Masterpiece Journal Society Service Insight
e-ISSN: 3090-2185 *Page*: 859-877
Volume 2, Issue 2 (2026)

The Influence of Selling Price and Production Volume on Copra Farmers' Income in Bonea Makmur Village, Bontomanai District, Selayar Islands Regency

Rifka Alfiana*[1], Asriati[2], A. Nur Achsanuddin UA[3]
Development Economics Study Program, Faculty of Economics and Business
*e-mail: rifkialfiana@gmail.com

Abstract: This study examines the effects of selling price and production quantity on copra farmers' income in Bonea Makmur Village, Bontomanai District, Selayar Islands Regency, Indonesia. The study addresses the economic challenges faced by smallholder coconut farmers, particularly price fluctuations, production constraints, and limited bargaining power within agricultural marketing channels. A quantitative associative research design was employed, involving 64 copra farmers selected through simple random sampling from a population of 176 farmers. Primary data were collected through questionnaire-based interviews, observation, and documentation, and analyzed using multiple linear regression. The findings reveal that selling price has a positive and statistically significant effect on farmers' income ($\beta = 0.390$; $t = 3.529$; $p = 0.001$). Similarly, production quantity demonstrates a positive and significant effect ($\beta = 0.290$; $t = 2.627$; $p = 0.011$). Furthermore, both variables jointly exert a significant influence on farmers' income ($F = 11.191$; $p < 0.001$). The coefficient of determination ($R^2 = 0.268$) indicates that selling price and production quantity explain 26.8% of the variation in farmers' income. Selling price emerges as the more dominant explanatory variable. These findings highlight the importance of strengthening farmers' market bargaining power, improving copra quality, and enhancing production efficiency. The study provides empirical insights for developing integrated agricultural policies that promote price fairness, productivity improvement, and the economic welfare of smallholder copra farmers.

Keywords: Selling Price; Production Quantity; Farmers' Income; Copra

1. Introduction

Agriculture plays a strategic role in Indonesia's national economy, particularly in providing food for the population and supplying raw materials for various industries. The agricultural sector comprises several subsectors, including food crops, horticulture, fisheries, livestock, and forestry. It also serves as a major source of livelihood for Indonesian communities, as a substantial proportion of the population depends on agricultural activities. However, agricultural productivity remains below its expected potential. One of the contributing factors is the limited capacity of human resources in managing agricultural land and processing agricultural products. Most farmers in Indonesia continue to rely on conventional methods in their agricultural activities, which may constrain productivity and the optimal utilization of available resources (Tamungku et al., 2019). Economic development is an important indicator of regional progress, as economic growth reflects improvements in the overall economic conditions of a region (Sukirno, 2005). In this regard, agricultural development plays a significant role in Indonesia's national development. Its importance is supported by the country's abundant and diverse natural resources, its substantial contribution to national income and exports, the large proportion of the population dependent on agricultural activities, and its essential role in ensuring food availability and supporting rural economic development (Tamungku et al., 2019).

Among the various agricultural commodities, coconut is one of Indonesia's most strategic plantation crops, with considerable social, cultural, and economic significance. Coconut cultivation serves as a major source of income for millions of farmers and contributes to national foreign exchange earnings through the export of various derivative products, including coconut oil, coconut milk, and copra. Furthermore, coconut plays an important role in supporting household livelihoods, particularly in coastal communities, by providing employment opportunities and strengthening local economic activities. Its economic potential can be further enhanced through improved agricultural productivity, effective land utilization, and the processing of raw materials into higher-value products. Consequently, the coconut subsector represents an important component of national economic development and a

driver of community-based economic growth at the local level (Fardani et al., 2025). Despite its considerable economic potential, coconut farmers continue to face challenges in maximizing their income. One of the main problems is the relatively low and fluctuating selling prices received by farmers compared with prices in the final consumer market. Limited capabilities in production management and marketing further contribute to this situation, resulting in an imbalance between the economic value generated and the efforts invested by farmers. This condition is exacerbated by the dominance of intermediaries in the copra market, whose substantial profit margins contribute to price disparities between producers and final consumers (Sari & Wahyuni, 2022).

Indonesia is among the world's major copra-exporting countries, ranking third after Papua New Guinea and Thailand. Nevertheless, Indonesian copra exports are still predominantly characterized by primary products with relatively low added value. Copra is generally exported as an industrial raw material, which is subsequently processed into crude coconut oil and various derivative products, including cooking oil, soap ingredients, chemicals, and cosmetics. Although international demand for processed coconut products is expected to increase, Indonesia remains relatively dependent on semi-processed coconut products, such as copra, which require further processing before they can be directly utilized by international consumers (Dalimunthe et al., 2023). South Sulawesi Province is one of Indonesia's major coconut-producing regions. According to the 2023 Plantation Statistics of South Sulawesi Province, the total coconut plantation area reached 92,750 hectares, with copra production amounting to approximately 72,453 tons (BPS Sulawesi Selatan, 2024). Within the province, Selayar Islands Regency is recognized as one of the leading coconut-producing regions. Coconut trees are widely cultivated across the islands, extending from coastal areas to remote inland communities, primarily through smallholder plantations. The regency occupies a leading position in terms of coconut plantation area and production in South Sulawesi. Its average coconut plantation area exceeds 18,000 hectares, with annual copra production reaching approximately 20,000 tons. This figure is higher than the production recorded in other regencies, including Bone, with approximately 11,000 tons, and Pinrang, with approximately 4,000 tons (Perkebunan, 2024). The processing of coconuts into copra therefore represents an important opportunity to increase product added value, improve farmers' income, and strengthen the regional economy. Accordingly, improving copra production and managing its selling prices are essential to supporting farmers' welfare and the sustainable development of the local coconut-based economy.

Coconut is a multipurpose plantation crop with substantial economic value, particularly when properly managed. In Indonesia, approximately 98% of coconut plantations are smallholder-owned, demonstrating the commodity's significant contribution to rural livelihoods. One of the secondary products derived from coconut is copra, which provides considerable economic value to farmers. Processing coconuts into copra can generate greater economic returns than selling fresh coconuts directly because the processed product offers additional value and provides an alternative source of income. This demonstrates that coconut has considerable potential not only as a primary agricultural commodity but also as a higher-value processed product through appropriate management and downstream processing (Andika & Iskandar, 2023). Copra is one of the most important derivative products of coconut and serves as a primary raw material for coconut oil production and its various derivatives. Farmers commonly process harvested coconuts into copra for subsequent sale. Although coconut processing generally involves relatively low production costs, primarily requiring farmers' labor, the selling prices received do not always provide adequate economic returns (Andilan et al., 2021b). Copra itself refers to the dried flesh of mature coconuts, which is processed through various drying methods, including sun drying and smoking. The drying techniques and resulting copra quality significantly influence the quality of coconut oil produced. In Indonesia, copra processing has become an important agro-industrial activity for rural communities because the production process is relatively simple and requires comparatively low investment, making it a potential source of household income

(Perkebunan, 2020). Thus, the development of the copra industry is closely associated with improving agricultural productivity, product quality, and farmers' economic welfare. As an important coconut derivative, copra also supports the domestic and international markets for coconut oil and other processed products (Perkebunan, 2020).

However, the copra industry in Selayar Islands Regency faces several significant challenges that affect production continuity and farmers' income. One of the main problems is the limited availability of raw coconuts for copra processing. Increasing demand for peeled coconuts for export markets has reduced the supply of coconuts available to local copra producers. The imbalance between supply and demand has contributed to substantial increases in coconut and copra prices in the market, without being accompanied by an improvement in production volume (News, 2023). In addition to market-related constraints, weather conditions also significantly affect coconut production and copra processing. Prolonged dry seasons can disrupt the fruiting cycle of coconut trees, resulting in declining harvest volumes. Conversely, during rainy or cloudy periods, traditional copra drying processes become more difficult. High moisture content can cause coconut flesh to develop mold, consequently reducing the quality of the resulting copra. These unpredictable weather conditions create difficulties for farmers in maintaining stable production levels and consistent product quality (Perkebunan, 2020).

Another contributing factor is the increasing age of coconut trees in Selayar Islands Regency. Many existing trees have exceeded their productive age, resulting in declining harvest yields and limiting farmers' capacity to meet market demand. In response to this situation, the regional government, through the Regent of Selayar Islands, introduced a program to plant five million coconut trees as a long-term strategic initiative to restore plantation productivity and ensure the sustainability of the coconut sector (Selayar, 2022). Furthermore, the limited adoption of modern copra-processing technologies remains a major obstacle for farmers in Selayar Islands Regency. Most farmers continue to depend on traditional drying methods using sunlight or smoke, which are highly vulnerable to weather conditions and may produce copra with excessive moisture content and relatively low quality. The adoption of technologies such as solar-hybrid copra dryers and biomass-fueled electric ovens offers opportunities to improve drying efficiency by up to 50%, reduce moisture content to below 7%, and increase selling prices by approximately 20–30% through the production of premium-quality copra suitable for export markets. Nevertheless, limited access to capital, technical training, and electricity infrastructure in remote areas continues to hinder the adoption of these technologies, thereby constraining improvements in farmers' income despite the growing potential of the global copra market (Putra et al., 2021).

These interconnected problems create economic uncertainty for copra farmers, particularly when market prices increase while production volumes decline. Although higher selling prices theoretically provide opportunities to increase farmers' income, limited production quantities may prevent farmers from fully benefiting from favorable market conditions. Consequently, increases in selling prices do not necessarily translate into significant improvements in household income when production remains constrained. If these conditions persist, they may adversely affect farmers' economic welfare and the sustainability of the regional economy. Based on these conditions, examining the factors that determine copra farmers' income is essential. In particular, selling price and production quantity represent two important economic factors that may influence the income received by farmers. However, their respective and simultaneous contributions need to be empirically examined to provide a clearer understanding of the economic conditions experienced by copra farmers. Therefore, this study aims to analyze the effect of selling price and production quantity on the income of copra farmers in Bonea Makmur Village, Selayar Islands Regency. The findings are expected to provide empirical evidence that can support the formulation of more effective strategies and policies for improving copra production, strengthening farmers' economic resilience, increasing household income, and supporting regional government initiatives for the sustainable development of the coconut sector.

2. Method

Pada This study employed an associative quantitative research design to examine the effect of selling price and production quantity on the income of copra farmers. A quantitative associative approach was selected because it enables the identification and statistical examination of relationships and effects between independent and dependent variables. According to Sugiyono (2019), quantitative research involves numerical data analyzed using statistical techniques to test predetermined hypotheses. Similarly, Putri and Santosa (2019) explain that associative quantitative research is used to examine the effects of two or more variables through statistical approaches, particularly structured surveys and multiple linear regression analysis. The research was conducted in Bonea Makmur Village, Bontomanai District, Selayar Islands Regency, from January to February 2026. The study used primary and secondary data. Primary data were collected directly from copra farmers through questionnaire-based interviews covering selling prices, production quantities, and farmers' income. Secondary data were obtained from books, previous research findings, the Central Statistics Agency (BPS), and other relevant institutions to support the research objectives. The study population consisted of 176 copra farmers in Bonea Makmur Village. Using simple random sampling and Slovin's formula with an error tolerance of 10%, the sample size was determined to be 64 respondents.

Data were collected through three techniques: (1) **observation**, involving direct examination of copra production practices, cultivated land areas, and farmers' agricultural activities; (2) **questionnaire-based interviews**, conducted individually with respondents to obtain quantitative information regarding the research variables; and (3) **documentation**, involving the collection of photographs and records of production activities, agricultural land conditions, and copra marketing processes. Respondents' perceptions were measured using a five-point Likert scale, as recommended by Sugiyono (2019), ranging from strongly agree (5), agree (4), undecided (3), disagree (2), to strongly disagree (1). The study examined three variables: selling price (X1), production quantity (X2), and farmers' income (Y). According to Sugiyono (2019), operational definitions translate theoretical concepts into measurable indicators that can be empirically examined. Selling price was measured by the selling price of copra per kilogram, copra quality, and local market conditions, expressed in rupiah per kilogram (Rp/kg). Production quantity was measured through total copra production (kg), coconut plantation area, and harvesting frequency. Farmers' income was measured through total revenue (selling price multiplied by production quantity), total production costs, and net income, expressed in rupiah (Rp). Data analysis employed multiple linear regression to examine the individual and simultaneous effects of selling price and production quantity on copra farmers' income. The regression model was formulated as follows:

$$Y = \alpha + b1X1 + b2X2 + e$$

Where Y represents copra farmers' income, α represents the constant, b1 and b2 represent the regression coefficients, X1 represents selling price, X2 represents production quantity, and e represents the error term accounting for other variables outside the research model. Before conducting hypothesis testing, the research instruments were evaluated for validity and reliability. Instrument validity and reliability were assessed to ensure that the collected data accurately and consistently represented the research variables (Sugiyono, 2019). The validity test employed Pearson product-moment correlation by comparing the calculated correlation coefficient (r-count) with the critical value (r-table). An instrument was considered valid when r-count exceeded r-table (Sugiyono, 2019). Reliability was assessed using Cronbach's alpha to evaluate the internal consistency of questionnaire responses. According to Sugiyono (2019), reliability indicates the consistency of measurement results when the same research object is examined. Ghozali (2018) states that a Cronbach's alpha value greater than 0.60 indicates acceptable reliability, with values approaching 1.00 reflecting higher internal consistency. Classical assumption tests were subsequently performed, comprising normality and heteroscedasticity

tests. The normality test used the Kolmogorov–Smirnov method to determine whether the data were normally distributed, with a significance value greater than 0.05 indicating normality (Gunawan, 2020). The heteroscedasticity test examined whether the residual variance remained constant across observations. The absence of heteroscedasticity was indicated by a significance value greater than 0.05 between the independent variables and the absolute residuals.

Finally, hypothesis testing was conducted through partial and simultaneous significance tests. The partial significance test (t-test) was used to determine the individual effects of selling price and production quantity on farmers' income, with the other independent variable held constant. A significance value below 0.05 indicated a statistically significant individual effect, whereas a value above 0.05 indicated no statistically significant effect. The simultaneous significance test (F-test) was used to examine whether selling price and production quantity jointly influenced farmers' income. A significance value below 0.05 indicated that the independent variables had a statistically significant simultaneous effect on the dependent variable. These statistical procedures provided measurable criteria for evaluating the research hypotheses and determining the extent to which the two independent variables contributed to variations in copra farmers' income.

3. Result and Discussion

3.1 Result

3.1.1 Descriptive Analysis of Research Variables

The descriptive analysis was conducted to examine respondents' perceptions of selling price, production quantity, and copra farmers' income in Bonea Makmur Village. Each variable was measured using six questionnaire items involving 64 respondents. The analysis focused on response frequencies, percentages, and mean scores to identify the characteristics of each research variable.

a. Selling Price (X1)

Table 1. Descriptive Analysis of the Selling Price Variable (X1)

Item	SS		S		RR		TS		Total		Mean
	F	%	F	%	F	%	F	%	F	%	
X1.1	32	50,00	14	21,88	9	14,06	9	14,06	64	100,00	4,08
X1.2	25	39,68	21	33,33	10	15,87	7	11,11	64	100,00	3,97
X1.3	34	53,13	18	28,13	6	9,38	6	9,38	64	100,00	4,25
X1.4	42	65,63	14	21,88	3	4,69	5	7,81	64	100,00	4,45
X1.5	38	59,38	7	10,94	10	15,63	9	14,06	64	100,00	4,16
X1.6	36	56,25	16	25,00	6	9,38	6	9,38	64	100,00	4,28

Source: Primary data, processed (2026).

The selling price variable (X1) was measured using six questionnaire items covering the alignment of selling prices with local market prices, price profitability, the influence of product quality on selling prices, efforts to maintain copra quality, market price fluctuations, and the effects of price changes on farmers' income. Overall, the results indicate relatively high mean scores, reflecting farmers' awareness and direct experience of selling price dynamics in their agricultural activities. Item X1.4, concerning farmers' efforts to maintain copra quality to obtain better selling prices, recorded the highest mean score of 4.45. A total of 42 respondents (65.63%) strongly agreed, while only 3 respondents (4.69%) were undecided and 5 respondents (7.81%) disagreed. This finding indicates that farmers

recognize product quality as an important strategy for obtaining more competitive market prices.

Item X1.6, concerning the effect of changes in copra prices on farmers' income, recorded the second-highest mean score of 4.28. The majority of respondents strongly agreed (56.25%) or agreed (25.00%), indicating that farmers directly experience the effects of price fluctuations on their income. This perception is consistent with the regression results, which identify selling price as the more dominant predictor of copra farmers' income. Item X1.3 recorded a mean score of 4.25, indicating that respondents recognize the relationship between copra quality and selling prices. Meanwhile, X1.5 obtained a mean score of 4.16, suggesting that farmers have varying perceptions regarding the frequency of market price changes. Differences in market information access, distance to trading centers, and marketing practices may contribute to these variations.

Item X1.1 recorded a mean score of 4.08, indicating that some farmers remain uncertain whether the selling prices they receive fully reflect prevailing local market prices. Limited access to market information, dependence on intermediaries, and weak bargaining positions may contribute to this condition. Item X1.2 obtained the lowest mean score of 3.97, suggesting that some farmers consider the selling prices insufficient to provide reasonable returns relative to the labor and production costs incurred. Overall, the descriptive findings demonstrate that selling price is an important consideration for copra farmers. Nevertheless, concerns regarding price fairness and profitability indicate the need to improve market information access and strengthen farmers' bargaining positions within the copra marketing chain.

b. Production Quantity (X2)

Table 2. Descriptive Analysis of the Production Quantity Variable (X2)

Item	SS		S		RR		TS		Total		Mean
	F	%	F	%	F	%	F	%	F	%	
X2.1	39	60,94	13	20,31	7	10,94	5	7,81	64	100,00	4,34
X2.2	34	53,13	18	28,13	7	10,94	5	7,81	64	100,00	4,27
X2.3	36	56,25	18	28,13	4	6,25	6	9,38	64	100,00	4,31
X2.4	37	57,81	17	26,56	4	6,25	6	9,38	64	100,00	4,33
X2.5	36	56,25	18	28,13	5	7,81	5	7,81	64	100,00	4,33
X2.6	35	54,69	18	28,13	6	9,38	5	7,81	64	100,00	4,30

Source: Primary data, processed (2026).

The production quantity variable (X2) was measured through six questionnaire items covering production capacity, production stability, the influence of plantation area, land utilization, harvesting frequency, and harvesting regularity. Overall, all items recorded relatively high mean scores, indicating positive respondent perceptions regarding their copra production activities. Item X2.1, concerning the adequacy of copra production for sale during each harvest, obtained the highest mean score of 4.34. A total of 39 respondents (60.94%) strongly agreed, indicating that most farmers considered their production capacity sufficient to support their selling activities. Item X2.2, which assessed production stability between harvest periods, recorded the lowest mean score of 4.27. Although most respondents expressed agreement, this finding suggests that some farmers still experience production fluctuations, potentially associated with weather conditions, pest attacks, and seasonal factors.

Item X2.3, concerning the influence of coconut plantation area on copra production, obtained a mean score of 4.31. This finding indicates that farmers recognize the importance of cultivated land area in determining production volume. Item X2.4, concerning the optimization of coconut plantation land, recorded a mean score of 4.33, reflecting farmers' awareness of the importance of productive land management. Similarly, item X2.5 obtained a mean score of 4.33, demonstrating that respondents

recognize the contribution of harvesting frequency to copra production. Item X2.6 recorded a mean score of 4.30, indicating that regular harvesting is also perceived as an important factor in maintaining production levels. Nevertheless, labor and logistical constraints may prevent some farmers from implementing consistent harvesting schedules. Overall, the findings indicate that production quantity is perceived positively by copra farmers in Bonea Makmur Village. Plantation area, harvesting frequency, and harvesting regularity are recognized as important factors influencing the volume of copra produced.

c. Copra Farmers' Income (Y)

Table 3. Descriptive Analysis of the Copra Farmers' Income Variable (Y)

Item	SS		S		RR		TS		Total		Mean
	F	%	F	%	F	%	F	%	F	%	
Y1	38	59,38	14	21,88	6	9,38	6	9,38	64	100,00	4,31
Y2	41	64,06	13	20,31	4	6,25	6	9,38	64	100,00	4,39
Y3	28	43,75	22	34,38	8	12,50	6	9,38	64	100,00	4,13
Y4	26	40,63	26	40,63	6	9,38	6	9,38	64	100,00	4,13
Y5	34	53,13	19	29,69	5	7,81	6	9,38	64	100,00	4,27
Y6	36	56,25	18	28,13	4	6,25	6	9,38	64	100,00	4,31

Source: Primary data, processed (2026).

The copra farmers' income variable (Y) was measured using six questionnaire items covering the relationship between revenue and production quantity, revenue increases resulting from higher selling prices, the reasonableness of production costs, the effects of increasing production costs on income, the ability of net income to meet household needs, and the profitability of coconut processing into copra. Item Y2, concerning the increase in copra revenue when selling prices rise, recorded the highest mean score of 4.39. A total of 41 respondents (64.06%) strongly agreed, indicating that farmers clearly recognize the positive relationship between selling prices and revenue. This finding is consistent with the regression results, which demonstrate that selling price is the more dominant explanatory variable in determining farmers' income.

Items Y1 and Y6 both obtained mean scores of 4.31. These findings indicate that respondents recognize the relationship between production volume and total revenue and generally consider copra processing to be economically beneficial. Item Y5 recorded a mean score of 4.27, suggesting that copra income remains an important source of household financial support, although some farmers still experience difficulties in meeting household needs. Items Y3 and Y4 both obtained the lowest mean score of 4.13. The relatively higher proportions of undecided and disagreeing responses indicate that some farmers experience production cost pressures. Increasing labor expenses, fuel costs for copra drying, and transportation expenses may reduce profit margins, particularly when production costs increase without corresponding improvements in selling prices. Overall, the descriptive findings suggest that copra farming continues to provide economic benefits to farmers in Bonea Makmur Village. However, production cost pressures and selling price uncertainty remain important challenges. Improving production efficiency, controlling input costs, and maintaining reasonable selling prices are therefore essential to strengthening farmers' economic welfare.

3.1.2 Descriptive Statistics of Research Variables

Table 4. Descriptive Statistics of Research Variables

Variable	N	Mean	Standard Deviation
Selling Price	64	4.28	0.98

Production Quantity	64	4.30	0.94
Copra Farmers' Income	64	4.31	0.96

Source: SPSS 25 data processing (2026).

The descriptive statistical results indicate that all research variables were measured using 64 respondents. Selling price recorded a mean of 4.28, indicating a relatively high respondent assessment of the selling prices received by farmers. Production quantity obtained a mean of 4.30, reflecting positive perceptions regarding production conditions. Meanwhile, copra farmers' income recorded the highest mean of 4.31, indicating that respondents generally perceived their income conditions positively. The standard deviation values ranged from 0.94 to 0.98, all of which were below 1.00. This indicates relatively limited variation in respondents' answers and suggests that their perceptions of selling price, production quantity, and income were relatively homogeneous. These descriptive findings provide an initial indication of the positive perceptions associated with the three research variables.

3.2 Instrument Validity Testing

Validity testing was conducted to determine whether each questionnaire item adequately measured its respective research variable. The Pearson product-moment correlation coefficient and its significance value were used to evaluate the validity of each item.

3.2.1 Validity Test of Selling Price (X1)

Table 5. Validity Test of the Selling Price Variable (X1)

Item	Calculated r (Pearson Correlation with Total Score)	Sig. (2-tailed)	Decision
X1.1	0.828	0.000	Valid
X1.2	0.809	0.000	Valid
X1.3	0.871	0.000	Valid
X1.4	0.905	0.000	Valid
X1.5	0.706	0.000	Valid
X1.6	0.835	0.000	Valid

Source: SPSS 25 data processing (2026).

All six selling price items (X1.1–X1.6) were declared valid because their calculated correlation coefficients exceeded the critical r-value, with significance values of 0.000 ($p < 0.05$). The calculated correlation coefficients ranged from 0.706 to 0.905, indicating strong to very strong relationships between individual items and the total variable score. Item X1.4 recorded the highest correlation ($r = 0.905$), whereas X1.5 recorded the lowest ($r = 0.706$). Nevertheless, all items met the validity requirements and were suitable for further analysis.

3.2.2 Validity Test of Production Quantity (X2)

Table 6. Validity Test of the Production Quantity Variable (X2)

Item	Calculated r (Pearson Correlation with Total Score)	Sig. (2-tailed)	Decision
X2.1	0.939	0.000	Valid
X2.2	0.905	0.000	Valid
X2.3	0.925	0.000	Valid
X2.4	0.872	0.000	Valid
X2.5	0.910	0.000	Valid
X2.6	0.954	0.000	Valid

Source: SPSS 25 data processing (2026).

All six production quantity items (X2.1–X2.6) were declared valid, with calculated correlation coefficients exceeding the critical r-value and significance values of 0.000 ($p < 0.05$). The correlation coefficients ranged from 0.872 to 0.954, indicating very strong relationships between the individual items and the total variable score. Item X2.6 recorded the highest correlation ($r = 0.954$), while X2.4 recorded the lowest ($r = 0.872$). These findings confirm that all production quantity items met the validity requirements.

3.2.3 Validity Test of Copra Farmers' Income (Y)

Table 7. Validity Test of the Copra Farmers' Income Variable (Y)

Item	Calculated r (Pearson Correlation with Total Score)	Sig. (2-tailed)	Decision
Y1	0.894	0.000	Valid
Y2	0.930	0.000	Valid
Y3	0.895	0.000	Valid
Y4	0.927	0.000	Valid
Y5	0.955	0.000	Valid
Y6	0.931	0.000	Valid

Source: SPSS 25 data processing (2026).

All six income variable items (Y1–Y6) were declared valid, with calculated correlation coefficients exceeding the critical r-value and significance values of 0.000 ($p < 0.05$). The coefficients ranged from 0.894 to 0.955, indicating very strong correlations between individual items and the total score. Item Y5 recorded the highest correlation ($r = 0.955$), whereas Y1 recorded the lowest ($r = 0.894$). These results demonstrate that the income measurement instrument met the validity requirements and was suitable for subsequent regression and hypothesis testing.

3.3 Instrument Reliability Testing

Reliability testing was performed to assess the internal consistency of the questionnaire items. Cronbach's alpha was used to determine whether the research instruments produced sufficiently consistent measurements.

Table 8. Reliability Test of Research Variables

Variable	Cronbach's Alpha	Number of Items	Decision
X1 (Selling Price)	0.902	6	Reliable
X2 (Production Quantity)	0.962	6	Reliable
Y (Copra Farmers' Income)	0.965	6	Reliable

Source: SPSS 25 data processing (2026).

The reliability results demonstrate that all research variables exceeded the minimum Cronbach's alpha threshold of 0.60. Selling price (X1) recorded an alpha value of 0.902, production quantity (X2) recorded 0.962, and copra farmers' income (Y) recorded 0.965. These values indicate very high internal consistency across all three research instruments. The income variable demonstrated the highest reliability, followed by production quantity and selling price. Therefore, all questionnaire instruments were considered reliable and suitable for further inferential statistical analysis.

3.4 Classical Assumption Testing

Classical assumption testing was conducted to evaluate the suitability of the multiple linear regression model. The tests included normality, multicollinearity, and heteroscedasticity assessments.

3.4.1 Normality Test

Table 9. One-Sample Kolmogorov–Smirnov Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		64
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	4,55909357
Most Extreme Differences	Absolute	,082
	Positive	,065
	Negative	-,082
Test Statistic		,082
Asymp. Sig. (2-tailed)		,200[c]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: SPSS 25 data processing (2026).

The normality test produced an Asymp. Sig. (2-tailed) value of 0.200, which exceeded the significance threshold of 0.05. Therefore, the null hypothesis of normally distributed residuals could not be rejected. The test statistic of 0.082 indicates a relatively small maximum difference between the empirical residual distribution and the theoretical normal distribution. The residual mean of 0.0000000 also indicates that the residuals were centered around zero, while the standard deviation was 4.55909357. These findings indicate that the normality assumption was satisfied.

3.4.2 Multicollinearity Test

Table 10. Multicollinearity Test Results

Independent Variable	Tolerance	VIF	Decision
Selling Price (X1)	0.980	1.020	No multicollinearity
Production Quantity (X2)	0.980	1.020	No multicollinearity

Source: SPSS 25 data processing (2026).

The multicollinearity test indicates that neither independent variable experienced multicollinearity. Both selling price and production quantity recorded tolerance values of 0.980, exceeding the minimum threshold of 0.10, and VIF values of 1.020, remaining well below the maximum threshold of 10.00. These results indicate that the independent variables do not exhibit problematic linear relationships that would distort the estimation of their individual regression coefficients. Consequently, the multicollinearity assumption was satisfied.

3.4.3 Heteroscedasticity Test

Table 11. Glejser Heteroscedasticity Test Results

Variable	Coefficient (B)	Significance
Constant	10.243	0.006
Selling Price	1.917	0.003
Production Quantity	1.648	0.013

Source: SPSS 25 data processing (2026).

The Glejser test results indicate that selling price recorded a significance value of 0.003, while production quantity recorded 0.013. Both values were below the 0.05 significance threshold, indicating the presence of heteroscedasticity in the regression model. This finding suggests that the residual variance was not constant across observations, meaning that the homoscedasticity assumption was not fully satisfied. Accordingly, further statistical treatment, such as data transformation or the application of robust estimation methods, is necessary to improve the reliability of the regression estimates.

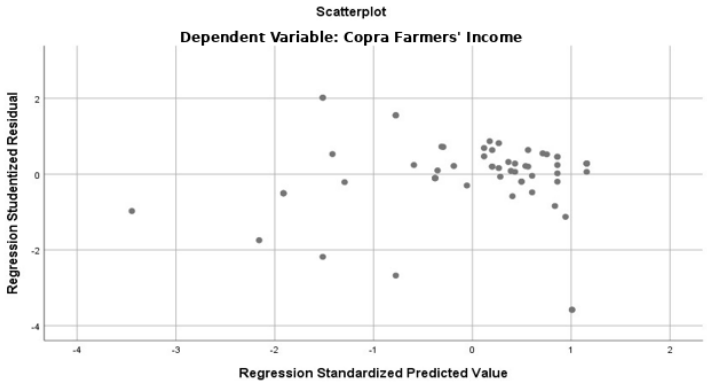


Figure 1. Residual Scatterplot for Heteroscedasticity Assessment

Source: SPSS 25 data processing (2026).

The visual inspection of the residual scatterplot indicates that most points were distributed relatively randomly without forming a clearly identifiable funnel, fan, or wave pattern around the zero line. This suggests that the residual variance appeared generally constant based on visual inspection. However, several points were concentrated around predicted values between 0 and +1, indicating an uneven distribution of observations. In addition, an extreme outlier was identified at approximately the coordinates (1, -3.5) to (1, -4). Although the scatterplot did not reveal a clear systematic pattern, the uneven concentration of points and the presence of an extreme outlier warrant further examination. Importantly, the visual interpretation differs from the Glejser test results, which indicate statistically significant heteroscedasticity. Therefore, the formal test results should not be disregarded, and additional treatment is recommended before drawing definitive conclusions regarding the regression model.

3.5 Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to determine the effects of selling price (X1) and production quantity (X2) on copra farmers' income (Y). The analysis examined the regression coefficients, individual significance levels, and relative contributions of the independent variables.

Table 12. Multiple Linear Regression Analysis

Model	Variable	Unstandardized Coefficient (B)	Std. Error	Standardized Coefficient (Beta)	t	Sig.
1	Constant	7.539	3.877	—	1.945	0.056
1	Selling Price	0.410	0.116	0.390	3.529	0.001
1	Production Quantity	0.296	0.113	0.290	2.627	0.011

Dependent variable: Copra Farmers' Income.

Source: SPSS 25 data processing (2026).

Based on the regression coefficients, the estimated regression equation is:

$$\hat{Y} = 7{,}539 + 0{,}410X_1 + 0{,}296X_2$$

Where:
$\hat{Y}$ = Copra farmers' income
X_1 = Selling price
X_2 = Production quantity

The constant of 7.539 indicates the estimated value of copra farmers' income when both independent variables are zero. The selling price coefficient of 0.410 indicates that a one-unit increase in selling price is associated with a 0.410-unit increase in farmers' income, assuming production quantity remains constant. The significance value of 0.001 indicates that this effect is statistically significant. Similarly, the production quantity coefficient of 0.296 indicates that a one-unit increase in production quantity is associated with a 0.296-unit increase in farmers' income, assuming selling price remains constant. Its significance value of 0.011 also indicates a statistically significant effect. The standardized regression coefficients further indicate that selling price (Beta = 0.390) has a greater relative contribution than production quantity (Beta = 0.290). This suggests that selling price is the more dominant predictor of copra farmers' income in the estimated regression model.

3.6 Hypothesis Testing

3.6.1 Partial Significance Test (t-Test)

The partial significance test was conducted to examine the individual effects of selling price and production quantity on copra farmers' income.

Table 13. Partial Significance Test (t-Test)

Model	Variable	Unstandardized Coefficient (B)	Std. Error	Standardized Coefficient (Beta)	t-count	Sig.
1	Constant	7.539	3.877	—	1.945	0.056
1	Selling Price	0.410	0.116	0.390	3.529	0.001
1	Production Quantity	0.296	0.113	0.290	2.627	0.011

Dependent variable: Copra Farmers' Income.

Source: SPSS 25 data processing (2026).

The partial test results demonstrate that selling price has a positive and statistically significant effect on copra farmers' income, with a t-value of 3.529 and a significance value of 0.001, which is below 0.05. Therefore, the first hypothesis (H1) is accepted. This indicates that higher copra selling prices are associated with increased farmers' income, assuming production quantity remains constant. Production quantity also demonstrates a positive and statistically significant effect on farmers' income, with a t-value of 2.627 and a significance value of 0.011, which is below 0.05. Therefore, the second hypothesis (H2) is accepted. This finding indicates that higher copra production quantities are associated with increased farmers' income, assuming selling price remains constant. A comparison of the two variables indicates that selling price has a stronger partial statistical effect than production quantity, as reflected in its higher t-value (3.529 > 2.627), lower significance value (0.001 < 0.011), and higher standardized coefficient (0.390 > 0.290). These findings establish that both independent variables significantly influence farmers' income, with selling price demonstrating greater relative explanatory importance.

3.6.2 Simultaneous Significance Test (F-Test)

The simultaneous significance test was conducted to determine whether selling price and production quantity jointly influence copra farmers' income.

Table 14. Simultaneous Significance Test (F-Test)

Model	Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	480.461	2	240.231	11.191	0.000
1	Residual	1,309.476	61	21.467	—	—
1	Total	1,789.938	63	—	—	—

Dependent variable: Copra Farmers' Income.
Predictors: (Constant), Production Quantity, Selling Price.
Source: SPSS 25 data processing (2026).

The ANOVA results indicate an F-value of 11.191 with a significance value of 0.000, which is below the 0.05 threshold. Therefore, selling price and production quantity jointly have a statistically significant effect on copra farmers' income. This finding confirms that the regression model is statistically significant in explaining variations in farmers' income. The regression sum of squares of 480.461 represents the variation in farmers' income explained by selling price and production quantity. Meanwhile, the residual sum of squares of 1,309.476 represents the variation not explained by the model. The total sum of squares was 1,789.938, with a total degree of freedom of 63. These results support the joint significance of the independent variables in explaining copra farmers' income.

3.6.3 Coefficient of Determination (R^2)

The coefficient of determination was examined to assess the explanatory capacity of selling price and production quantity in accounting for variations in copra farmers' income.

Table 15. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin–Watson
1	0.518	0.268	0.244	4.63323	1.868

Source: SPSS 25 data processing (2026).

The correlation coefficient (R) of 0.518 indicates a moderate positive relationship between selling price and production quantity jointly and copra farmers' income. This suggests that improvements in both independent variables are associated with higher income levels. The coefficient of determination (R^2) of 0.268 indicates that selling price and production quantity jointly explain 26.8% of the variation in copra farmers' income. The remaining 73.2% is attributable to other factors outside the research model, potentially including production costs, market access, weather conditions, and government policies.

The adjusted R^2 value of 0.244 represents the adjusted explanatory capacity of the model after accounting for the number of independent variables and sample size. The relatively small difference between R^2 (0.268) and adjusted R^2 (0.244) suggests that the adjustment for model complexity does not substantially reduce its explanatory capacity. The standard error of the estimate was 4.63323, representing the model's estimation error. Meanwhile, the Durbin–Watson statistic of 1.868 falls within the 1.5–2.5 range used in the original analysis, indicating no apparent autocorrelation problem based on this criterion. Overall, the regression model demonstrates a moderate explanatory capacity, accounting for 26.8% of the variation in farmers' income. Further research incorporating additional variables is therefore necessary to provide a more comprehensive explanation of the factors determining copra farmers' income.

3.2 Discussion

a. The Effect of Selling Price on Copra Farmers' Income

The results demonstrate that selling price (X1) has a positive and statistically significant effect on copra farmers' income (Y), with a regression coefficient of 0.410, a t-value of 3.529, and a significance level of 0.001. This indicates that an increase in copra selling prices directly contributes to higher farmers' income, assuming production quantity remains constant. This finding is consistent with the farm income concept, which establishes that revenue is determined by multiplying production quantity by selling price. Consequently, changes in selling prices directly influence the total revenue received by farmers. In copra farming, selling price is particularly important because farmers generally have limited control over market price determination. Prices are frequently influenced by collectors and intermediaries who possess stronger bargaining positions, making farmers' income highly responsive to market price fluctuations.

This finding is supported by Andilan et al. (2021), who examined the effects of production costs, land area, and selling prices on coconut (copra) farmers' income in Talawaan District. Their findings indicated that selling price had a significant simultaneous effect on farmers' income. Although the partial effect of selling price was not statistically significant in their study, its direction remained positive, confirming the importance of price in determining copra farmers' income. The differences in statistical results may be associated with variations in regional conditions, sample sizes, and research periods. These differences suggest that local market characteristics and marketing structures may influence the extent to which selling prices affect farmers' income.

Maro and Nur Asih (2020), in their study of copra farming income in Lompio Village, Sirenja District, Donggala Regency, also emphasized the importance of selling prices in determining farmers' income. Their analysis established that farm income is calculated as the difference between total revenue, obtained by multiplying selling price by production quantity, and total production costs. Therefore, fluctuations in copra prices directly influence farmers' income. When selling prices decline sharply while production costs remain constant or increase, farmers become more vulnerable to financial losses and declining economic welfare.

Further support is provided by Dunggio (2022), who examined copra income and marketing in Longkoga Barat Village, Banggai Regency. The study identified selling price as an important component of farmers' income and demonstrated how marketing margins influence the prices received by producers. A lengthy marketing chain can create substantial differences between the prices paid by final consumers and those received by farmers, thereby reducing the proportion of final market value retained by producers. Accordingly, shortening marketing channels and maintaining stable copra prices are essential strategies for improving farmers' income. Strengthening farmer institutions, cooperatives, and government policy interventions to establish appropriate minimum price mechanisms may also improve farmers' bargaining positions within the marketing system.

Overall, the findings establish that selling price is an important and relatively dominant determinant of copra farmers' income. Compared with production quantity, selling price demonstrates a greater relative contribution to income formation, as reflected in its higher standardized regression coefficient (0.390 compared with 0.290). This finding implies that strategies to improve farmers' income should not focus exclusively on increasing production. Rather, they should also emphasize strengthening farmers' bargaining positions, expanding market access, improving marketing efficiency, and promoting price stabilization policies that protect farmers' economic interests.

b. The Effect of Production Quantity on Copra Farmers' Income

The findings also indicate that production quantity (X2) has a positive and statistically significant effect on copra farmers' income (Y), with a regression coefficient of 0.296, a t-value of 2.627, and a significance level of 0.011. This means that an increase in the quantity of copra produced contributes to higher farmers' income, assuming selling prices remain constant. Production quantity reflects the productive capacity of agricultural activities and is influenced by several factors, including cultivated

land area, the number of productive coconut trees, labor availability, and plantation maintenance practices. Farmers who manage their coconut plantations effectively through regular maintenance, fertilization, and pest control are more likely to achieve higher production volumes, which can subsequently increase their income.

This finding is consistent with the research conducted by Ilham and Ramli (2024), which examined the effects of production factors on copra farmers' income in Lembang Matene Village, Selayar Islands Regency. Their study found that production quantity had a positive and statistically significant effect on farmers' income. This indicates that increases in copra output directly contribute to higher income, reinforcing the findings of the present study. The consistency between these findings suggests that the positive relationship between production quantity and farmers' income is also relevant across different locations within the copra farming sector. Husain (2022), in a study examining production factors and potato farming income in Erelembang Village, Gowa Regency, also provides conceptual support for this finding. The study demonstrated that production had a statistically significant partial effect on agricultural income. Although the commodity examined was different, the relationship between production output and farming income remains relevant because higher production generally creates greater opportunities for generating revenue, provided that market prices remain relatively stable. This reinforces the importance of production capacity in determining farmers' potential economic returns across different agricultural commodities.

Furthermore, Ismail (2022), who investigated improvements in farmers' income through the diversification of coconut derivative products in Gorontalo Regency, demonstrated that coconut production positively influenced farmers' income, with favorable agricultural feasibility results. These findings suggest that increasing coconut production not only contributes directly to farmers' income through copra sales but also creates opportunities for broader business development through the diversification of derivative products. Such opportunities include coconut oil, nata de coco, and coconut milk-based products, which may provide additional economic value. Therefore, investment in coconut plantation productivity can generate multiple economic benefits by increasing raw material availability and supporting the development of higher-value processed products. Maro and Nur Asih (2020) also emphasized the importance of adequate production volume as a fundamental requirement for sustainable copra farming. This issue is particularly relevant because farmers in several regions continue to face productivity constraints associated with aging coconut trees, inadequate plantation maintenance, and limited access to modern agricultural technologies. Consequently, coconut tree rejuvenation programs, agricultural extension services, and the provision of appropriate production facilities and inputs are important measures that should receive greater attention from government institutions and other relevant stakeholders.

Taken together, these findings confirm that production quantity is an important factor influencing copra farmers' income. Increasing productivity through improved plantation management, regular harvesting, access to production facilities, and appropriate agricultural technologies can strengthen farmers' income-generating capacity. Nevertheless, production improvements should be accompanied by effective marketing strategies to ensure that increased output translates into greater economic benefits.

c. The Combined Effect of Selling Price and Production Quantity on Copra Farmers' Income

The overall findings confirm that selling price and production quantity individually and simultaneously have statistically significant effects on copra farmers' income. The simultaneous significance test produced an F-value of 11.191 with a significance level of 0.000, demonstrating that both independent variables jointly influence farmers' income. However, the coefficient of determination (R^2) of 0.268 indicates that these variables explain 26.8% of the variation in farmers' income, while the remaining 73.2% is attributable to other factors not included in the research model, such as production

costs, cultivated land area, labor availability, weather conditions, access to capital, and government policies concerning copra marketing.

These findings are consistent with previous studies that identify selling price and production quantity as important components of agricultural income formation. The findings of Andilan et al. (2021), Maro and Nur Asih (2020), Dunggio (2022), Ilham and Ramli (2024), Husain (2022), and Ismail (2022) collectively reinforce the importance of market prices, production capacity, and agricultural management in determining farmers' economic outcomes. Although the specific commodities and research locations differ, these studies provide supporting empirical evidence regarding the contribution of production and market-related factors to agricultural income. The relatively limited explanatory capacity of the regression model also indicates that improving farmers' welfare requires a broader approach that considers factors beyond selling prices and production quantity. In particular, controlling production costs, improving market access, strengthening institutional support, expanding access to capital, and adopting appropriate production technologies may contribute to more sustainable income improvements.

Therefore, strategies to improve copra farmers' economic welfare should simultaneously address two major aspects: increasing coconut plantation productivity and strengthening farmers' access to fair and competitive markets. Coordinated efforts involving farmers, cooperatives, agricultural institutions, and local government are essential to improving production efficiency, strengthening bargaining positions, and ensuring that the economic benefits of the coconut and copra industry are distributed more equitably among producers.

4. Conclusion and Recommendation

4.1 Conclusion

Based on the research findings and discussion concerning the effect of selling price and production quantity on copra farmers' income in Bonea Makmur Village, the following conclusions can be drawn:

a. **Selling price has a positive and significant effect on copra farmers' income.** This is demonstrated by the t-statistic of 3.529 and a significance value of 0.001, which is below 0.05. These findings indicate that selling price plays an important role in determining farmers' income. An increase in the selling price of copra received by farmers is associated with higher income. Furthermore, selling price is the more dominant variable in this study, as indicated by its higher standardized regression coefficient compared with production quantity.
b. **Production quantity has a positive and significant effect on copra farmers' income.** This is evidenced by the t-statistic of 2.627 and a significance value of 0.011, which is below 0.05. The findings indicate that increased production can contribute to higher farmers' income, particularly when selling prices remain relatively stable. Therefore, improving productivity through appropriate plantation management is essential to support the sustainability of copra farming and increase farmers' income.
c. **Selling price and production quantity simultaneously have a significant effect on copra farmers' income.** The coefficient of determination (R^2) of 0.268 indicates that these two variables explain 26.8% of the variation in farmers' income, while the remaining 73.2% is explained by other factors outside the research model. This demonstrates that selling price and production quantity are important determinants of copra farmers' income, although other economic and operational factors also contribute to income variation.
d. **The main strength of this research** is that it provides empirical evidence regarding the contribution of selling price and production quantity to copra farmers' income. The findings identify selling price as the more dominant factor while confirming that production quantity also plays a significant role. However, the research is limited by the explanatory power of the model, which

accounts for only 26.8% of income variation. Consequently, other factors affecting farmers' income require further investigation.

4.2 Recommendation

Based on the research findings and conclusions, the following recommendations are proposed:

a. For Copra Farmers

Copra farmers are encouraged to actively participate in farmer organizations or groups to strengthen their bargaining position in determining copra selling prices. Through collective organizations, farmers can negotiate prices collectively and reduce their dependence on collectors or middlemen. Farmers should also improve copra quality by adopting better processing techniques, as higher-quality copra generally has the potential to obtain more competitive market prices.

In terms of production, farmers are encouraged to gradually replant old and unproductive coconut trees and implement appropriate cultivation practices, including balanced fertilization, pest and disease control, and more intensive plantation management. These efforts are expected to improve coconut productivity and increase copra production over time.

b. For Local Government and Policymakers

Local governments are encouraged to play an active role in maintaining copra price stability at the farmer level. Possible measures include establishing a minimum reference price for copra, developing transparent and accessible price information systems, and implementing regulations to prevent monopolistic and monopsonistic practices within the copra marketing chain. These measures are important because unpredictable price fluctuations contribute to uncertainty in farmers' income. Furthermore, the government should support the development of more efficient copra marketing infrastructure, including the establishment of copra auction markets, strengthening cooperatives as alternative marketing institutions, and facilitating farmers' access to export markets. Shortening the copra marketing chain could help improve the prices received by farmers at the producer level. To increase production, the government is also encouraged to expand and strengthen coconut replanting programs through subsidies for superior seedlings, fertilizer assistance, and continuous technical guidance. Agricultural extension programs should be reinforced with practical materials relevant to local farming conditions and delivered regularly by competent agricultural extension officers.

c. For Future Researchers

Since selling price and production quantity explain only 26.8% of the variation in copra farmers' income, future researchers are encouraged to expand the research model by incorporating additional variables that may influence farmers' income. These variables may include production costs, cultivated land area, labor availability, access to business capital and credit, distance to markets, education level, and farming experience. Future studies may also employ qualitative or mixed-methods approaches to obtain a deeper understanding of the structural and social factors influencing copra farmers' income. These may include social relationships within the marketing chain, the dynamics of farmer groups, and the effects of local policies on copra farming activities. Such approaches are expected to provide more comprehensive insights and contribute to the development of knowledge and policymaking in the copra agribusiness sector.

Bibliography

Alitawan, I., & Sutrisna, I. K. (2017). Hubungan jumlah produksi terhadap pendapatan petani. *Jurnal Ekonomi Pembangunan*.

Andika, I., & Iskandar, S. (2023). Analisis nilai tambah pengolahan kelapa menjadi kopra di Desa Penuguan Kecamatan Selat Penuguan Kabupaten Banyuasin [Analysis of added value from processing coconut into copra in Penuguan Village, Penuguan Strait District, Banyuasin Regency].

Societa: Jurnal Ilmu-Ilmu Agribisnis, 12(1), 35–41.
Andilan, J., Engka, D. S. M., & Sumual, J. I. (2021a). Pengaruh biaya produksi, luas lahan, dan harga jual terhadap pendapatan petani kelapa (kopra). *Jurnal Berkala Ilmiah Efisiensi, 21*(6).
Andilan, J., Engka, D. S. M., & Sumual, J. I. (2021b). Pengaruh biaya produksi, luas lahan, dan harga jual terhadap pendapatan petani kelapa (kopra) di Kecamatan Talawaan. *Jurnal Berkala Ilmiah Efisiensi, 21*(2), 33–44.
Aprilia. (2019). *Pengaruh biaya produksi dan harga jual terhadap pendapatan petani menurut perspektif ekonomi Islam*. Universitas Raden Intan Lampung.
Assauri, S. (2008). *Manajemen produksi dan operasi*. Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
Bandrang, A. (2024). Analisis struktur tata niaga dan penetapan harga jual di tingkat petani. *Jurnal Agribisnis dan Tata Niaga, 12*(1), 35–48.
Buhang, J. (2021). Analisis konsep income dan revenue dalam pelaporan keuangan perusahaan. *Jurnal Akuntansi dan Keuangan, 9*(2), 150–162.
Dalimunthe, A. G., Salqaura, S. S., & Barus, A. F. (2023). Analisis faktor yang mempengaruhi volume ekspor kopra Indonesia di pasar dunia. *JASc (Journal of Agribusiness Sciences), 7*(2), 119–129. https://doi.org/10.30596/jasc.v7i2.16477
Dunggio, R. (2022). *Analisis pendapatan dan margin pemasaran usaha kopra*.
Fardani, A., Budi, S., & Cahyani, R. (2025). Peran komoditas kelapa terhadap perekonomian dan kesejahteraan petani di Indonesia. *Jurnal Ekonomi Perkebunan, 10*(2), 123–135.
Fina. (2018). *Analisis biaya produksi dan pendapatan usaha*.
Fitriani, N. (2023). Analisis fungsi produksi dalam teori ekonomi mikro. *Jurnal Ekonomi dan Pembangunan, 18*(1), 45–56.
Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS*. Badan Penerbit Universitas Diponegoro.
Gunawan, C. (2020). *Mahir teknik analisis data penelitian dengan SPSS*. Deepublish.
Husain, A. (2022). *Analisis faktor-faktor produksi terhadap pendapatan petani*.
Ilham, A. N., & Ramli, B. (2024). *Pengaruh faktor produksi terhadap pendapatan petani kopra*.
Ismail, R. (2022). *Peningkatan pendapatan petani melalui usaha pengolahan kopra*.
Kemiringan 1 derajat dan terletak di dataran rendah. (n.d.). September.
Lewis, G. (2025). *Manajemen harga dan strategi pemasaran*. Penerbit Ekonomi Nusantara.
Mankiw, N. G. (2021). *Principles of economics* (9th ed.). Cengage Learning.
Maro, Z., & Nur Asih, D. (2020). Analisis pendapatan usaha kopra di Desa Lompio Kecamatan Sirenja Kabupaten Donggala. *Agrotekbis, 8*(1), 95–105.
Mawardati. (2013). Analisis faktor-faktor yang mempengaruhi pendapatan usahatani kentang. *Jurnal Agrium, 10*(2), 36–44.
Mulyati, S., Rahman, A., & Putri, D. (2021). Analisis penetapan harga jual dan komponennya dalam perusahaan manufaktur. *Jurnal Akuntansi dan Bisnis, 15*(2), 120–133.
Nasir, N., Wahyuni, W., & Jusman, J. (2015). Pengaruh produksi kelapa sawit terhadap pendapatan masyarakat. *Jurnal Ekonomi Pertanian, 7*(3), 343–350.
Nasiyra, N., & Fathimah, V. (2022). Pengaruh biaya produksi dan harga jual terhadap pendapatan UMKM. *Jurnal Manajemen UMKM, 3*(2), 58–66.
Nasution, R. (2019). Pengaruh strategi harga terhadap keputusan pembelian konsumen. *Jurnal Manajemen Pemasaran, 7*(1), 45–58.
Natang. (2014). Pengaruh harga jual dan hasil produksi terhadap keuntungan usaha susu kedelai. *Oikonomia: Jurnal Pendidikan Ekonomi, 3*(1).
News, A. (2023). *Hilirisasi jadi kunci sejahterakan petani kelapa di Sulawesi Selatan*.
Nurwahida, N., Marhawati, M., Mustar, M., Rahmatullah, R., & Nurdiana, N. (2021). Analisis pendapatan dan kelayakan usaha kopra di Desa Bontolempangan Kecamatan Buki Kabupaten Kepulauan Selayar. *Jambura Economic Education Journal, 3*(1), 28–37. https://doi.org/10.37479/jeej.v3i1
Parkin, M. (2023). *Economics* (14th ed.). Pearson Education.
Perkebunan, D. J. (2020). *Pedoman teknis pengolahan kelapa dan produk turunannya*. Kementerian Pertanian Republik Indonesia.
Perkebunan, D. J. (2024). *Statistik perkebunan kelapa Indonesia*. Kementerian Pertanian Republik Indonesia.

Purwanti. (2014). Pengaruh biaya produksi terhadap hasil produksi pada home industri sambel pecel di Kota Madiun. *Jurnal Ekonomi, 12*(1), 88–97.

Putra, R., Hasan, M., & Rahman, A. (2021). Peningkatan mutu kopra melalui penerapan teknologi pengeringan modern. *Jurnal Agroindustri, 9*(2), 85–96.

Putri, A., & Santosa, B. (2019). Penerapan metode penelitian kuantitatif asosiatif dalam analisis hubungan antar variabel. *Jurnal Metodologi Penelitian Sosial, 7*(2), 85–96.

Sari, D. P., & Wahyuni, R. (2022). Analisis rantai pemasaran kopra dan disparitas harga antara petani dan konsumen. *Jurnal Agribisnis, 14*(2), 101–112.

Sarsina, A. (2018). Analisis pendapatan petani kopra dan struktur biaya usahatani. *Jurnal Ekonomi Pertanian, 6*(2), 120–132.

Selatan, B. P. S. P. S. (2024). *Statistik perkebunan Provinsi Sulawesi Selatan tahun 2023*. BPS Sulawesi Selatan.

Selayar, P. K. K. (2022). *Program penanaman lima juta pohon kelapa untuk peningkatan produktivitas perkebunan*. Pemerintah Kabupaten Kepulauan Selayar.

Sholeh, M. S., Mublihatin, L., Laila, N., & Maimunah, S. (2021). Kontribusi pendapatan usaha tani terhadap ekonomi rumah tangga petani di daerah pedesaan. *Jurnal AGROMIX, 12*(1), 55–61. https://doi.org/10.35891/agmx.v12i1.2330

Siti, N. (2018). Penerimaan dan pendapatan petani kelapa melalui pengolahan kopra. *Jurnal Agribisnis, 5*(1), 40–52.

Soeharno. (2009). *Teori produksi dan operasi*. Bumi Aksara.

Soekartawi. (2023). *Analisis pendapatan usahatani*. UI Press.

Sugiyono. (2019). *Metodologi penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.

Sukirno, S. (2005). *Ekonomi pembangunan: Proses, masalah, dan kebijakan*. Kencana Prenada Media Group.

Sukirno, S. (2016). *Mikroekonomi teori pengantar*. RajaGrafindo Persada.

Tamungku, O., Koleangan, R. A., & Wauran, P. C. (2019a). Analisis pendapatan petani kelapa (kopra) di Kabupaten Kepulauan Talaud. *Jurnal Berkala Ilmiah Efisiensi, 19*(2), 152–161.

Tjiptono, F. (2019). *Strategi pemasaran*. Andi.

Varian, H. R. (2019). *Intermediate microeconomics: A modern approach* (9th ed.). W. W. Norton & Company.

Wulandari. (2018). *Kontribusi pendapatan usaha kopra terhadap pendapatan keluarga*.

Pendapatan rumah tangga dan implikasinya terhadap pola konsumsi. (2015). *Jurnal Sosial Ekonomi, 9*(1), 55–67.