International Journal of Technology and Education Research

https://e-journal.citakonsultindo.or.id/index.php/IJETER

E-ISSN: 2986-0733

Factors Affecting The Income Of Pennyakap Red Onion Farmers In Tampo Village, Anggeraja Sub-District, Enrekang District.

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Abstract

Shallots are a horticultural plant of the spice vegetable group with high economic value. The cultivation of shallot commodities is thought to increase income and improve welfare. However, on the other hand, there are several problems that occur in farmers where the income of farmers does not always increase, this is because there are several factors that affect the size of income.This study aims to determine how much income is obtained by orangutan farmers from onion farming in Tampo Village, Anggeraja District, Enrekang Regency and how the effect of production costs, production amount, selling price and labor on the income of shallot trapping farmers in Tampo Village , Anggeraja District, Enrekang Regency. The sampling technique used was simple random sampling from 44 farmers. This research uses qualitative analysis methods, quantitative description and multiple linear regression analysis. The results of this study showed that based on income analysis, the average yield of receipts (TR) of one planting season per farmer was obtained, which was IDR 252,698,634. Based on the results of regression, which has a significant effect, namely production costs, production quantities, and selling prices. meanwhile,

Keywords: Shallot, production costs, quantity of production, selling price, labor and income.

INTRODUCTION

The agricultural sector is one of the sectors that has a large role in the economy in Indonesia, because as a source of foreign exchange earnings, it encourages economic growth and provides employment for the community. In addition, the agricultural sector is also an important provider of raw materials for industry. Such as the food and beverage processing industry or in other words agro-industry. The agricultural sector is also the main pillar in supporting the country's food security, due to its contribution to meeting the food needs of most Indonesian people.

Indonesia is known as an agricultural country, where most of the population lives and still depends on the agricultural sector. National development is prioritized in the economic sector,

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so it is not surprising that the government is always trying to implement policies in order to increase agricultural production. Development in the agricultural sector is absolutely necessary considering that most of the population lives in rural areas and their main occupation is farming. It is therefore natural that more development is directed at improving the lives of people in rural areas because farmers are a low-income group.

Shallot farming is expected to increase farmers' income so as to improve farmers' welfare. However, on the other hand, there are several problems that occur with shallot farmers where the income of farmers does not always increase, this is because there are several factors that can affect the size of an income. The problem of production costs incurred by farmers for the cultivation of shallot commodities has increased. loss. The amount of production produced by farmers also varies, this is due to differences in land area and attacks by plant-disturbing organisms and shallots are susceptible to Fusarium wilt caused by the fungus Fusarium oxysporum so that the amount of production produced by farmers has decreased. The selling price of shallots often fluctuates, starting from IDR 15,000/Kg – IDR 19,000/Kg. This difference in selling prices can affect the size of the income earned by farmers. The amount of labor used by farmers also varies, the larger the land cultivated, the more labor required and the costs incurred will also be greater.

Shallot farming is expected to be able to increase revenue and income so that farmers can meet their basic needs of life and their families which include clothing, food, housing, education and health needs. For this reason, shallot farming needs to be developed so that the government's efforts to encourage the economy and welfare of farmers can be realized. By knowing the effect of production costs, production quantities, selling prices and labor on farmers' income, farmers can make decisions in their farming so that they can increase production and income. Based on the description above, research is needed on the factors that influence the income of shallot farmers in Anggeraja Village, Enrekang Regency.

MATERIALS AND METHODS

Study this is implemented in Village Tampo Subdistrict Anggeraja Regency Enrekang in January 2022– August 2022. The research location was chosen purposively with consideration that in location the is village Which own 364 farmer onion red. Population in study This is all shallot farmers in Village Tampo Subdistrict Anggeraja Regency Enrekang Which totaling 364 farmers. Technique taking sample instudy This is *simple random sampling* (simple random sample), that is a sample Which taken such shape so that each units study or unit elementary from Population have chance Which The same For chosen as sample (Rianse and Abdi, 2009). The type of data used in this research is primary data and secondary data. The variables in this study are two variables, namely the independent variable and the dependent variable. independent variables include income, number of family dependents, education, and land area. The dependent variable is welfare. The data analysis used is descriptive qualitative and quantitative analysis.

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RESULTS AND DISCUSSION

Analysis of Shallot Farming Income

Income analysis is used to find out how much income farmers get from the shallot farming. Shallot farming income is obtained from the reduction between total revenue and total farming costs. The average total costs, receipts and income of shallot farming for one growing season in Tampo Village, Anggeraja District, Enrekang Regency are as follows:

a. Total Cost of Shallot Farming

Costs are all expenditures used by farmers in cultivating shallots. The total cost of farming is obtained from the sum of the fixed costs (fixed costs) and variable costs (variable costs). The average total cost of shallot farming for one growing season in Tampo Village, Anggeraja District, Enrekang Regency can be seen in the table below:

Table 1.The average total cost of shallot farming for one growing season in Tampo Village, Anggeraja District, Enrekang Regency in 2022.

No.	Description	Average per Farmer (Rp)	Average per Ha (Rp)
1.	**Fixed Cost (FC)**	15.205	16,317
	a. Land tax		134,145
	b. Cost of depreciation		
	● Water pump machine	124,999	835,366
	● Water wheel	774,409	417,683
	● Tractor	389,205	17,242
	● Hoe	16,067	126,389
	● Spayer	17,780	32,450
	● Ground Fork	30,238	835,366
	Total Depreciation Cost	1,456,697	1,563,284
	Total Fixed Costs (FC)	1,456,697	1,579,601
2.	**Variable Cost (VC)**		
	a. Seed	14,853,409	15,940,244
	b. Seeds	2,294,432	2,462,317
	c. Pesticide	2,231,500	2,394,780
	d. Workforce	7,345,682	7,883,171
	Total Variable Cost (VC)	26,725,023	28,680,512
3.	**Total Cost (TC)**	**28,181,720**	**30,260,113**

Source; Primary Data Processed 2022

Table 1 shows that the average fixed costs (FC) incurred in shallot farming for one planting season per farmer is IDR 1,456,697 with an average per hectare of IDR 1,579,601. The average variable cost (VC) incurred in one growing season per farmer is Rp. 26,725,023 with an

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average per hectare of Rp. 28,680,512 so that the average total cost (TC) for one growing season per farmer is obtained, namely Rp. 28,181,720 with an average per hectare of Rp. 30,260,113. The size of the total cost used is in accordance with the area of land managed. The larger the land area, the more production facilities used so that the total cost will be greater, and vice versa. The production facilities used include seeds, fertilizers, pesticides, agricultural tools and machines and so on. Farmers must calculate and reduce total costs and allocate them properly so that the income earned by farmers increases.

b. Shallot Farming Revenue

Revenue (gross income) is the total production value of agricultural commodities before deducting production costs(Soekartawi 2002). The total income of farming is obtained from multiplying the amount of production produced by the selling price. The revenue of shallot farming for one growing season in Tampo Village, Anggeraja District, Enrekang Regency can be seen in the table below:

Table 2.Revenue from one planting season shallot farming in Tampo Village, Anggeraja District, Enrekang Regency in 2022.

No.	Description	Average per farmer (Rp)	Average per hectare (Rp)
1.	Total Production (Kg)	15.138	16,693
2.	Selling Price (IDR)	16,693	16,693
3.	Revenue (TR) (Rp)	252,698,634	271,194,478

Table 2. shows that the average amount of shallot production in one growing season per farmer is 15,138 Kg with an average production amount per hectare of 16,693 Kg and the average selling price of shallots is IDR 16,693/Kg so that an average acceptance of one planting season per farmer is IDR 265,385,314 with an average revenue per hectare of IDR 271,235,778. The size of the income earned by farmers is influenced by the amount of production. Farmers who have a high amount of production will get a large income and conversely farmers who have a low amount of production will also get a low income. Besides that,

c. Shallot Farming Income

Income can represent the success or failure of a farming activity. According toMardiyanto et al. (2017) To find farm income, it is necessary to know the receipts and total costs incurred for farming. The average income of shallot farming for one growing season in Tampo Village, Anggeraja District, Enrekang Regency can be seen in the table below:

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International Journal of Technology and Education Research

https://e-journal.citakonsultindo.or.id/index.php/IJETER

E-ISSN: 2986-0733

Table 3. The average income of shallot farming for one growing season in Tampo Village, Anggeraja District, Enrekang Regency.

No.	Description	Average per Farmer (Rp)	Average per Hectare (Rp)
1.	Acceptance (TR)	252,698,634	271,194,478
2.	Total Cost (TC)	28,181,720	30,260,113
3.	Income of One Growing Season (2 months)	67,730,789	72,686,700
4.	Monthly Income	33,865,395	36,343,350

Table 3. shows that the average revenue (TR) for one growing season per farmer is IDR 252,698,634 with an average revenue per hectare of IDR 271,194,478. The av erage total cost (TC) for one growing season per farmer is IDR 28,181,720 with an average per hectare of IDR 30,260,113. The average income of shallot farming for one growing season (2 months) per farmer is IDR 67,730,789 with an average per hectare of IDR 72,686,700. So that the average monthly income per farmer is IDR 33,865,395 with an average monthly income per hectare of IDR 36,343,350. The results of this study indicate that shallot farming in Tampo Village, Anggeraja District, Enrekang Regency is profitable because the revenue received by farmers can cover all the total costs incurred by farmers.

Factors Affecting the Income of Shallot Farmers in Tampo Village, Anggeraja District, Enrekang Regency

Factors affecting the income of shallot harvesters in Tampo Village, Anggeraja District were analyzed using multiple linear regression analysis using SPSS version 25.

Multiple Linear Regression Analysis

The analysis used in this study is multiple linear regression analysis. This analysis is used to examine the effect of production costs, production quantities, selling prices and labor on the income of shallot farmers. The results of the analysis can be seen in the following table:

Table 4.The results of multiple linear regression analysis of one growing season shallot farming in Tampo Village, Anggeraja District, Enrekang Regency.

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	-436384446.958	73669088.486		-5,924	0.000

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	Production Cost (Rp)	-1,663	.836	-.087	-1,988	0.000
	Total Production (Kg)	17500.178	790,513	1,055	22.138	0.000
	Selling Price (Rp/Kg)	25598573	4382952	0.121	5,840	0.000
	Labor (Person)	13381.489	249140.997	0.002	0.054	0.957
a. Dependent Variable: Income (Rp)						

Based on the results of the regression analysis in table 4.12, the multiple linear regression equation in this study can be formulated as follows:

$Y = \alpha + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + e$

$Y = -436,384,446.958 – 1,663X1 + 17,500.178X2 + 25,598.573X3 + 13,381.489X4 + e$

The multiple linear regression equation can be explained as follows:

The constant value (α) is -436,384,446.958 meaning that if the variable production costs (X1), production quantity (X2), selling price (X3) and labor (X4) are considered constant, the farmer's income (Y) will be IDR -436,384 .446,958. According toNurhidayati and Yuliantari (2018)Negative constants are not a problem and can be ignored as long as the regression model meets the assumptions and as long as the slope value obtained is not zero, then there is no need to care about negative constant values. Negative constants may be ignored as long as the multiple linear regression model satisfies the assumption test because basically linear regression is used to predict the dependent variable based on the change in value of the independent variable, therefore the concern should be the independent variable not the constant value(Wibawa et al, 2016).

The regression coefficient value on the production cost variable (X1) is negative, namely -1.663. This means that for every Rp. 1 increase in production costs, farmers' income will decrease by Rp. 1.663, assuming that it is not influenced by other factors. The results of this study are in accordance with research conducted byYanti and Usman (2020) which states that the production cost variable has a negative and significant effect on farmers' income. The production cost variable and the income variable have a non-unidirectional relationship, that is, if the production cost variable increases, the income variable will decrease and vice versa.

The value of the regression coefficient on the variable amount of production (X2) is positive, namely 17,500.178. This means that for every 1 kg increase in production, farmers' income will increase by Rp. 17,500.178, assuming that it is not influenced by other factors. The results of this study are in accordance with research conducted byPradnyawati and Cipta (2021) which states that the variable amount of production has a positive and significant effect on

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farmers' income. The production quantity variable and the income variable have a unidirectional relationship, that is, if the production quantity variable increases, the income variable will also increase and vice versa.

The value of the regression coefficient on the selling price variable (X3) is positive, namely 25,598.573. This means that for every Rp. 1 increase in the selling price, the farmer's income will increase by Rp. 25,598.573 assuming that it is not influenced by other factors. The results of this study are in accordance with research conducted byAprilia (2019)which states that the selling price variable has a positive and significant effect on farmers' income. The selling price variable and the income variable have a unidirectional relationship, that is, if the selling price variable increases, the income variable will also increase and vice versa.

The regression coefficient value on the labor variable (X4) is positive, namely 13,381.489. This means that for every increase in the workforce of 1 person, the farmer's income will increase by IDR 13,381.489 assuming that it is not influenced by other factors. The results of this study are in accordance with research conducted byTangkul et al, (2021) which states that the labor variable has a positive and insignificant effect on farmers' income. The labor variable and the income variable have a unidirectional relationship, that is, if the labor variable increases, income will also increase and vice versa.

The coefficient of determination (R2) is 0.984 or 98.4%. This value indicates that 98.4% of shallot farmers' income is influenced by production costs, production quantities, selling prices and labor. While the remaining 1.6% is influenced by other independent variables not examined.

Hypothesis testing

a. Simultaneous Test (F test)

The F test is used to determine whether the independent variables (production costs, production quantities, selling prices and labor) together have a significant effect on the dependent variable (farmer income). From the table it can be seen that the value of Fcount > Ftable (610,308 > 2.024) and sig value <α (0.000 <0.05) then H0 is rejected and H1 is accepted, so it can be concluded that production costs (X1), production quantity (X2), price selling (X3) and labor (X4) simultaneously have a significant effect on the income of shallot farmers in Enrekang Regency.

b. Partial Significance Test (t test)

The t test was used to determine whether in this study the independent variables used (production costs, production quantities, selling prices and labor) partially (individuals) had a significant effect on the dependent variable (farmer income). Based on table 4 the t test can be explained as follows:

1. Production Cost (X1)

In the production cost variable (X1) the sig* value <α (0.000 <0.05) then H0 is rejected

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and H1 is accepted, so it can be concluded that production costs have a negative and significant effect on the income of shallot farmers in Enrekang Regency. This is in accordance with the results of research conducted byAprilia (2019),Yanti and Usman (2020) ie production costs have a negative and significant effect on farmers' income. This means that if production costs increase, farmers' income will decrease, conversely if production costs decrease, farmers' income will increase. According toPurnomo et al, (2018) Production costs can provide an overview regarding the expenditure of each respondent in carrying out farming activities where the amount of production costs depends on the needs and area of the farmer's land. The wider the land managed by farmers, the greater the production costs incurred.

2. Total Production (X2)

In the variable amount of production (X2) the tcount > ttable (22,138 > 2.46) and the sig* value <α (0.000 <0.05) then H0 is rejected and H1 is accepted, so it can be concluded that the amount of production has a positive and significant effect on income shallot harvester farmers in Tampo Village, Anggeraja District, Enrekang Regency. This means that the size of the amount of shallot production obtained by farmers has an effect on the high and low income of farmers. This is in accordance with the results of research conducted byAlitawan and Sutrisna (2017),Manua et al, (2018)AndPradnyawati and Cipta (2021) where the amount of production has a positive and significant effect on farmers' income. The greater the amount of production produced by farmers, the greater the income of farmers and vice versa. It's the same with opinionsGodby (2015) that the level of production is directly proportional to the level of income, which means that the higher the level of production obtained by farmers, the higher the level of income of farmers. The higher the amount of production, the greater the income of farmers so that the greater the income earned by farmers.

3. Selling Price (X3)

In the selling price variable (X3) the tcount > ttable (5,840 > 2.46) and the sig* value > α (0.000 > 0.05) then H0 is rejected and H1 is accepted, so it can be concluded that the selling price has a positive and significant effect on income shallot harvester farmers in Tampo Village, Anggeraja District, Enrekang Regency. This means that the high and low selling prices affect the high and low income of farmers. The results of this study are in accordance with research conducted byAprilia (2019),Rosmiyati (2019) AndTangkul et al, (2021) where the selling price has a positive and significant effect on farmers' income. This means that if the selling price of shallots increases, the farmer's income will also increase. And vice versa, if the selling price of shallots decreases, the farmer's income will also decrease. The selling price of shallots in Enrekang is between IDR 15,000/Kg – IDR 19,000/Kg. This price difference is because not all farmers sell their shallots directly to the market, but there are also farmers who sell their crops to collectors. Where shallots are sold to collectors and the price is cheaper than selling the

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harvest in the market. In addition, the price of shallots is also adjusted to the quality of shallots produced.

4. Labor (X4)

In the labor variable (X4) the value of tcount < ttable (0.054 <2.46) and the value of signs > α (0.957 > 0.05) then H0 is accepted and H1 is rejected, so it can be concluded that labor has a positive and insignificant effect on income shallot harvester farmers in Tampo Village, Anggeraja District, Enrekang Regency. The results of this study are in accordance with the researchDamic (2014) AndTangkul et al, (2021) where partially labor has a positive and insignificant effect on farmers' income. Every additional labor used, the income earned by farmers will be even greater. Vice versa, every reduction in labor used, the farmer's income will also be smaller. According toSuryati (2017) labor has a positive and not significant relationship to farmer income. If the amount of labor used in farming is large, labor costs will increase so that farmers' income will decrease, and vice versa if the amount of labor used is small, labor costs will decrease so that the income earned will increase. Labor does not have a significant effect on farmers' income because the size of the amount of labor used by farmers does not cause the amount of production to increase or decrease, which is followed by high and low shallot income earned by farmers. In shallot farming, labor does not play an important role in efforts to increase production, but in shallot cultivation, labor plays a role to save time. Labor is an important factor in supporting the success of farming. Labor is needed starting from land preparation, planting, fertilizing, weeding, eradicating pests and diseases, harvesting and post-harvesting.

CONCLUSIONS AND SUGGESTIONS

Conclusion

`` Based on the results of the research and discussion described, it can be concluded that:

1. Based on the income analysis, the average income (TR) for one growing season per farmer is IDR 252,698,634.
2. Based on the regression results that have a significant effect, namely production costs, production quantities, and selling prices. While that does not have a significant effect is labor.

Suggestion

Based on the results of the research that has been done, the suggestions that can be given are as follows:

1. It is expected that farmers will cultivate farming more intensively with the most efficient costs possible so that the proper and efficient allocation of costs can obtain maximum results. Then setting a fair price for business actors is a psychological way. with a high selling price, the income will also increase. And can utilize the workforce as much as possible.

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2. The government should maintain price stability by issuing policies to monitor the stability of different prices on the market so that farmers' incomes also increase.
3. It is hoped that further researchers can develop this research by adding other variables that affect the welfare of shallot farmers such as education level, number of family dependents, farming experience and so on.

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