

The Contribution of Oil Palm Plantations to Farmers' Household Income

Nita Oktavia¹, Ine Fausayana², La Ode Kasno Arif³

¹ Alumnus of Agribusiness, Faculty of Agriculture, Halu Oleo University, Kendari City, Indonesia

^{2,3} Lecturer, Faculty of Agriculture, Halu Oleo University, Kendari City, Indonesia

Corresponding Author: nitaoktavia51@gmail.com

Abstract

This research was conducted in Aopa Village, Angata District, South Konawe Regency. The aim was to determine the income of oil palm farmers and the contribution of oil palm plantation businesses to their household income. The population in this study consisted of 24 oil palm farmers, all of whom were sampled using the census method. The data used consisted of primary and secondary data obtained through interviews, observation, documentation, and literature review. Data analysis was conducted descriptively and quantitatively using income analysis and contribution analysis. The results showed that the average income of oil palm farming farmers in Aopa Village was IDR 20,598,520 per hectare per year or IDR 1,716,544 per month. Meanwhile, the average total income of farmer households reached IDR 33,765,187 per year, derived from oil palm farming, non-oil palm farming, and non-agricultural income. The contribution of oil palm farming income to total household income was 61%, making it a significant contributor

Keywords: oil palm, farmer income, household income, contribution

INTRODUCTION

Palm oil plantations contribute significantly to the country's foreign exchange earnings through the export of their derivative products, particularly *Crude Palm Oil* (CPO) and *Palm Kernel Oil* (PKO). Data from the Coordinating Ministry for Economic Affairs (2021) indicates that the palm oil industry is one of the leading sectors supporting national economic growth. In 2020, Indonesia's palm oil export volume reached 25,935,257 tons of CPO and 1,689,177 tons of PKO, with primary destination countries including India, Spain, Malaysia, Italy, and Kenya (BPS, 2020). In addition to contributing to the national economy, the development of smallholder oil palm

510

IJETER, Volume 04 Issue 02, 2026



Copyright to the author of some rights reserved This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).



plantations also plays a role in improving the welfare of rural communities, reducing poverty levels, and narrowing income disparities (Budiasa, 2002).

At the regional level, the palm oil commodity is also one of the growing plantation sectors in Southeast Sulawesi Province. Based on data from the Southeast Sulawesi Provincial Central Statistics Agency and the Indonesian Palm Oil Book for 2018–2022, palm oil production during that period experienced significant fluctuations. In 2018, palm oil production reached 86,855 tons across an area of 73,785 hectares; it then increased to 106,113 tons in 2019 across an area of 74,872 hectares. However, in 2020, production dropped sharply to 59,460 tons as the cultivated area decreased to 61,721 hectares. The decline in production continued in 2021, reaching 52,292 tons, even though the cultivated area increased again to 74,480 hectares. In 2022, production increased again to 65,596 tons with a cultivated area of 73,880 hectares. This situation indicates that the size of the cultivated area is not the only factor influencing production levels and the income of oil palm farmers.

One of the challenges faced by oil palm farmers is the low selling price of fresh fruit bunches (FFB) at the farm level. Low selling prices result in unstable and declining farmer income. Additionally, the distance between the plantation and the oil palm mill (OPM), as well as high transportation costs, also affect the selling price received by farmers. The farther the plantation is from the PKS, the lower the selling price of FFB received by farmers tends to be. On the other hand, most farmers cannot sell their harvest directly to the mill due to minimum purchase quantity requirements that are difficult for small-scale farmers to meet (Bisuk, 2009).

Palm oil farmers' income is also influenced by the magnitude of production costs incurred during the cultivation process. Production costs encompass all expenditures used for farming activities, such as labor costs, fertilization, maintenance, and harvesting (Manurung, 2019). High production costs, without being offset by increased productivity or selling prices, will reduce the profits earned by farmers. Conversely, when the selling price of oil palm increases, farmers' income will also rise significantly (Haykal & Yunus, 2021). Therefore, income analysis is crucial for determining the profit levels farmers derive from their oil palm farming operations.

Aopa Village, Angata Subdistrict, South Konawe Regency is one of the areas developing smallholder oil palm plantations. A portion of the community in this village relies on oil palm farming as their primary source of livelihood. However, the income levels earned by farmers vary considerably, influenced by the size of land owned, crop productivity, fresh fruit bunch (FFB) selling prices, production costs, and market conditions for the harvested produce. These variations result in the contribution of oil palm farming income to farmers' household income



also differing significantly.

Several previous studies have shown that oil palm farming makes a significant contribution to farmers' household income and well-being. Susiana et al. (2023) found that oil palm farming in Sumber Bakti Village, Darul Makmur Subdistrict, Nagan Raya Regency contributed Rp5,950,154.47 per month to family income, or 49.63% of total household income. Research by Pratiwi et al. (2020) in Waru Subdistrict, Penajam Paser Utara Regency, showed that oil palm farming generates an average income of Rp19,882,641.92 per hectare per year with a R/C Ratio of 4.44, indicating that the business is viable and profitable to undertake.

Although various studies have examined the income and contribution of oil palm farming to farmers' welfare, studies specifically analyzing farmers' income levels and the contribution of oil palm farming to farmers' household income in Aopa Village, Angata Subdistrict, South Konawe Regency remain limited. However, different regional characteristics, production conditions, and marketing systems can result in varying levels of income and contribution. Therefore, this study is important to analyze the income levels from oil palm farming and to determine the extent of the contribution of oil palm farming income to farmers' household income in Aopa Village. The results of this study are expected to serve as a basis for consideration by farmers, local governments, and relevant parties in formulating strategies to increase the income and welfare of oil palm farmers in a sustainable manner.

METHOD

This study was conducted in Aopa Village, Angata Subdistrict, South Konawe Regency from November 2024 to September 2025. The study employed a quantitative approach to analyze oil palm farmers' income and its contribution to farmers' household income. The study population consisted of all 24 oil palm farmers in Aopa Village. The sampling technique used a census method, meaning all members of the population were included as research respondents. The data used consisted of primary and secondary data. Primary data was obtained directly from respondents through interviews using a structured questionnaire and field observations, while secondary data was obtained from various relevant sources, such as the Central Statistics Agency (BPS), books, reports, scientific journals, and relevant articles. The data collection techniques used included interviews and documentation. Interviews were conducted directly with respondents based on a prepared list of questions, while documentation involved collecting and reviewing various documents related to the research subject to support the completeness and accuracy of the data obtained.

This study employs a quantitative approach with descriptive analysis techniques to explain oil palm farm income and its impact on oil palm farmers' income in Aopa Village, Angata Subdistrict, South Konawe Regency. Additionally, it analyzes income and income contributions.

According to Boediono (2002), the amount of income and income contribution from oil palm farming can be calculated using the formula:

$$TR = P \times Q \dots\dots\dots \text{(Total Revenue (TR))}$$

Where:

TR = Total Revenue (Rp)

P = Product Price (Kg/Rp)

Q = Amount of oil palm production (kg)

$$I = TR - TC \dots\dots\dots \text{(Income)}$$

Where:

I = Palm Oil Revenue (IDR)

TR = Total Revenue (Rp)

TC = Total Cost (Rp)

To determine the extent of the contribution of oil palm farming revenue to total revenue, the following percentage calculation can be used:

$$\text{contribution (\%)} = \frac{\text{income from oil palm farming}}{\text{Total Household Income}} \times 100\%$$

RESULTS AND DISCUSSION

Analysis of Oil Palm Farming Costs in Aopa Village

Production costs are the total costs incurred to meet production needs, whether in the form of services or goods. The cost analysis of oil palm cultivation covers all costs incurred over the course of a year. Regarding cost calculations, according to Soekartaw (2006), cultivation costs are divided into *fixed costs* and *variable costs*.

Table 1 Average Fixed Costs of Oil Palm Plantation Farming in Aopa Village, Angata Subdistrict, South Konawe Regency , 2025

No	Fixed Costs	Average Fixed Costs (Rp/Ha/Year)
1	Sickle/Machete	45,120

2	Hoe	56,040
3	Machete	34,800
4	Handcart	115,200
5	Sprayer	91,200
6	Dodos	67,120
	Total	409,480

Table 1 shows that *fixed costs* in oil palm farming include depreciation costs for agricultural equipment. Oil palm farming indicates that equipment depreciation is a significant component of oil palm cultivation in Aopa Village, Angata Subdistrict, South Konawe Regency, as these costs can influence the total production costs of the farm. The amount of fixed costs is greatly influenced by the number and type of equipment owned, the purchase price of each piece of equipment, and its economic life. The more expensive the equipment and the shorter its useful life, the greater the monthly depreciation value will be. This explains why sprayers contribute the most to total fixed costs.

Table 2 Average Variable Costs of Oil Palm Plantation Farming in Aopa Village, Angata Subdistrict, South Konawe Regency , 2025

No	Variable Cost	Average Variable Cost (Rp/Ha/Year)
1	Seedlings	11,733,235
2	Fertilizer	7,722,735
3	Labor	721,176
4	Pesticides	1,314,853
	Total	21,492,000

Table 2 shows that the production output achieved by the oil palm plantation is directly related to the variable costs incurred during the oil palm cultivation process. Variable costs are the accumulation of all expenditures used to produce oil palm. Based on the data in the table, the total variable costs incurred over a one-year period reached Rp21,492,000. Of these total costs, the largest expenditure came from seedlings. This indicates that oil palm seedlings, as the primary input, have the most dominant contribution to the variable cost structure.

Other cost components, such as fertilizer, labor, and pesticides, serve as supporting elements and account for a smaller proportion of expenditures. The use of variable costs such as seedlings, fertilizer, labor, and pesticides is crucial because these factors directly influence

productivity and the quality of the harvest. The seedlings used in oil palm farming in Aopa Village are obtained from the local government and then distributed to farmer groups; this is part of a government program to support the sustainability of farmers and strengthen the role of farmer groups in supporting oil palm farming. Regarding fertilizer use, farmers in Aopa Village use two types of fertilizer: urea and phonska. Both provide essential nutrients required for optimal plant growth and increased crop yields. For pesticides, they use two types: Roundup and Gramaxone. According to Hartono (2012), cost is defined as the burden that a company must bear to produce goods or services ready for consumer use. Total cost is the sum of fixed costs and variable costs. In this study, total cost is calculated for all commodities, and the total cost is then divided by the land area of each crop. Total costs in oil palm farming represent the total expenses incurred by farmers in Aopa Village to manage and produce oil palm. Total costs include fixed and variable costs, as shown in the table:

Table 3 Average Total Costs of Oil Palm Plantation Farming in Aopa Village, Angata Subdistrict, South Konawe Regency , 2025

No	Type of Total Cost	Average (Rp/Ha/Year)
1	Fixed Costs	409,480
2	Variable Costs	21,492,000
	Total	21,901,480

Table 3 shows that the total costs incurred by farmers in the oil palm farming business in Aopa Village amount to Rp. 21,901,480 per hectare per year; this figure is the sum of fixed and variable costs, meaning the total is significantly influenced by fluctuations in both types of costs. If variable costs, such as raw materials and wages, increase, or if additional equipment is acquired, leading to an increase in fixed costs, the total costs will also rise. This highlights the importance of efficient management of both cost components to maintain the stability of production expenditures.

This study also indicates that, consistent with the research by Gustika (2023), in oil palm farming, variable costs significantly influence production output, leading to higher expenditures. Additionally, land area serves as a key factor in production output, necessitating greater quantities of seedlings, fertilizers, pesticides, and labor.

Revenue and Income from Oil Palm Plantation Operations in Aopa Village

Revenue from oil palm farming is the product of production output multiplied by the selling price; the amount of revenue depends on the volume of production generated. Meanwhile, farm income is the difference between revenue and total costs (Soekartawi, 2016). The income referred to in this study is the total revenue earned by farmers for each commodity over two harvest seasons, minus the total expenses (costs) for each commodity during the farming period.

Table 4 Average Total Farmer Receipts from Oil Palm Plantation Farming in Aopa Village, Angata Subdistrict, South Konawe Regency , 2025

No	Description	Amount
1	Production (kg/ha/year)	17,000
2	Price (Rp/kg)	2,500
3	Revenue (IDR/Year)	42,500,000

Table 4 shows that the difference between revenue and total costs indicates that this business is capable of generating a profit of Rp42,500,000 per year per hectare. This profit figure indicates that the oil palm farming operations at are running smoothly. Consequently, this business is deemed viable for further development, as it can provide positive economic contributions and has good prospects for sustainability in the future. Increasing oil palm production plays a crucial role in boosting farm revenue; with larger production volumes, farmers can leverage economies of scale and increase their income.

Table 5 Average Farmer Income in Oil Palm Plantations in Aopa Village, Angata Subdistrict, South Konawe Regency , 2025

No	Description	Average (Rp/Ha/Year)
1	Revenue	42,500,000
2	Total Costs	21,901,480
	Total Revenue	20,598,520

Based on Table 5, it can be seen that the average revenue from oil palm farming in Aopa Village has a significant impact. Revenue and total costs greatly influence the income of oil palm farming in Aopa Village because they are the two main components that determine business profitability. Therefore, understanding and managing these two components effectively is

crucial for financial success in oil palm farming. This aligns with the research (Pulungan *et al.*, 2021). The low income of oil palm farmers is attributed to a decline in the price of fresh fruit bunches (FFB) and insufficient maintenance of oil palm plants, as evidenced in the income appendix for Respondent 6, who reported revenue of Rp 27,500,000 and a net loss of Rp - 6,674,000; this aligns with the research by Pratiwi *et al.* (2020). Income is influenced by the volume of sold fresh fruit bunches (FFB).

Additionally, income is significantly influenced by production costs, selling prices, and land area, which substantially affect oil palm farmers' income. As seen in the income appendix, Respondent 3 has a land area of 1.5 ha, with revenue of Rp82,500,000 and income of Rp65,718,000, while Respondent 14 has a land area of 2.1 hectares with receipts of Rp90,000,000 and income of Rp57,837,000; this aligns with the research (Achsanuddin *et al.*, 2025). The implications of these findings highlight the importance of efficient production cost management, stabilizing selling prices, and optimizing land area to increase oil palm farmers' income.

Income outside of oil palm cultivation includes non-oil palm farming income and non-agricultural income. Non-oil palm farming income within agriculture includes pepper farming, patchouli farming, farm labor, and vegetable farming, as well as non-agricultural or *non-farm* income such as contract workers, civil servants, and other income—ranging from income outside farming that is still related to agriculture to income entirely outside the agricultural sector. The total income of farmers in Aopa Village is shown in the following table:

Table 6 Average Total Income of Oil Palm Farmer Households , 2025

No	Description	Total Revenue (IDR/Year)	%
1	Non-Palm Oil Farming	6,208,333	47
2	Non-Agricultural	6,958,333	53
	Total Revenue	13,166,667	100

Table 6 indicates that the average annual income of farmers in Aopa Village, Angata Subdistrict, South Konawe Regency, is Rp13,166,667, or a monthly income of Rp1,097,223. This study reveals that oil palm farmers do not rely solely on income from oil palm farming but also utilize other potential income sources such as other agricultural activities, selling goods, working as farm laborers, and even engaging in entrepreneurship.

Contribution of Oil Palm Plantation Farming in Aopa Village

The contribution mentioned in this study refers to the portion or contribution derived from the oil palm farming operations studied among 24 oil palm farmer samples in the research area. These oil palm farming operations are carried out by farmers to generate income, cover daily living expenses, and fund their children's education. However, the income derived from oil palm farming is not necessarily sufficient to meet these needs given the current situation where basic daily living costs are becoming increasingly expensive. This situation has led farmers to seek ways to generate additional income to help cover daily living expenses, such as engaging in other agricultural activities or simply starting a small-scale home-based business.

Research findings indicate that all samples are oil palm farmers. There are also other types of agricultural and non-agricultural activities carried out by farmers or other family members who are able to work.

Table 7 Average Farmer Income and the Contribution of Oil Palm Farming to Household Income in , 2025

No	Income Source	Annual Value (IDR)
1	Palm Oil Farming	20,598,520
2	Non-Oil Palm Business	6,208,333
3	Non-Agricultural	6,958,333
	Total	33,765,187
	Contribution	61

Table 7 shows that the average contribution of oil palm farming to farmers' income in Aopa Village, Angata Subdistrict, South Konawe Regency is above 50%, specifically an average of 61%. When calculated as a monthly income of Rp2,813,766, and compared to the minimum wage (UMR) in South Konawe Regency in 2025, which is Rp3,073,551, it can be seen that the minimum wage is higher than the income from oil palm farming. Based on this study, it can be concluded that the contribution of oil palm farming to farmers' income falls into the "high" category, making oil palm farming the primary source of income for farmers in Aopa Village, Angata Subdistrict, South Konawe Regency.

CONCLUSION

Based on the results of the study conducted in Aopa Village, Angata Subdistrict, South Konawe Regency, it can be concluded that oil palm farming generates an average income of

Rp20,598,520 per hectare per year, or the equivalent of Rp1,716,544 per month. Furthermore, oil palm farming contributes 61% to the total household income of farmers, placing it in the category of significant contribution. This finding indicates that oil palm plantations are the primary source of income that plays a crucial role in supporting the economy and the well-being of farmers' households in Aopa Village. Based on the research results, it is recommended that farmers increase productivity through proper fertilization, weed control, and participation in farmer groups. The government is expected to enhance extension and training programs on efficient and sustainable oil palm cultivation. Further research is recommended to examine the impact of fluctuations in the oil palm market price on farmers' income and welfare.

REFERENCE

- Achsanuddin UA AN, Mahputra, Muhammad Yusuf. 2025. Pengaruh Biaya Produksi, Harga Jual, dan Luas Lahan terhadap Pendapatan Petani Kelapa Sawit di Desa Karossa Provinsi Sulawesi Barat. *Kompeten: Jurnal Ilmiah Ekonomi dan Bisnis* Vol. 3 No. 6. Hal 1137-1142
- Afifuddin, S., Kusuma, SI. 2007. Analisis Struktur Pasar CPO: Pengaruhnya terhadap pengembangan ekonomi wilayah Sumater Utara. *Jurnal Perencanaan dan Pengembangan Wilayah*. Vol. 2 No. 3. April 2007. Hal 124 – 136.
- Badan Pusat Statistik. 2023. Statistik Kelapa Sawit Indonesia 2022. Jakarta. Badan Pusat Statistik.
- Bisuk, P. (2009). Analisis Tataniaga dan Elastisitas Transmisi Harga CPO Internasional terhadap Harga TBS Kelapa Sawit (Studi Kasus Desa Mananti Kecamatan Sosa Kabupaten Padang Lawas). 1–76.
- Devi Alfiyanti Pratiwi, Syarifah Maryam dan Siti Balkis. 2020. Analisis Pendapatan Usahatani Kelapa Sawit (*Elaeis Guineensis* Jacq.) Di Kecamatan Waru Kabupaten Penajam Paser Utara. *J. Agribisnis. Komun. Pertan*. Volume 3, Nomor 1, Halaman: 9-16.
- Fauzi, Yan, 2004, Kelapa Sawit Budidaya Pemanfaatan Hasil dan limbah Analisis Usaha dan Pemasaran, Edisi Revisi, Penerbit penebar Swadaya, Jakarta
- Nisa, W. 2017. Kontribusi Usahatani Padi dalam Meningkatkan Kesejahteraan Ekonomi Masyarakat (Studi Kasus Desa Terutung Megara Bakhu Kecamatan Lawe Sumur Kabupaten Aceh Tenggara Aceh). Skripsi. Universitas Islam Negeri Sumatera Utara. Medan.
- Nurdin, H. S. 2010. Analisis penerimaan bersih usaha tanaman pada petani nenas di Desa Palaran Samarinda. *Jurnal Eksis*, Politeknik Negeri Samarinda, 6(1).
- Sholihin, 2013 Teori Pendapatan (Studi Kasus: Pendapatan Petani Desa Medan Krio)



- Sukirno, S. 2000. Pengantar Teori Mikro Ekonomi. PT Raja Grafindo Persada, Jakarta.
- Suroso. 2006. Analisis Curah Hujan untuk Membuat Kurva Intensity Duration Frequency (IDF) di Kawasan Rawan Banjir Kabupaten Banyumas. Jurnal Teknik Sipil Vol. 3.
- Syahza, 2011. Percepatan Ekonomi Pedesaan Melalui Pembangunan Perkebunan kelapa Sawit. Jurnal Ekonomi Pembangunan, Vol. 12, No. 2, Februari 2011. Hal, 60-78.
- Syahza, Almasdi. 2007. Percepatan Pemberdayaan Ekonomi Masyarakat Pedesaan dengan Model Agroestate Berbasis Kelapa Sawit, dalam Jurnal Ekonomi, Th.XII/02/Juli/2007, PPD&I Fakultas Ekonomi Universitas Tarumanegara, Jakarta.
- Tarigan, R. 2005. *Perencanaan pembangunan wilayah*. Jakarta: PT. Bumi Aksara

