



Income Analisis of Langsung Farmers

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Abstract

The purpose of this study was to analyze the income of farmers who grow langsung in Sulewatang village and evaluate the feasibility of their agricultural activities using profit ratio (R/C) analysis. The primary data used were obtained from direct interviews with farmers who grow langsung, as well as secondary data collected from related institutions. The analysis method includes calculating total income ($TR = P \times Q$), total costs ($TC = FC + VC$), and profit ratio ($R/C = TR \div TC$). The results showed that the average income of farmers who grow langsung reached 2,241,190 Indonesian rupiah, with a total production cost of 360,769 Indonesian rupiah. Thus, the farmer's net income was 1,880,421 Indonesian rupiah. The profitability coefficient (R/C) value of 6.21 indicates that $R/C > 1$, which means that langsung cultivation in Sulewatang village is profitable and feasible to be further developed.

Introduction

The Langsung (*Lansium domesticum* L.) is a fruit plant widely known in Indonesia. This plant belongs to the Meliaceae family and bears fruit seasonally. Characteristics of the langsung fruit include white sap even when ripe, thin skin, and a round to oval shape. Furthermore, langsung plants typically grow in tropical regions at medium to low altitudes and require high rainfall to produce optimal fruit. Due to its sweet and refreshing taste, this fruit is widely favored by the public and has significant economic value for farmers in the producing areas (Samsul et al., 2022; Dimelu & Odo, 2013; Harker et al., 2003; Wu et al., 2025; Nuraini et al., 2025; Rahman et al., 2024).

According to data from the West Sulawesi Statistics Agency (BPS), production of Duku, Langsung, and Kokosan fruit in West Sulawesi Province reached a total of 257,787.87 quintals, with production distribution varying between districts. Majene Regency is the largest producing region, with production reaching 197,096 quintals, or approximately 76.4% of the province's total, followed by Polewali Mandar with 47,304 quintals. Other regencies, such as Mamuju (7,391.87 quintals), Pasangkayu (4,316 quintals), Central Mamuju (1,585 quintals), and Mamasa (95 quintals), have relatively small production. These differences are influenced by agro-climatic conditions, land area, number of productive trees, and the level of cultivation technology implemented in each region (Roy et al., 2023; Teramage et al., 2023; Tripathi et al., 2024). Therefore, it can be concluded that Majene Regency has the potential to become a major center for Langsung fruit production in West Sulawesi, while other regions still have opportunities for development through improving production facilities, providing extension services, and strengthening access to fruit markets.

The agricultural sector is a crucial sector in supporting the rural economy. One fruit commodity with significant potential for development in Polewali Mandar Regency is langsung (*Lansium domesticum*). Langsung fruit is widely cultivated by communities in various regions, including

Sulewatang Village. This commodity has significant economic value due to its distinctive flavor, high nutritional content, and strong demand (Bhardwaj et al., 2024; Abbas et al., 2023; Belbase et al., 2025).

However, in practice, langsung farmers in Sulewatang Village still face various challenges, particularly in marketing their crops. Every harvest season, farmers often experience difficulties selling their produce. This is due to limited market access, limited price information, and a lack of adequate transportation to reach a wider market (Ma et al., 2024; Bonuedi et al., 2022). As a result, farmers are forced to sell their crops to middlemen or collectors at relatively low prices. Consequently, the income received by farmers does not match the costs incurred in the production process, ultimately leading to low profitability in agriculture and reducing farmers' incentives to maintain and develop their farming businesses (Manono, 2025; Arowosegbe et al., 2024; Sahore et al., 2025).

This condition can cause langsung farming to be less than optimal in improving farmer welfare. Therefore, an analysis of langsung farming income is conducted to determine the amount of profit earned by farmers and the level of efficiency of farm management. Through this analysis, it is hoped that an overview of the economic conditions of langsung farmers in Sulewatang Village can be obtained and can be used as a consideration in formulating policies and strategies to increase market access and farmers' income in the future for the local government and stakeholders.

According to Purnamawati et al. (2024), langsung (*Lansium domesticum*) is a woody tree that can grow in various terrestrial habitats, from lowlands to highlands. Langsung fruit is characterized by its clustered fruit clusters. Furthermore, langsung fruit is known for its sweet and slightly sour taste and translucent white flesh, making it a popular choice among consumers. These advantages make langsung a tropical fruit with high economic potential and suitable for development in various regions.

According to Nainggolan (2024), variable costs are costs whose value changes depending on the quantity of goods or services produced by a company. The amount of these costs depends on the level of production activity. The greater the production volume, the greater the total variable costs incurred. Variable cost components typically include raw material costs, direct labor wages, and various operational costs directly related to the production process and the formation of the cost of goods manufactured. Analyzing variable costs is important so companies can see the relationship between cost elements and their impact on the total cost of goods manufactured.

According to (Putri & Arif, 2023), fixed costs are costs whose total value remains unchanged despite increases or decreases in production volume or sales levels within a given period. These costs are constant and unaffected by the company's operational activities, as they must be paid regardless of output. Fixed costs include several costs, such as land rent, building rent, permanent employee salaries, depreciation of equipment and machinery, and insurance costs. The existence of fixed costs is crucial in financial planning because companies must be able to cover these costs even when production declines. Understanding the structure of fixed costs helps companies determine the break-even point, plan production capacity, and develop more accurate pricing strategies and operational efficiency.

According to Ramadhan et al. (2023), revenue is income received within a specific time period from business activities, primarily from the sale of goods and services. Revenue represents all receipts earned by a business unit before deducting costs or expenses. Furthermore, revenue has a different meaning than income. Revenue is the total gross receipts from business activities

before deducting various costs and operational expenses. Meanwhile, income is defined as the net profit earned after deducting all production costs and company expenses. Therefore, income is an important indicator in assessing the economic efficiency of a business and the level of welfare of its stakeholders.

According to Syarif et al. (2024), income is the receipts obtained from the sale of goods and services to customers or recipients of the products. In the agricultural context, income is defined as the net proceeds received by farmers from production activities, namely the difference between the total revenue (Total Revenue/TR) obtained from the sale of agricultural products and the total costs (Total Cost/TC) incurred throughout the entire production process. The amount of income reflects the level of profitability of the farm and the efficiency of management of the factors of production used. Furthermore, profit is the net income received by farmers or business actors after deducting all types of expenses incurred in the production process. These expenses include maintenance costs, production inputs, post-harvest activities, land cultivation, and distribution costs. These factors can directly influence the size of farm income.

Income analysis is used to determine the level of profit earned by farmers during the production period. This profit is calculated based on the difference between total revenue from agricultural product sales and total production costs incurred during agricultural activities. Total production costs include fixed and variable costs, so the income earned reflects the overall economic conditions of the farm (Aini et al., 2025). Therefore, to determine the amount of profit farmers earn from agricultural activities, a net income analysis is performed. Agricultural income can be calculated using the following formula:

$$Pd = \text{Total Revenue (TR)} - \text{Total Cost (TC)}$$

Formula explanation:

Pd = Income

TR = Total Revenue

TC = Total Cost

According to Syarif et al. (2024), economic feasibility assessment can be conducted using the revenue/cost ratio (R/C Ratio), which allows you to determine whether a farming activity is profitable, breaking even, or incurring losses. The R/C ratio is the comparison between total revenue and total production costs, reflecting the level of efficiency of the farming business in covering costs during the production process.

The formula that can be used is as follows:

$$R/C = \frac{TR}{TC}$$

Description:

R/C = Revenue-Cost Ratio

TR = Total Revenue (Rp)

TC = Total Cost (Rp)

Requirements for assessing a business's economic feasibility: If $R/C > 1$, the farm is profitable because it generates a profit. If $R/C < 1$, the farm is unprofitable because it will incur a loss. If

$R/C = 1$, the farm is at the break-even point, which is when total revenue equals total production costs.

Methods

The research was conducted in Sulewatang Village, Polewali District, Polewali Mandar Regency, West Sulawesi Province. The location was selected purposively, considering the availability of langsung plantation centers and respondent access. Locations were selected intentionally (purposive sampling) based on certain criteria, such as areas with high internet access or schools with special education programs, to obtain more specific and accurate data for the study (Hasan, 2022).

The sampling method used purposive sampling. The population consisted of all farmers cultivating langsung plants, with a sample size of 30. The population consisted of all langsung farmers in Sulewatang Village. The sample consisted of active farmers during the last harvest season, determined by purposive sampling; a minimum sample size of 30 respondents was used to ensure representativeness.

According to Lasut et al. (2025), targeted sampling is a sampling method based on specific criteria aligned with the research objectives, ensuring that the collected data is relevant and representative of the population as a whole. This research uses a quantitative approach with primary and secondary data sources. Quantitative research is systematic and structured and emphasizes numerical data analysis. This study uses numbers in data collection, data estimation, and presentation of results, allowing for objective and accurate statistical analysis (Dhewy, 2022).

Primary Data: Data collected directly from the source, namely langsung farmers in Sulewatang Village, through interviews, questionnaires, and observations. According to Hamsah et al. (2023), primary data comes from interviews and field observations, including the characteristics of local community informants, site visitors, and the local government. Secondary data is data obtained from indirect sources or other parties, such as previous research reports, agricultural statistics, and government documents. According to Hamsah & Nirmawala (2022), secondary data is obtained indirectly from various related agencies, such as government institutions, and other sources relevant and related to the research object.

A questionnaire is a data collection method that involves providing written questions to respondents to obtain answers. This method is efficient in collecting data from a large number of respondents in a short time. Questionnaires can be open-ended, allowing for freedom of response, or closed-ended, facilitating analysis. As a research instrument, questionnaires are effective for obtaining primary data that systematically describe respondents' perceptions and conditions (Nurmiati & Rusli, 2025). The observation method is a data collection technique through observation of the research object accompanied by systematic recording, either through direct or indirect observation. This technique aims to obtain factual data based on what is seen and occurs in the field during the research process (Hasibuan et al., 2023).

Documentation is a data collection method that involves collecting, recording, and storing various accurate information or evidence from various sources. This information can be in the form of writing, photographs, drawings, or videos, which serve as supporting data for the research. The documentation process requires a dedicated storage space or media so that the data obtained can be processed and used effectively (Hasan & Tidore, 2022).

Total revenue (PT) is obtained by multiplying production volume (Q) by the selling price per unit (P). Mathematically, total revenue is formulated as $PT = P \times Q$, where PT is total revenue, P is the selling price per unit, and Q is the production volume (Meiratania, 2025).

Variable costs are costs that change depending on the level of production. These costs are influenced by the area of land cultivated, labor usage, and the amount of production resources used, such as seeds, fertilizers, and pesticides (Tamboto et al., 2025).

Fixed costs are costs whose total value remains unchanged even if production levels change within a certain range, but on a per-unit basis, they can change. These costs remain constant regardless of the size of the output produced (Nainggolan, 2024). Total costs are all production costs, consisting of fixed and variable costs, reflecting all expenses incurred during an agricultural production cycle (Sardianti et al., 2023).

Revenue is all receipts from the sale of goods or services, whether in cash or in kind, reflecting a business's ability to generate profits. Revenue is a crucial factor in assessing the success and progress of a business because it reflects the results of production or service activities within a specific period. Revenue or net profit is calculated as the difference between total revenue (TR) and total costs (TC), using the formula $\pi = TR - TC$ (Putri & Arif, 2023).

According to Nugroho & Mas'ud (2021), the R/C ratio is the comparison between revenue and total costs used to assess the profitability and feasibility of a business. The purpose of this analysis is to determine whether a farming activity is economically profitable. An R/C value greater than one indicates a profitable business, an R/C value equal to one indicates a break-even point, and an R/C value less than one indicates a loss. The higher the R/C value, the higher the feasibility and profitability of the business. The calculation formula is:

$$R/C = \frac{\text{Amount of Acceptance (R)}}{\text{Total Cost (C)}}$$

Results and Discussion

Sulewatang Village is located in Polewali District and directly borders Pekkabata, Wattang, and Darma Villages. The majority of residents are farmers, and one of the agricultural sectors in Sulewatang Village is Langsat. Farmers' land sizes range from 0.5 to 2 hectares, with the number of langsung trees varying from 12 to 40. This variation in the number of trees directly influences the land's ability to produce fruit. Annual langsung production is recorded at between 300 and 2,000 kilograms, depending on land conditions and planting density. In general, differences in production yields are primarily influenced by differences in land area and the number of trees owned by each farmer.

Variable costs in agriculture for langsung cultivation in Sulewatang Village are production costs that fluctuate depending on the level of agricultural activity. The main variable costs consist of pesticides, labor, and transportation. Pesticides are used to control plant pests and diseases, with each unit costing Rp76,000. Labor is used for maintenance and harvesting activities, amounting to 1 day of work (HOK) at a cost of IDR 240,000. Transportation costs cover the transportation of production inputs and harvested produce, carried out three times at a total cost of IDR 30,000. Therefore, the total variable cost of langsung farming in Sulewatang Village is IDR 346,000, which is a crucial component in calculating total production costs and analyzing langsung farming profitability.

Fixed costs incurred by farmers in langsung farming in Sulewatang Village are long-term investments, as the equipment can be used across multiple growing seasons. Fixed cost

components include hoes (IDR 55,000), machetes (IDR 137,000), and 13 baskets (IDR 350,000). Therefore, the total fixed cost incurred by farmers is IDR 542,000.

Furthermore, fixed costs are also calculated in the form of equipment depreciation to reflect the decline in economic value due to use and lifespan. Depreciation for hoes is IDR 825 per year, machetes IDR 2,569 per year, and baskets IDR 11,375 per year, bringing the total annual depreciation cost of equipment to IDR 14,769.

This depreciation cost is important in calculating production costs because it provides a more accurate picture of the asset's usage value within a single year of langsung farming.

Farm income is calculated as the difference between the total revenue earned from agricultural product sales and the total production costs incurred by farmers during a specific farming period. This income reflects the level of profit earned by farmers and is an important indicator for assessing the economic efficiency of agricultural management, including the efficiency of resource use, resource utilization, and its suitability for future sustainable development (Larasati et al., 2022).

This table illustrates the results of the analysis of langsung farming income in Sulewatang Village during the current production year, when the plants are bearing fruit normally and producing a relatively optimal harvest. This analysis includes the total income earned by farmers from langsung fruit sales, the total costs incurred during the farming activities, and the net income or profit received by farmers in one year. This information is used to assess the profitability and economic feasibility of langsung farming activities run by farmers in the research area.

Table 1. Income of langsung farmers in Sulewatang Village

Description	Qty	Unit	Unit Price (IDR)	Total Value (IDR/Year)
Production	707	Kg	3,170	2,241,190
Variable Costs				
Pesticide	1	Bottle	76,000	76,000
Labor	1	HOK*	240,000	240,000
Transportation	3	Liter	10,000	30,000
Total Variable Costs				346,000
Fixed Costs				
Equipment Depreciation				14,769
Total Fixed Costs				14,769
Total Costs				360,769
Net Income				1,880,421

Source: Processed Primary Data (2025)

Production

In this production year, langsung fruit production reached 707 kilograms, with an average selling price of IDR 3,170 per kilogram. Therefore, the total revenue or gross income from langsung fruit sales is: $707 \text{ kg} \times \text{IDR } 3,170 = \text{IDR } 2,241,190$. This value reflects the total revenue earned by farmers during one harvest year.

Variable Costs

According to (Kinasih et al., 2025), variable costs are costs that change according to production activities, as they depend on the number of workers, the use of production facilities, and operational activities. In langsung farming in Sulewatang Village, the total variable costs

incurred by farmers were IDR 346,000. These costs include one bottle of pesticide at a cost of IDR 76,000, one hour of labor at a cost of IDR 240,000, and transportation costs incurred three times at a cost of IDR 10,000 each time, totaling IDR 30,000. Thus, the total variable costs for langsung farming in this area amount to IDR 346,000.

Fixed Costs

Fixed costs are costs that remain constant despite changes in production volume, as they are long-term in nature. In this activity, fixed costs are calculated based on the depreciation value of agricultural tools such as hoes, machetes, and baskets, totaling IDR 14,769 per year.

Total Production Costs

The total production costs of langsung farming in Sulewatang Village are obtained by adding variable costs of Rp346,000 and fixed costs (equipment depreciation) of Rp14,769, resulting in total production costs incurred by farmers reaching Rp360,769 in one year of production.

Income (Net Profit)

Net income or profit from langsung farming is obtained from the difference between total revenue and total production costs. With a total of Rp2,241,190 and total production costs of Rp360,769, the net income received by farmers reaches Rp1,880,421 per year. These results indicate that langsung farming in Sulewatang Village provides positive profits and is worthy of development, particularly through cost efficiency efforts and increased productivity through optimal plant maintenance and care.

Understanding the R/C Ratio

The R/C ratio (revenue-cost ratio) is the comparison between total revenue and total production costs in agricultural activities. The R/C ratio can be used to assess the level of efficiency and feasibility of a business, as well as to determine whether a farming venture is profitable or not.

Calculation

From the data obtained:

Total Revenue (R) = Rp2,241,190

Total Cost (C) = Rp360,769

The calculation is:

$$R/C = \frac{2.241.190}{360.769} = 6,21$$

The calculation results show that the R/C ratio is 6.21. This means that for every Rp1 of production costs incurred in langsung farming in Sulewatang Village, Rp6.21 in revenue is generated. In other words, langsung farming is highly feasible to continue or pursue, as its R/C ratio is higher than 1.

Based on the data analysis, it can be concluded that langsung farming in Sulewatang Village generates Rp2,241,190 in revenue per year. Total production costs are Rp360,769 per year. With an R/C ratio of 6.21, this activity is profitable and economically efficient. These results indicate that langsung farming has good prospects for development, both as a primary and supplementary source of income for local farmers. Most farmers stated that langsung farming is profitable. Other respondents considered it unprofitable, possibly related to low harvest productivity and marketing constraints.

Table 2. Feasibility analysis of langsung farming in Sulewatang Village

R/C Ratio Analysis	Mark
Total Revenue	2241190
Total Cost	360.769
R/C Ratio	6,21

Source: Processed Primary Data (2025)

The majority of farmers sell their crops directly to local markets or consumers, resulting in relatively short marketing channels. However, farmers still face challenges such as limited market access, price fluctuations, inadequate farm road infrastructure, and unstable production. Although langsung farming is considered profitable, support from the government and relevant institutions is still needed, particularly in improving market access, training, and improving transportation facilities to maximize langsung's economic potential.

The finding that langsung farming in Sulewatang Village remains profitable with a strong revenue cost position suggests that the economic promise of this commodity lies not merely in gross sales, but in the relationship between production output and a relatively manageable cost structure. This matters because farm viability in rural settings is often determined less by spectacular yields than by whether farmers can preserve a meaningful margin after routine expenditures are absorbed. Nugroho and Mas'ud (2021) explain that the revenue cost ratio is useful precisely because it shows whether a farm enterprise can convert limited production spending into sustained returns. That logic is reinforced by Larasati et al. (2022), who argue that farm income should be interpreted as a welfare indicator rather than a simple accounting residue, since it reflects how effectively rural households transform labor, land, and production inputs into economic security. In a similar vein, Sardianti et al. (2023) show that production cost analysis is central to understanding business sustainability in agricultural settings because even modest cost pressures can alter the meaning of profitability for small producers. Nainggolan (2024) further clarifies that the distinction between fixed and variable cost is not merely technical, since it shapes the resilience of farm income when output fluctuates. What makes the present study important, therefore, is that it reveals a pattern of efficiency in which annual expenditures remain sufficiently contained to allow farmers to retain a meaningful surplus. This interpretation is also consistent with Aini et al. (2025), who show that the significance of agricultural income analysis lies in its ability to capture the real economic outcome of farming after all cost obligations are considered. Kinasih et al. (2025) and Tamboto et al. (2025) likewise emphasize that a financially feasible farm is not simply one that generates revenue, but one that can maintain cost discipline across an entire production cycle. Seen from this angle, the Sulewatang case contributes to agribusiness discussion by showing that perennial fruit farming can remain economically attractive even at a modest scale when production expenses do not rise disproportionately to output.

Even so, profitability at the aggregate level should not be read as evidence that all farmers experience similar economic benefits. The study points to variation in land area, number of productive trees, and harvested volume, and this variation is crucial because it indicates that income is shaped by unequal production capacity within the same village context. Roy et al. (2023) argue that agricultural performance cannot be separated from agroclimatic variability, since local environmental conditions influence productivity patterns in direct and cumulative ways. Teramage et al. (2023) strengthen this view by showing that land use characteristics and soil related conditions can create substantial differences in production potential, even within geographically proximate areas. Tripathi et al. (2024) similarly note that productivity in tree

based agricultural systems is deeply affected by environmental suitability and adaptation to local growing conditions. In relation to *langsats* itself, Purnamawati et al. (2024) highlight that this fruit species has strong ecological and economic potential, yet its performance still depends on the conditions under which it is cultivated and maintained. This means that the present findings should be interpreted not as proof of uniform prosperity, but as evidence that profitability is achievable under favorable combinations of land, trees, and management quality. At the same time, the value of the commodity is also connected to consumer perception and market desirability. Abbas et al. (2023) show that horticultural commodities derive economic value not only from volume but also from quality related attributes that strengthen their attractiveness in broader value chains. Bhardwaj et al. (2024) deepen this point by arguing that the nutritional and quality profile of food products increasingly shapes their market relevance. For a fruit commodity such as *langsats*, this suggests that maintaining product quality is not peripheral to farm income, but central to whether farmers can capture better prices and strengthen their long term market position. In other words, the present study implies that biological potential and economic return are closely intertwined, and that future gains will depend on how well farmers convert ecological suitability into a consistently marketable product.

The most serious limitation emerging from the study does not appear to lie inside the farm itself, but in the weak structure surrounding the farm, especially in relation to market access, transportation, and price stability. This is a significant point because profitable production does not automatically translate into secure livelihoods when market linkage remains fragile. Bonuedi et al. (2022) demonstrate that limited market access can reduce the welfare benefits of agricultural production, particularly in rural settings where seasonal commodities are vulnerable to distribution bottlenecks. Ma et al. (2024) make a similar argument when they identify weak farmer market integration as a persistent barrier that prevents producers from converting output into stronger economic outcomes. In this respect, the Sulewatang case reflects a familiar agrarian pattern in which the farm may be technically viable, yet the surrounding institutional and commercial environment constrains the full realization of that viability. Putri and Arif (2023) suggest that income growth is closely tied to market strategy and product positioning, which means that selling channels matter as much as production performance. Arowosegbe et al. (2024) further show that inefficiencies along the agricultural supply chain can diminish value capture at the producer level, especially when transport and distribution are weak. Nuraini et al. (2025) add that market and operational risks shape farmers' willingness to sustain or expand a commodity, indicating that economic feasibility alone does not guarantee future commitment if uncertainty remains high. Manono (2025) reaches a comparable conclusion in his discussion of small scale farming, where profitability often remains vulnerable unless supported by stronger access systems, institutional backing, and more reliable routes to market. Taken together, these studies help explain why the current findings are important. The issue is not whether *langsats* farming can generate income, because the study shows that it can. The more critical question is whether that income can become stable, predictable, and expandable under existing rural market conditions. The answer suggested by the evidence is that production success still sits inside a fragile commercial environment.

For that reason, the broader contribution of this study lies in showing that the future of *langsats* farming in Sulewatang Village depends on moving from isolated farm profitability toward a more integrated agribusiness model. Ramadhan et al. (2023) remind us that revenue and income should not be treated as interchangeable concepts, because a farm may generate cash flow without securing a strong net return if structural constraints remain unresolved. Syarif et al.

(2024) also emphasize that feasibility must be interpreted in relation to the wider conditions that shape business continuity, not merely by one cycle of positive earnings. Belbase and Balaji Bhaskar (2025) argue that sustainable horticultural development depends on integrated management strategies that improve productivity while protecting long term viability. Wu et al. (2025) similarly show that the development prospects of fruit commodities depend on how biological potential is aligned with cultivation goals and future market direction. In the context of the present study, this means that the economic promise of langsung should not be framed only as evidence of current profitability, but as an invitation for targeted intervention. Better farm road access, more reliable market information, stronger extension support, improved post harvest handling, and collective marketing arrangements would likely do more than raise income in a narrow sense. They would also reduce vulnerability and help transform a profitable seasonal activity into a more stable rural livelihood base. The study therefore offers an important practical message. Langsung farming in Sulewatang Village is already economically feasible, yet its real developmental value will depend on whether local institutions can help farmers move from being price takers at harvest time to becoming more secure participants in a better connected fruit economy.

Conclusion

Based on the research results, langsung farming in Sulewatang Village has proven to be profitable and feasible. Langsung production reaches 707 kg/year with an average price of Rp3,170/kg, resulting in total revenue of Rp2,241,190/year. Total production costs are Rp360,769 per year, resulting in a net income of Rp1,880,421 per year for farmers. The profit ratio for langsung cultivation is 6.21, meaning that every Rp1 of production costs generates Rp6.21 in revenue. These results indicate that langsung farming is efficient and economically feasible. The amount of farmer income is influenced by various factors, including land area, number of productive trees, production level, input use, labor, and access to transportation and marketing. However, obstacles such as inadequate farm road infrastructure, price fluctuations, and limited access to marketing still affect the stability of farmer income. Overall, langsung farming has the potential to be developed with the support of increased productivity, improved infrastructure, and strengthened market access.

References

- Abbas, F., Zhou, Y., O'Neill Rothenberg, D., Alam, I., Ke, Y., & Wang, H. C. (2023). Aroma components in horticultural crops: chemical diversity and usage of metabolic engineering for industrial applications. *Plants*, *12*(9), 1748. <https://doi.org/10.3390/plants12091748>
- Aini, E. N., Lestari, D. A. H., & Rahmalia, D. (2025). Analisis Efektivitas Pemanfaatan Pembiayaan Pada Sektor Pertanian Dan Pendapatan Usahatani Padi Di KSPPS BMT Assyafiiyah Berkah Nasional Cabang Kota Gajah Kabupaten Lampung Tengah. *Jurnal Ilmu Ilmu Agribisnis: Journal of Agribusiness Science*, *13* (4), 296–304. <https://doi.org/https://doi.org/10.23960/jiia.v13i4.11644>
- Arowosegbe, O. B., Ballali, C., Kofi, K. R., Adeshina, M. K., Agbelusi, J., & Adeshina, M. A. (2024). Combating food waste in the agricultural supply chain: A systematic review of supply chain optimization strategies and their sustainability benefits. *World Journal of Advanced Research and Reviews*, *24*(1), 122–140. <https://doi.org/10.30574/wjarr.2024.24.1.3023>

- Belbase, P., & Balaji Bhaskar, M. S. (2025). Sustainable cultivation of dragon fruit: integrated nutrient and pest management strategies for enhanced productivity and environmental stewardship. *Agronomy*, 15(11), 2514. <https://doi.org/10.3390/agronomy15112514>
- Bhardwaj, R. L., Parashar, A., Parewa, H. P., & Vyas, L. (2024). An alarming decline in the nutritional quality of foods: the biggest challenge for future generations' health. *Foods*, 13(6), 877. <https://doi.org/10.3390/foods13060877>
- Bonuedi, I., Kornher, L., & Gerber, N. (2022). Agricultural seasonality, market access, and food security in Sierra Leone. *Food Security*, 14(2), 471-494. <https://doi.org/10.1007/s12571-021-01242-z>
- Dhewy. R.C. (2022). Pelatihan Analisis Data Kuantitatif Untuk Penulisan Karya Ilmiah Mahasiswa. *Jurnal Pengabdian Kepada Masyarakat*, 2 (3), 4575-4578. <https://doi.org/10.53625/jabdi.v2i3.3224>
- Dimelu, M. U., & Odo, R. N. (2013). Production preference and importance of fruit species in home garden among rural households in Igbo-Eze North Agricultural Zone of Enugu State, Nigeria. *African Journal of Agricultural Research*, 8(46), 5733-5740.
- Hamsah, H., & Nirmawala, N. (2022). Zonasi Bencana Abrasi Pantai Sappoang Kabupaten Polewali Mandar. *Jurnal Geografi : Media Informasi Pengembangan Dan Profesi Kegeografian*, 19 (2), 62-72. <https://doi.org/10.15294/jg.v19i2.34486>
- Hamsah, Nirmawala, Asrandi, & Saleh, N. (2023). Model Kawasan Agrowisata Bulu Dengan Menggunakan Analisis Spasial. *Kepariwisata: Jurnal Ilmiah*, 17 (3), 230-238. <http://dx.doi.org/10.47256/kji.v17i3.267>
- Harker, F. R., Gunson, F. A., & Jaeger, S. R. (2003). The case for fruit quality: an interpretive review of consumer attitudes, and preferences for apples. *Postharvest biology and technology*, 28(3), 333-347. [https://doi.org/10.1016/S0925-5214\(02\)00215-6](https://doi.org/10.1016/S0925-5214(02)00215-6)
- Hasan, H. (2022). Pengembangan Sistem Informasi Dokumentasi Terpusat Pada Stmik Tidore Mandiri. *JURASIK (Jurnal Sistem Informasi dan Komputer)*, 2 (1), 23-29.
- Hasibuan, Azmi, Arjuna, & Rahayu. (2023). Analisis Pengukuran Temperatur Udara Dengan Metode Observasi. *GABDIMAS: Jurnal Garuda Pengabdian Kepada Masyarakat*, 1 (1), 1-8. <https://doi.org/10.55537/gabdimas.v1i1.582>
- Kinasih, A. S., Prasmatiwi, F. E., Murniati, K., & Situmorang, S. (2025). Evaluasi Kelayakan Finansial Usaha Susu Kambing Segar Labany Di Kota Metro. *Jurnal Ilmu Agribisnis: Journal of Agribusiness Science*, 13 (4), 331-339. <https://doi.org/10.23960/jiia.v13i4.10848>
- Larasati, T., Murniati, K., & Adawiyah, R. (2022). Analisis Pendapatan Dan Tingkat Kesejahteraan Rumah Tangga Petani Jagung Di Kelurahan Sidosari, Kabupaten Lampung Selatan. *Jurnal Ilmu Ilmu Agribisnis: Journal of Agribusiness Science*, 13 (3), 283-290. <https://jurnal.fp.unila.ac.id/index.php/JIA/article/view/10312>
- Lasut, Saerang, & Sumarauw. (2025). Pengaruh Proporsi Hutang, Profitabilitas, Dan Nilai Tukar Rupiah Terhadap Volatilitas Harga Saham Emiten Perbankan Di Bei Periode 2019-2023. *Jurnal EMBA*, 13 (2), 48-60. <https://ejournal.unsrat.ac.id/index.php/emba/article/view/61598>

- Ma, W., Sonobe, T., & Gong, B. (2024). Linking farmers to markets: Barriers, solutions, and policy options. *Economic Analysis and Policy*, 82, 1102-1112. <https://doi.org/10.1016/j.eap.2024.05.005>
- Manono, B. O. (2025). Small-scale farming in the United States: Challenges and pathways to enhanced productivity and profitability. *Sustainability*, 17(15), 6752. <https://doi.org/10.3390/su17156752>
- Meiratania, M. (2025). Analisis Pendapatan Usahatani Sayuran Kebun Polikultur Kelurahan Siantan Hilir Di Kecamatan Pontianak Utara. *INNOVATIVE: Journal Of Social Science Research*, 5 (4), 12208–12217. <https://j-innovative.org/index.php/Innovative>
- Nainggolan, K. F. (2024). Analisis Pendapatan Usahatani Padi Sawah Dan Usaha Gula Merah Kelapa Di Kecamatan Sirandorung Kabupaten Tapanuli Tengah. *Repository Universitas HKBP Nommensem*, 1 (1), 2–36.
- Nugroho, A. Y., & Mas'ud, A. A. (2021). *Proyeksi Bep, Rc Ratio Dan R/L Ratio Terhadap Kelayakan Usaha (Studi Kasus Pada Usaha Taoge Di Desa Wonoagung Tirtoyudo Kabupaten Malang)*. *Journal Kopersai dan Manajemen*, 2 (1), 27-37. <http://journal.stiekop.ac.id/index.php/komastie>
- Nuraini, C., Helbawanti, O., Mutolib, A., Rofatin, B., & Yuliyani, L. (2025). The Effect of Market and Operational Risks on Farmers' Interest in Honey Star Fruit Cultivation: The Moderating Role of Chili Farming in Banjar City. In *E3S Web of Conferences* (Vol. 665, p. 04004). EDP Sciences.
- Nurmiati, S., & Rusli. (2025). Karakteristik Responden Dalam Mengisi Kuesioner Tentang Hambatan Penggunaan E-Learning Characteristics Of Respondents In Completing A Questionnaire On Barriers To E-Learning Use. *Jurnal Rekayasa Informasi*, 14 (1), 18–26. <https://journal.istn.ac.id/index.php/rekayasainformasi/article/view/2339>
- Purnamawati, R., Mahrudin, & Iriyati, R. (2024). Keanekaragaman Jenis Langsung (Genus Lansium) di Desa Tanta Kabupaten Tabalong. *JURNAL BIOSHELL*, 13 (1), 71–80. <https://doi.org/10.56013/bio.v13i1.275>
- Putri, A., & Arif, M. (2023). Pengaruh Digital Marketing Dan Inovasi Produk Terhadap Pendapatan. *Jesya*, 6 (1), 194–208. <https://doi.org/10.36778/jesya.v6i1.915>
- Rahman, J., Zahidur Rahman, M., Tasfia, A., & Borhannuddin Bhuyan, M. H. M. (2024, November). Biodiversity of citrus fruits in Bangladesh. In *XV International Citrus Congress 1448* (pp. 773-788). <https://doi.org/10.17660/ActaHortic.2026.1448.94>
- Ramadhan, A., Rahim, R., & Utami, N. N. (2023). Teori Pendapatan (Studi Kasus: Pendapatan Petani Desa Medan Krio). *Penerbit Tahta Media..* <https://tahtamedia.co.id/index.php/issj/article/view/144>
- Roy, T., Kalambukattu, J. G., Biswas, S. S., & Kumar, S. (2023). Agro-climatic variability in climate change scenario: adaptive approach and sustainability. In *Ecological footprints of climate change: Adaptive approaches and sustainability* (pp. 313-348). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-15501-7_12
- Sahore, N., Awan, U., Chotia, V., & Agarwal, V. (2025). Exploring the potential and limits of green and sustainable agribusiness practices as a driver of environmental management. *Business Strategy and the Environment*, 34(6), 6885-6905. <https://doi.org/10.1002/bse.4320>

- Samsul, E., Jumain, J., & Sinala, S. (2022). Formulasi Masker Gel Peel Off Ekstrak Kulit Buah Langsat (*Lansium domesticum* L) dengan Variasi PVA (Polivinil Alkohol). *Jurnal Mandala Pharmacon Indonesia*, 8 (2), 151–164. <https://doi.org/10.35311/jmpi.v8i2.203>
- Sardianti, A. L., Dunda, T., & Hidayah, W. (2023). Analisis Biaya Produksi Cengkeh Di Kecamatan Botumoito Kabupaten Boalemo. *Journal Of Agritech Science (JASc)*, 7 (1), 103–110. <https://doi.org/10.30869/jasc.v7i01.1124>
- Syarif, Hamsiah, & Aulia Nurul Hikmah. (2024). Analisis Kelayakan Usaha Rumahan Gula Merah Kelapa Di Desa Pasiang. *Jurnal E-Business Institut Teknologi Dan Bisnis Muhammadiyah Polewali Mandar*, 4 (1), 1–10. <https://doi.org/10.59903/ebusiness.v4i1.96>
- Syarif, Hamsiah, Hikmah, A. N., Dambe, J., Ansyar, & Hamsah. (2024). Analisis Pendapatan Home Industry Gula Merah Kelapa Di Desa Pasiang. *Jurnal Riset Multidisiplin AGRISOSCO*, 2 (1), 1–7. <https://www.agrisosco.com/index.php/asc/article/view/22>
- Tamboto, K. G., Timban, J. F. J., & Katiandagho, T. M. (2025). Cost Analysis Of Rice Paddy Farming In West Poopo Village, Ranoyapo District, South Minahasa Regency. *Agri-Sosial Ekonomi Unsrat*, 21 (2), 1015-1022. <https://ejournal.unsrat.ac.id/index.php/jisep/article/view/61983>
- Teramage, M. T., Asfaw, M., Demissie, A., Feyissa, A., Ababu, T., Gonfa, Y., & Sime, G. (2023). Effects of land use types on the depth distribution of selected soil properties in two contrasting agro-climatic zones. *Heliyon*, 9(6). <https://doi.org/10.1016/j.heliyon.2023.e17354>
- Tripathi, R. S., Soondarmurthy, S., Ahuja, U. R., Sharma, R., Rohilla, P. P., & Singh, R. (Eds.). (2024). Climatic variations influenced distribution and productivity of different agroforestry systems in Rajasthan, India. *Annals of Arid Zone*, 63(3), 13-30.
- Wu, M., Liu, Y., Jiang, T., Liu, Y., Chen, Z., Wang, X., ... & Zhang, M. (2025). The origin, applications, and breeding goals of jujube in China. *Horticulturae*, 11(1), 37. <https://doi.org/10.3390/horticulturae11010037>