

ANALYSIS OF ELIGIBILITY, CONTRIBUTION AND BEHAVIOR OF CLOVES MARKET IN NORTH KULISUSU DISTRICT, NORTH BUTON REGENCY, SOUTHEAST SULAWESI

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Abstract:

This research was conducted in Wa Ode Buri Village, North Kulisusu District, and North Buton Regency. The location determination was determined purposively. The objectives of this research are 1) to determine how much income farmers get from farming, which is obtained by farmers from clove farming in Wa Ode Buri Village, North Kulisusu District, and North Buton Regency. 2) To determine how much contribution farmers get from clove farming in Wa Ode Buri Village, North Kulisusu District, North Buton Regency. 3) To find out how much feasibility value is obtained by farmers from clove farming in Wa Ode Buri Village, North Kulisusu District, and North Buton Regency. 4) How is the behavior of the clove market in North Kulisusu District. The sampling technique used is a simple random sampling technique. The results showed that 1) the average income received by respondent farmers from clove farming was IDR 15,258,026 with an income range of IDR 7,098,750 – IDR 29,798,750. 2) The value of the feasibility of farming is obtained by a value of 2.3, which means that the clove farming carried out by the respondent farmers is feasible to be cultivated and developed. 3) The contribution of clove farming income to the total income of farmers is 68.04%, which means that clove farming income is categorized as high.

Keywords: Behavior, Contribution, Farmer

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INTRODUCTION

Clove (*Syzygium aromaticum* L) is one of the plantation commodities that contributes to the country's economy, Runhayat (2001). The clove plant or its Latin name *Syzygium aromaticum* or *Eugenia aromaticum*, is a type of shrub plant which has a large tree trunk and hardwood and can live for tens to hundreds of years. Clove is a native plant of Indonesia, which was originally an export commodity, its position has changed to a commodity that must be imported due to the rapid development of the kretek cigarette industry. (Nurdjannah, 2004). Clove is a spice plant that is included in the plantation sector commodity which has a somewhat important role, among others, in contributing to farmers' income, providing and increasing state foreign exchange as well as a means for equitable distribution of development areas as well as in the preservation of natural resources and the environment. The main part of the clove plant's commercial value is clove flowers, mainly used in the tobacco industry in this case the manufacture of cigarettes and very little in the food industry. However, with new discoveries, different parts of the clove plant, namely the leaves and stems, are used as raw materials for clove oil used in pharmaceutical, cosmetic and other industries.

North Buton Regency has the potential for the development of the agricultural sector. The potential development that needs to be developed about commodity diversification, especially in the plantation sector, is clove commodity. Based on BPS 2021, the total area of clove plants in North Buton Regency in 2019 is 724 Ha with a total production of 37.1 tons and in 2020 it is 757 Ha with a total production of 37.6 Ha. This shows that the amount of clove production produced

in North Buton Regency is increasing. One of the sub-districts with the highest area for clove plants in the North Buton Regency is North Kulisusu District. North Kulisusu sub-district has potential in clove plantations, so the development of clove farming needs to be increased and has the most significant amount of clove production. Based on North Buton data in 2021 figures, it can be seen that in 2019 the North Kulisusu District has a clove plant area of 500 Ha with a total production of 8.2 tons, while in 2020 the area is 511 with a total production of 9.1 tons.

One of the villages in North Kulisusu District, North Buton Regency is Wa Ode Buri Village which has the potential to develop clove farming and is one of the clove producing centers. In the initial observations, the researchers obtained information and data that farmers in obtaining income to meet their daily needs, farmers not only carry out and develop clove farming activities but also carry out other farming activities. However, farmers still rely on clove farming because clove plants are suitable for developing in this area because natural factors can provide income for farmers. Seeing the high production of clove farming does not guarantee that it can also provide high income for farmers. The price factor farmers receive plays a significant role in determining the level of business income. The need for planning in conducting a business becomes a powerful weapon to achieve a maximum goal. Farmers should know the extent of the feasibility and contribution given from the business they run by doing simple calculations to provide proper benefits for farmers in meeting their daily needs and developing their farming activities.

The results of research conducted by Malahika et al. (2019) showed 1) farm income cloves to the household income of IDR 21,519,319.56, the contribution of corn farming to Farmer household income in Momalia 1 Village, Posiga District and South Bolaang Mongondow Regency of 52.44% obtained from the comparison between the average total clove farming income of Rp. 21,519,319.56 minus the average farmer's household income of IDR 41,030,705.18 and multiplied 100%, from the contribution value above, it is stated that the contribution of clove farming to household income Farmers' ladders in Momalia 1 Village, Posiga Sub-district and South Bolaang Mongondow Regency contribute is large (decent) or > 50%. This is because the average value of clove farming income is higher than the average value outside the agricultural sector. Furthermore, the research results conducted by Nurmala et al. (2020) show that clove farming income is the source of income that contributes the most to all family income sources, IDR 579,277,557,- per year or 56.44%.

The objectives of this research are 1) to find out how much income farmers get from farming, which is obtained by farmers from clove farming in Wa Ode Buri Village, North Kulisusu District, and North Buton Regency. 2) To determine how much contribution farmers get from clove farming in Wa Ode Buri Village, North Kulisusu District, North Buton Regency. 3) To find out the feasibility value obtained by farmers from clove farming in Wa Ode Buri Village, North Kulisusu District, and North Buton Regency.

METHODS

This research was carried out in Wa Ode Buri Village, North Kulisusu District, and North Buton Regency. The location determination was determined purposively with the consideration that Wa Ode Buri Village is a village that has the potential to develop clove plants and is one of the centers for clove production. The population in this study were all clove farmers as many as 155 people. The sampling technique in this study used a simple random sampling technique by taking 25% of the total population to obtain a total sample of 38 people. Types and sources of data in this study using primary and secondary data. To achieve the objectives of this study, the data obtained were tabulated as needed, then analyzed using a qualitative descriptive method to describe the characteristics of the respondent farmers and their farms. To analyze income use the formula below:

$$\pi = TR - TC$$

Description:

π = income
 TR = Total revenue
 TC = Total costs

Analysis (R/C Ratio) is the ratio of revenue to costs which shows how much revenue will be obtained from every rupiah spent on production, as stated by Soeharjo and Patong and Rosa (2020). Furthermore, Suratiyah (2015) R/C is a comparison between revenue and costs. The R/C Ratio can be used to measure the level of relative profit in business activities where the results of the ratio of revenues to costs can be seen whether a business is profitable or not. According to Marrisa (2010), if the R/C Ratio is greater than 1 ($R/C > 1$), it means that a profitable business or the additional costs incurred will result in additional revenue that is greater than the additional costs. However, if the value of the R/C Ratio is less than 1 ($R/C < 1$), it means that a business suffers a loss or the additional costs incurred will result in additional revenue that is smaller than the additional costs. According to Soekartawi (2006), the formula for the R/C ratio is:

$$R/C \text{ Ratio} = \frac{\text{Revenue}}{\text{Total Cost}}$$

Where: R/C Ratio > 1 = Profit
 R/C Ratio < 1 = Loss
 R/C Ratio = 1 = Break-even

To determine the contribution of farming cloves using descriptive percentage analysis (DP), namely the contribution of farming to farmers' total income in percent, carried out by percentage analysis with the formula:
 Analysis with the formula:

$$K = \frac{RI}{KI} \times 100\%$$

$$\text{Clove Income Contribution} = \frac{\text{Clove farming income}}{\text{Total Farmers Income}} \times 100$$

Description:

K = Clove Income Contribution (%)
 RI = Income from clove farming
 KI = Total Farmer Income

Sundari, HA, & Utami, DP (2012) There are 4 categories of income contribution, namely:

1. If the contribution of clove farming income is $< 25\%$ of the farmer's household income, it is categorized as very low.
2. If the contribution of clove farming income is $25\% - 49\%$ of the farmer's household income, it is categorized as low.
3. If the contribution of clove farming income is $50\% - 75\%$ of the farmer's household income, it is categorized as high.
4. If the contribution of clove farming income is $>75\%$ of the farmer's household income, it is categorized as very high.

RESULT AND DISCUSSION

Clove Farming Income Farming. Income is the difference between farm cash receipts and farm expenditures. Farm cash income is defined as the value of money received from the sale of farm products. Meanwhile, cash farm expenditure is the amount paid for the purchase of goods and services for farming. Farming income analysis is carried out with the aim of describing the current state of a farming situation and describing future conditions from planning or action. For a farmer, income analysis helps to measure whether his current business activities are successful or not.

The results of the analysis show that the average income obtained by respondent farmers with an average land area of 1.14 hectares is IDR 15,258,026. With an income range of 7,098,750 – IDR 29,798,750. For more details regarding the state of income received by farmers from clove farming, it can be seen in Table 1.

Table 1. Clove Farming Income in Wa Ode Buri Village, North Kulisusu District

No	Income (IDR)	Total (Percent)	Percent (%)
1	7,098,750 – 14,665,416	19	50,00
2	14,665,417 – 22,232,082	12	31,58
3	22,232,083 – 29,798,750	7	18,42
Total		38	100,00

In the table above shows that the majority of respondent farmers earn income ranging from 7,098,750 – 14,665,416 with the number of farmer respondents as many as 19 people or 50%, farmers who earned incomes ranging from 14,665,417-22,232,082 amounted to 12 people or 31.58% and respondent farmers who earned incomes ranging from IDR 22,232. 082-Rp 29,798,750 totaling 7 people or 18.42%. The income obtained by respondent farmers from an average income of IDR 15,258,056 in one year, if calculated per month, the income is IDR 1,267,165 per month. Based on one of the criteria for poor families based on the Indonesian Central Statistics Agency, the source of household income below IDR 600,000 per month is categorized as a poor family, with these criteria showing that the average respondent farmer household in Wa Ode Village is not categorized as a poor family.

R/C Ratio Analysis. One measure of revenue efficiency for each rupiah issued is the R/C analysis. The analysis of the R/C ratio in farming shows a comparison between the output value and the input value, which aims to determine the feasibility of the farming carried out. In addition, the R/C ratio is also a comparison between farm income and expenditure. The R/C ratio calculated in this analysis consists of R/C for cash costs and R/C for total costs. The R/C ratio for cash costs is calculated by comparing the total receipts with cash costs in a certain period. The ratio of R/C to total cost is calculated by comparing the total revenue with the total cost in a certain period. Analysis of the R/C Ratio is an analysis carried out. The results of the analysis show that the average total income obtained by respondent farmers is IDR 27,103,158 while the expenditure of respondent farmers is IDR 11,845,132 so the R/C Ratio value is 2,3. For more details regarding the analysis of the R/C ratio as follows:

$$\begin{aligned}
 \text{R/C Ratio} &= \frac{\text{Total revenue}}{\text{Total cost}} \\
 &= \frac{\text{IDR } 27,103,158}{\text{IDR } 11,845,132} \\
 &= 2.3
 \end{aligned}$$

This value shows that each cost incurred by respondent farmers of IDR 1,000 will provide an income of IDR 2,300. This condition illustrates that clove farming carried out by respondent farmers in Wa Ode Buri Village is feasible to be cultivated and developed.

Income outside Clove Farming. In meeting the necessities of life and developing their farm, respondent farmers do not only cultivate one type of farming but also combine farming branches, namely in addition to growing cloves, they also carry out coconut farming activities which are processed into copra and some respondents farmers combine clove farming with cashew farming activities. The aim of the respondent farmers to combine these farming branches is to avoid the risk of failure, which means that if one crop fails, it can be covered by the success of another. The results showed that the income earned outside of clove farming was in the range of IDR 3,020,000 – IDR 10, 875,000 with an average income of IDR 7,034,053. For more details, the situation regarding income outside of clove farming can be seen in Table 2.

Table 2. Income of Respondent Farmers outside Clove Farming in Wa Ode Buri Village, North Kalisusu District

No	Income (IDR)	Total (Percent)	Percent (%)
1	3,020,000 – 5,638,334	11	28,95
2	5,638,335 – 8,256,668	12	31,58
3	8,256,669 – 10,875,000	15	39,47
Total		38	100,00

The table above Showed that 15 respondent farmers or 39.47% earned income outside of clove farming ranging from IDR 5,638,335- IDR 8,256,668 as many as 12 people or 31.58%. This situation illustrates that the income obtained by respondent farmers from coconut processing farming into copra and cashew farming, from the average income obtained and calculated monthly per capita income of IDR 586,171. **Total Income of Respondent Farmers.** The results of the analysis obtained that the total income of respondent farmers from clove farming and partly from copra farming and cashew farming obtained an average income of IDR 22.006.053 with an income range of IDR 11.700.000 – IDR 37.689.000. For more details regarding the total income of respondent farmers, it can be seen in Table 3.

Table 3. Total Income of Respondent Farmers in Wa Ode Buri Village, North Kulisusu District

No	Total Income (IDR)	Total (Person)	Percent (%)
1	12,807,000 – 21,525,584	16	42,11
2	21,525,584 – 30,244,168	18	47,37
3	30,244,169 – 38,962,750	4	10,53
Total		38	100,00

Table 3 shows that the respondent farmers who earn a total income ranged from IDR 12,807,000 – IDR 21,525,000 totaling 16 people or 42.117%, respondent farmers who earn between IDR 21,525,000 – IDR 30,244,000 as many as 18 people or 47.37% and respondent farmers who earn between IDR 30,244,000-Rp 38,962 .000 as many as 4 people or 10.53%.

Contribution of Clove Farming Income. Percentage analysis conducted to determine the contribution of clove farming income to the total income of respondent farmers in Wa Ode Buri Village showed a contribution of 68.04%. To be clearer, it can be seen from the following analysis.

$$\begin{aligned}
 K &= \frac{\text{Income from clove farming}}{\text{Total Farmer Income}} \times 100\% \\
 &= \frac{\text{IDR 15,258,026}}{\text{IDR 22,292,079}} \times 100\% \\
 &= 68.04\%
 \end{aligned}$$

Based on this value, it shows that the income obtained by the respondent farmers from clove farming activities contributes a value of 68.04%, this means that clove farming income is

categorized as high. The value of this contribution is greater than the contribution of income obtained from copra processing activities and cashew farming activities, thus it is hoped that farmers will continue to carry out clove farming activities while also continuing to carry out copra processing and cashew farming activities. Of the total income obtained by respondent farmers in a year, if calculated in each month obtained an average income of IDR 1,857,673.25 per month. Based on the Indonesian Central Bureau of Statistics, the income value obtained by respondent farmers in Wa Ode Buri Village is categorized as not included in the category of poor families for village community income standards.

Market Behavior. Market clove in the marketing process, which is implemented in the process of price determination mechanism, the payment system when a transaction occurs between farmers and clove traders to gain profit as the ultimate goal of a business process carried out by market participants. The traders are the price determinants in the process of selling cloves from farmers to traders, who should be the decision makers as the owners and producers of cloves. In the process of determining the price, traders are based on consideration of the profits to be received and the number of cloves offered by farmers. The payment system used by the traders at the time of the transaction varies according to the condition of the capital owned and the agreement of the two parties, which can be made in cash, advance payment and later payment. Both parties between farmers and traders have established a non-binding cooperation based on trust that has been built for a long time.

CONCLUSION

The conclusions in this study are 1) the average income received by respondent farmers from clove farming is IDR 15,258,026 with an income range of IDR 7,098,750 - IDR 29,798,750. 2) The value of the feasibility of farming is obtained by a value of 2.3 which means that the clove farming carried out by the respondent farmers is feasible to be cultivated and developed. 3) The contribution of clove farming income to the total income of farmers is 68.04%, this means that clove farming income is categorized as high. Market behavior is shown in determining the price determined by traders with consideration of the profits to be received and the number of clove products offered by farmers. A payment system that can be made in cash, advance payments and later payments.

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