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# The Influence Of Total Production, NTP And Grdp On Labor Absorption In The Coconut Plantation Subsector In Riau Province

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#### ARTICLE HISTORY

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#### **KEYWORDS**

GRDP, Labor Absorption, NTP, Total Production

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# **ABSTRACT**

This research aims to determine the effect of total production, Farmer Exchange Rate (NTP) and Gross Regional Domestic Product (GRDP) on labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023. In this research, multiple linear regression techniques were used using the Ordinary Least Square (OLS) method. The research results show that the simultaneous test (F test) shows that total production, NTP and GRDP together have a significant influence on labor absorption in the coconut plantation subsector in Riau Province in 2012-2023. Meanwhile, the partial regression test (t test) shows that total production has a positive and significant effect on labor absorption, NTP has a positive and significant effect on labor absorption, and GRDP has a negative and insignificant effect on labor absorption. The results of the coefficient of determination (R2) of the independent variable on the dependent variable obtained a value of 0.973238. This means that the contribution of the independent variables (total production, NTP and GRDP) to the dependent variable (demand for employment) is 97.32% and the remaining 2.68% is influenced by other variables outside the regression model in this research.

# **INTRODUCTION**

The agricultural sector has a strategic role in the national economy, this can be seen from its ability to contribute to Gross Domestic Product (GDP), absorb labor and create employment/business opportunities, increase people's income, as well as a source of foreign exchange earnings, agriculture is also seen as a sector that has special abilities in producing quality growth (Daryanto, 2012:26-27).

Riau Province has potential land resources to be developed as an agricultural area, especially the plantation subsector, with adequate land area and very favorable natural conditions, so it is not surprising that the plantation subsector is a subsector that has a strategic role in increasing the availability of employment opportunities and meeting consumption needs. domestically, domestic industrial needs, and optimizing sustainable management of natural resources (Kusumaningrum, 2019:61).

Coconut commodities play a strategic role in earning foreign exchange, providing employment opportunities and increasing farmers' income. As a source of income for farmers, the role of coconut commodities is very large considering its ability to produce continuously throughout the year and be ready for sale to meet the needs of farming families. Coconut is known as a people's commodity, where most of the business comes from people's plantations. In Indonesia, coconut commodities are spread across 34 provinces. Based on the variety, coconut is divided into coconut and hybrid coconut. The following is data on coconut production centers in Indonesia for 2012-2023:

Table 1 Coconut Production Centers In Indonesia 2012-2023 (Tons)

Year	Riau	Sulawesi Utara	Jawa Timur	Maluku Utara	Sulawesi Tengah
2012	456.930	265.219	274.068	251.490	193.062
2013	450.571	277.025	266.206	251.391	189.572
2014	405.456	284.330	252.672	238.205	190.858
2015	401.874	284.118	241.301	231.911	190.510
2016	401.448	277.943	282.245	213.398	217.654
2017	398.034	260.702	253.904	234.153	187.435
2018	372.721	262.521	244.060	209.791	193.898
2019	374.523	271.808	240.406	210.946	195.714
2020	372.038	270.372	240.168	211.753	198.614
2021	377.808	271.117	244.491	211.802	199.154
2022	391.333	270.363	233.616	209.528	204.968
2023	378.007	271.344	240.349	212.845	201.318
Average	398.395	272.239	251.124	223.934	196.896

Source: Directorate General of Plantations Indonesia, 2023

Based on table 1, it can be seen that Riau Province is the main province as a coconut producer in Indonesia with a contribution reaching 398.395 tons. Coconuts in Riau Province are only controlled by smallholder plantations, and none are controlled by large state plantations and large private plantations (BPS, 2020).

The main centers of coconut production in Riau are in 5 districts. The district with the highest coconut production is Indragiri Hilir District with a production contribution of 82.46 percent of the total coconut production in Riau Province (BPS, 2020). The following is data on the number of workers in the plantation sub-sector in Riau Province for 2012-2023:

Table 2 Number Of Workers Per Head Of Family (KK) For Community Plantation Commodities In Riau Province, 2012-2023

Year	Coconut	Palm Oil	Rubber	Cacao
2012	210.319	513.707	196.172	10.142
2013	205.948	526.350	191.738	13.566
2014	208.615	524.561	199.626	14.075
2015	208.473	521.509	200.123	13.828
2016	206.986	524.001	200.743	13.775
2017	192.887	533.905	202.429	19.363
2018	192.918	642.412	206.525	14.038
2019	192.175	672.441	207.098	14.276
2020	174.039	678.584	207.621	14.024
2021	171.833	655.033	162.160	13.380
2022	165.647	655.033	169.737	12.140
2023	168.425	670.038	164.938	12.735
Average	191.522	593.131	192.409	13.779

Source: Directorate General of Plantations, 2023

Based on Table 2, it can be seen that coconut plantations are the third commodity that absorbs the most workers from oil palm plantations and rubber plantations over the last 12 years, which has fluctuated with a negative trend. It can be seen that the average number of workers on coconut plantations in Riau Province is 191.522 families, very far compared to the palm oil commodity with an average of 593.131 families followed by the rubber commodity with an average of 192.409. This shows that coconut plantations are a commodity that has quite high economic value and plays a role in the strategy of providing employment opportunities, but has not been able to be utilized optimally.

The total of labor absorbed by employment can be influenced by several factors including production quantity, output demand, government policy, economic growth, technology, labor or capital cost budget and finally the price of other input factors (Feriyanto, 2014: 72-74 ). Producers, in order to realize optimum production to obtain optimum profits, have certain measures related to the output and input needed to achieve production targets and profits. The optimum production quantity (output) desired by producers in order to meet market demand will encourage producers to increase their production input. One of the important input increases in production activities is the addition of a certain number of workers to increase the productivity and efficiency of the production activities carried out.

Thus, it can be assumed that the amount of production has a positive relationship with the level of labor absorption. However, based on the data, there is a discrepancy between theory and reality, where in certain years labor absorption actually decreases when there is an increase in production levels and vice versa.

As happened in 2012, when the quantity of production decreased by 1.39%, the number of workers actually increased by 0.8%, in 2014 the quantity of production decreased by 0.9%, while the number of workers increased by 1.3%, in the same year also occurs from 2020 to 2023. Data on the total of coconut production for Riau Province can be seen in the following table:

Table 3 Total Production Of Coconut Plantations In Riau Province In 2012-2023 (Tons)

Year	Production (Tons)	Growth
2012	456.930	-
2013	450.571	-1.39
2014	405.456	-10.01
2015	401.874	-0.88
2016	401.448	-0.11
2017	398.034	-0.85
2018	372.721	-6.36
2019	374.523	0.48
2020	372.038	-0.66
2021	377.808	1.55
2022	391.333	3.58
2023	378.007	-3.41

Source: Directorate General of Plantations Indonesia, 2023

Based on the table above, it can be concluded that the total of production in the subsector of smallholder coconut plantations in Riau Province has fluctuated with a positive trend. It can be seen that the highest increase in the total of coconut production in Riau Province occurred in 2022, amounting to 3.58%, amounting to 391.333 tonnes from the previous year, namely amounting to 377.808 Tons This increase occurred due to the government's efforts to save coconut plantations, such as Indragiri Hilir (Inhil) Regency which received an allotment for replanting (rejuvenation) of 200 Ha of coconut plants. Of this area, 100 hectares are from the coconut rejuvenation assistance program through the APBN, and the other 100 hectares come from the APBD (Gunawan A. 2021).

And the lowest decline in the number of smallholder coconut plantation production in Riau Province occurred in 2018, amounting to -6.36%, amounting to 372,721 from the previous year, namely 398,034. This happened due to sea water intrusion which caused 100.000 Ha of Coconut in Indragiri Hilir Regency to be damaged so that production fell, and some farmers even switched to other commodities such as Palm Oil (Nasser, P. 2013). Until the end of 2023, the number of coconut production for the people of Riau Province has decreased by -0.31%, amounting to 378.007.

The community's desire to carry out farming activities can also be caused by the ability of the business to improve their welfare. NTP is an indicator of the relative level of farmer welfare. An increase in the farmer exchange rate indicates an increase in farmer welfare due to an increase in farmers' real capabilities. The higher the NTP, the relatively more prosperous the level of life of farmers (Rachmat, 2013:113).

This means that the higher the farmer's exchange rate (NTP), the higher the community's desire to carry out farming. The nature of the relationship between the NTP variable and labor absorption is positive, which means that if the Farmer Exchange Rate variable experiences an increase or decrease, it will cause a decrease or increase in the same direction as labor absorption in the coconut plantation subsector in Riau Province.

However, based on existing data, there is a discrepancy between theory and reality, where in certain years, the decline and increase in NTP are not in line with labor absorption. The following is data on Farmer Exchange Rates (NTP) for the sub-sector of smallholder coconut plantations in Riau Province for 2012-2023:

Table 4 Farmer Exchange Rate Index For Plantation Crops Subsector People Of Riau Province 2012-2023 (%)

Year	NTP	Growth
2012	94.39	-
2013	98.22	4.06
2014	101.92	3.77
2015	101.93	0.01
2016	102.34	0.40
2017	101.77	-0.57
2018	101.39	-0.37
2019	101.76	0.36
2020	96.07	-5.59
2021	93.86	-2.30
2022	94.08	0.23
2023	94.62	0.57

Source: Directorate General of Plantations Indonesia, 2023

Based on table 4 above, it can be seen that the growth of NTP over the last 12 years has fluctuated with a negative tern. The highest growth occurred in. Meanwhile, the NTP for people's plantation crops in Riau Province with the lowest growth occurred in 2020, with growth of 5.59%, amounting to 96.07% compared to 2019, namely 101.76%. This was caused by a decrease in the price index received by farmers of -4.43%, while the price paid by farmers increased by 0.46% (BPS, 2020).

Apart from the total of production and NTP, gross regional domestic product (GRDP) can also influence the amount of labor absorption. Gross Regional Domestic Product (GRDP) is the added value of goods and services produced by various production units or sectors in an area within a certain period of time.

GRDP will affect the number of workers working with the assumption that when the GRDP value increases, the amount of value added output or sales in all economic units in a region will also increase. The increase in output or sales made by the company will influence the company to increase demand for labor so that production can increase to catch up with the increase in sales that occurs (Feriyanto, 2014: 43). This means that the relationship between the GRDP variable and labor absorption is positive, if the GRDP variable for the Plantation Sub-Sector experiences an increase or decrease, it will cause a decrease or increase in the same direction as the labor absorption of the coconut plantation sub-sector in Riau Province.

However, based on existing data, there is a discrepancy between theory and reality, where in certain years when GRDP experiences an increase, the number of labor absorption actually decreases and vice versa. As happened in 2013, when GRDP increased by 8.04%, the number of labor absorption decreased by -2.08%, then the same thing happened throughout 2015 to 2022. The following is the GDP data for the plantation crop subsector of Riau Province in 2012 -2023:

Table 5 GRDP Of Plantation Crops Subsector Of Riau Province 2012-2023 (Rp Billion)

Year	GRDP	Growth
2012	61361.04	-
2013	65270.59	6.37
2014	70707.29	8.33
2015	70355.29	-0.50
2016	74218.61	5.49
2017	97168.30	30.92
2018	94631.93	-2.61
2019	99997.36	5.67
2020	91600.81	-8.40
2021	96569.76	5.42
2022	100030.70	3.58
2023	103249.30	3.22

Source: Directorate General of Plantations Indonesia, 2023

Based on the table above, it can be seen that during the period 2012 to 2023 the GRDP of the plantation crop subsector of Riau Province fluctuated with a positive trend. The highest growth occurred in 2017 amounting to 30.92%. while the lowest growth occurred in 2020. This was due to the PSBB and PPKM policies which basically hampered the rate of community mobility.

# LITERATURE REVIEW

# **Labor Demand Theory**

Labor demand can be interpreted as the amount of labor requested by companies at various alternative labor prices or various wage levels (Tohar, 2000: 10). Labor demand is different from consumer demand for goods and services. Consumers will buy goods or services because these goods provide benefits to the consumer. However, for companies, hiring someone aims to help produce goods or services to sell to consumers. Therefore, the increase in entrepreneurs' demand for labor depends on the increase in public demand for the goods and services they produce. Thus, labor demand is a derived demand.

# **Labor Supply Theory**

Labor supply is the number of workers offered by a company at a certain wage level (Sumarsono, 2009:69). In classical theory, human resources are individuals who are free to make decisions about whether to work or not. This theory is based on consumer theory, where each individual aims to maximize satisfaction with the constraints they face. Labor supply includes all people who have jobs in society plus the number of people who are actively looking for work and the number of those who should be measurably included in economic activities.

Labor supply is a function that describes the relationship between the wage level and the amount of labor supplied. The higher the wage level, the higher the supply of labor will be. There are two types of labor supply, namely long-term and short-term supply. Supply in the short run

is a supply of labor to the market where the total amount of labor offered to an economy is seen as a result of choices of working hours and participation by individuals. Meanwhile, labor supply in the long term is a concept of adjustments. These adjustments can take the form of changes in labor participation and population.

# The Influence Of Total Production On Labor Absorption

Production value has a real influence on labor absorption. Production value is the total number of goods produced by the industry or company. The high or low demand for goods demanded by the market for the results produced is related if the goods demanded increase. Therefore, the increasing demand for goods will increase the number of workers.

# The Influence Of Ntp On Labor Absorption

NTP is an indicator of the relative level of farmer welfare. An increase in the farmer exchange rate indicates an increase in farmer welfare due to an increase in farmers' real capabilities. The higher the NTP, the relatively more prosperous the level of life of farmers (Silitonga, 1995; Sumodiningrat, 2001; Tambunan, 2003 and Masyhuri, 2007 in Asmara et.al, 2016: 79). Improvements and increases in farmers' exchange rates which indicate an increase in farmers' welfare will be related to farmers' enthusiasm for production. This will have an impact on increasing farmer participation and agricultural production, but also increasing community interest in carrying out farming activities (Halim et al., 2015:23).

# The Influence Of Grdp On Labor Absorption

Gross Regional Domestic Product (GRDP) is the added value of goods and services produced by various production units or sectors in an area within a certain period of time. GRDP will affect the number of workers working with the assumption that when the GRDP value increases, the amount of value added output or sales in all economic units in a region will also increase. The increase in output or sales made by the company will influence the company to increase demand for labor so that production can increase to catch up with the increase in sales that occurs (Feriyanto, 2014: 43). This means that the nature of the relationship between the GRDP variable and labor absorption is positive, meaning that if the variable experiences an increase or decrease it will cause a decrease or increase in the same direction as labor absorption.

#### **METHODS**

This research was conducted in Pekanbaru using regional data, namely in Riau Province, in order to analyze the influence of the total of production, Farmer Exchange Rate (NTP) and Gross Regional Domestic Product (GRDP) on the absorption of labor in the smallholder coconut plantation crop sector in Riau Province in 2012-2023. The type of data used in this research is secondary data based on a time series for 2012-2023. This time series data is secondary data, obtained from several sources, the Secretariat of the Directorate General of Plantations, namely the variable Labor absorption in the sub-sector of provincial coconut plantations. Riau and Production Total. Meanwhile, data on Farmer Exchange Rates (NTP) and Gross Regional Domestic Product (GRDP) were obtained from the Riau Province Central Statistics Agency (BPS).

The research variables that will be studied in this research are divided into two main variables, namely the dependent variable and the independent variable. The dependent variable in this research is labor absorption.

Meanwhile, the independent variable is the variable that is the cause of the occurrence or influence of the dependent variable. The independent variables in this research are total production, NTP and GRDP. The operational definition of each variable indicator in this research is as follows:

# Dependent Variable

a. Labor Absorption (Y)

According to Todaro and Smith (2011) labor absorption is the demand for labor to do work, or the availability of jobs to be filled by those seeking workers. It can be said that labor absorption shows how much a company absorbs labor to produce goods and services. The data used in this research was taken from data published by the Indonesian Directorate General of Plantations in the 2012 to 2023 financial reports which are expressed in units (KK).

# Independent Variable

a. Total Production (X1)

Total production is an activity between production factors and the resulting level of production achieved, where these factors are often called output. The data used in this research was taken from data published by the Indonesian Directorate General of Plantations from 2012 to 2023 in tons.

b. Farmers exchange rate (X2)

Farmer Exchange Rate (NTP) is a comparison between the price index received by farmers (IT) and the price index paid by farmers (IB) in percentage. The farmer's exchange rate is also an indicator used to measure the level of welfare or purchasing power of farmers (Central Statistics Agency 2011). The data used in this research was obtained from the compilation of data on the number of production of smallholder coconut plantations in Riau Province obtained from the Directorate General of Plantations in IDR/Ton in 2012-2023, data on the price of smallholder coconut plantation producers in Riau Province in IDR/100 grains, and wages for rural farm workers in Riau Province obtained from the Central Statistics Agency in 2012-2023 in Rupiah units. The analysis of Farmer Exchange Rates in Salahuddin et, al (2023:51):

$$NTP = \frac{It}{Ib} \times 100\%$$

Information:

NTP = Nilai Tukar Petani (farmers exchange rate)

It = Indeks nilai yang diterima petani (index of value received by farmers)

Ib = Indeks harga yang dibayar petani (index of value paid by farmers)

The index is a weighted value of quantity in a certain base year. Exchange rate movements will be determined by determining the base year because different base years will produce different index development performances. The index formulation used is the Laspeyres Index (Budiono et al, 2015:30).

$$I = \frac{\sum Qo.Pi}{\sum Qo.Po}$$

Information:

I = Lasperes Index

Qo = Quantity of goods at base year
Po = Price of goods at base year
Pi = Price of goods at th current year

c. Gross Regional Domestic Product (GRDP) (X3)

Gross Regional Domestic Product (GRDP) according to the Central Statistics Agency (BPS) is defined as the total of added value produced by all business units in a region, or is the total

value of final goods and services produced by all economic units in a region. The data used in this research is GRDP at constant prices obtained from the Riau Province Central Statistics Agency.

The analytical method used in this research is a quantitative data analysis method, namely where the data used is time series data from 2012 to 2023. The model used is multiple linear regression analysis with the Ordinary Least Square (OLS) estimation method, namely a method of finding values residual is as small as possible by adding the squares. The analytical tool used in this research is the Eviews 10 program.

Multiple regression analysis is used to measure the extent of the influence of the dependent variable using the independent variable. Gujarati (2012:115) defines multiple regression analysis as the study of the relationship between one dependent variable or the variable being explained and one or more other variables called the independent variable or explanatory variable. The multiple regression equation in Gujarati (2012:163) can be formulated as follows:

$$Y_i = \beta_0 + \beta_1 X_{1i} + u_i$$
 (3.1)

The general form of multiple linear regression is:

$$Y_i = \beta_0 + \beta_1 X_1 i + + \beta_2 X_2 i + \beta_3 X_3 i + \cdots [+\beta_k X_k i + u]_i \dots (3.2)$$

Information:

Y\_i = dependent variable

 $\beta_0$  = intercept/ regression constant

 $\beta_1, \beta_2, \beta_3$  = Regression coefficient of each independent variable

X\_1i,X\_2i,X\_3i = independent variables u = interference factor i = i-th observation

The independent variables in this research are total production, farmer exchange rate (NTP) and gross regional domestic product (GRDP). Meanwhile, the dependent variable is labor absorption, so the research model is obtained as follows:

Labor absorption = 
$$\beta_0 + \beta_1 total \ production + \beta_2 farmer \ exchange \ rate + \beta_3 GRDP + u$$
.....(3.3)

Information:

Labor absorption = Number of workers in the family (KK)

 $\beta_0$  = intercept/ regression constant

 $\beta_1, \beta_2, \beta_3$  = Regression coefficient of each independent variable

Total Production = Total production in IDR/ton

Farmer exchange rate = Farmer exchange rate in percent (%)

GRDP = GRDP variable in billions of Rupiah

u = Interference factor

# **RESULTS**

After carrying out calculations using the E-Views 10 computer statistical program, the following results were obtained:

Table 6 Output Of Multiple Linear Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-282074.7	79670.96	-3.540496	0.0076
JUMLAH_PRODUKSI	0.419903	0.100109	4.194461	0.0030
NTP	3380.201	351.1205	9.626896	0.0000
PDRB	-0.284215	0.139917	-2.031308	0.0767
R-squared	0.980537	Mean depende	ent var	191522.1
Adjusted R-squared	0.973238	S.D. dependent var		17269.56
S.E. of regression	2825.120	Akaike info criterion		18.99169
Sum squared resid	63850445	Schwarz criterion		19.15333
Log likelihood	-109.9501	Hannan-Quinn criter.		18.93185
F-statistic	134.3459	Durbin-Watson stat		1.517800
Prob(F-statistic)	0.000000			

Source: Data Processed (2024)

Based on table 6 above, it can be seen that the total of production and the Farmer Exchange Rate (NTP) have a positive and significant influence. The estimation results show that the Adj value. The R-squared is 0.973238, which means that 97.32% of the labor absorption model for the smallholder coconut plantation subsector in Riau Province can be explained by the total of production, Farmer Exchange Rate (NTP) and gross regional domestic product (GRDP). Meanwhile, the remaining 2.68% is explained by other variables outside the equation.

# Classic Assumption Test Results

Table 7 Multicollinearity Test Output

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
С	6.35E+09	9543.494	NA
JUMLAH_PRODUKSI	0.010022	2328.480	6.696397
NTP	123285.6	1801.759	2.268596
PDRB	0.019577	221.3989	6.580872

Source: Data Processed (2024)

Based on table 7, it is known that the Centered VIF value of total production is 6.69 NTP of 2.26 and GRDP of 6.58. The Centered VIF value of each independent variable is smaller than 10. So it can be concluded that the regression model is free from multicollinearity.

Table 8 Heteroscedasticity Test Output

F-statistic	7.404372	Prob. F(9,2)	0.1246
Obs*R-squared	11.65035	Prob. Chi-Square(9)	0.2337
Scaled explained SS	2.053009	Prob. Chi-Square(9)	0.9906

Source: Data Processed (2024)

Based on Table 8, the Obs\*R-squared probability value of 0.2337 is greater than the value of 0.05 or Obs\*R-squared is 23.37% greater than 5%, meaning the model in this study is free from heteroscedasticity problems.

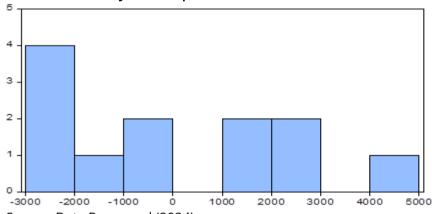
**Table 9 Autocorrelation Test Output** 

F-statistic	0.410834	Prob. F(2,6)	0.6804
Obs*R-squared	1.445397	Prob. Chi-Square(2)	0.4854

Source: Data Processed (2024)

In Table 9 it can be seen that the Obs\*R Squared LM Probability value is greater than  $\alpha$  = 0.05, namely 0.4854 or greater than 5%, namely 48.54%, which means the model in this study is free from autocorrelation problems.

**Table 10 Normality Test Output** 



Series: Residuals Sample 2012 2023 Observations 12 -3.98e-11 Mean Median -408.5543 4317.973 Maximum Minimum -2910.775 Std. Dev. 2409.271 0.296380 Skewness 1.792984 Kurtosis Jarque-Bera 0.904125 0.636314 Probability

Source: Data Processed (2024)

Based on table 10, it shows that after testing the normality of the data using Eviews, all the variables in the model testing show that the residuals are normally distributed or it can be said that the normality requirements can be met. This can be seen from the Probability value being greater than  $\alpha$  = 0.05, namely 0.904125 or greater than 5%, namely 90.41%.

#### DISCUSSION

# The Influence Of Total Production On Labor Absorption

Based on the regression results, it is known that the coefficient of total production has a positive influence of 0.419903 with a probability value of 0.0030 on labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023. This means that the total of production partially has a significant effect on labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023. A positive value in the coefficient of total production indicates that there is a positive relationship or influence of the total of production on labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023. The sign of the coefficient for the variable total of production is in accordance with theory, namely it has a sign that is in accordance with the hypothesis, which states that there is a positive relationship or influence on the total of production on labor absorption in the sub-sector of smallholder coconut plantations in Riau Province in 2012-2023. Total production is the level of production or the total number of goods produced by an industry. The rise and fall of market demand for production results will greatly influence labor absorption in the industry (Sumarsono, 2003:65). According to Sukirno (2005: 195) states that a production function shows the relationship between the total of output produced for each particular combination of output, meaning that the higher the total of production, the higher the company's employment.

This research is in line with research conducted by Prabaningtyas, Meiditya Y (2015) which states that there is a positive and significant relationship between the total of production and

employment. Riau Province is a province with a fairly high agricultural sector contribution compared to other sectors. Most of the people of Riau generally work in the agricultural sector. Apart from that, agricultural business fields are also the main choice for employment. There are no demands for special qualifications and high flexibility, making the agricultural sector business fields very popular in Riau Province. The large contribution of the agricultural sector to the economy is accompanied by the large absorption of labor in the sector itself.

This is supported by the fact that the agricultural sector is a labor intensive sector rather than capital intensive. Meanwhile, other sectors, such as the secondary sector, have a lower percentage because the secondary sector has capital-intensive characteristics and workers are required to have special skills and expertise. Even though the contribution of this sector leads the country's income ladder. Increasing agricultural productivity not only has a direct impact on the performance of the agricultural sector, but also on the welfare of farmers and poverty rates in Indonesia. However, there are still many Indonesians who work in agriculture who have not achieved prosperity. These various things require the government to adjust the agricultural sector. However, since 1990, the government's attention has continued to focus on the industrial and service sectors due to changes in the economy from an agricultural country to an industrial country so that the role of the agricultural sector began to decline Faqih (2021:30).

Apart from that, the decline in productivity of coconut plantations is also caused by sea water intrusion, flooding of coconut plantations due to high tides and also monkey pests. This is because many mangrove forests, which are monkey ecosystems, are being cut down to build oil palm plantations and other things. As a result, the monkeys moved to the surrounding coconut plantations because they could get food. Apart from that, when the price of coconut fell in 2018, many farmers did not take care of their coconut plantations, it looked like a forest and many monkeys entered the coconut plantations.

To overcome this, there needs to be joint action between the plantation service and the agencies in charge of forestry, both the forestry service and the Natural Resources Conservation Agency, KLHK. It is necessary to find a way to control monkey pests without violating forestry regulations. Farmers have carried out control individually, there is also a program from the plantation service.

#### The Influence Of The Farmer's Exchange Rate (Ntp) On Labor Absorption

Based on the regression results, it is known that the NTP variable coefficient has a positive influence of 3380.201 with a probability value of 0.0000 on labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023. This means that NTP partially has a significant effect on labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023. A positive value on the NTP coefficient indicates that there is a positive relationship or influence of NTP on labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023.

The coefficient sign of the NTP variable is in accordance with theory, namely that it has a sign that is in accordance with the hypothesis, which states that there is a positive relationship or influence of NTP on labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023.

NTP is an indicator of the relative level of farmer welfare. An increase in the farmer exchange rate indicates an increase in farmer welfare due to an increase in farmers' real capabilities. The higher the NTP, the relatively more prosperous the farmer's level of life is (Rachmat, 2013:113). If the farmer's purchasing power due to the income received from the increase in the price of agricultural production produced is greater than the increase in the price of goods purchased, then this indicates that the farmer's power and ability better or the farmer's income level increases.

This research is in line with research conducted by Zi, H., M., Hamzah A., Sofyan (2015), which states that there is a positive influence between NTP and labor absorption. The influence

of the farmer's exchange rate (NTP) on labor absorption in rice farming is due to The exchange rate reflects the level of welfare of farmers. The higher the exchange rate for farmers means that their level of welfare increases and ultimately encourages the workforce to enter farming. On the other hand, if the farmer's exchange rate (NTP) decreases, it means that the level of welfare of farmers from the farming they do also decreases. Thus, there is a unidirectional relationship between NTP and farmer welfare, which ultimately has an impact on people's interest in pursuing farming.

Although farmer productivity and welfare are measured using the Farmer Exchange Rate (NTP). Based on data, the NTP figures in the smallholder plantation crop subsector will decrease by 0.56% in 2023. As a comparison, the highest NTP occurred in 2015, increasing by 0.40% on the previous year. However, data shows that although the price index received by farmers through their production commodities increased by 0.88% in 2015, the price index paid by farmers also rose by almost the same amount, namely reaching 0.48%. There have been many analyzes that say the NTP cannot fully describe the welfare of farmers. This is because the NTP only measures prices without considering the income received by farmers based on the harvest from their respective cultivated areas.

With a relatively small area of cultivated land, the role of prices in farmers' income may not be significant. The risk of extreme weather and natural disasters also increases the risk of crop failure. This further reduces the added value of agricultural activities. The geographical and ecological context is also a challenge because cultivation systems and livelihood strategies are strongly influenced by inherent factors, such as land height, availability of water sources and soil fertility. Therefore, there will still be parties who are vulnerable to being left behind, for example agricultural workers and sharecroppers. Limited assets and resources owned by this vulnerable group also make efforts to increase productivity difficult.

There are still many farmers who use coconut seeds that grow themselves without special care, and coconut care is not done by using fertilizer and controlling pests and diseases. In order for coconut farming to be more productive, farmers can rejuvenate old and damaged plants. The Riau Provincial Government is expected to take wage levels more into account by adjusting workers' minimum living needs.

One of the reasons why many workers are left out of the agricultural sector is the low wage level. Providing optimal wages is expected to increase workers' interest in working in the agricultural sector. The Riau Provincial Government is expected to increase people's purchasing power, both for food and non-food consumption. One of the efforts that the government can make is to increase income adjusted to inflation conditions and provide optimal wages.

Considering that farmers have a weakness for limited economic working capital, it is hoped that the government will provide assistance in the form of seeds. Apart from that, observing that coconut farming is relatively poorly managed using limited inputs, it is hoped that there will be subsidies for inputs (fertilizers, herbicides, pesticides and others).

To be allocatively efficient, the government should make efforts to control input prices and increase output prices which will have an impact on increasing farmers' income. If farmers' income is high, farmers' attention to coconut plantations will be high. If these two efficiencies are achieved, it will have an impact on reducing costs, so that economic efficiency will be achieved automatically.

#### The Influence Of Gross Regional Domestic Product (Grdp) On Labor Absorption

Based on the regression results, it is known that the coefficient of the GRDP variable has a negative and insignificant relationship with labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023. Proven by a coefficient of -0.284215 and a probability value of 0.0767 for labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023. This means that GRDP partially has an insignificant effect on labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023.

This research is in line with research conducted by Kurniasih, P., E. (2017), which states that there is a negative influence between economic growth and labor absorption. This finding means that the higher economic growth, the lower labor absorption will be, but the effect is not significant. This is caused by several factors. First, an indication of the poor quality of economic growth can be seen from the relatively low and slow increase in labor absorption. Second, increasing economic growth tends to be driven by increased consumption and is not followed by increased investment so that job creation is very slow and too little labor is absorbed. Third, most of the labor absorption occurs in the primary sector where productivity is low. Fourth, the primary sector which absorbs more labor has the smallest elasticity. Fourth, the disparity in sectoral economic growth with sectoral labor absorption. The primary sector, which is labor intensive and has a large contribution to GDP, grows slowly and is below GDP growth. On the other hand, the secondary and tertiary sectors always show higher growth than GDP growth, but labor absorption is small because they use capital-intensive technology.

Based on these results, the recommendation from this research is that the Riau Provincial government is expected to be able to increase the growth rate and GRDP contribution of the agricultural sector, industrial sector and service sector. This is done with an effort to facilitate access to facilitate and develop business in the service sector and infrastructure development in the agricultural sector which has an impact on labor absorption in all sectors. In addition, the Riau Provincial government is expected to take wage levels more into account by adjusting workers' minimum living needs. One of the reasons why many workers are left out of the agricultural sector is the low wage level. Providing optimal wages is expected to increase workers' interest in working in the agricultural sector.

The Riau Provincial Government is expected to increase people's purchasing power, both for food and non-food consumption. One of the efforts that the government can make is to increase income adjusted to inflation conditions and provide optimal wages. Furthermore, the Riau Provincial government is expected to pay attention to employment conditions in its region which has great potential in absorbing labor in the agricultural sector and other sectors.

#### CONCLUSION AND SUGGESTION

Total production and Farmer Exchange Rate (NTP) have a positive and significant effect on labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023. Meanwhile, GRDP has a negative and insignificant effect on labor absorption in the smallholder coconut plantation subsector in Riau Province in 2012-2023.

This shows that economic growth has not been optimal in absorbing labor and improving community welfare. The GRDP of the smallholder plantation subsector in Riau Province over the last 12 years has still tended to decline with a negative trend. Based on the data, total coconut production from smallholder plantations in Riau Province has tended to decline throughout 2012-2023.

This happened because of sea water intrusion which caused 100,000 hectares of coconut plantations in Indragiri Hilir Regency to be damaged so that the amount of production fell, some farmers even switched to other commodities such as palm oil, so it is hoped that the government will make efforts to limit land transfer and pay attention to the condition of coconut farmers due to unstable producer prices, by providing budget support from the State Revenue and Expenditure Budget (APBN) to increase the productivity of the smallholder coconut plantation subsector in Riau Province, such as fertilizer subsidies, special allocation funds (DAK) for the agricultural sector, and assistance with agricultural facilities and infrastructure. By increasing the productivity of the agricultural sector, the welfare of farmers as agricultural business actors/agricultural producers is also expected to increase, which in turn will increase the number of workers absorbed in this sector.

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