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Risk Analysis of Costs and Income of Clove Farming in Balassuka Village, Tombolopao Subdistrict, Gowa District

Putri Amalia Ramadhani*, Amruddin, dan Muh Ikmal Saleh
Faculty of Agriculture, Universitas Muhammadiyah Makassar, Makassar, Indonesia, Indonesia
putriamaliaramadhani37@gmail.com

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Corresponding Author: Putri Amalia Ramadhani, Universitas Muhammadiyah Makassar, Email: putriamaliaramadhani37@gmail.com

ABSTRACT

This study aims to determine the amount of production costs and income as well as the risk of costs and income of clove farming. This research was conducted in Balassuka Village, Tombolopao District, Gowa Regency for 2 months, namely in September - October 2024. This research method uses purposive sampling, which is a deliberate sample selection technique by taking 30 clove farmers in Balassuka Village, Tombolopao District, Gowa Regency. Data analysis techniques used are production cost analysis, revenue analysis, income analysis and coefficient of variation (CV) analysis.The results showed that: (1) Production costs that have been incurred by clove farmers during one harvest season amounted to Rp.209,993,332 with an average production cost of Rp.6,999,778, while the income earned by clove farmers amounted to Rp.835,806,668 / year with an average income earned by clove farmers is Rp. 27,860,222. (2) The risks faced by farmers in clove farming are cost risk and income risk. The Coefficient of Variation (CV) of the cost risk is obtained at 0.08 (0.08 < 1) while the Coefficient of Variation (CV) of the income risk is 0.05 (0.05 < 1). Then the results of these calculations indicate that the cost and income risks in clove farming borne by farmers are relatively low.

Keywords: *Cost, Income, Farming, Clove*

INTRODUCTION

Indonesia has enormous natural potential to develop its agricultural industry. Agriculture consists of several subsectors such as horticulture, plantations, livestock, fisheries, and food crops that have supported the local and national economy. One of the agricultural subsectors that needs to be developed further is the plantation subsector. Clove crops are one of the plantation subsectors that require more attention in order to be well developed so as to provide added value to products and increase the selling price of cloves (Arinda & Yantu, 2015). The condition of cloves at the national level experiences ups and downs considering the large fluctuations in clove prices and the high costs of harvesting and processing, while on the technical side the clove crop has distinctive characteristics, namely the existence of a large harvest followed by a small harvest the following year and a bumper harvest at a certain period. Large harvests or bumper harvest prices tend to result in farmers losing money and then not maintaining their plants. This results in poor planting and low production (Siregar, 2011).

Clove productivity in Indonesia is needed to meet domestic demand and import demand in the international market. About 95% of cloves grown in Indonesia are produced from smallholder plantations managed by individuals or groups of farmers spread across several provinces. The rest, about 5%, comes from large state-owned and private plantations. Therefore, cloves play an important role in the economy at the national level (Arinda & Yantu, 2015).

The clove commodity has a strategic role in the Indonesian economy, both in terms of social, economic and environmental aspects. Not only does it play a role in increasing farmers' income and supporting equitable regional development, cloves also contribute to preserving the environment and natural resources (Kinasih et al.,

2022). Most of the clove production comes from smallholder plantations spread across several provinces (Kinasih et al., 2022). However, the volatility of clove prices in the domestic market is a major constraint that has implications for farmers' income risks. Fluctuations in production due to natural factors, farmers' weak bargaining position, and lack of product diversification make sustainable price stability difficult to achieve (Hadi & Nuryanti, 2018; Nurhalimah et al., 2020). In addition, uneven market infrastructure and limited access to information also exacerbate this condition, especially in remote areas. Price stabilization efforts have been carried out through various mechanisms, both direct and market-based interventions, with the aim of providing price certainty and reducing farmers' economic risks. This is important so that clove farmers can earn a more stable income and the sector can continue to contribute optimally to the national economy.

Table 1. Area and Production of Cloves in South Sulawesi in 2019-2024

No	Year	Land Area (Ha)	Production (Tons)
1	2019	64.651	20.143
2	2020	38.244	20.176
3	2021	41.238	21.854
4	2022	41.396	20.575
5	2023	42.478	21.689
6	2024	41.431	20.641

Source: BPS South Sulawesi Data,2024

Table 1 presents data on land area and production from 2019 to 2024. From this data it can be concluded that land area fluctuates from year to year, but production tends to remain in the range of 20,000 to 21,800 tons, indicating that other factors besides land area also affect production results. Fluctuations in clove land area are caused by several factors, namely land conversion, changes in reporting methods, as well as changes in government policies and the socio-economic dynamics of farmers. This shows that while conducting clove farming, it is possible that risks arise that result in a decrease in production which will have an impact on the income earned by farmers.

Risk is an integral part of agricultural activities including clove farming. Risk in clove farming is related to uncertainty because farmers cannot always predict exactly what will happen in the field. The uncertainty faced by farmers can have a detrimental or beneficial impact (Ayun et al., 2020). Risk in the clove sector is any form of uncertainty or potential events that can disrupt the production, processing, distribution, and marketing of cloves, which can cause economic, social, or environmental losses for farmers and business actors in this sector. Risk is divided into two, namely cost risk and income risk, where cost risk will affect the amount of costs that will be incurred by farmers in carrying out their farming activities. While the risk of income will affect the income that will be obtained by farmers (Putra et al., 2024).

The clove cultivation sector in Indonesia is one of the spearheads in poverty alleviation and prevention of community urbanization, where clove plantations are very important for the lives of clove farmers and the proceeds of the plantation are fully utilized for needs, especially the needs of children's education and family survival (Asniar, 2019). This good prospect of cloves must be balanced with good management as well. One form of management can be in the form of policies to determine the right area for clove cultivation. When viewed from the history of cloves, it is often found that the needs of the domestic community, especially cloves, exceed the amount of production that occurs in the country. This condition is one of the reasons why clove plantations must be developed. One area that is estimated to have potential in the development of clove plantations in eastern Indonesia is the province of South Sulawesi because of its climatic and topographic conditions that are suitable for clove commodities. South Sulawesi is also one of 12 provinces that are clove production centers in Indonesia (Isnaeni & Sugiarto, 2010).

One of the regions in Sulawesi Province is Gowa Regency, which has several sub-districts that are classified as fertile, one of which is Tombolopao District. Tombolopao sub-district has 9 villages, one of which is Balassuka Village, which is an area located in a mountainous area with the main source of income for people who come from clove commodities in Tombolopao sub-district. In Balassuka Village, clove farming carried out by farmers in the area is mostly the main livelihood. Clove farmers in Balassuka Village only focus on the cultivation process without taking into account the costs incurred and the income earned by farmers. Therefore, this study was conducted with the aim of knowing the amount of production costs and income, as well as analyzing the level of risk of costs and income on clove farming in Balassuka Village, Tombolopao District, Gowa Regency.

RESEARCH METHODS

Location and Time of Research

This research was conducted in Balassuka Village, Tombolopao Subdistrict, Gowa Regency. The location selection was based on the average production of cloves in this village is more than other villages in the Tombolopao Sub-district. This research took place for 2 months, namely in September - October 2024.

Population and Sample Determination Technique

Population is the entire research subject, where in this study the population includes clove farmers in Balassuka Village. The total population of clove farmers in Balassuka Village is 300 people. The number of samples taken in this study was 10% of the farmer population, this is in accordance with the opinion (Arikunto, 2007), that if the research subject is more than 100 people then a minimum sample of 10-15% or 20-25% can be taken, so a sample of 30 people was obtained. In the sampling technique carried out by purposive sampling or intentionally where data collection is determined based on certain characteristics and characteristics, namely farmers who have different land area, obtained a sample of farmers who have land with an area of less than 1 Ha, farmers who have land 1-2 Ha and farmers who have land more than 2 Ha.

In this study, farmers' land size was categorized as 0.25-0.9 ha (small farmers), 1-1.25 ha (medium farmers) and 2-3 ha (large farmers). These categories were determined based on local norms in Balassuka Village, Tombolopao Subdistrict, Gowa Regency and the statistical side. The statistical categories reflect the distribution pattern of agricultural land in the study area. Based on data from the Central Statistics Agency (BPS) of Gowa Regency and direct field observations, the distribution of farmers' land sizes in Balassuka Village shows a significant concentration within these ranges. Therefore, this stratification is considered capable of representing variations in farmers' socio-economic structures and production systems, thereby increasing the validity of the research results (Sugiyono, 2018; BPS Gowa, 2023).

Data Collection Methods

The data used in the study included primary data and secondary data. Primary data was obtained by direct observation and interviews with respondents using a questionnaire, while secondary data was obtained from the Balassuka Village Office, Tombolopao District, Gowa Regency and several literatures and other related agencies that support research activities.

Data Analysis

To analyze the risk of clove farming, the following formula is used. (Ashari, 2020) explained that to calculate the production costs incurred by farmers in agriculture, they can use the following formula:

$$\boldsymbol{TC = TFC + TVC}$$

Description:
TC =Total Cost
TFC=Total Fixed costs
TVC=Total variable Cost

Acceptance is the value of all products produced or the multiplication between the number of products produced and the selling price of the product per unit (Nurlina et al., 2020). Acceptance analysis is calculated using the formula:

$$\boldsymbol{TR = Y \times Py}$$

Description:
TR =Total Revenue
Y =Production Yield (Kg)
Py =production price (Rp)

Revenue is the difference between revenue (TR) and total cost (TC) expressed by the formula of farm income according to (Soekartawi, 2002), namely:

$$\boldsymbol{Pd = TR - TC}$$

Description:
Pd=farm income
TR=Total Revenue
TC =Total Cost

According to (Asminar et al., 2021), to calculate the standard deviation (standard deviation), the following formula is used:

$$\sigma = \sqrt{\frac{\sum_{i=1}^{n} x_i - \bar{x}}{n-1}}$$

σ = standard deviation/standard deviation
x_i = cost/revenue data
$\bar{x}$ = average cost / revenue
n = number of samples

To calculate the cost risk and income risk to be borne by clove farmers, can be done by calculating the value of the coefficient of variation (CV). Measurements can be calculated using the following formula:

a. Cost risk : $CV = \frac{\sigma}{C}$

b. Income risk : $CV = \frac{\sigma}{Y}$

Description:
CV = coefficient of variation
σ = standard deviation/standard deviation
C = average cost (Rp)
Y = average income (Rp)

According to (Fadholi, 1996), the criterion for measuring the value of the coefficient of variation (CV) is if CV > 0.5 then the risk borne by farmers is greater and if CV < 0.5 then farmers will profit

RESULT AND DISCUSSION

Research Design

This study was conducted at the D'Reppa Cow House in Gowa Regency, South Sulawesi, Indonesia. The informants included: (1) the D'Reppa Cow House Manager, (2) beef cattle breeders, and (3) selected university representatives. Data was gathered through interviews and analyzed using Interpretative Structural Modeling (ISM) techniques (Arsyad et al., 2020; Widayanto, 2013; Darmawan, 2017).

Land area

Land is one of the production factors that determine the least amount of production obtained by farmers, where the wider the land planted, the higher the production produced and the narrower the land planted, the lower the production (Ramli & Suradi, 2022). Clove farming area in Balassuka Village, Tombolopao District, Gowa regency can be seen in Table 2:

Tabel 2. Land area of clove farmers in Balassuka Village, Tombolopao District, Gowa regency

No	Land Area (Ha)	Total (people)	Percentage (%)
1	0,25 – 0,9	10	33,33
2	1,00 – 1,25	10	33,33
3	2,00 – 3,00	10	33,33
Total		**30**	**100%**

Source: primary data processed, 2025

Based on Table 2, it can be seen that the land area owned by clove farmers in Balassuka Village, Tombolopao District, Gowa regency is divided evenly into three groups, as many as 10 farmers (33.33%) have a land area between 0.25–0.9 ha. This shows that one-third of the farmers in the region own small-scale land, which is likely to limit production capacity and crop yield potential. In the context of cost risks, farmers with small plots of 0.25-0.9 ha generally face higher production costs per unit of yield due to limited economies of scale. They tend to depend on external inputs such as fertilizers and pesticides, but with lower crop yields, causing high production costs per unit of yield (Saragih, 2019). In terms of income risk, farmers with small plots face high income uncertainty due to limited crop yields. If commodity prices fall or crop failures occur, the impact is more significant because they have little financial reserves (Ministry of Agriculture, 2021).

Furthermore, as many as 10 farmers (33.33%) have a land area ranging from 1.00–1.25 ha, this group is in the middle category, which allows them to have more optimal production results compared to groups with smaller land. In cost risk, farmers with medium land (1.00-1.25 hectares) have better flexibility in managing costs, but still face significant cost risks in the event of a spike in the price of agricultural inputs or natural disasters. They have greater opportunities to use more efficient farming practices compared to farmers with smaller plots of

land, but still face challenges in accessing greater financing for farm development. Farmers with medium land have slightly more resilience to income fluctuations, but remain vulnerable to market volatility and extreme weather conditions (Rosyid et al., 2020).

Meanwhile, as many as 10 other farmers (33.33%) have a larger land area, which ranges from 2.00–3.00 ha. With more land ownership, this group has the potential to have higher production capacity as well as opportunities to implement more efficient and sustainable agricultural systems. Farmers with more land (2.00-3.00 hectares) have an advantage in terms of economies of scale, so the cost of production per unit of yield is lower. However, they face the risk of greater costs in the form of high initial investments, such as the purchase of modern agricultural tools, additional labor and greater maintenance costs. In the event of crop failure, the losses they experience are also greater than farmers with small or medium-sized land (Setiawan & Hidayat, 2022). Meanwhile, farmers with large areas of land have a greater chance of obtaining a stable income because they can diversify their farming business (Rosyid et al., 2020).

Thus, land area directly affects the cost risk and Income Risk experienced by farmers. The smaller the land area, the higher the economic risks faced, both in terms of production costs and income uncertainty. Conversely, the larger the land area, the greater the opportunity to improve production efficiency and income diversification, but also the greater the responsibilities and challenges in resource management.

Analysis of The Cost of Agricultural Production

Clove farming production cost analysis includes fixed costs, variable costs and labor costs as well as the total cost obtained by clove farmers in Balassuka Village, Tombolopao District, Gowa regency.

Fixed Cost

Fixed costs are costs that are not influenced by the amount of output produced by farmers (Bakari, 2019). Fixed costs are costs that do not affect the size of production. (Mamero et al., 2023). Based on the results of research it is known that clove farmers in Balassuka Village, Tombolopao District, Gowa regency, the majority use hoes, machetes and sprayers. The following average fixed costs used in clove farming can be seen in Table 2:

Table 3. Fixed Costs of Clove Farming in Balassuka Village, Tombolopao District, Gowa Regency

No	Type of Equipment Cost	Total Fixed Cost (Rp)
1	Hoe	20.222
2	Parang	21.833
3	Sprayer	74.722
4	Land tax	34.500
Total		**151.278**

Source: Processed primary data, 2025

Table 3 shows that the average fixed cost is the cost of depreciation of equipment that has been issued clove farmers with the total amount during production in once a year harvest of Rp.151,278 / year. With the amount of Rp.20,222 / year includes hoe depreciation costs which are the most beautiful fixed costs and sprayer depreciation costs which are the highest fixed costs, amounting to Rp.74,722 / year.

Variable Cost

Variable costs are costs that are affected by the amount of production and are exhausted in one production process. Variable costs consist of means of production, labor wages and capital interest (Arfah et al., 2020). Based on the results of the study, it is known that clove farmers in Balassuka Village, Tombolo pao District, Gowa regency, in calculating the average cost of variables consisting of fertilizers, pesticides and labor shown in Table 4:

Table 4. Variable Costs of Clove Farming in Balassuka Village, Tombolopao District, Gowa Regency

No	Type of Cost	Total *Variable Cost (Rp)*
1	fertilizer	2.344.333
2	pesticide	981.500
3	labor force	3.522.667
Total		**6.848.500**

Source: Processed primary data, 2025

Based on Table 4, the average variable costs incurred by clove farmers in Balassuka Village, Tombolopao District, Gowa regency for once-a-year harvest reached Rp.6.848.500. Of the total costs, the highest variable cost

is labor costs reached Rp.3,522,667 in once-a-year harvest, while the lowest variable costs incurred by farmers is the cost of pesticides which amounted to Rp.981,500 in once-a-year harvest.

Total Cost

Total cost is the overall cost incurred to produce production which is the sum between fixed costs and variable costs (Ibrahim et al., 2021b). The following are the results of the total costs incurred by clove farmers in Balassuka Village, Tombolopao District, Gowa regency, shown in Table 5:

Tabel 5. Total Cost of Clove Farming in Balassuka Village, Tombolopao District, Gowa Regency

No	Type of Cost	*Total Cost* (Rp)
1	Fixed cost	151.278
2	Variable cost	6.848.500
Total		**6.999.778**

Source: Processed primary data, 2025

Table 5 shows that the total cost incurred by clove farmers in Balassuka Village, Tombolopao District, Gowa Regency during one harvest season amounts to Rp.6,965,278. The total cost consists of fixed costs amounting to Rp.116,778 and variable costs amounting to Rp.6,848,500.

Clove Farming Acceptance

Clove farming revenue is a sum of money received by farmers as a result of the sale of cloves. Total revenue obtained from the multiplication of the number of clove production produced by the price of cloves (Kumaat et al., 2015) applicable in Balassuka Village, Tombolopao District, Gowa regency, the more the amount of production sold, the more receipts obtained by farmers (Ramli & Suradi, 2022). The following are the results of the acceptance of clove farmers in Balassuka Village, Tombolopao District, Gowa regency, shown in Table 6:

Table 6. Income from Clove Farming in Balassuka Village, Tombolopao District, Gowa Regency

No	Acceptance	Amount (Kg)	Price (Rp)	Total (Rp)
1	Production	415	83.333	
Total Overall Revenue				**34.860.000**

Source: Processed primary data, 2025

Based on Table 6, the farming income in Balassuka Village, Tombolopao District, Gowa Regency, is obtained at 415/kg with a selling price of Rp.83,333/kg, resulting in an average total income of clove farming amounting to Rp.34,860,000/season.

Clove Farming Income

Income in general is income obtained or received from the sale of products, both goods and services. Income is also defined as the difference between receipts and all costs incurred in the process of farming activities (Mooduto et al., 2021). Income is the result of receipts obtained by farmers from each farm, either directly or indirectly in the form of Wages, Salaries, land rent, interest, profit and others. The following is the income of clove farmers in Balassuka Village, Tombolopao District, Gowa regency, shown in Table 7:

Table 7. Income from Clove Farming in Balassuka Village, Tombolopao District, Gowa Regency

No	Cost Analysis	Total Overall Clove Farmers (Rp)	Average Amount (Rp)
1	**Acceptance (TR)**	1.045.800.000	34.860.000
	Total Revenue	**1.045.800.000**	**34.860.000**
2	**Fixed Costs (FC)**		
	Hoe	606.665	20.222
	Parang	655.001	21.833
	Pulverizador	2.241.666	74.722
	Land Tax	1.035.000	34.500
	Total Fixed Costs	**4.538.332**	**151.278**
	Variable Cost (VC)		
	Fertilizer	70.330.000	2.344.333
	Pesticide	29.445.000	981.500
	Labor	105.680.000	3.522.667
	Total Variabel Cost	**205.455.000**	**6.848.500**
3	Total Cost (TC)		
	Fixed Costs	4.538.332	151.278
	Variable Costs	205.455.000	6.848.500
	Total Production Cost	**209.993.332**	**6.999.778**
4	**Revenue (TR - TC)**	**835.806.668**	**27.860.222**

Source: Processed primary data, 2025

Table 7 shows that the total revenue of clove farming in Balassuka Village, Tombolopao District, Gowa regency reached Rp.1,045,800,000/year. The amount is obtained before deducting the total cost of production consisting of fixed costs (Fixed Cost) of Rp.4,538,332 and variable costs (Variable Cost) of Rp.205,455,000, so that the total overall production costs reached Rp.209,993,332 / year. Thus, the income obtained by clove farmers in Balassuka Village is Rp.835,806,668 / year.

In addition, the average income of farmers was recorded at Rp.34,860,000, with an average total fixed costs of Rp.151,278 and the average total variable costs of Rp.6.848.500. Meanwhile, the average total production cost reached Rp.6,999,778, so that the average income obtained by clove farmers is Rp.27.860.222.

Cost Risk Analysis of Clove Farming

Cost in general is the nominal money spent by the perpetrator economy to obtain the necessary goods or services. The cost of farming is the cost incurred by farmers in the production process. In this case the costs are classified into fixed costs and variable costs. Cost risk is the financial risk that will be felt by farmers when doing farming activities (Putra et al., 2024). Cost risk is analyzed by using the coefficient of variation (CV), the results of which can be seen in Table 8:

Table 8. Risk of Clove Farming Costs in Balassuka Village, Tombolopao District, Gowa Regency

Description	Cost Risk
Average production cost	6.999.778
Standard Deviation	622.892
Coefficient of Variation	0,08

Source: Processed primary data, 2025

Table 8 shows that the risk of clove farming costs that have been analyzed using the coefficient of variation (CV). From Table 18, it can be seen that the average production cost of clove farmers in Balassuka Village, Tombolopao Subdistrict, Gowa Regency is Rp.6,999,778, from the average production cost, it can be seen that the standard deviation of cloves is Rp.622,892. Meanwhile, the coefficient of variation obtained is 0.08, this indicates that the risk of costs incurred by farmers in clove farming is low because the value of the coefficient of variation (CV) 0.08 <1. This is in line with research conducted (Putra et al., 2024), where the cost risk incurred by farmers is classified as low due to the coefficient of variation (CV) of 0.0777 <1. The CV value that is smaller than 1 (CV < 1) indicates that the variability of the data is relatively low relative to the average, so it is categorized as low risk. Conversely, CV values equal to or greater than 1 indicate moderate to high risk. In clove farming in Balassuka Village, the coefficient of variation (CV) for cost risk is 0.08. This value is well below 1, indicating that the cost risk borne by farmers is low. The term low in cost risk analysis refers to a condition where the level of

uncertainty in cost variables is within safe and controllable limits. This is assessed through the Coefficient of Variation (CV) value, which is the ratio between the standard deviation and the mean of a variable. If the CV value is less than 1 (CV < 1), then the diversity or fluctuation of data against the average value is relatively small, which means that the risk borne by farmers is low.

In clove farming in Balassuka Village, the CV value for cost risk of 0.08 indicates that the costs experienced by farmers are stable, do not experience large variations, and provide certainty in business planning and management. Thus, being relatively low means that the risks faced by farmers are not significant and are still within tolerable levels, so that clove farming is considered economically safe.

Risk Analysis of The Income of Clove Farming

Revenue is the value obtained by clove farmers from receipts for the sale of production after deducting the costs incurred in farming cloves. The income obtained by farmers is often not as expected so it is necessary to know the risk of income (Lawalata et al., 2017). Income risk is the risk faced by entrepreneurs with regard to finance. Revenue risk usually occurs due to differences in the selling price of a product. Income risk needs to be known in a farm so that farmers can minimize the risks received (Rianti & Maula, 2023). Revenue risk was analyzed using the coefficient of variation (KV), the results of which can be seen in Table 9:

Table 9. Risk of Clove Farming Income in Balassuka Village, Tombolopao District, Gowa Regency

Description	Income Risk
Average Income	27.860.222
Standard Deviation	1.422.863
Coefficient of Variation	0,05

Source: Processed primary data, 2025

Table 9 shows that the average income of clove farmers in Balassuka Village, Tombolopao Subdistrict, Gowa Regency is Rp.27,860,222, from the calculation of this income, the standard deviation of cloves can be obtained at Rp.1,422,863, then the coefficient of variation (CV) obtained from the calculation by dividing the standard deviation by the average income is 0.05. The coefficient of variation (CV) obtained of 0.05 <1 indicates that the risk of income is relatively low, where the smaller the coefficient of variation, the more stable the income obtained. A small coefficient of variation indicates low variability in mean values. This illustrates the income risk faced to get these results is small (Hanisah et al., 2021). This is in line with research conducted (Kinasih et al., 2022), where the income risk incurred by farmers is low due to the coefficient of variation (CV) value of 0.059, <1. The CV value that is smaller than 1 (CV < 1) indicates that income fluctuations are relatively low, so the income risk is categorized as low. The term relatively low in income risk analysis refers to a condition where the level of uncertainty over income is within safe and controllable limits. This is assessed through the Coefficient of Variation (CV) value, which is the ratio between the standard deviation and the mean of a variable. If the CV value is less than 1 (CV < 1), then the diversity or fluctuation of data against the average value is relatively small, which means that the risk borne by farmers is low.

In clove farming in Balassuka Village, the coefficient of variation (CV) for income risk is 0.05. This value is very low and far below the unit limit, which indicates that farmers' income from clove farming tends to be stable. This reflects a low level of uncertainty about the results obtained by farmers, thus providing confidence that the income generated is relatively predictable and does not experience large changes in the short term.

CONCLUSION

The risks faced by farmers in clove farming in Balassuka Village include cost risk and income risk. The Coefficient of Variation (CV) of cost risk is 0.08 (0.08 < 1) while the Coefficient of Variation (CV) of income risk is 0.05 (0.05 < 1). Both values are far below 1, so it can be concluded that the cost risk and income risk faced by farmers are low. The CV value of 0.08 indicates that the costs incurred by farmers are relatively stable and do not show significant fluctuations during the business period. Similarly, the CV value of 0.05 on revenue indicates that farmers' income from clove farming is also relatively consistent and predictable, with very little uncertainty. Thus, it can be concluded that clove farming in Balassuka Village has a low level of cost and income risk. This indicates that the farming activities are quite stable and provide promising economic prospects for farmers, especially in terms of financial stability.

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