

The Effect of Land Area and Labor on Income of Onion Farmers in Naru Barat Village, Sape District, Bima Regency, Nusa Tenggara Barat Province

Mulhaerati

Faculty of Economics and Business, University of Muhammadiyah Makassar
mulhaerati@gmail.com

Arniati

Faculty of Economics and Business, University of Muhammadiyah Makassar
arniati@unismuh.ac.id

A. Nur Fitrianti

Faculty of Economics and Business, University of Muhammadiyah Makassar
anurfirianti@unismuh.ac.id

Article Info	Abstract
Keywords: <i>Direct Cash Assistance, Community Welfare</i>	<i>This study aims to determine the effect of land area and labor on the income of onion farmers in the village of West Naru, Sape District, Bima Regency, West Nusa Tenggara Province. The research method used in this research is quantitative research. Sources of data come from observations, interviews and questionnaires. The total population in this study was 220 people, with the sampling using the Slovin formula to 69 respondents. With the technique of data processing using multiple linear regression with the help of SPSS 25 software for windows . The results of the study show that land area has a positive and significant effect on the income of shallot farmers in West Naru Village, Sape District, Bima Regency, West Nusa Tenggara Province. And the workforce has a positive and significant effect on the income of shallot farmers in West Naru Village, Sape District, Bima Regency, West Nusa Tenggara Province.</i>

1. INTRODUCTION

The agricultural sector in developing countries has a very large role because it is the main livelihood of the majority of the population., 2012). The agricultural sector plays an important role in the economic development of a country. The agricultural sector provides food, a contributor to the country's foreign exchange through exports and so on. The positive impact is not only on the growth and development of the country's economy, but also has a positive impact on the community. The majority of the Indonesian population, who mostly lives in rural areas, still relies on the agricultural sector for their livelihood.

Agriculture is one of the primary sectors, it should be a concern of the government so that the sector can be developed properly. Greater development is in fostering and developing the agribusiness sector, especially in rural areas because most of the population in rural areas earn

their living as farmers. is expected to process economic recovery and national economic development.

Shallots are one of the leading vegetable commodities that have been intensively cultivated by farmers for a long time. Winkanda Satria Putra (2015) argues, Shallots are bulbs with a specific aroma that can stimulate tears due to the *etheric oil content of alliin* . The stem is disc-shaped and this disc grows shoots and fibrous roots. Onion flowers are hump-shaped at the end of a long stalk with a hole in it. Onion flowers are perfectly flowered with small, dome-shaped fruits with three chambers and fleshy acts.

Shallots are produced in almost all parts of Indonesia. There are four provinces of shallot production centers, namely Central Java, East Java, West Java and West Nusa Tenggara. West Nusa Tenggara is one of the centers of shallot production, as can be seen from the increased production in

2018 producing onions. red onion as much as 212,885 tons which in the previous year (2017) only produced red onions as much as 195,458 tons. Based on 2020 horticultural statistical data. From 10 regencies/cities in West Nusa Tenggara Province. Bima is the highest producer of Shallots in West Nusa Tenggara Province (BPS NTB Province 2020).

Shallots have the potential to be cultivated in Bima Regency. The number of farmers who have cultivated shallots has made it a superior commodity in Bima Regency. Bima's original red onions have good quality, namely a hard texture so that they do not rot easily even if they are stored for too long and also have a high taste. , which is more pungent and fragrant and has a very red red color indicating good quality. One of the shallot-producing villages in Bima Regency is West Naru Village.

Shallots are one of the priority commodities in vegetable development in Indonesia and this creates a great opportunity to reach national and international markets. Therefore, the development of shallot farming in Indonesia must be directed at realizing agribusiness and agro-industry that is competitive, sustainable, and able to improve the welfare of farmers so that it has an impact on economic development. the good one.

The problem that often occurs in the community, especially shallot farmers in West Naru Village, is the decline in income. Income is the amount of income received within a certain period of time as compensation for the factors that have been contributed. will create prosperity. The main purpose of trading is to get income. The income obtained from activities carried out for profit. Profits are determined by subtracting fixed costs (costs of plowing preparation, equipment preparation costs) and variable costs (fuel oil, consumption, etc.) incurred during the work process. The total net income will be known after

deducting the total costs incurred (Sandono Sukirno, 2019).

Farmers' income is caused by various factors, one of which is land area. Land is part of the land surface of the earth which includes land and all factors that affect its use. Agricultural land is a plot of land used for planting crops in agriculture (Syamsul Rahman 2018). Agricultural land is something that is very important in the production process of agricultural businesses. In farming, narrow land tenure is definitely less efficient than wider land. The narrower the business area, the more inefficient farming is done.

In addition to land area, labor also affects farmers' income. The workforce is a working population, who is looking for work and doing other activities such as school and taking care of the household. The existing workforce is still dominated by workers whose average age is 30 -50 years and over. Most of the farmers only get farming skills which are inherited from their predecessors and are still traditional. Currently, in the agricultural sector, it is urgently needed to have a young workforce that is qualified and committed to development efforts in the agricultural sector. The role of easy workers is currently very much needed because they have more knowledge and skills in managing agriculture with sophisticated innovation and tectonology.

Based on the description above, it encourages the author to wish to conduct research with the title: "The Effect of Land Area and Labor on the Income of Shallot Farmers in West Naru Village, Sape District, Bima Regency, West Nusa Tenggara Province".

2. LITERATURE REVIEW

2.1 Land area

Land is a natural resource with a very important function in the development of a country, the development process in all

sectors requires land such as agriculture, infrastructure, trade, industry and so on. In the agricultural sector, land is a crucial resource both for farmers and for agricultural development. This is because land has a very important role in production activities that can produce food needs that are needed by every community (Alfiyah Putri, 2015).

Land as one of the factors of production which is the factory of agricultural products which has a significant contribution to farming. The size of the production from farming, among others, is influenced by the narrow area of land used. The narrower the business area, the more inefficient the agricultural business carried out unless the farming is carried out in an orderly manner. The extent of ownership or control is related to the efficiency of farming. The use of inputs will be more efficient if the area of land controlled is larger.

Mastery of agricultural land area is something that is very important in the production process or farming and agricultural businesses. In farming, for example, ownership or control of narrow land is definitely less efficient than wider land. The narrower the business area, the less efficient the farming is. Unless a business is run in an orderly manner and with good administration and appropriate technology. The actual level of efficiency lies in the application of technology. Because on a narrower land area, the application of technology tends to be excessive (this is closely related to the conversion of land area to hectares), and makes the business inefficient (Moehar Daniel, 2011).

will result in reduced efforts to take actions that lead to efficiency due to the following:

- a. Weak supervision of production factors such as seeds, fertilizers, medicines, and labor.
- b. The limited supply of labor around this

area will ultimately affect the efficiency of the agricultural business.

- c. Limited capital stock to finance such a large scale business.

Land is the land part of the earth's surface that is owned. Land is part of the land surface of the earth which includes land and all the factors that influence its use. Land is the most important factor in agriculture which is a place where farming can be carried out and where production is released because it is the land where plants grow.

The area of agricultural land is a determinant of the influence of agricultural commodities in general, it is said, the wider the area of land cultivated or planted, the greater the amount of production produced by the land. The size of agricultural land can be expressed in hectare (ha) or are. In rural areas, farmers still use traditional measures, such as stakes and anchors.

One of the factors of agricultural production that has been a barrier to achieving food sovereignty is land. The land problems faced so far are the availability of insufficient agricultural land, the shrinking of existing agricultural land, and the difficulty of developing new agricultural land due to various obstacles. Development of agricultural land needs to be done considering the balance between agricultural land area and population is not adequate. Development needs to be carried out on land that has the potential to be developed both into dry land and alkaline land (Triwibowo Yuwono et al, 2011).

Utilization of land area for agriculture in general can be divided into: seasonal, annual and permanent land area. The use of land area for seasonal crops is prioritized for seasonal crops which in the pattern can be by rotation or intercropping and harvesting is carried out every season with a period usually of less than a year. The use of land area for annual crops is the use of

long-term crops which are rotated after the crops are economically unproductive, such as plantation crops. The use of permanent land area is directed at land that is not cultivated for agriculture, such as forests, conservation areas, urban areas, villages and their facilities, airports and ports.

2.2 Labor

Labor is a population aged 15-64 years who can work to produce. The influence of labor on production is not the same in each branch of production (Moehar Daniel, 2011). Labor is an important factor in farming, especially family workers and their family members. If it can still be done by family workers themselves, there is no need to hire outside workers, so that the level of cost efficiency incurred is able to provide very significant income for agricultural families.

Mulyadi (2014) argues, labor is someone who has the age of 15-64 years or all residents in a country who are able to produce production/services if there is a demand for them, and if they are willing to take part in that activity.

Moehar Daniel (2011) argues, labor is a tool of human physical and brain power, which cannot be separated from humans and is shown in the production business. The workforce can be divided into two, namely:

- a. By their nature:
 - 1) Physical labor is labor that uses more physical strength than mental power.
 - 2) Spiritual labor is a workforce that uses more spiritual/mind power than physical power.
- b. Strength of quality:
 - 1) Educated workforce (*skilled labor*) is a workforce that requires education first.
 - 2) Trained *labor* is a workforce that requires training such as monitors and drivers.
 - 3) Uneducated and trained workers are

workers who have not gone through education or training first.

In the agricultural business, labor is divided into male workers, female workers and child workers. Farm workers can be obtained from outside the family obtained by means of wages. This hired labor is usually found in large-scale farming businesses. In farming most of the workforce comes from the farming family itself which consists of the father as the head of the family, the wife and children of the farmers. The family's overall agricultural production has never been valued in terms of money. The size of the labor force can be expressed in days worked (HOK).

Labor production factors are important production factors and need to be taken into account in sufficient quantities, not only seen from the availability of labor but also the quality of labor. Some things that need to be considered in labor production factors are:

a. Availability of manpower

The production process requires adequate manpower. The number of workers required is adjusted to the needs to a certain degree so that the number is optimal.

b. Labor Quality

Workers who have certain skills are needed to produce higher quality products in accordance with their capabilities. It is often found that advanced technology tools cannot be operated or maintained because there is no manpower that has the classification to operate these tools.

c. Gender

Labor is also influenced by gender, especially in the agricultural production process. Male workers specialize in heavy work because men tend to have excessive physical strength compared to women.

d. Seasonal Workforce

In general, agricultural labor is determined by the seasons. In the agricultural

production process requires additional labor outside the family workforce. Additional labor is required at the time of tillage, planting and harvesting.

2.3 Income

In general, income is the result of production obtained in the form of materials and can be reused to meet the needs of production facilities and infrastructure. This income can generally be obtained from the sale of one product, or it can be said that income is the difference between total business revenues and the total costs incurred in conducting a business activity in one period (Jhingan, 2014).

Income consists of two, namely: gross income and revenue results. Gross income is all income earned from all branches in the farming business which can be calculated from the sales proceeds. Yield income is a portion of gross income which is considered as interest for all capital used in farming. (Subandriyo, 2012).

Income is the result of production obtained in the form of material and can be reused to meet the needs of production facilities and infrastructure. in one period.

Factors that affect income include the following:

- a. The number of production factors that determine the amount of business capital, both fixed and variable capital, which depends on the source of capital acquisition, either through bank loans, own capital, or grants.
- b. The price per unit of production output that determines the function and elasticity of consumer demand and supply for the goods or services produced.
- c. Income from side jobs that are able to support the main business in increasing production factors as inputs and being able to maximize profits as outputs

Anastasia Diana and Lilis Setiawati (2017) argue that income is a gross inflow of economic benefits arising from the entity's normal activities during a period if the inflow results in an increase in equity that does not come from investment contributions.

According to Zaki Baridwan (2011) the elements of income are as follows:

- a. Income from the production of goods or services
- b. Rewards received for the use of outside activities or the company's economic resources by other parties
- c. Sales of assets outside of merchandise are elements of other income of a company

Zaki Baridwa (2011) also argues, in terms of income it is known that the source of income can be through several aspects which can be divided into three sources of income, namely:

- a. Operating income, namely income derived from the company's main activities
- b. Non-operational income, income that is not tied to the company's activities, namely income derived from external factors.
- c. Extraordinary income, namely unexpected income where this income does not occur often and is usually expected not to be used again in the future .

Income is an increase in economic benefits during an accounting period in the form of income or additional income or a decrease in liabilities resulting in an increase in equity that does not come from investment contributions (Hans Kartkahadi, et al, 2012). The amount of income is determined by the ability of the factors of production to produce goods and services. If the ability of the factors of production to produce goods and services, the greater the

income that will be generated. Income analysis is a quantity that measures the amount of income that will be obtained from the harvest, after the total income is reduced by the total expenditure it becomes income. As for how to calculate farmers' income, the following formula can be used:

$$Pd = TR - TC$$

Information:

Pd = farmer's income

TR = total revenue

TC = total cost

The income earned by shallot farmers can be a benchmark for the welfare of the family, both children and farmers' wives. If the activities carried out by shallot farmers get a high level of income, it will clearly affect the welfare of the farmer's family, both in terms of consumption and from the feasibility of living. It should be noted that income streams have the following characteristics (Sandono, 2011):

- a. The corporate sector uses production factors owned by households. These factors of production earn income in the form of salaries and wages, rent, interest and profit.
- b. Most of the income received by households will be used for consumption, namely buying goods and services produced by the corporate sector.
- c. The remaining household income that is not used for consumption will be saved for future use or for savings in financial institutions.
- d. Entrepreneurs who want to invest will borrow household savings.

2.4 Relationship of Land Area to Income

Land is one of the most important things in the production process of farming and agriculture. The area of agricultural land tenure is very important in the production process or farming and agricultural businesses. In farming, for

example, the owner or control of a narrow land is definitely less efficient than a wider area. The narrower the business area, the less efficient the farming will be. Unless something farming is carried out in an orderly manner and with good administration and appropriate technology. The actual level of efficiency is lies in the application of technology. Because on a narrower land area, the application of technology tends to be excessive (this is closely related to the conversion of land area to hectares) and makes land area inefficient.

Rico phahlevi (2013) argues that the area of land will affect the scale of the business which in turn will affect the large or small amount of production of an agricultural business. The size of the land area will affect the income of farmers, where farmers who have a large land area will get a lot of production so that they get a lot of income while farmers who have a small land area will get a little income.

In an agricultural business, land is said to be productive if the agricultural land can produce satisfactory production in the field of farming. To increase agricultural productivity, every farmer is increasingly dependent on sources from the area of his environment. The status of agricultural land is classified as owned land, leased land and land holdings. The value or price of land with owned status is often more expensive than land that is not owned. Owned land which is usually stated with proof of land certificate as the price is higher, one of which is due to legal certainty of land ownership. Land or agricultural land with the status of usufructuary or usufructuary rights, the value is relatively lower than the status of ownership.

Land is land that will be used for an agricultural business. But, not all land is agricultural land and vice versa all agricultural land is land. Land area is the entire area that will be the place for

planting the planting process, the land area can guarantee the amount and results that will be obtained by farmers (Simanungkalit, 2010).

Land area is a very important production factor in the production process or farming business. The area of agricultural land can affect the efficiency or inefficiency of an agricultural business. In agriculture, the relationship between land area and income means that the more land used, the income will increase. The relationship between land area and income shows that land area has a positive effect on income. farmer. Well-managed land will certainly provide good and profitable results for farmers.

2.5 Relationship of Labor to Income

Moehar Daniel (2011) argues, the influence of labor on production is not the same in each branch of production. Labor is one of the factors that affect the level of production in farming. Labor is also defined as household labor and non-household labor. Labor is people who are working, who are looking for work and doing other activities such as going to school and taking care of the house. ladder. Most of the workers in Indonesia still depend on the agricultural sector for their livelihood. In farming, most of the workers come from the farming families themselves.

Labor is an important factor in farming, especially the labor of family members. If it can still be done by the family's own workforce, then there is no need to hire outside workers, so that the level of cost efficiency that is issued is able to provide a very significant opinion for the farming family.

Labor with related income. Where, labor has a positive effect on farmers' income/income by looking at the need for labor on the land. The workforce is everyone who is able to carry out work well, inside and outside the employment

relationship in order to produce goods or services to meet the needs of the community.

Workers who work inside and outside the employment relationship, with the main means of production in the production process are their own energy, both physical and mental energy. However, the absorption of the number of workers is certainly not excessive because it will increase waste or losses. Labor plays an important role in a company because it can help the company's productivity.

2.6 Red onion

The history of shallots begins in 3,200-2,800 BC, which is known for the writings found on various ancient tombs in Egypt. Then spread to India around 600 BC. In 400-300 BC, the Greeks and Romans had written about onions and garlic. Around the 7th century, this plant spread to Western Europe, Eastern Europe, and Spain, then in the early Middle Ages the onion began to spread to northern Europe, then the onion spread to America, East Asia and Southeast Asia. In the 19th century, shallots have been listed as one of the commercial horticultural commodities in various countries, where the largest producing countries are Japan, America, Romania, Italy and Mexico (H. Zulkarnain, 2018).

Shallots are bulbs with a specific aroma that can stimulate the release of tears because of the *etheric oil content of alliin*. The stem is disc-shaped and this disc grows shoots and fibrous roots. Onion flowers are hump-shaped at the end of a long stalk with a hole in it. Shallots are perfectly flowered with small, dome-shaped fruits with three chambers and no flesh (Putra, 2015).

The nutritional content of shallots is equivalent to the nutritional value of most vegetable crops in general. The tubers are starchless and their carbohydrate content accounts for about 13% of the daily

requirement. Shallot tubers are a potential source of pyridoxy, vitamin A, vitamin C, iron, manganese, and energy to meet daily needs (H. Zulkarnain, 2018).

Based on the color of the tubers, shallots are divided into three groups, namely:

- a. Groups with dark red tubers, such as Medan Cultivators, Sri Sakate, Maja and Gurgur.
- b. The group with pale light yellow tubers, such as the Sumenep cultivar.
- c. Groups of tubers whose tubers are yellow to red, such as Lampung, Bima, Ampenan and so on.

3. RESEARCH METHODS

3.1 Types of research

This type of research uses quantitative description research methods because the implementation includes data, analysis and interpretation of the meaning of the data obtained. This research is a field research that seeks and collects data with the aim of knowing the factors, elements, and a nature of the phenomenon. In this study, the search for the influence of land area and labor on the income of shallot farmers was obtained by using the *survey method*, which used a questionnaire as the main instrument.

3.2 Analysis Techniques

The data analysis technique used in this research is descriptive method and descriptive multiple regression analysis.

1. Descriptive method

The description method is an analysis used to reveal or describe something about the situation that is in accordance with the accurate facts of the place under study. and labor on the income of Shallot farmers in West Naru Village, Sape District, Bima Regency, West Nusa Tenggara Province.

2. Multiple Regression Analysis

Multiple regression analysis can be used by researchers, if the researcher intends to predict how the condition (up and down) of

the dependent variable will be, if two or more independent variables as predictor factors are manipulated (increase in value). So multiple regression analysis will be carried out if the number of independent variables is two (Sugiono, 2016). In making predictions through regression, data is needed for each variable. Furthermore, based on that data, researchers must find equations through calculations. Multiple regression analysis can be used the following formula:

$$Y = a + b_1 X_1 + b_2 X_2$$

To obtain the elasticity, it is transformed into a linear equation using the natural logarithm (Ln) to calculate the estimated value of each independent variable on the dependent variable into the model so that the following equation can be obtained:

$$\ln Y = a + b_1 \ln X_1 + b_2 \ln X_2$$

Information:

Y = Dependent Variable (farmer's income)

X₁ = land area

X₂ = labor

a = constant value

b = Parameter

4. RESULTS AND DISCUSSION

4.1 Research result

a. Description of Research Variables

Characteristics of farming, namely the factors that affect the level of income of shallot farmers include land area and labor. The descriptions of research variables are as follows:

1) Land Area (X₁)

The characteristics of the area of land cultivated by shallot farmers in West Naru Village, Sape District, Bima Regency, West Nusa Tenggara Province can be seen in table 4.7 below:

Table 4.7
Shallot Farmer's Land Area in West Naru Village

No	Cultivated Land Area (are)	Frequency	Percentage (%)
1	10 -24	18	26.09
2	25-39	39	56.52
3	40-54	11	15.94
4	> 55	1	1.45
Amount		69	100

Source: data processed in 2021

The area of land arable by farmers will affect the results obtained by farmers, of course, with land area, it is expected that more results will be obtained. The average area of land used by the sample farmers in this study is 25-39 acres with a total of 39 people with a percentage of 56.52 %.

2) Labor (X2)

The number of workers on shallot farmers in West Naru Village, Sape District, Bima Regency, West Nusa Tenggara Province can be seen in table 4.8 below:

Table 4.8
Number of Shallot Farmers in West Naru Village

No	Labor (Person)	Frequency	Percentage (%)
1	6- 15	25	36.23
2	16 - 25	27	39.13
3	26 - 35	14	20.29
4	> 35	3	4.35
Amount		69	100

Source: Data Processed in 2021

Based on the table in 4.8 above, it can be seen that farmers in onion farming mostly use 16-20 workers as many as 27 farmers with a percentage of 39.13%.

3) Income (Y)

A person's income can meet their living needs and income depends on the job one has. Based on this explanation, the

characteristics of respondents regarding income can be seen in table 4.9 below:

Table 4.9.
Average Income of Shallot Farmers in West Naru Village

No	Income (Rp)	Frequency	Percentage (%)
1	6,000,000 - 25,000,000	30	43.48
2	26,000,000 - 45,000,000	26	37.68
3	46,000,000 - 65,000,000	9	13.04
4	> 65,000,000	4	5.80
Amount		69	100

Source: Data Processed in 2021

Based on table 4.9 above, it can be seen that the percentage of respondents who earn between 6,000,000 – 25,000,000 illustrates that the income of the community is relatively small, this indicates that they are financially able to meet the needs of their family. Seen from the table above, the average farmer income is 6,000,000 – 25,000,000 with a percentage of 43,48 %.

3.3 Analysis Method

a. Multiple regression analysis

Multiple regression analysis was used to determine the direction of the relationship between the independent variable and the dependent variable. The regression equation can be seen from the table of coefficient test results based on the output of SPSS version 25 on the independent variables, namely land area and labor, to the dependent variable, namely the income of shallot farmers, which is shown in table 4.10 as follows:

Table 4.10
Regression Analysis Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	13.106	.134		98.024	.000
Land area (X1)	.841	.094	.593	8.949	.000
labor (X2)	.440	.072	.404	6.097	.000

Source: SPSS 25 . output

Based on table 4.10 above, it can be seen that the constant value of a is 13.106 and the regression coefficient of b₁ is 0.841 and b₂ is 0.440. Constant values and regression coefficients (a, b₁, b₂) are intended in the multiple linear regression equation as follows:

$$\text{LnY} = 13.106 + 0.841\text{LnX}_1 + 0.440\text{LnX}_2$$

From the multiple regression equation above, it can be seen as follows:

- 1) Constant value (a) of 13.106 means that if the area of land (X1) and labor (X2) is 0 or constant, the shallot farmer's income (Y) is 13.106.
- 2) Land area (X1), regression coefficient value b₁ of 0.841 shows the influence of the respondent's land area which is positive (+) meaning that if every 1% addition of land area it will cause an increase in the income of shallot farmers by 0.841. And vice versa if the land area is reduced by 1% it will cause a decrease in the income of shallot farmers by 0.841.
- 3) Labor (X2), the value of the regression coefficient b₂ of 0.440 indicates the influence of the respondent's workforce which is positive (+), meaning that if every 1% addition of labor, it causes an increase in the income of shallot farmers by 0.440. And vice versa if the workforce is reduced by 1% it will cause a decrease in the income of shallot farmers by 0.440.
- 4) Hypothesis testing

In this study, the hypothesis testing includes testing the determinant coefficient (R²), simultaneous test (F) and partial test (t). can be seen as follows:

a) Determinant Coefficient Test (R²)

The determinant coefficient test (R²) is used to measure how far the independent variables explain the dependent variable. The value of the determinant coefficient that is close to one of the independent variables explains almost all the information needed to predict the dependent variable. The results of the calculation of the determinant coefficient of this study can be seen in table 4.11 as follows:

Table 4.11.
Coefficient of Determination (R²)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.986 ^a	.972	.971	.09522

Source: SPSS 25 . output

Based on table 4.11 above, it shows that the results of the calculation show that the coefficient of determination symbolized by R² is 0.972, in other words this is explained by the variation of the two independent variables, namely land area (X1) and labor (X2) able to explain the dependent by 97.2%. While the rest while the rest is explained by other variables that are not included in this study that is equal to 2.8 %.

b) F test (simultaneously)

To determine the effect of the variable area of land (X1) and labor (X2) on the income of shallot farmers together, an analytical tool is used, namely the F test. The decision making criteria in this F test is if the significant value is <0.05 then, there the influence of the independent variable, namely land area (X1) and labor (X2) on the dependent variable, namely income (Y).

Table 4.12.
F test calculation results (simultaneously)

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	20,450	2	10.225	1127,740	.000 ^b
Residual	.598	66	.009		
Total	21,048	68			

Source: SPSS 25 . output

From the results of the regression in table 4.12 above, it shows the effect of the variable area of land (X1) and labor (X2) on the income of shallot farmers (Y). The significant value obtained is $0.000 < 0.05$, which means that the two independent variables simultaneously have a significant effect. significant. Thus, it can be concluded that testing the hypothesis above shows that the area of land and labor simultaneously (simultaneously) affects the income of shallot farmers in West Natu Village, Sape District, Bima Regency, West Nusa Tenggara Province.

c) t test (Partially)

The t-test is a partial test carried out to determine the effect of each or partially the independent variable, namely land area (X1) and labor (X2) on the dependent variable, namely the income of shallot farmers (Y). The test criteria for the t-test include: : if the significant value is <0.05 , then H_0 is rejected and H_a is accepted, it means that there is a significant effect between the independent variables on the dependent variable, and if the significant value is >0.05 , then H_0 is accepted and H_a is rejected so that there is no significant effect between each variable. independent of the dependent variable. While the results of the t-test calculations are shown in table 4.13 below:

Table 4.13.

T-Test Calculation Results (Partial)

Coefficients ^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	13.106	.134		98.024	.000
Land area (X1)	.841	.094	.593	8.949	.000
labor (X2)	.440	.072	.404	6.097	.000

Source: SPSS 25 . output

There is table 4.13 above, it can be seen that the calculation of t can be seen the results of partial testing of each independent variable partially on the dependent variable can be analyzed as follows.

4.2 Discussion of Research Results

a. The Effect of Land Area on Shallot Farmer's Income

The results showed that the variable land area (X1) is an independent variable that has a positive and significant effect on the income of shallot farmers in West Naru Village. The unit of land discussed in this study is Are. The results of multiple linear regression calculations state that the land area factor has a significant effect on the income of shallot farmers at a 95% confidence level and a regression coefficient value of 0.841.

The regression coefficient value of land area is 0.841 which means that every 1% addition of land area will cause an increase in the income of shallot farmers by 0.841%. On the other hand, if the land area is reduced by 1%, it will cause a decrease in the income of shallot farmers by 0.841%, so to get a greater increase in income, it must be followed by an increase in the area of a larger land.

The area of agricultural land tenure will affect farming. Judging from the previous studies above, it shows that the area of agricultural land tenure is very important in an agricultural business because the presence of land will result in a business activity that produces production. And the increase in production will affect the increase in farmers' income.

The results of this study are in line with Zahratul Dinni's research (2019) which says that land area has a positive and significant effect on the income of rubber farmers in Mudung Laut village. Agricultural land is a determinant of the influence of agricultural commodities. The more land area cultivated, the greater the amount of production produced. by the land.

According to Ummul Wafikah (2018) with the thesis title "Analysis of the Effect of Labor and Land Area on the Income of Pepper Farmers in Kindang District,

Bulukumba Regency". The results showed that together the independent variables including land area had a significant effect on the income of pepper farmers in Kindang District, meaning that every 1% addition of pepper farming land area would cause an increase in pepper farmers' income. On the other hand, if the land area is reduced by 1% it will cause a decrease in the income of pepper farmers, so to get a larger addition, it must be followed by an even larger addition of land area.

Opinions were also expressed on the results of research conducted by Suryati (2017) with the thesis title "The Effect of Working Capital, Land Area and Labor on the Income of Shallot Farmers in Sakuru Village, Monta District, Bima Regency". Land area has a positive and significant effect on onion farmers' income. red. The area of land can be interpreted that every additional 1 Are of land area will cause the level of income of shallot farmers.

b. The Effect of Labor on the Income of Shallot Farmers

Based on table 4.13 above, it shows that labor (X2) has a significant effect on the income of shallot farmers. The amount of labor used in one harvest is starting from land processing to harvesting, both from the family and outside the family. The results of multiple linear regression calculations state that that the labor factor has a significant effect on the income of shallot farmers at a 95% confidence level and a regression coefficient value of 0.440.

The value of the labor regression coefficient of 0.440 states that each additional 1% of labor will cause an increase in farmers' income by 0.440%. Conversely, if the workforce is reduced by 1%, it will cause a decrease in the income of shallot farmers as much as 0.440%, so that to get a greater increase in income, it must be followed by the addition of more workers than before.

One of the important factors in the agricultural business is the workforce, especially family workers and their family members. If it can still be done by the family's own workforce, there is no need to hire outside workers, so it can save costs and be able to have a significant impact on income for the family. farmer family. In addition, in West Naru Village, the feeling of compassion and solidarity with others is still very strong, for example when one of the neighbors who is not invited to work will come to help not only the next door neighbor who helps but also the people who are or are working on the rice fields. around the paddy field.

According to Suryati's research (2017), another factor that affects the income of shallot farmers is labor, which simultaneously or simultaneously has a positive effect on the income of shallot farmers in line with the research conducted by the author, while partially labor does not have a significant effect on the income of shallot farmers. This study is not in line with research conducted by the author, this is because labor will affect the size of agricultural products. Usually small farmers will need a little labor and on the other hand large farmers will need a large workforce and have certain skills.

5. CLOSING

5.1 Conclusion

Based on the research, the results of the data analysis carried out and the discussions that have been put forward, the following conclusions are obtained:

1. Based on the results of data analysis and discussion that the land area variable shows a significant value $< (0.000 < 0.05)$ with a coefficient value of 0.841. This means that the variable area of land has a positive and significant effect on the income of shallot farmers in West Naru Village, Sape District, Bima Regency, West Nusa Tenggara Province.

2. Based on the results of data analysis and discussion that the labor variable shows a significant value $<\alpha$ ($0.000 < 0.05$) with a coefficient value of 0.440. This means that the labor variable has a positive and significant effect on the income of shallot farmers in West Naru Village, Sape District, Bima Regency, West Nusa Tenggara Privinsi.

5.2 Suggestion

To further increase the income of shallot farmers in West Naru Village, Sape District, Bima Regency, West Nusa Tenggara Province in particular, it is necessary to have hard work and cooperation from all parties, both government and farmers. The suggestions from the researchers are:

1. The availability of adequate land can increase the income of shallot farmers because land greatly affects the results obtained by farmers.
2. To increase the income of shallot farmers, farmers who are engaged in the world of agriculture, especially labor or farmers, must have skills in maintaining their plants because most farmers only have the ability from before.
3. It is hoped that the government will pay more attention to the development of shallot farming by providing direct assistance programs to shallot farmers. And it is also expected that the government will implement a price policy or set a price where this policy is needed to keep prices at harvest from fluctuating, so that shallot farmers are enthusiastic in cultivating agricultural land which results in an increase in the standard of living of farmers.

BIBLIOGRAPHY

Baridwan, Zakir. 2011. *Financial Accounting Intermediary Special Issues Issue 1*. BPFE.Yogyakarta.

Daniel, Moehar. 2011. *Introduction to agricultural economics*. Earth Literature. Jakarta.

Diana, Anastasia and Setiawati Lilis. (2017). *Intermediate Financial Accounting*. Andi Offset. Yogyakarta.

Dinni, Zahratul. 2019. *The Influence of Land Area and Farming Capital on the Income of Rubber Farmers in Mudung Laut Village, Serving District, Jambi City*. Thesis Journal. Sulthan Thaha Saifuddin State Islamic University Jambi.

Febrianto, Muhammad Munir. 2018. *Factors Affecting the Income of Shallot Farmers in Jatiadi Village, Gending District, Probolinggo Regency*. Thesis Journal. University of Jember.

Gregory, Mankwi. 2007. *Macroeconomics*. Erlangga, Jakarta.

<https://ntb.bps.go.id>

Jhingan, ML 2014. *Development Economics and Planning*. Rajawali Press, Jakarta.

Kartikahadi, Hans et al. 2012. *Financial accounting and cost accounting*. Salemba four. Jakarta.

Kharismawati, KHD and Karjati, PD 2021. *The Effect of Land Area and Labor on Rice Production in 10 Districts of East Java in 2014-2018*. Journal of the Faculty of Economics and Business. Wijaya Kusuma University, Surabaya.

Mulyadi. 2014. *Cost Accounting*, fifth edition. Gajah Mada University, Yogyakarta.

Nurmala et al. 2012. *Introduction to Agricultural Science*. Graha Ilmu, Yogyakarta.

Son, WS2015. *The Archipelago Herbal Book, a collection of recipes and ingredients for medicinal plants for various disorders*. Katahati, Yogyakarta.

Daughter, Alfiya. 2015. *Analysis of the Effect of Changes in Profitability on Changes in Stocks on Changes in Manufacturing Listed on the Indonesia Stock Exchange in 2009-2013*. Thesis. Hasanuddin University Makassar.

- Rahma, Syamsul. 2018. *Building Agriculture and Food To Realize Food Sovereignty*. DeePublish, Yogyakarta.
- Riduwan and Akdon. 2020. *Formulas and Data in Statistical Analysis* . Alphabeta, Bandung.
- Samuelson and Nordhaus. 2003. *Macroeconomics* . McGraw-Hill. Global Media Education.
- Sukirno, Sadono. 2019. *Microeconomics Introductory Theory* . Rajagrafindo persada, Depok.
- Subandriyo.2012 *The Effect of Government Policy on the Income of Cocoa Farmers in Jayapura Regency*. CV Budi Utama, Yogyakarta.
- Sugiyono. 2016. *Statistics For Research* . Alfabet. Bandung.
- Suryati. 2017. *The Effect of Working Capital, Land Area, and Labor on the Income of Shallot Farmers in Sakuru Village, Monta District, Bima Regency*, Thesis Journal. Alauddin State Islamic University Makassar.
- Wafikah, Ummul. 2018. *Analysis of the Effect of Labor and Land Area on the Income of Pepper Farmers in Kindang District, Bulukumba Regency* . Thesis Journal. Alauddin State Islamic University Makassar.
- Yuwono et al., 2011. *Agricultural Development: Building Food Sovereignty*. Yogyakarta: Gadjah Mada University Press.
- Zulkarnain, H. 2018. *Tropical Vegetable Cultivation* . Earth Literacy, Jakarta.