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Examining the Influences on pineapple growers' profits in Basarang District's Batu Nindan Village

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ABSTRACT

This research was conducted to analyze the characteristics of farmers and the profile of pineapple farming in Batu Nindan Village, Basarang District, Kapuas Regency, and to analyze the factors that influence the income of pineapple farming carried out by farmers in Batu Nindan Village, Basarang District, Kapuas Regency. This research was conducted in Batu Nindan Village, Basarang District, Kapuas Regency. The research location was chosen purposively to obtain the research objective, namely, to determine the factors influencing income in pineapple farming. The sample population that became research respondents was 35 pineapple farmers. This number is based on the sample determination method, classified as non-probability sampling. The analysis method used is descriptive data analysis. The research findings show that pineapple farmers' income in Batu Nindan Village is influenced by the size of the business, capital, amount of production, and labor. All variables show significant influence both partially and simultaneously.

Keywords: land area, capital, production, labor, income, pineapple

I. INTRODUCTION

The agriculture industry is Indonesia's primary catalyst for development (Tumiwa et al., 2022). This sector includes food crops, horticulture crops, the fisheries sub-sector, the livestock sub-sector, and the forestry sub-sector. The agriculture sector assumes a pivotal position in bolstering this nation's economy. The agricultural industry plays a crucial role in the economy by producing high-quality agricultural products domestically (Saban & Falatehan, 2023). The aforementioned excellent items can serve as raw materials for manufacture and components of processed products for consumption. The commodities extensively transformed into the products in issue are fruits, including pineapple.

Pineapple is a prominent item in the tropical fruit industry, holding second in popularity, right after bananas. Indonesia is the fifth greatest producer globally, following Brazil, Thailand, the Philippines, and China (Firatoiu et al., 2021). Pineapple plants are distributed evenly across Indonesia due to their favorable conditions for growth, including suitable land, agroclimate, and topography. Pineapple plants can thrive in various agricultural soil types and have significant economic value. Additionally, they provide employment opportunities and contribute to land conservation efforts. Pineapple, scientifically known as Ananas comosus, is a prominent fruit crop in Indonesia and holds promising potential to fulfill the country's demand for nutritious

fruits (Mansyah et al., 2024). The fruit exhibits promising potential for export, as indicated by data from the Central Statistics Agency (BPS), which reports that the total volume of pineapple exports from Indonesia, encompassing both fresh and canned varieties, amounted to 161,386 tons valued at US$ 173,890,000 from January to October 2011. In 2011, Indonesia produced 1.5 million tons of pineapples, with queen pineapples accounting for 90% of the crop and smooth cayenne pineapples making up the remaining 10%. Therefore, it is evident that pineapple commodities had the potential for further advancement to augment their contribution to state revenue. Continued endeavors to cultivate pineapple plants involve various actions, such as enhancing product quality (intensification), expanding cultivation regions (extensification), and diversifying plant varieties. Pineapple is a valuable commodity with significant economic worth that can enhance the well-being of producers. An aspect that reinforces this claim is the inherent adaptability of pineapples, making them well-suited for cultivation in high-altitude and low-altitude regions. Given the favorable climate conditions in Indonesia, pineapple cultivation is projected to thrive and yield sufficient quantities (Pandit et al., 2020).

Indonesia boasts multiple pineapple production hubs. According to data from the Central Statistics Agency, pineapple production in Indonesia is concentrated in five provinces. These province are Lampung, contributing 32.80% to the national pineapple production. West Java has a total contribution of 20.45%, North Sumatra has a contribution of 11.89%, Riau has 7.10%, and Central Java has 6.03% (Siska et al., 2015). The combined contribution of these five provinces accounts for 78.27% of Indonesia's overall pineapple production. The remaining 21.73% represents the combined pineapple production from regions other than the five provinces, including East Java. Based on this quantity, it is evident that there is significant potential for pineapple commodities in multiple regions.

Indonesia has multiple pineapple production hubs, indicating a promising potential for pineapple commodities in various areas. The potential of pineapple cultivation in Indonesia is moderately promising. Still, it has not been fully exploited due to intense competition with other horticultural products, inadequate local supply in terms of quality and quantity, and a lack of transparent communication regarding prices and market information for farmers. Typically, pineapple development is characterized by unplanned growth. Farmers choose to plant crops based on price information from past seasons without correctly anticipating the balance between supply and demand (Panunggul et al., 2023). Indonesia has a substantial pineapple crop. Indonesia ranks Southeast Asia's third-largest pineapple grower, following the Philippines and Thailand, contributing approximately 23%. Most of Indonesia is a pineapple-producing region due to its favorable tropical climate. Nevertheless, the lack of progress in utilizing improved pineapple cultivars and poor growth techniques has resulted in pineapple development being overlooked (Maia et al., 2020). Indonesia's primary pineapple-producing hubs encompass North Sumatra, Riau, South Sumatra, West Java, and East Java (Rahayu et al., 2024).

Various elements, such as land area, labor, capital, management, climate, and other socio-economic aspects significantly impact production availability. It is crucial to understand these characteristics as they directly impact the income of pineapple farmers in Pandantoyo Village. Furthermore, the revenue generated will also impact the farm's viability. This will also determine the accessibility of farmers to acquire diverse amenities to advance their crops, for instance, on licenses for obtaining commercial capital loans from banks. Insufficient profitability of the farm poses challenges for farmers in obtaining loans. Conversely, According to the previous explanation, further research is required to analyze the factors that influence the revenue of pineapple producers in Batu Nindan Village, Basarang District, Kapuas Regency. This study aims

to determine the income generated by farmers in the community through pineapple cultivation and identify the elements that impact it.

II. LITERATURE REVIEW

A farm is a designated area of land where agricultural activities are conducted by individuals who may be business owners, farmers, or salaried managers (Hanggana et al., 2022). Farming utilizes several natural resources, including land, water, sunlight, and infrastructure, to facilitate agricultural output (Obaisi et al., 2022). Farming deliberately manages production factors, including nature, labor, capital, and skills, to generate agricultural products (Zaika & Gridin, 2020). Farming includes utilizing various natural resources, including land, water bodies, land improvements, sunlight, and constructed buildings, to facilitate agricultural output (Dhonde et al., 2022).

Agricultural science is the study of effectively and efficiently allocating available resources to maximize earnings within a specific timeframe (Council et al., 2010). Farming is considered adequate when farmers can efficiently allocate their resources and achieve output that surpasses the input (Hsiao et al., 2007). Agricultural science studies all aspects of farming and the specific problems farmers face from an entrepreneurial perspective. It focuses on investigating how farmers, as entrepreneurs, develop, organize, and manage their agricultural businesses (Dias et al., 2019). According to the perspectives expressed earlier, farming is generally considered an economic activity that involves allocating restricted production components to meet demands and generate profits. Farming is a method of managing agricultural areas that involves the integration of nature, capital, and various forms of labor with the goal of production. These actions can be performed either individually or together (Raj et al., 2022).

Farming costs refer to the expenses that farmers must bear to conduct agricultural activities (Kambali & Panakaje, 2022). Farming Costs have two distinct types: fixed and variable (Candemir et al., 2021). Fixed costs are expenses that farmers have to bear, and these costs do not vary based on the production quantity. Fixed costs are unavoidable expenses that must be paid regardless of whether or not the farming business is operational. Fixed costs remain constant regardless of changes in production or sales volume (Moon et al., 2022). According to this viewpoint, fixed costs include renting land, paying land taxes, and purchasing agricultural equipment. Figure 1 displays the fixed cost curve.

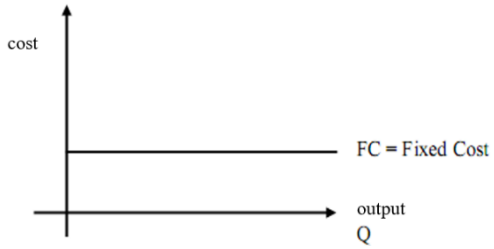

Fig 1. Fixed cost curve

Figure 1 demonstrates that the level of fixed costs borne by farmers or enterprises is identical. This is denoted by the symbol A when the expenditure on production costs in rupiah remains constant despite an increase in the quantity of output. The letter indicates the number of products that are seeing a rise. Variable costs are costs that fluctuate in size based on the level of farm production. As the level of output increases, the variable costs will likewise rise. According to this viewpoint, variable costs encompass either seed costs alone or both seed costs and labor expenses (Tanjung et al., 2020).

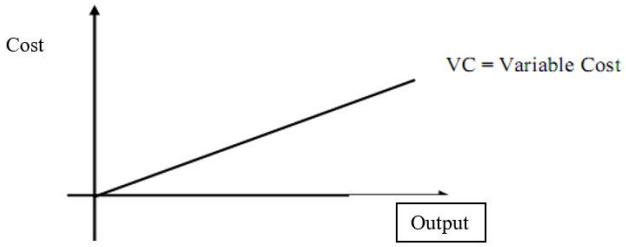

Fig 2. Variable Cost Curve

Figure 2 shows the effect of the number of units produced (Q) on the costs incurred (C). The VC (Variable cost) line shows that the VC line will shift to the right according to the shift in units produced (Q). This condition shows a positive relationship between Q and C, where each additional production unit will increase the costs incurred. Total costs must be incurred to obtain production factors (input) (Lizot et al., 2021). Based on this opinion, it can be seen that total costs are the result of adding fixed costs and variable costs that must be incurred when farming activities are carried out. Fixed costs can be formulated as follows:

$$TC = FC + VC \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (1)$$

Description:
TC = Total Cost
FC = Fixed Cost
TV = Variable Cost

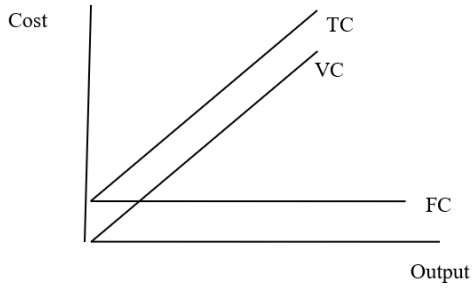

Fig 3. Total Cost Curve

Farm income is multiplying farm production results by the selling price of farm production results. Farm income can be formulated as follows:

$$TR = Yi.Pyi \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (2)$$

Description:
TR = Total Income
Yi = Production Results
Farm = Price of Production Results

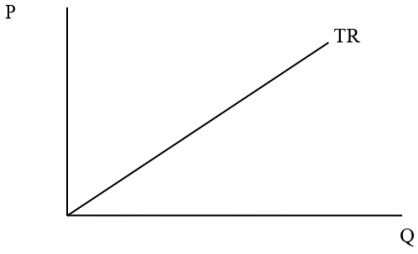

Fig 4. Income Curve

Farm income is the difference between income and all costs. Based on this opinion, a picture can be drawn that farm income minus total costs based on the accumulation of fixed costs and variable costs will produce the profit value of a farm. The formula is:

$$\pi = TR - TC \quad \text{..... (3)}$$

Description:

π = Income (Rp)
TR = Income (Rp)
TC = Total cost (Rp)

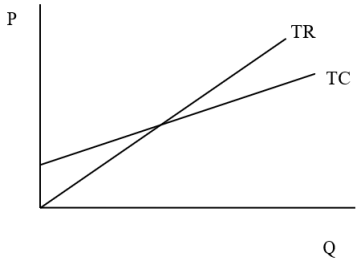

Fig 5. Farming Income Curve

III. METHODS

This research was conducted in Batu Nindan Village, Basarang District, Kapuas Regency. The research location was chosen purposively to obtain the research objective, namely, to determine the factors influencing income in pineapple farming. In addition, the method of determining the location was also adjusted to the characteristics of farmers as research objects. This location was chosen because Batu Nindan Village is one of the pineapple-producing centers. This is the basis for choosing this area as the research location.

The sample population that became research respondents was 35 pineapple farmers. This number is based on the sampling method, classified as non-probability sampling (Sugiyono, 2018). The sampling method used is the census method, namely the sampling process that makes all pineapple farmers in Batu Nindan Village as samples. From the definition above, it is known that the number of farmers will be sampled in this study is 35 farmers. The selected respondents were pineapple farmers in Batu Nindan Village, Basarang District, Kapuas Regency.

F statistical test essentially aims to show whether all independent or free variables entered into the model mutually influence the dependent variable. This F test compares the F value from the calculation results with F in the table. Thus, an alternative hypothesis will be obtained, which states that all independent variables simultaneously and significantly influence the dependent variable.

In an observational study, it is necessary to consider how far the model formed can explain the actual conditions. In regression analysis, a measure known as the coefficient of determination can be used for this purpose. The value of the coefficient of determination in question is a measure that describes the significant contribution of the independent variable to the dependent variable, or in other words, the coefficient of determination shows the variation of the decrease in Y explained by the linear influence of X. If the value of the coefficient of determination given the symbol R^2 approaches the number 1. The independent variable is getting closer to the relationship with the dependent variable, so it can be said that the use of the model can be justified. The uses of the coefficient of determination are:

As a measure of the accuracy/suitability of the regression line made from the estimation results of a group of observation data, the greater the R^2 value, the better the regression line formed, and the smaller the R^2, the less precise the regression line is that represents the observation data. To measure the proportion (Percentage) of the variation in Y explained by the regression model or the significant contribution of variable X to variable Y. The t-test shows how far the influence of one independent variable is in explaining the variation of the dependent variable. The purpose of the t-test is to determine the significance or otherwise of the regression

coefficient or the independent variable (X) that has a partially significant influence on the independent variable (Y).

IV. RESULTS AND DISCUSSION

Multiple linear regression analysis measures the strength of the relationship between two or more variables, also showing the direction of the relationship between the dependent and independent variables (Ghozali, 2016). Multiple linear regression analysis has independent variables (X) and dependent variables (Y). The multiple linear regression analysis results can be seen in the SPSS version 25 output table as follows.

Table 2. Results of Multiple Linear Regression Analysis

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.153	.303		3.806	.001
Land Area	.394	.121	.281	3.262	.003
Amount of Capital	.535	.110	.371	4.846	.000
Amount of Production per Harvest	1.000	.073	.927	13.753	.000
Amount of Labor	.769	.133	.484	5.769	.000

Source: Primary data processed by SPSS, 2023

Multiple linear regression analysis was used to answer the research problems in this study. This analysis determines the dependence between the independent variable (X) and the related variable (Y) based on the multiple linear regression analysis. The following equation is produced:

$$Y = a + b1X1 + b2X2 + b3X3 + e$$

$$Y = 1.153 + 0.394X1 + 0.535X2 + 1.000X3 + 0.769X4 + e$$

Description:

Y = Pineapple Farmer Income
X1 = Land Area
X2 = Business Capital
X3 = Production Amount
X4 = Number of Workers

Based on the multiple linear regression equation results, each variable explains that Constant (α) = 1.153. In the equation above, the constant value is obtained as 1.153 (positive), which means that the land area, business capital, production volume, and number of workers are equal to zero, so the income of pineapple farmers in Batu Nindan Village, Basarang District is equal to 1.153. The regression coefficient of land area (b1) = 0.394. The positive regression coefficient value (unidirectional) means that if the land area is increased by 1%, the income of pineapple farmers in Batu Nindan Village, Basarang District, will increase by 0.394, assuming other independent variables are constant. The regression coefficient of business capital (b2) = 0.535. The positive regression coefficient value (unidirectional) means that if business capital is increased by 1%, the income of pineapple farmers in Batu Nindan Village, Basarang District, will increase by 0.535, assuming other independent variables are constant.

The coefficient of production volume (b3) = 1,000. The value of the regression coefficient of production volume is 1,000, which indicates a positive (unidirectional) value. This means that if the number of workers is increased, the income of pineapple farmers in Batu Nindan Village, Basarang District, will increase by 1,000, assuming that other variables are considered constant. The coefficient of the number of workers (b4) = 0.769. The regression coefficient value of the number of workers is 0.769, which indicates positive (in the same direction). This means that if the number of workers is increased, the income of pineapple farmers in Batu Nindan Village, Basarang District, will increase by 0.769, assuming that other variables are considered constant.

Hypothesis testing in this study uses multiple linear regression analysis. This analysis determines the effect of several independent variables (X) on the dependent variable (Y). Multiple linear analysis is carried out by testing the coefficient of determination (R2), simultaneous statistical tests (f tests), and partial tests (t-tests). With the following specifications: The t table value of the land area is seen from the significance level of 0.05 where df = number of samples - number of independent variables - 1 = 30 - 4 - 1 = 25; therefore the t table value at df 25 is 2.05954 while the calculated t value of the land area variable (X1) is 3.262 meaning that the calculated t value ≥ t table, namely 3.262 ≥ 2.00958, then the land area has a positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District.

Furthermore, when viewed from the significance value of the results of the SPSS calculation, the sig. Value. The sig is a land area variable of 0.003 compared to α = 0.05. value is smaller than the value of α = 0.05 (0.003 ≤ 0.05), meaning that the area of land that has been owned significantly affects the income of pineapple farmers in Batu Nindan Village, Basarang District. The t-table value of business capital is seen from the significance level of 0.05 where df = number of samples - number of independent variables - 1 = 30 - 4 - 1 = 25. Therefore, the t-table value at df 25 is 2.05954 while the calculated t-value of the business capital variable (X2) is 4.846, meaning that the calculated t-value ≥ t-table is 4.846 ≥ 2.00958, so the amount of business capital has a positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District. Furthermore, when viewed from the significance value of the results of the SPSS calculation, the sig. Value. The capital variable of 0.000 is the sig when compared to α = 0.05. Value is smaller than the value of α = 0.05 (0.000 ≤ 0.05), meaning that capital has a significant effect on the income of pineapple farmers in Batu Nindan Village, Basarang District

The t-table value of the amount of production per harvest is seen from the significance level of 0.05 where df = number of samples - number of independent variables - 1 = 30 - 4 - 1 = 25; therefore, the t-table value at df 25 is 2.05954 while the calculated t-value of the variable amount of production per harvest (X3) is 13.753 meaning that the calculated t-value ≥ t-table is 13.753 ≥ 2.00958 then the amount of production per harvest has a positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District. Furthermore, when viewed from the significance value of the results of the SPSS calculation, the sig. The variable's value for the production amount per harvest is 0.000 when compared to α = 0.05, the sig. Value is smaller than the value of α = 0.05 (0.000 ≤ 0.05), meaning that the amount of production per harvest significantly affects the income of pineapple farmers in Batu Nindan Village, Basarang District.

The t-table value of the number of workers is seen from the significance level of 0.05 where df = number of samples - number of independent variables - 1 = 30 - 4 - 1 = 25. Therefore, the t-table value at df 25 is 2.05954 while the calculated t-value of the variable for the number of workers (X4) is 5.769, meaning that the calculated t-value ≥ t-table, namely 5.769 ≥ 2.00958, so the number of workers has a positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District. Furthermore, when viewed from the significance value of the results of the SPSS calculation, the sig. The value of the variable number of workers is 0.000 when compared to α = 0.05, the sig. Value is smaller than the value of α = 0.05 (0.000 ≤ 0.05), meaning that the number of workers significantly affects the income of pineapple farmers in Batu Nindan Village, Basarang District.

F Test shows whether all independent or free variables included in the model jointly influence the dependent/related variables. This test also uses a significance level of 5% or 0.05. The results of calculating multiple linear regression analysis parameters using the SPPS version 25 program obtained the following results.

The first way is to compare the F table and F count values. The F table was obtained at

2,759, seen from the numerator df = 4 (number of independent and dependent variables - 1) and the denominator df = 25 (number of respondents - number of independent and dependent variables). The results obtained show that the calculated F is greater than the F table (63.386 ≥ 2.79), and when viewed from the significance value of the calculated results with SPSS, the significance value is (0.000 ≤ 0.05). This means that the independent variables significantly affect the income of pineapple farmers in Batu Nindan Village, Basarang District Coefficient of Determination Test. The coefficient of determination test is used to measure how far the model's ability to apply the dependent variable. The determinant (R2) reflects the ability of the dependent variable. The R2 value shows how much influence the explanatory variable can have on the proportion of the total variation of the dependent variable. The higher R2 value shows how much proportion of the total variation of the dependent variable can be explained by the dependent variable. The value (R2) can be seen from the printout results. The value (R2) is between 0 and 1. The value (R2) will be better if it approaches 1. The calculation results using the SPSS version 25 program can show that the Adjusted R Square value is 0.896 or means that the land area, amount of capital, amount of production, and number of workers affect the income of pineapple farmers in Batu Nindan Village, Basarang District by 89.6%. At the same time, other variables outside this study influence the remaining 11.4%.

Discussion The effect of land area on pineapple farmers' income The regression coefficient value of the business period variable is 0.394, which means that for every additional unit of land area, there will be an increase in pineapple farmers' income by 0.394. The significant value of land area is 0.003, which is smaller than 0.05, which means that the land area variable significantly affects the income of pineapple farmers in Batu Nindan Village, Basarang District, assuming that other variables are considered constant. So, it can be concluded that the partial hypothesis proposed, namely that land area has a significant positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District, is accepted. Their research concluded that land area has a positive and significant effect on the income of vegetable farmers in Baturiti District (Pradnyawati & Cipta, 2021). Other research also supports the results of this study, where a land area has a positive and significant effect on the income of coffee farmers in Lewa Jadi Village, Bandar District, and Bener Meriah Regency (Daini et al., 2020).

The area of land planted will affect the number of plants that can be planted, which in turn can affect the amount of production produced. If the area of farmers' land is large enough, the economic opportunities to increase production and income will be more significant. Land area for farmers is one of the factors that influences increased income. Villagers whose main activity is farming depend on their land for a living. Thus, the area of land they own is one of the indicators of the amount of income received. If the land area increases, farmers' income will also increase, and vice versa; if the land area used is small or narrow, then the income obtained by farmers will also decrease because the rice planted is tiny. So, the relationship between land area and farmer income is positive.

The regression coefficient value of the business capital variable is 0.535, which means that every additional unit of business capital will increase the income of pineapple farmers in Batu Nindan Village, Basarang District, by 0.535. The significant value of business capital of 0.000 is smaller than 0.05, which means that the business capital variable significantly affects the income of pineapple farmers in Batu Nindan Village, Basarang District, assuming that other variables are considered constant. So, it can be concluded that the partial hypothesis proposed, namely that business capital has a significant positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District, is accepted.

This study is in line with the research, which concluded that business capital has a

positive and significant effect on the income of vegetable farmers in Baturiti District (Pradnyawati & Cipta, 2021). Daini's research also supports the results of this study, where business capital has a positive and significant effect on the income of coffee farmers in Lewa Jadi Village, Bandar District, Bener Meriah Regency (Daini et al., 2020).

Business capital is one aspect that must be present in entrepreneurship, and other aspects that are no less important are HR (labor skills), technology, economy, and organization or legality. Business capital is a fund to support production activities to achieve specific goals. It is also used to run a business so that it continues to run. Thus, the amount of business capital will affect the development and expansion of the business.

Working capital is essentially an amount that continues to exist in supporting a business that bridges the gap between the time of expenditure to obtain materials or services and the time of receipt of sales. In addition, it is the most critical aspect of business activities. Without capital, a business will not be able to run even though other requirements for establishing a business are already in place. Capital is a factor that determines the amount of production and income. Lack of capital in farming will cause the use of production facilities to be very limited, which will affect production and income. Capital in farming can be classified as a form of wealth, either in the form of money or goods, used to produce something directly or indirectly in a production process.

The regression coefficient value of the production quantity variable is 1,000, which means that every additional unit of production quantity will increase the income of pineapple farmers in Batu Nindan Village, Basarang District, by 1,000. The significant value of the business period is 0.000, which is smaller than 0.05, which means that the price variable of production quantity significantly affects the income of pineapple farmers in Batu Nindan Village, Basarang District, assuming that other variables are considered constant. So, it can be concluded that the partial hypothesis proposed, namely that the amount of production significantly positively affects the income of pineapple farmers in Batu Nindan Village, Basarang District, is accepted.

The results of this study align with the statement before which states that production affects farmers' income because the higher the production, the greater the income farmers receive (Wehfany et al., 2022). The results of this study are also in line with previous research that states that production significantly affects income (Tanjung et al., 2020). Production is the result of multiplying the harvested area by the productivity per hectare of land, so how much production is in an area depends on the area harvested in the year in question or the level of productivity. The amount of production has a positive and significant effect on income. The amount of production produced by farmers in each harvest will affect the income obtained by farmers. Production is an activity that obtains final results in the form of goods produced from a production process.

Production can be divided into three parts. The first total production (total product) is the amount of production resulting from the use of total production factors, Marginal production (marginal product) is additional production due to the addition of the use of one unit of production factor, average production (average product) is the average output produced per unit of production factor (Hu et al., 2022). The amount of production in this study is the amount of harvest from the farming business owned by vegetable farmers. If the demand for the amount of production is high, the price at the farmer level will also be high so that farmers will get higher income with the exact cost. Conversely, if farmers succeed in increasing production but prices fall, farmers' income will also fall.

The regression coefficient value of the variable number of workers is 0.769, which means that every additional unit of the number of workers will increase the income of pineapple farmers

in Batu Nindan Village, Basarang District, by 0.769. The significant value of the length of business is 0.000, which is smaller than 0.05, which means that the variable number of workers significantly affects the income of pineapple farmers in Batu Nindan Village, Basarang District, assuming that other variables are considered constant. So, it can be concluded that the partial hypothesis proposed, namely the amount of production that has a significant positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District, is accepted.

This study is also in line with the research conducted before, where in their study, they concluded that the number of workers had a positive and significant effect on the income of seaweed farmers in Ped Village, Nusa Penida District (Latif et al., 2023). Labor is a significant factor in production because labor is a driving factor for other input factors; without labor, other production factors would be meaningless. Increasing labor productivity will encourage increased production so that income will also increase. If many products are sold, entrepreneurs will increase their production. Increasing the amount of production will increase the workforce needed, so income will also increase (Pesona et al., 2023).

Labor is an essential factor that affects income. Labor is a driving factor for other input factors; other production factors would be meaningless without labor. The problem of human resource quality will affect the management of natural resources produced and price regulation problems (Khan et al., 2021). A person's work experience will affect labor productivity, which will encourage increased production and income (Johari & Jha, 2020). The more workers who work, the income of seaweed farmers will also increase.

V. CONCLUSION

Based on the data obtained from the field and processed using SPSS, the researcher found the following results, and it can be concluded the results of the study indicate that the area of land partially has a significant and positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District. The wider the land is owned, the greater the possibility that the income of pineapple farmers in Batu Nindan Village, Basarang District, will also increase. The study results indicate that business capital partially has a significant and positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District. The higher the business capital issued, the higher the equipment that can be provided, the wider the land owned, and the more labor and seeds. So that the possibility of increasing the income of pineapple farmers in Batu Nindan Village, Basarang District, will be greater. The study results indicate that the amount of production partially has a significant and positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District. The greater the production, the higher the income of pineapple farmers in Batu Nindan Village, Basarang District. The study results indicate that the number of workers partially has a significant and positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District. The greater the number of workers, the higher the income of pineapple farmers in Batu Nindan Village, Basarang District. The study results indicate that land area, business capital, production volume, and number of workers simultaneously have a significant and positive effect on the income of pineapple farmers in Batu Nindan Village, Basarang District.

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