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# The Effect Of FFB Prices On The Welfare Of Oil Palm Farmers In Mentawak Village Merangin Regency

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**ABSTRACT**

This study aims to determine how far the influence of the price of Oil Palm FFB in Mentawak Village, Nalo Tantan District. The research was conducted at the price of fresh fruit bunches (FFB) of oil palm Rp. 1,200.00/kg. The method used is a quantitative research method with simple linear regression using the SPSS version 22 program. The results of this study the regression model obtained is Y=44,554+0,074 X. The regression model obtained at the price of oil palm FFB Rp. 1,200.00/kg is worth positive, so that it is said that the price of oil palm FFB and the welfare of oil palm farmers is positively related. This study suggests that related parties pay more attention to farmers and can provide guidance such as training/counseling to farmers so that they can make derivative products from oil palm plantations. Thus, it is hoped that the farmers will not only benefit from the sale of their agricultural/plantation products but also become entrepreneurs.



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# INTRODUCTION

The supply of palm oil is still a major topic in international discussion. One of the countries supplying crude palm oil (CPO) is Indonesia. The Indonesian state produces palm oil not only for export, but also to meet domestic needs. This makes CPO an important commodity in Indonesia (Arsyad, Achmad,Suharno & Siti, 2020).CPO is obtained from processing oil palm. Oil palm is one of the plantation crops that occupies the most important position in the agricultural sector (Rai & Faisal, 2022). The development of the agricultural sector is encouraged through various researches, development of agricultural technology and the development of social and economic facilities in various regions which constitute a large amount of state investment (Mashi, Inkani, & Oghenejabor, 2022). Palm oil or ordinary called Crude Palm Oil (CPO) can compete in the global market so that the income obtained can help meet the livelihoods of oil palm farmers (Nurfatriani, Ramawati, Sari, & Komarudin, 2019).

The economic value of oil palm is quite high so that it becomes one of the incomes expected by the people of Indonesia, especially the people in Merangin Regency, Jambi Province. This is supported by the land owned by Merangin Regency which is very suitable for plantations.

The results of an interview with one of the oil palm farmers in Merangin Regency, he explained that the increase in income occurred because the price of palm oil increased so that the wider the land area, the level of welfare could be known quickly. Prosperous family formed on the basis of a legal marriage is able to meet the spiritual and material needs of a decent life.Welfare is the first step to reducing poverty. Poverty cannot be measured only by income, because the benefits derived from a certain amount of income will vary greatly depending on the situation. Therefore, welfare is not only seen from income but also other indicators. Welfare does not escape the indicators of the level of welfare that must be met, including employment/occupation, health, education, consumption, health, housing conditions and facilities owned.

The income of oil palm farmers in 2021 with the item of family expenditure is the price of basic necessities at that time, of course, it can be said that oil palm farmers can meet their living needs, so that their welfare level can be seen directly (Candrasa, 2022). This is much different from 2022. The price of oil palm Fresh Fruit Bunches (FFB) has decreased so that it has an impact on the economy and welfare of oil palm farmers (Awang et al., 2021).

The decline in FFB prices could be influenced by several factors. In theory, the price level can be influenced by several factors, including economic conditions, supply and demand, elasticity of demand and competition (Sarjana, Meitriana, & Suwendra, 2018). The decline in the price of oil palm FFB is not supported by the price of fertilizer, making it difficult for farmers (Mulyani, 2021). From this existing phenomenon, a research was conducted in Mentawak Village, Nalo Tantan District, Merangin Regency on the Effect of FFB Prices on the Welfare of Oil Palm Farmers in Mentawak Village, Merangin Regency. At the time of the research in 2022, the price of oil palm FFB fluctuated and each palm oil token did not tend to put the same price. This helped a little in the implementation of the research. After being observed, a decision was made that the benchmark price for oil palm FFB in the Mentawak Village studied was Rp. 1.200,00/Kg.

The difference with previous studies, previous researchers examined where there has been no instability in various sectors. This research was carried out where yhe situation in Indonesia or even world was experiencing Covid 19. Sri Mulyani said Indonesia was quite hit by the spread of covid-19, not only in the human health sector but also disrupting the health of the global economy (Mohammad, Toha & Haidar, 2020). From this explanation it can be seen that there are various unstable sectors such as health, trade, the economy and other. Therefore, in the a situation that is not yet completely stable and with price fluctuations, the researcher is interested in knowing the extent to which these price fluctuations have an impact on the welfare of farmers, especially oil palm farmers.

# RESEARCH METHOD

The research method is a scientific way to obtain data with certain purposes and uses. The research conducted is quantitative, namely the method used to examine a particular population or sample in order to be able to test the hypothesis that has been applied.

**Population and Sample**

**a. Population**

The population in this study is the number of oil palm farmers in Mentawak Village, Nalo Tantan District, Merangin Regency. There are approximately 1128 oil palm farmers

**b. Sample**

The sample is part or representative of the population to be studied. The total population is more than 100, namely 1128 oil palm farmers, so the sample is taken using the incindental sampling. The incindental sampling is the technique of collecting samples based on coincidence who meets the researcher can be used as a research sample.

**Types of Data Collection**

**a. Primary data**

Primary data was taken by distributing questionnaires to research respondents. Questionnaire is a draft of questions/statements given to respondents to get answers from respondents.

**b. Secondary Data**

Secondary data is data taken directly from the village office where the data is population data in Mentawak Village, Nalo Tantan District.

**Instrument Test**

**a. Validity test**

The research instrument in the form of a questionnaire before being distributed to respondents was tested for validity. The validity test uses the SPSS version 22 program while the results of the validity test can be seen from table 1

**Table 1.** Instrument Validity Test Results

| Number | Variable | Number of items | Valid items | Invalid items |
|---|---|---|---|---|
| 1 | Price | 16 | 11 | 5 |
| 2 | Welfare | 15 | 11 | 4 |

Source :processed data, 2022

The price variable has 16 statement items which after the validity test is carried out, the results are 5 invalid items, while the welfare variable has 11 valid items. This validity test uses 30 respondents.

**b. Reliability test**

Reliability test used with alpha scale measurement (Alpha Cronbach) with the following conditions:

a) If the value of the correlation coefficient (r alpha) is greater than and equal to the value of r table at a significant level of = 0.05 then the item statement of the instrument is said to be reliable

b) If the value of the correlation coefficient (r alpha) is smaller than the value of r table at a significant level = 0.05 then the item statement of the instrument is said to be unreliable

The reliability test was carried out using the SPSS version 22 program whose results are in table 2

**Table 2.** Instrument Reliability Test Results

| Number | Variable | Alpha Cronbach | Description |
|---|---|---|---|
| 1 | Price | 0,666 | Reliable |
| 2 | Welfare | 0,642 | Reliable |

*Source : processed data,2022*

Table 2 explains that the price variable and the welfare variable have an ralpha greater than and equal to the value of r table at a significant level (α = 0.05), so the instrument statement items are said to be reliable for both variables

# RESULTS AND DISCUSSIONS

## RESULTS

### Classic assumption test

Classical assumption test is one of the conditions that must be met to create a regression model. In this study, the classical assumption test used the SPSS version 22 program. The classical assumption test carried out in the study was divided into three namely normality test, linearity test and heteroscedasticity test.

**Normality test**

Normality test is done by looking at the Kolmogrov-Smirnov test with the test criteria:

a. If the significance > 0.05 then the data is normally distributed
b. If the significance is < 0.05 then the data is not normally distributed

The results of processing the normality test are in table 3

**Table 3.** Normality Test Results

| One-Sample Kolmogorov-Smirnov Test | | |
|---|---|---|
| | | Unstandardized Residual |
| N | | 91 |
| Normal Parameters[a,b] | Mean | ,0000000 |
| | Std. Deviation | 2,89680204 |
| Most Extreme Differences | Absolute | ,084 |
| | Positive | ,084 |
| | Negative | -,082 |
| Test Statistic | | ,084 |
| Asymp. Sig. (2-tailed) | | ,135[c] |

*Source : processed data,2022*

Table 3 explains that the Asymp Sig (2 tailed) of 0.135 is greater than 0.05 so that the data is said to be normally distributed.

**Linearity test**

The linearity test is seen in the Anova table, where deviation from linearity is listed. If the significance of deviation from linearity is greater than or equal to 0.05, then the data is linear. The results of the linearity test are in table 4

**Table 4.** Linearity Test Results

| ANOVA Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Sum of Squares | df | Mean Square | F | Sig. |
| Y * X | Between Groups | (Combined) | 34,980 | 12 | 2,915 | ,314 | ,985 |
| | | Linearity | 4,153 | 1 | 4,153 | ,447 | ,506 |
| | | Deviation from Linearity | 30,827 | 11 | 2,802 | ,302 | ,984 |
| | Within Groups | | 724,405 | 78 | 9,287 | | |
| | Total | | 759,385 | 90 | | | |

*Source :processed data, 2022*

Deviation from linearity has a significance level of 0.984 which is greater than 0.05 so that the conclusion is that all variables meet linearity.

**Heteroscedasticity Test**

The heteroscedasticity test is seen in the Coefficinets table which if the significance is greater than 0.05 then the statement in the variable meets the heteroscedasticity test. Heteroscedasticity test results can be seen in table 5

**Table 5.** Heteroscedasticity Test Results

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2,498 | 2,130 | | 1,173 | ,244 |
| | X | -,002 | ,057 | -,004 | -,034 | ,973 |
| **a. Dependent Variable: absolut** | | | | | | |

*Source : processed data,2022*

Table 5 explains that the significance value obtained is 0.973 which is greater than 0.05 so that the conclusion does not violate the heteroscedasticity test.

**Simple Linear Regression Analysis**

The research instrument on all variables has passed the classical assumption test and meets the prerequisite test criteria so that it is continued with simple linear regression analysis. Simple linear regression analysis was performed using SPSS version 22. The results of simple linear regression can be seen in table 6

**Table 6.** Simple Linear Regression Results

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 44,554 | 3,947 | | 11,287 | ,000 |
| | X | ,074 | ,106 | ,074 | ,700 | ,486 |
| a. Dependent Variable: Y | | | | | | |

*Source : processed data,2022*

Table 6 explains that in column B there is a constant value of 44,554 with a regression coefficient of 0,074. If the regression model is made, then Y = 44,554 + 0,074 X. The regression model obtained in this study is positive, so it is said that the two variables have a positive relationship

**Discussions**

The research was conducted when the price of oil palm FFB fluctuated and each palm token tended not to put the same price. After being observed, a decision was made that the benchmark price for oil palm FFB in the Mentawak Village studied was Rp. 1,200.00/kg. The research data were collected using a questionnaire distributed to respondents and processed through the SPSS version 22 program. After carrying out various stages of instrument testing, classical assumption testing, a simple linear regression model was obtained Y=44,554+0,074 X. The regression model obtained in this study has a positive value. In addition, in his research, it is also known that the price of Palm Oil FFB affects welfare as much as 16% while the remaining 84% is influenced by other variables. This can also be seen from the relevant research by Maghfira (2019) entitled The Effect of FFB Production and Prices on Farmers' Income in Si Bodak Sosa Jae Village, Padang Lawas where the research resulted in 24,0711% of farmers' income being influenced by production and price while 75.9289% influenced by other variables not examined. This other factor could be because oil palm farmers have other side jobs besides oil palm, so the fluctuating price of palm oil does not really affect their income and welfare. The fluctuation in the price of FFB will certainly have a very different impact on oil palm farmers whose work focuses on oil palm. The ups and downs of FFB prices will greatly affect their income.

Price fixing does not escape government intervention.The government only sets the cost of purchase price (HPP) and retail price (HET) which are policy instruments (Rizka & Manuntun, 2021). Basically the price of FFB is not only influenced by the amount of harvest, but also depends on the quality of the harvest. Farmers and traders generally use invisible, so it is difficult to determine the quality of what is transacted and it is detrimental to farmers. This results in the need to increase the human resource capacity of oil palm farmers (Enni & Riska, 2021). Increasing the ability of oil palm farmers can be done by providing counseling and training about oil palm. The knowledge provided does not only focus on oil palm plantations, but how to produce other products from palm oil and how to market them. For example, palm oil and palm kernel oil, which are produced from palm oil, are used as ice cream formulations that replace hydrogenated fats (Hasrul, Aga & Annisa, 2021). In addition to improving the welfare of oil palm farmers, it can be done by developing a cattle oil integration business. In this case, oil palm farmers plant weeds on

oil palm land. This weed has a high nutritional content and is shade tolerant, so it is widely used as an excellent fodder, especially for cattle (Nyak, Ashari, Mahendri & Wulandari, 2021). Existing potential must be optimally processed in order to increase income thereby increasing welfare which reduces poverty (Bahri & Widodo, 2020).

# CONCLUSION

The results of data analysis that have been obtained in Mentawak Village, it can be seen that the price of palm oil FFB Rp. 1.200.00/kg in Mentawak Village produces a positive regression model so that there is a positive relationship between oil palm prices and the welfare of oil palm farmers. The higher the price of oil palm FFB, the higher the welfare of oil palm farmers. The ups and downs of commodity prices cannot be separated from the elasticity of demand and supply, which if not supported by the ease of other operational costs, will certainly make it difficult for people who really make their land their sole livelihood. From the results of this study, it is hoped that related parties will pay more attention to farmers and can provide guidance such as training / counseling to farmers so that they can make derivative products from oil palm plantations, such as processing waste from their gardens into products that have economic value, for example sticks from leaves. Unused palm oil can be made into containers for food or other valuable business. Thus, it is hoped that the farmers will not only benefit from the sale of their agricultural/plantation products but also become entrepreneurs.

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