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Analysis Of Income And Feasibility Of Shallot Farming In Tiworo District, West Muna Regency

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Abstract

This research is motivated by shallotf armersin Tikep District, West Muna Regency, currently focusing on the agricultural development sector with consideration of the condition of facilities and infrastructure that are still inadequate and hinder the development process of shallot production. Shallot production in Wulanga Jaya Village over the past few years has fluctuated and can be said to be very far from the national shallot production standard. This study aims to (1) determine the income level of shallot farmingin Tikep District, West Muna Regency, (2) determine the feasibility of shallot farmingin Tikep District, West Muna Regency. The population in this study is all onion farmers in Tikep District, West Muna Regency, which is 17 farmers. The sampling technique uses the census method, where all populations in the study are used as samples. The data analysis used is the R/Cratio. Based on the results of research on the Analysis of Income and Feasibility of Shallot Farming in Wulanga Jaya Village, Tikep District, West Muna Regency, it shows that (1) the income level of shallot farmingis 1,501.17 kg with an average income of Rp.13,368,280.73 for three planting periods where in one planting period equal to three months, three planting periods mean three harvests a year (2) The feasibility of shallot farming obtained an R/C Ratio value of 9.44 forthree planting periods where in one planting period equal to three months, three planting periods mean three harvests a year, meaning that farming is feasible to cultivate.

Keywords: Production, Feasibility of Farming, Shallots.

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INTRODUCTION

Horticultural commodities, especially shallots as one of those that have a considerable role because they are still widely cultivated both on a large scale and in households by farmers in Indonesia, including in Central Indonesia. One of the areas that has the potential for horticultural plant development is Southeast Sulawesi, especially in Tikep District, West Muna Regency. One type of horticultural commodity that has been cultivated for a long time by the people of Tikep District, West Muna Regency is shallots. Of course, the regional income of West Muna Regency is greatly supported by the plantation and agricultural sectors which are spread evenly throughout almost the entire region (BPS West Muna Regency, 2020).

Tikep District is currently focused on the agricultural development sector with consideration that the condition of facilities and infrastructure is still not feasible and hinders the development process of shallot production. In addition, there are no adequate facilities and infrastructure that connect agricultural nodes with agricultural sales locations and there is no service center that encourages the development of agricultural areas, and there is also no agricultural extension program so that the community does not get direction in the process of planting and caring for superior commodities, including shallots. Shallot production in Wulanga Jaya Village, Tikep District over the past few years has fluctuated and can be said to be very far from the national shallot production standard. Based on initial observations and information from the West Muna Regency Agriculture Office, the amount of shallot production in Wulanga Jaya Village only ranges from 250-350 kg/ha.

The level of income or profit obtained by shallot farmers is greatly influenced by the amount of production costs incurred by farmers. The income of shallot farmers is obtained from the difference between the total revenue from shallot farming and the total cost of farming. High income will affect farmers' decisions in carrying out their business activities. Basically, the sustainability of farming activities is not only seen from the amount of income obtained by farmers, the sustainability of farming activities is greatly influenced by the level of feasibility of farming.

Wijatno (2009) stated that the income aspect plays a very important role in determining the feasibility of farming. Agricultural products that are profit-oriented and non-profit-oriented must still pay attention to the income aspect in carrying out farming activities. In addition to avoiding losses, the feasibility study of farming is also needed as a consideration for farmers to continue shallot farming activities.

Income analysis needs to be carried out in farming management, because profitable farming must be seen from the perspective of the economy as a whole. The purpose of using

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income analysis is to estimate the feasibility level of farming, especially shallot plants, in the sense that it is feasible and inappropriate for a business to be run and whether or not a business is able to repay the costs that have been incurred and how much the ability of the business to provide benefits or benefits greater than the costs incurred, can be known from income analysis. Affandi *et al* (2019) said that in the study, feasibility analysis is used to identify problems in the future, so that it can minimize the possibility of missing the results to be achieved in an investment.

In the assessment of the feasibility of farming, it can be concluded that the business is feasible or not to be pursued based on several criteria including R/C. However, the most common problem faced is the inability of farmers to conduct an assessment or analysis of their business feasibility. The lack of farmers' ability to analyze the feasibility of shallot farming also applies in Tikep District in carrying out shallot farming activities, so it is necessary to conduct further economic analysis to find out the feasibility level of shallot farming in order to provide more information for farmers in developing shallot farming. Therefore, feasibility analysis is a systematic study that can show and measure the benefits and costs of a business, including shallot farming (Limbong, 2012).

MATERIALS AND METHODS

This research was carried out in Wulanga Jaya Village, Tikep District, West Muna Regency in November 2022 – June 2023. The location selection was carried out purposively or deliberately with the consideration that in Tikep District, West Muna Regency there are people who grow shallots, so it is interesting to know whether the business is feasible or not.

The sample was determined using the census method The data collected in this study were primary data and secondary data. Data collection techniques through observation, interviews and documentation. Then from the results of the analysis, revenue analysis and R/C Ratio can be used.

RESULTS AND DISCUSSION

Production

Production of an activity that converts *input* into *output*. Another definition of production is the end result of an economic process or activity by utilizing several inputs or *inputs*. This understanding can be understood that production activities are defined as activities in producing *output* by using certain production techniques to process or process *inputs* in such a way (Sukimo, 2017). The production results produced by shallot farmers are erratic in each

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harvest season depending on several things that affect shallot farming. In general, the amount of shallot farming production in Wulanga Jaya Village can be seen in Table 1

Table 1. Average Amount of Red Onion Farming Production in Wulanga Jaya Village , Tikep District, West Muna Regency in 2022

No	Planting Period	Quantity (Kg)
1	I	512,94
2	II	475,88
3	III	512,35
Total		1.501,17
Rata-Rata		500,39

Table 1 shows that the amount of shallot farming production in Wulanga Jaya Village fluctuates in three planting periods where one planting period is equal to three months, three planting periods means three planting times in a year. The first planting period was carried out from January 2022 to March 2022, the second planting period was carried out from May 2022 to July 2022, and the third planting period was carried out from September 2022 to November 2022. The first thing to do is to make a bed that is adapted to the conditions of the garden as well as make a trench, loosen the soil whose surface shape or the top of the bed is flat or not curved, use urea fertilizer, sprinkle fertilizer on the bed, stir until the soil and fertilizer are evenly distributed, and leave it for one week before the bed is ready to be planted. Based on the results of interviews conducted with farmers, the fluctuations occurred due to the influence of rainfall and pest attacks. The high and low production yield in shallot farming activities is highly dependent on the adequate cultivation processing system and production facilities. In shallot farming activities in Wulanga Jaya Village, harvesting activities are usually carried out three times a year with cultivation time from land preparation to harvest ranging from 80-90 days. From the results of the interview, it was concluded that the harvest time for shallot commodities is in April, August and December. The amount of shallot production of farmers in Wulanga Jaya Village can be seen in appendix 4. The purpose of increasing production and productivity is to increase the income and welfare of shallot farming business actors. With the use of the suggested technology package, it is hoped that the goal will be achieved in this case increasing production output (Jones, 2010).

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Price

Tjiptono and Chandra (2017) stated that price is the only element in the marketing mix that brings in revenue. The price of the product is a determinant of the market demand for the product in question. Price affects a company's competitive position and market share. The impact is that price affects the company's revenue and net profit so that in other words the company earns money through the price charged for the products or services it sells. The price of shallots offered to consumers certainly varies depending on the type and size of the shallots sold. The price of shallots is also sometimes erratic, this is because the market price sometimes changes. Regarding the overview of the price of shallots sold by shallot farming business actors in Wulanga Jaya Village in three planting periods, it can be seen in Table 2.

Table 2. Selling Price of Shallots in Wulanga Jaya Village , Tikep District, West Muna Regency in 2022

No	Planting Period	Selling Price (Rp/kg)
1	I	25.000
2	II	35.000
3	III	30.000
Sum		90.000
Rata-Rata		30.000

Table 2 shows that the average selling price of shallots from farmers during three planting periods where one planting period is equal to three months, three planting periods means three planting times in a year is Rp. 30,000/kg. In line with this, it is also said that the price of onion farming depends on the size of the shallots. The high and low selling price of shallots depends on market demand and commodity availability. If the yield decreases, usually the price of shallots will increase, and vice versa, if the production of shallots is abundant, the selling price will relatively decrease.

Total Cost

The production process and production costs are a unit that cannot be separated. The two are bound to each other and influence each other. When running the production process, of course, there are supporting factors needed and all of them can be available if purchased and it costs money. The meaning of production costs is the amount of all the funds needed in the process of producing goods and services which are influenced by several factors such as the

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price of raw materials to labor wages. Production costs can also be said to be the production tariff needed by business actors to produce a commodity from the beginning of production until it is ready to be marketed to consumers.

In general, the total cost in the production process of shallot farming during the last three periods in Wulanga Village, Tikep District, West Muna Regency can be seen in Table 3.

Table 3.Total Costs Incurred in Shallot Farming in Wulanga Jaya Village, Tikep District, West Muna Regency in 2022

No	Period	Fixed Fee (Rp)	Variable Cost (Rp)	Total Cost (Rp)
1	I	424.299,99	1.157.352,94	1.581.652,93
2	II	424.299,99	1.157.352,94	1.581.652,93
3	III	424.299,99	1.157.352,94	1.581.652,93
Sum		1.272.899,97	3.472.058,82	4.744.958,79
Rata-Rata		424.299,99	1.157.352,94	1.581.652,93

Table 3 shows that the total cost in the last three seasons has not increased. This is due to the production inputs at the cultivation location are always the same and uniform in size. So that in terms of business actors' spending, there is no increase. The total cost in farming is the overall cost incurred by business actors to produce shallots. For more details about the costs in onion farming, see appendices 6 and 8. According to Yudaswara (2018), fixed costs are obtained from the total depreciation costs derived from investment goods. Meanwhile, non-fixed costs are the costs of using materials used during the farming process until harvest. To calculate the total cost is obtained by adding fixed *costs* and variable costs.

Number of Business Receipts

Revenue is the amount of money received from the sale of its products to traders or directly to consumers. Meanwhile, according to Syafril (2000) stated that revenue is all income received regardless of where it comes from, with the amount not always the same for each period or a certain period of time. The revenue obtained by shallot farming business actors every month is quite variable depending on the amount of production exported out of the region.

In general, the total income of shallot farming in Wulanga Jaya Village, Tikep District, West Muna Regency during the three planting periods in 2022 can be seen in Table 4.

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Table 4.Average Amount of Revenue in Shallot Farming in Wulanga Jaya Village, Tikep District, West Muna Regency in 2022

No	Period	Unit Price (Rp)	Number of Units (Kg)	Total Revenue (Rp)
1	I	25.000	512,94	12.823.500
2	II	35.000	475,88	16.655.800
3	III	30.000	512,35	15.370.500
Sum			1.501,17	44.849.800
Rata-Rata			500,39	14.949.933

Table 4. shows that the total revenue of shallot farming in the three planting periods fluctuated. This is caused by the yield of shallots which also decreases and increases in each cultivation period.

In line with this, Boesono (2011) explained that the high and low revenue in the aquaculture business depends on the number of products produced or the higher the price per unit of production, the greater the total revenue obtained, and vice versa if the products produced are small and the price is low, the total revenue received by business actors will also be smaller.

Operating Income

Income shows all money or other material results achieved from the use of wealth or services received by a person or household during a certain period of time in an economic activity (Winardi, 2016). In other words, income can also be described as the total income received by workers, laborers or households, either in the form of physical or non-physical as long as they do work in an agency company or income as long as they work or do business. Everyone who works will try to earn the maximum amount of income in order to meet their living needs. In this study, the income in question is the income of the respondents from the results of their shallot farming business in three cultivation periods.

Revenue is the difference between total revenue and total costs incurred by a business. In general, the amount of income from shallot farming in Wulanga Village, Tikep District, West Muna Regency in three cultivation periods can be seen in Table 5.

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Table 5. Amount of Income Received in Shallot FarmingWulanga Jaya Village, Tikep District, West Muna Regency in 2022

No	Period	Admission (Rp)	Total Cost (Rp)	Total Revenue (Rp)
1	I	12.823.500	1.581.652,93	11.241.848,07
2	II	16.655.800	1.581.652,93	15.074.147,07
3	III	15.370.500	1.581.652,93	13.788.847,07
Sum		44.849.800	4.744.958,79	40.104.842,21
Rata-Rata		14.949.933	1.581.652,93	13.368.280,73

Table 5 shows that the total income of shallot farming in the three planting periods in 2022 is different where the highest total income is obtained in the second planting period. This is due to the increase in the price of shallots per kilo, but in terms of production produced less than the first and third planting periods. This is in line with the opinion put forward by Jones (2010) that the high and low income is influenced by several things, including the unit price of goods and the availability of commodities in the market. The multiplication between production and selling price with farmers' receipts for each rupiah spent is influenced by the number of products and the unit price produced. Therefore, the higher the amount of production and the unit price of the product produced, the higher the farmer's income

R/C Ratio

R/C Ratio is the number of ratios used to see the relative profits obtained in a production process. The data used in this study are data from the last three periods in 2022. The R/C Ratio value is obtained by calculating the average revenue divided by the average total cost. For more details, please see Table 6.

Table 6. R/C Ratio Value in Shallot FarmingWulanga Jaya Village, Tikep District, West Muna Regency in 2022

No	Period	Admission (Rp)	Total Cost (Rp)	R/C Ratio
1	I	12.823.500	1.581.652,93	8,10
2	II	16.655.800	1.581.652,93	10,53
3	III	15.370.500	1.581.652,93	9,71
Rata-Rata		14.949.933	1.581.65 2,93	9,44

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Table 6 shows that for the calculation of the R/C ratio in this study, the results of the R/C ratio of shallot farming business for each month are obtained a value of more than 1 where it is known that if the R/C ratio >1 then it is included in the category of profitable shallot farming. So that the results of this study during three planting periods obtained significant profits. So based on this, it can be explained that shallot farming in Walunga Jaya Village is worthy of cultivation.

If the entrepreneur gains profit from the business he does, then the business can be said to be feasible to run. With good management, a business can provide maximum profits. Likewise, shallot farming needs good management to carry out its business management, to find out whether the shallot farming business is feasible or not, then it can be analyzed using *revenue cost ratio* (R/C ratio) analysis (Saragih, 2020).

According to Siregar (2012) that the feasibility of a business/business is an activity in order to determine whether or not the business is feasible to run, the object of research is not only on large businesses, but also on simple businesses or businesses that can also be applied. Feasibility means research to determine whether the businesses that will be carried out will provide a greater revenue compared to the costs that have been incurred. Then feasibility also means that the business that is run will provide *financial* and *non-financial* benefits where it is in accordance with what goals they want. The meaning of feasibility or not here is an estimate that the business will be able or not able to generate decent profits when operationalized.

CONCLUSION

Based on the results of this study, it can be concluded that the income level of shallot farming with an average income of Rp.13,368,280.73 during three planting periods where in one planting period is equal to three months, three planting periods means three planting times in a year. The feasibility of shallot farming was obtained with an R/C Ratio value of 9.44 during three planting periods where one planting period is equal to three months, three planting periods means three plantings in a year, meaning that farming is feasible to cultivate.

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