

Cost Structure and Net Income Analysis of Copra Farmers: A Case Study in Kohala Village

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Abstract

Purpose: This study analyzes the production cost structure and net income of copra farmers in Kohala Village, Buki District, Selayar Islands Regency, and identifies factors influencing their income.

Research Methodology: A qualitative approach with a single case study design was employed. Data were collected through in-depth interviews, field observations, and documentation involving 10 active copra farmers selected through purposive sampling.

Results: The findings indicate that labor costs dominate the production cost structure, accounting for 65–80% of total production costs. Average net income varies according to farm scale, ranging from IDR 125,000 to IDR 5,550,000 per harvest, or IDR 41,667 to IDR 1,850,000 per month. Small-scale farmers earn net incomes below the regional minimum wage.

Conclusions: Copra farming in Kohala Village remains largely traditional, with labor constituting the largest production cost. Net income is influenced by fluctuations in copra prices, land size, dependence on local collectors, and limited access to capital and production technology.

Limitations: The study is limited to Kohala Village, restricting the generalizability of its findings. Income estimates are also approximate because most farmers do not maintain systematic financial records.

Contribution: This study provides empirical evidence on copra production costs and farmer income, offering insights for local government policies aimed at improving the welfare of copra farmers in island regions.

Keywords: Case Study, Copra Farming, Copra Farmers, Cost Structure, Net Income, Selayar Islands

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1. Introduction

Indonesia is one of the world's largest coconut-producing and exporting countries, with more than 3.4 million hectares of coconut plantations distributed across several provinces. The coconut sector plays an important role in supporting rural livelihoods, creating employment opportunities, and contributing to the national economy (Vijayakumar, 2020). In addition to being consumed as fresh fruit, coconuts can be processed into a wide range of value-added products that serve as raw materials for various industries (Doe, Aboagye, Osei-Owusu, Amoah, Aidoo, & Amponsah, 2023; Hermiza, 2021). One of the most important processed products is copra, which is produced by drying coconut meat. Copra is the primary raw material for the coconut oil industry and is also used in the production of soap, cosmetics, animal feed, and other coconut-based products (Lahama, Rengkung, & Ruauw, 2018). Consequently, the sustainability of copra production is closely related to the economic welfare of coconut farmers, particularly in rural and island communities (Sathana, 2018).

The Selayar Islands Regency, located in South Sulawesi Province, is one of the regions with considerable potential for coconut cultivation and copra production. Its geographical characteristics as an archipelagic area, combined with fertile land and favorable climatic conditions, make coconut one of the region's leading agricultural commodities ([Makmur, 2021](#)). Coconut farming has long been practiced as a traditional livelihood and remains an important source of household income for many rural communities. Among these communities, Kohala Village in Buki District is recognized as a village where a large proportion of residents depend on copra production as their primary economic activity. Despite the importance of this commodity, comprehensive information regarding the production cost structure and net income of copra farmers in the village remains limited, particularly from an academic perspective ([Phelan, Ruhanen, & Mair, 2020](#); [Elpisah, Suarlin, & Yahya, 2021](#)).

Previous studies have discussed various aspects of copra farming and agricultural income in different regions. [Rahim and Hastuti \(2007\)](#) explained that farmers' income is determined by the difference between total revenue and the production costs incurred during farming activities. In addition to production costs, [Mosher \(1991\)](#) argued that infrastructure, market access, and technology are important factors affecting agricultural productivity and farmers' income. Specifically in the copra industry, market price fluctuations are considered one of the dominant factors influencing farmers' earnings because changes in selling prices directly affect profitability ([Suherman, Palenewen, & Mirah, 2016](#)). Furthermore, [Dady, Kaunang, and Tulung \(2018\)](#) emphasized that analyzing production cost structures is essential since labor costs generally represent the largest component of production expenses and significantly influence the efficiency and profitability of copra farming.

Although previous studies have provided valuable insights, research specifically examining the production cost structure and net income of copra farmers in Kohala Village, Buki District, Selayar Islands Regency, remains scarce. Most existing studies focus on broader agricultural sectors or different geographical areas, making it difficult to understand the unique economic conditions experienced by farmers in this village. In addition, differences in farm size, production capacity, labor utilization, and market accessibility may lead to variations in production costs and net income among farmers. Therefore, empirical evidence from Kohala Village is needed to provide a clearer understanding of the economic characteristics of local copra farming.

A comprehensive analysis of production costs and net income is expected to provide useful information for both farmers and policymakers. For farmers, such information can serve as a basis for improving production efficiency, controlling operational costs, and increasing profitability. For local governments, the findings may support the formulation of policies related to agricultural development, market access, financial assistance, and technology adoption aimed at improving the welfare of copra farmers in island regions.

Based on the background described above, this study addresses the following research questions: (1) What is the production cost structure of copra farming in Kohala Village? (2) How does the net income of copra farmers vary according to the scale of their farming operations? and (3) What factors influence the net income earned by copra farmers in Kohala Village? Accordingly, this study aims to analyze the production cost structure, examine the net income of copra farmers across different business scales, and identify the factors affecting their net income. The findings are expected to contribute to the literature on agricultural economics while providing practical recommendations for improving the sustainability and profitability of copra farming in the Selayar Islands Regency.

2. Literature Review and Hypothesis/es Development

2.1 Concept of Farm Income

Farm income is defined as the difference between total revenue and total production costs incurred during a production period. According to [Soekartawi \(2002\)](#), farm income refers to the total revenue earned by farmers from the sale of agricultural products after deducting all production costs, including both fixed and variable costs. Farm income is one of the primary indicators of agricultural business

performance because it reflects the economic returns obtained from farming activities and the level of farmers' welfare ([Coppola, Scardera, Amato, & Verneau, 2020](#); [Spicka, Hlavsa, Soukupova, & Stolbova, 2019](#); [Arru, Furesi, Madau, & Pulina, 2021](#)). [Hernanto \(1994\)](#) classified farm income into two categories: gross income, which represents the total revenue before deducting production costs, and net income, which refers to the remaining revenue after all production expenses have been deducted.

[Suratiyah \(2015\)](#) stated that farm income is influenced by two major groups of factors, namely internal and external factors. Internal factors include land size, labor availability, capital, and farmers' managerial skills in organizing farming activities. External factors consist of input prices, output market prices, government policies, and climatic conditions. The interaction between these internal and external factors determines the efficiency, productivity, and profitability of agricultural businesses. Therefore, understanding the determinants of farm income is essential for developing strategies to improve farmers' economic welfare ([Musa, & Basir, 2021](#); [Briones, & de Nieves, 2018](#); [Novotná, & Volek, 2015](#)).

2.2 Concept of Production Cost Structure

Production costs refer to all expenditures incurred during the production process to generate a particular output. According to [Soekartawi \(2002\)](#), production costs in farming activities are generally classified into two categories: fixed costs and variable costs. Fixed costs are expenses that remain relatively constant regardless of production volume, such as equipment depreciation and land rental costs. In contrast, variable costs change according to the level of production and include labor wages, fuel, transportation, and other operational expenses ([Tsiouni, Aggelopoulos, Pavloudi, & Siggia, 2021](#); [Izadi, Nabipour, & Titidezh, 2019](#)).

The production cost structure describes the proportion of each cost component relative to the total production cost. Analyzing the cost structure is important because it helps identify the dominant cost components, allowing farmers to focus efficiency improvement efforts on the largest expenditure categories ([Suratiyah, 2015](#)). In conventional copra production, labor costs usually represent the largest proportion of production costs because most production activities, including harvesting, splitting coconuts, removing the coconut meat, and drying the copra, are still performed manually ([Dady, Kaunang, & Tulung, 2018](#); [Dimitri, & Gardner, 2019](#)). Therefore, understanding the production cost structure is essential for improving production efficiency and increasing the profitability of copra farming.

2.3 Copra Farming and Its Characteristics

Copra is a processed coconut product obtained by drying coconut meat through sun drying or artificial heating methods. The production process includes selecting mature coconuts, splitting the fruits, removing the coconut meat, and drying it for approximately four to seven days, depending on the production method employed ([Ismail, Niode, & Juanna, 2022](#)). The quality of copra is primarily determined by its moisture content, with export-quality copra generally required to have a moisture content of no more than 6–7% ([Badan, 2006](#)).

In Indonesia, copra farming is predominantly conducted on a small scale using traditional production methods managed by family farmers. This production system often results in lower productivity compared to countries that have adopted more advanced production technologies ([Elizabeth & Anugrah, 2020](#)). Copra farmers commonly face several challenges, including limited access to modern processing technology, insufficient capital, dependence on local collectors or middlemen, and unpredictable market price fluctuations ([Marhawati, Mustar, Rahmatullah, & Nurdiana, 2021](#)). Despite these challenges, copra farming remains an important source of income for millions of rural households, particularly in island regions where coconut cultivation is one of the primary agricultural activities ([Hestina, Purba, Yusuf, Dabukke, Azhari, & Darwis, 2022](#); [Mat, Rusli, Wei, Rahman, & Goh, 2022](#)).

2.4 Factors Affecting the Net Income of Copra Farmers

[Suherman, Palenewen, and Mirah \(2016\)](#) concluded that the price received by copra farmers in North Sulawesi is highly unstable and largely depends on fluctuations in the international vegetable oil market. A decline in palm oil prices generally reduces the demand for copra, resulting in lower copra prices received by farmers. Consequently, changes in market prices have a direct impact on the net income earned by copra producers ([Myeni, Moeletsi, Thavhana, Randela, & Mokoena, 2019](#); [Shiferaw, Kebede, Kassie, & Fisher, 2015](#)).

Besides market prices, land size is another important determinant of farmers' net income. [Marhawati, Mustar, Rahmatullah, and Nurdiana \(2021\)](#), in a study conducted in Maluku, found that farmers owning more than two hectares of coconut plantations earned approximately three times higher income than farmers with smaller landholdings. However, [Suherman et al. \(2016\)](#) emphasized that labor efficiency must also be considered because labor costs account for approximately 40–60% of the total production costs in conventional copra farming. Improving labor productivity can therefore significantly reduce production costs and increase net income.

Marketing institutions also influence the net income of copra farmers. [Prastio, Soetoro, and Hardiyanto \(2017\)](#) found that long marketing chains often reduce the prices received by farmers because multiple intermediaries capture a substantial portion of the marketing margin. As a result, farmers receive significantly lower prices than those prevailing in the market, reducing their overall profitability. Strengthening farmer organizations and promoting direct marketing channels are therefore considered important strategies for increasing farmers' net income ([Liu, Ma, Renwick, & Fu, 2019](#); [Chengappa, 2018](#); [Dimitri, & Gardner, 2019](#)). In addition, limited access to financial capital remains a major constraint that prevents farmers from adopting improved production technologies capable of enhancing production efficiency and increasing profitability ([Prastio et al., 2017](#); [Mgbenka, Mbah, & Ezeano, 2016](#)). These findings indicate that the net income of copra farmers is influenced by a combination of production costs, land ownership, market conditions, labor efficiency, marketing systems, and access to capital.

3. Research Methodology

3.1 Research Design

This study employed a qualitative research approach using a single case study design to examine the production cost structure and net income of copra farmers in Kohala Village, Buki District, Selayar Islands Regency. A qualitative approach was chosen because the study aims to obtain an in-depth understanding of the socio-economic conditions experienced by copra farmers within their real-life context ([Creswell, 2014](#)). The single case study design allows researchers to explore a specific phenomenon comprehensively while considering the unique characteristics of the study area ([Yin, 2018](#)).

3.2 Research Site

The research was conducted in Kohala Village, Buki District, Selayar Islands Regency, South Sulawesi Province. This location was selected because the majority of the local population relies on copra farming as their primary source of livelihood. Furthermore, limited academic research has specifically examined the production cost structure and net income of copra farmers in this village, making it an appropriate setting for this study.

3.3 Research Informants

Research informants were selected using a purposive sampling technique. The selection criteria included: (1) actively engaged in copra farming for at least three years, (2) residing permanently in Kohala Village, and (3) being willing to participate and provide information openly. Based on these criteria, 10 informants were selected, consisting of seven small-scale copra farmers, two

medium-scale copra farmers, and one local copra collector. The number of informants was determined based on the principle of data saturation, where additional interviews no longer generated new or meaningful information ([Sugiyono, 2019](#)).

3.4 Data Collection

Data were collected through three primary techniques. First, in-depth interviews were conducted using semi-structured interview guidelines covering production costs, business revenue, marketing activities, production constraints, and factors influencing farmers' net income. Second, direct observation was carried out to examine the copra production process, including coconut harvesting, splitting, removing coconut meat, drying, and marketing activities. Third, documentation was used to collect supporting evidence, including sales records, receipts for production inputs, photographs of production activities, and secondary data obtained from the village administration and the local agricultural office.

3.5 Data Analysis

The collected data were analyzed using the interactive analysis model developed by [Miles, Huberman, and Saldaña \(2014\)](#), which consists of four stages: (1) data collection, (2) data condensation through selecting, coding, and simplifying relevant information, (3) data presentation in descriptive narratives and summary tables, and (4) conclusion drawing and verification. To ensure the credibility of the findings, source triangulation was applied by comparing information obtained from farmers, local collectors, field observations, and official secondary data.

3.6 Farm Income Analysis

The net income of copra farming was calculated using the following farm income formula:

$$\pi = TR - TC \quad (1)$$

Formula 1 was used to calculate the net income of copra farming by subtracting total production costs from total revenue. This formula provides a simple measure of farm profitability and was applied to determine the financial performance of copra farmers in Kohala Village based on the revenue generated and the production costs incurred during each harvesting cycle.

4. Results and Discussions

4.1 Overview of the Research Site

Kohala Village is one of the villages located in Buki District, Selayar Islands Regency, South Sulawesi Province. The village is approximately 45 minutes from the regency capital by motorcycle or other motorized transportation. According to the 2023 Village Profile, Kohala Village has a population of 1,247 residents, consisting of 623 males and 624 females, distributed across 356 households. Agriculture and plantation activities constitute the primary source of livelihood for the local community, with approximately 68% of residents working in these sectors. Among the various agricultural activities, copra farming represents the dominant economic activity and serves as the principal source of household income for most families ([Steenbergen, Marlessy, & Holle, 2017](#); [Labao, Yap, & Yap, 2017](#)).

The village has an estimated 320 hectares of coconut plantations, all of which are privately owned by local farmers. Individual land ownership generally ranges from 0.5 to 3 hectares, indicating that most farmers operate on a small to medium scale. The coconut plantations mainly consist of local tall coconut varieties, with tree ages ranging from 10 to 40 years. Most farmers rely on traditional cultivation practices and rarely implement planned replanting programs. Consequently, many plantations contain aging coconut trees with declining productivity, which affects copra production

and farmers' income. In addition, limited access to modern agricultural technology and financial resources constrains farmers' ability to improve plantation productivity and production efficiency ([Abdul-Rahaman, Issahaku, & Zereyesus, 2021](#); [Cafer, & Rikoon, 2018](#)).

4.2 Characteristics of the Research Informants

Based on the interview results, all research informants were male, with ages ranging from 35 to 62 years. The educational backgrounds of the informants varied considerably, from individuals who had not completed elementary school to those who had graduated from senior high school. This variation reflects the educational characteristics commonly found among small-scale agricultural communities in rural areas.

Table 1. Characteristics of the Research Informants

Informant Code	Age (Years)	Education	Land Area (ha)	Farming Experience (Years)
I-01	45	Junior High School	1.0	20
I-02	52	Elementary School	2.0	28
I-03	38	Senior High School	0.5	10
I-04	60	Elementary School	3.0	30
I-05	47	Junior High School	1.5	22
I-06	35	Senior High School	0.5	5
I-07	55	Did Not Complete Elementary School	2.5	25
I-08	42	Senior High School	1.0	15
I-09	50	Junior High School	1.5	20
I-10	62	Elementary School	2.0	30

Table 1 shows that the research informants represent diverse demographic and farming characteristics. The informants had 5 to 30 years of experience in copra farming, indicating that most possessed extensive practical knowledge regarding coconut cultivation and copra production. The average plantation area managed by each informant was approximately 1.2 hectares, with the number of productive coconut trees ranging from 50 to 200 trees per farmer. Differences in land ownership, farming experience, and production capacity contributed to variations in production costs, production volume, and net income among the informants.

4.3 Copra Production Process in Kohala Village

Based on the results of field observations and in-depth interviews, the copra production process in Kohala Village consists of several sequential stages. The first stage is coconut harvesting, which is generally carried out every three months, although the harvesting schedule may be adjusted depending on fruit maturity and the farmers' financial needs. Farmers usually harvest mature coconuts manually by climbing the trees or using long bamboo poles to detach the fruits. The harvested coconuts are then collected and transported to the processing area.

One informant (I-04) explained:

"We usually harvest every three months, sometimes every four months when we have other priorities. Each tree can produce around 10 to 15 coconuts per harvest."

The second stage involves splitting the coconuts to separate the coconut meat from the shell. This process is performed manually using machetes and requires considerable physical labor. The coconut meat is then prepared for the drying process, which is a critical stage in determining the quality of the final copra product.

The third stage is drying the coconut meat, which is carried out using one of two traditional methods. The first method is sun drying, in which the coconut meat is exposed to direct sunlight for approximately four to seven days. The second method is smoke drying using simple traditional furnaces for two to three days. Most farmers in Kohala Village continue to rely on sun drying because it requires lower production costs than smoke drying. However, this method is highly dependent on weather conditions and is vulnerable to prolonged rainfall.

As explained by Informant I-07:

"We dry the coconuts under the sun because it is cheaper, but when it rains, the copra can be damaged. We have suffered losses during long rainy seasons because the copra became moldy."

The final stage is marketing and selling the dried copra. Farmers either sell their products directly to local collectors who visit the village or transport the copra to the district market. Most informants prefer selling to local collectors because it is more convenient and eliminates transportation costs. However, this marketing system places farmers in a relatively weak bargaining position, as collectors generally determine the purchasing price. Consequently, fluctuations in market prices directly affect farmers' revenues and overall profitability.

4.4 Revenue Structure of Copra Farming

Revenue from copra farming was calculated by multiplying the quantity of dried copra produced by the prevailing selling price per kilogram. Based on interviews and supporting documentation, the average volume of copra produced per farmer in each harvesting cycle (approximately three months) varied considerably depending on land size, the number of productive coconut trees, and plantation conditions. Farmers managing larger plantations generally produced substantially more copra than those operating on smaller farms.

During the study period, the selling price of copra received by farmers in Kohala Village ranged from IDR 3,500 to IDR 4,500 per kilogram, depending on product quality, moisture content, and price negotiations with local collectors. Variations in production volume and selling prices resulted in significant differences in total revenue among farmers. In addition to production capacity, seasonal weather conditions and market price fluctuations also influenced the amount of revenue generated from each harvest.

Table 2. Average Revenue from Copra Farming per Harvest (Three-Month Production Cycle)

Farmer Category	Land Area (ha)	Copra Production (kg)	Selling Price (IDR/kg)	Total Revenue (IDR)
Small-Scale (< 1 ha)	0.5–0.9	200–400	3,500–4,000	700,000–1,600,000
Medium-Scale (1–2 ha)	1.0–2.0	400–800	3,500–4,500	1,400,000–3,600,000
Large-Scale (> 2 ha)	2.0–3.0	800–1,500	4,000–4,500	3,200,000–6,750,000

Table 2 shows that the average revenue of copra farmers increases with the scale of land ownership and production capacity. Large-scale farmers generate substantially higher revenues than small-scale farmers due to greater production volumes and, in some cases, higher selling prices resulting from better product quality and stronger bargaining power. These findings indicate that land area and production output are the primary determinants of revenue among copra farmers in Kohala Village.

Informant I-02, who owns 2 hectares of coconut plantation, stated that the revenue earned from copra farming is highly uncertain:

"Our revenue is unpredictable because it depends on market prices and how much copra we can produce. When prices are good, we can earn around three million rupiah per harvest, but when prices fall, our income can drop by half."

4.5 Production Cost Structure of Copra Farming

The production costs of copra farming in Kohala Village consist of fixed costs and variable costs. Fixed costs include equipment depreciation, such as machetes, drying trays, and sacks, as well as land rental expenses for farmers cultivating land that they do not own. Variable costs consist of harvesting labor, copra processing labor, fuel costs for smoke drying (for farmers using the smoking method), packaging materials, and transportation costs for delivering copra to local collectors or markets.

Table 3. Average Production Cost Components of Copra Farming per Harvest

Cost Component	Average Cost (IDR)	Percentage (%)
Harvesting Labor	300,000–600,000	45–55
Processing Labor	150,000–300,000	20–25
Transportation Costs	50,000–150,000	8–12
Materials and Equipment	50,000–100,000	8–10
Equipment Depreciation	25,000–50,000	4–6
Total Production Cost	575,000–1,200,000	100

Table 3 shows that labor costs represent the largest component of copra production expenses in Kohala Village. Harvesting and processing labor together account for approximately 65–80% of total production costs, indicating that copra production remains highly labor-intensive. This finding is consistent with [Dady, Kaunang, and Tulung \(2018\)](#), who reported that labor constitutes the dominant cost component in traditional copra production systems. Most farmers rely on family labor to reduce production expenses; however, farmers with larger plantations often hire additional wage laborers during harvesting and processing periods to maintain production efficiency.

4.6 Analysis of Production Cost Efficiency Across Farm Scales

Based on the production cost structure presented above, significant differences in production cost efficiency were observed among small-, medium-, and large-scale copra farmers. Farmers operating larger plantations tend to achieve greater production efficiency because they benefit from economies of scale, whereby higher production volumes reduce the average production cost per kilogram of copra. Consequently, larger farms are generally able to generate higher profit margins than smaller farms.

Table 4. Comparison of Production Cost Efficiency Across Farm Scales

Farmer Category	Total Cost (IDR)	Production (kg)	Cost per kg (IDR)
Small-Scale	575,000–700,000	200–400	1,437–3,500
Medium-Scale	700,000–1,000,000	400–800	875–2,500
Large-Scale	900,000–1,200,000	800–1,500	600–1,500

Table 4 indicates that the production cost per kilogram of copra is substantially higher for small-scale farmers than for medium- and large-scale farmers. This finding suggests that small-scale farmers experience greater cost pressures because fixed and labor costs are distributed over a relatively low production volume. As a result, their net profit margins remain considerably smaller than those of larger producers. This situation becomes even more challenging when copra prices decline, as small-scale farmers have limited opportunities to improve production efficiency or absorb the financial impact of lower selling prices. In contrast, larger farms benefit from lower average production costs, allowing them to remain more profitable despite fluctuations in market prices.

4.7 Net Income Analysis of Copra Farming

The net income of copra farmers in Kohala Village was calculated by subtracting total production costs from total revenue. Based on the analysis, the average net income earned by copra farmers per harvesting cycle (approximately three months) ranged from IDR 125,000 to IDR 5,550,000. When converted into monthly earnings, the average net income ranged from approximately IDR 41,667 to IDR 1,850,000 per month, depending on the scale of farming operations, production volume, and market prices.

Table 5. Average Net Income of Copra Farmers per Harvest (Three-Month Production)

Farmer Category	Total Revenue (IDR)	Total Cost (IDR)	Net Income (IDR)	Monthly Income (IDR)
Small-Scale	700,000–1,600,000	575,000–700,000	125,000–900,000	41,667–300,000
Medium-Scale	1,400,000–3,600,000	700,000–1,000,000	700,000–2,600,000	233,333–866,667
Large-Scale	3,200,000–6,750,000	900,000–1,200,000	2,300,000–5,550,000	766,667–1,850,000

Table 5 demonstrates that the net income of copra farmers increases significantly with farm size. Large-scale farmers generate substantially higher net income because they produce greater quantities of copra while maintaining lower production costs per kilogram. In contrast, small-scale farmers earn relatively low incomes due to limited production capacity and comparatively high production costs. These findings indicate that economies of scale play an important role in improving the profitability of copra farming.

The findings further reveal that the monthly income of most small-scale copra farmers remains below the regional minimum wage of the Selayar Islands Regency. This condition is consistent with the findings of [Prastio, Soetoro, and Hardiyanto \(2017\)](#), who reported that small-scale copra farmers in island regions are generally economically vulnerable due to the combined effects of low productivity and unfavorable selling prices.

4.8 Factors Affecting the Net Income of Copra Farmers

Based on the data analysis, four major factors were identified as influencing the net income of copra farmers in Kohala Village. The first factor is price fluctuations. All informants agreed that unstable copra prices represent the greatest threat to the sustainability of their farming businesses. One informant (I-05) explained:

"We can never predict copra prices. This month the price is good, but next month it may fall by half. We never know which price to rely on."

These price fluctuations are largely influenced by changes in the international vegetable oil market and the import policies of copra-importing countries, factors that are beyond the control of both farmers and local governments ([Suherman, Palenewen, & Mirah, 2016](#)).

The second factor is limited land size and declining plantation productivity. Farmers operating small plantations and those cultivating older coconut trees face significant production constraints. Coconut trees older than 30 years generally experience a productivity decline of approximately 40–60% compared to younger trees ([Elizabeth & Anugrah, 2020](#)). Many farmers in Kohala Village lack sufficient financial resources to undertake systematic replanting or plantation rejuvenation, resulting in lower production levels and reduced income.

The third factor is dependence on local collectors. Most farmers (8 out of 10 informants) sell their copra directly to collectors who visit the village. Although this marketing system is convenient and reduces transportation costs, it places farmers in a weak bargaining position. Local collectors typically

determine purchasing prices unilaterally and often apply quality deductions that are not fully transparent.

As stated by Informant I-03:

"We have no choice but to sell to the collectors. Taking the copra to the town ourselves is too far, and the transportation costs are too expensive to justify the effort."

The fourth factor is limited access to capital and production technology. Copra farmers in Kohala Village rely almost entirely on their own limited financial resources. Access to formal credit institutions remains very limited because most farmers lack sufficient collateral to qualify for bank loans. As a consequence, farmers are unable to invest in improved production technologies, such as mechanical drying equipment, which could enhance copra quality, reduce post-harvest losses, shorten processing time, and minimize dependence on favorable weather conditions ([Tikunch, Issa, & Tefera, 2023](#)). These limitations ultimately reduce production efficiency and constrain farmers' opportunities to increase their net income.

5. Conclusions

Based on the research findings and discussion, several conclusions can be drawn. First, copra farming in Kohala Village, Buki District, Selayar Islands Regency is still operated using traditional methods with simple technology and is highly dependent on weather conditions and market price fluctuations. Second, the production cost structure is dominated by labor costs, accounting for 65–80% of total production costs, making labor efficiency a key factor in determining business profitability. Third, there are significant differences in cost efficiency among farm scales, with large-scale farmers having much lower production costs per kilogram than small-scale farmers, resulting in higher net income. Fourth, the net income of copra farmers in Kohala Village varies significantly according to farm scale, with small-scale farmers earning monthly net incomes that remain below a reasonable living standard. Finally, the main factors affecting the net income of copra farmers in Kohala Village are fluctuations in copra prices, limited land area and the declining productivity of aging coconut trees, dependence on local collectors, and limited access to capital and technology.

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Author Contributions

EA contributed to the conceptualization, methodology, data collection, formal analysis, investigation, visualization, and preparation of the original manuscript. WOR contributed to the methodology, supervision, validation, manuscript review and editing, and approved the final version of the manuscript.

Conflict of Interest

The author declares that there are no conflicts of interest regarding the publication of this article. The research was conducted independently, and the author received no financial or commercial support that could have influenced the study's findings or conclusions.

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