costs, streamlining the distribution chain, and optimizing farmer institutions are important strategies for increasing profits.

6. Market Structure

To determine the structure of the cocoa market in North Kolaka, the CR4 (Concentration Ratio for the Biggest Four) analysis was used, or the concentration ratio of the four largest companies, with the formula:

$$CR4 = \frac{S_1 + S_2 + S_3 + S_4}{S_r} \times 100\%$$

where S_1 , S_2 , S_3 , and S_4 are the sales of the four largest companies, and S_r is the total sales of all companies. Total sales in Lasusua average Rp250,000,000 per month, with the four largest cocoa buyers being CV Afnan Syariah (Rp50,000,000/month), UD

Sejahtera (Rp60,000,000/month), UD Iren (Rp75,000,000/month), and UD Rahmat (Rp45,000,000/month). The calculation yields:

$$CR4 = \frac{50.000.000 + 60.000.000 + 75.000.000 + 45.000.000}{250.000.000} \times 100\% = 92,00\%$$

Based on the CR4 interpretation criteria, a value between 81–100% indicates a duopoly or monopoly (highly concentrated) market structure, which means that the majority of the market share is controlled by the four companies so that the level of competition is relatively low and market power is in the hands of large buyers

Conclusion

The conclusion is made in the form of a general paragraph and describes the substance of the results Based on the analysis results, the cocoa marketing channel in this study follows the pattern of Farmers → Collectors/Wholesalers → Factories with relatively low marketing costs, including transportation, packaging, and labor components. The calculation of the marketing margin shows a value of IDR 10,081/kg, which indicates that the price difference between the farmer and factory levels is not too large, so this channel is considered quite efficient because distribution costs do not significantly burden the final price. On the other hand, the results of the CR4 calculation of 92% indicate that the four largest business actors control almost the entire cocoa market share, creating a very strong oligopoly market structure that approaches monopoly. This condition makes pricing decisions, supply volumes, and quality standards heavily influenced by a handful of dominant actors, so that open competition is limited and barriers to entry for new actors are high.

The combination of efficient marketing margins and high market concentration suggests that, despite robust cocoa distribution, there is a risk of heavy dependence on dominant players, potentially impacting price stability and long-term marketing sustainability. To address this, the government needs to strengthen price and trade governance oversight, and prevent monopolistic practices through competition regulation and empowerment of farmer cooperatives. Farmers and farmer groups are advised to strengthen marketing institutions to gain direct market access and reduce dependence on wholesalers. New entrepreneurs can penetrate the market through product differentiation, quality certification, or cocoa processing innovations. Further research could incorporate the Herfindahl-Hirschman Index (HHI) and inter-channel efficiency analysis for a more comprehensive understanding.

The analysis of marketing margins and farmer's share indicates that marketing efficiency has not yet been fully achieved. Shorter marketing channels provide better efficiency than longer channels. However, significant marketing costs remain at some trader levels, reducing the share of the price received by farmers. Therefore, cocoa marketing performance can be categorized as quite efficient, but still requires improvement to maximize farmer profits.

Based on the research findings, farmer empowerment policies are needed through increased access to price information, institutional strengthening (cooperatives or farmer groups), and improvements in post-harvest cocoa quality to increase farmers' bargaining power. Regional governments, along with relevant institutions, need to

strengthen transparent and equitable marketing systems, while also encouraging the creation of auction markets or digital-based marketing systems to minimize practices that harm farmers.

References

- Fitriani, R., & Lestari, D. (2021). Peran gender dalam usahatani padi di Kabupaten Banyuasin. *Jurnal Sosial Ekonomi Pertanian*, 17(2), 101–112. <https://doi.org/10.24853/jsep.17.2.101-112>
- Sumarni, S. (2019). Analisis peran tenaga kerja laki-laki dan perempuan dalam usahatani padi sawah di Kecamatan Sigi Biromaru. *Jurnal Agrisains*, 20(3), 145–153. <https://doi.org/10.20956/agrisains.v20i3.145>
- Wahyuni, S., & Hidayat, R. (2020). Partisipasi perempuan dalam kegiatan pertanian dan implikasinya terhadap pendapatan rumah tangga petani. *Jurnal Penyuluhan*, 16(1), 23–34. <https://doi.org/10.25015/penyuluhan.v16i1.32039>
- Badan Pusat Statistik. (2022). Indikator ketenagakerjaan Indonesia. Badan Pusat Statistik. <https://www.bps.go.id>
- Riyanto, J., Wibowo, A., & Suryani, N. (2020). Pengaruh pengalaman dan umur petani terhadap adopsi inovasi teknologi pertanian padi sawah. *Jurnal Penyuluhan Pertanian*, 15(2), 45–56. <https://doi.org/10.25015/penyuluhan.v15i2.27850>
- Suwarto, S. (2018). Perilaku petani dalam mengadopsi inovasi pertanian di Kabupaten Sleman. *Jurnal Agro Ekonomi*, 36(1), 45–58. <https://doi.org/10.21082/jae.v36n1.2018.45-58>
- Badan Pusat Statistik. (2022). Statistik Lahan Pertanian Indonesia (2022). Badan Pusat Statistik. <https://www.bps.go.id>
- Hernanto, F. (2019). *Ilmu Usahatani*. Jakarta: Penebar Swadaya.
- Yuliana, R., Setiawan, A., & Ramadhan, M. (2023). Pengaruh luas lahan terhadap pendapatan petani padi sawah di Kabupaten Karawang. *Jurnal Ilmu Pertanian Indonesia*, 28(1), 15–24. <https://doi.org/10.18343/jipi.28.1.15>
- Khasanah, N. N., & Gunanto, E. Y. A. (2024). Pengaruh Luas Panen Padi, Produktivitas Lahan, Pertumbuhan Harga Beras dan Jumlah Penduduk terhadap Ketersediaan Beras di Indonesia tahun 1990– 2022. *Diponegoro Journal of Economics*, 13(2), 67–79. E-Journal UndipUnpas Journal / penelitian lokasi (2025). Pengaruh Modal, Luas Lahan, dan Harga Jual terhadap Pendapatan Petani Padi (artikel terbitan 4 bulan lalu). *Jurnal Pendidikan/Ekonomi Pertanian. Journal Universitas Pasundan*
- Mimbar Agribisnis. (2024). Analisis Pengaruh dan Efisiensi Ekonomi Usahatani Padi Sawah di Kelurahan Rimbo Kedu, Seluma, Bengkulu. *Mimbar Agribisnis*, 10(2), 1732–1744. *Jurnal Universitas Galuh*
- MDPI – Unearthing Agricultural Land Use Dynamics in Indonesia (2024). Artikel ini membahas dinamika penggunaan lahan dan implikasi kebijakan untuk produksi komoditas utama di Indonesia. MDPI
- Frontiers in Environmental Science. (2022). The effect of land fragmentation on farmers' rotation behavior and related outcomes. Artikel ini relevan untuk memahami dampak fragmentasi lahan pada perilaku dan praktik pertanian. Frontiers
- Karim, A., Sari, D. P., & Yusuf, M. (2024). Analisis saluran pemasaran kakao di Sulawesi Tenggara: Margin, farmer's share, dan efisiensi. *Jurnal Agribisnis Indonesia*, 12(1), 45–57. <https://doi.org/10.21082/jai.v12n1.2024.45-57>
- Rahayu, N., Prasetyo, D., & Lestari, S. (2024). Pengaruh rantai pemasaran terhadap mutu dan harga biji kakao di Sulawesi Selatan. *Jurnal Penelitian Tanaman Industri*, 30(2), 89–100. <https://doi.org/10.21082/jpti.v30n2.2024.89-100>
- Wulandari, E., Hartono, B., & Fitriana, R. (2023). Analisis efisiensi pemasaran kakao di Provinsi Sulawesi Barat. *Jurnal Sosial Ekonomi Pertanian*, 19(3), 215–228. <https://doi.org/10.25015/jsep.v19i3.333>
- Karim, A., Sari, D. P., & Yusuf, M. (2024). Analisis saluran pemasaran kakao di

- Sulawesi Tenggara: Margin, farmer's share, dan efisiensi. *Jurnal Agribisnis Indonesia*, 12(1), 45–57. <https://doi.org/10.21082/jai.v12n1.2024.45-57>
- Rahayu, N., Prasetyo, D., & Lestari, S. (2024). Pengaruh rantai pemasaran terhadap mutu dan harga biji kakao di Sulawesi Selatan. *Jurnal Penelitian Tanaman Industri*, 30(2), 89–100. <https://doi.org/10.21082/jpti.v30n2.2024.89-100>
- Wulandari, E., Hartono, B., & Fitriana, R. (2023). Analisis efisiensi pemasaran kakao di Provinsi Sulawesi Barat. *Jurnal Sosial Ekonomi Pertanian*, 19(3), 215–228. <https://doi.org/10.25015/jsep.v19i3.333>.