

# FACTORS AFFECTING EMPLOYEE PREMIUMS FOR PALM PALM HARVEST IN KRUENG LUAS GARDEN PT. AGRO SINERGI NUSANTARA

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## Abstract

The data collection technique used in this research uses secondary data. Secondary data is data obtained from a second source, through written sources (library study). Secondary data used are company archives, manuals or reading books related to research problems, journals obtained from the internet and previous theses. The analysis used in this research is multiple linear regression analysis. This analysis is used to analyze factors that are thought to influence the oil palm harvest premium (Y). The results of statistical tests on the effect of harvest premium on age, attendance and production influence the level of harvest premium. The results of the f-test  $\alpha=0.05$  show a significant influence on the production variable (X2) on Variable Y (premium). To identify the coefficient of determination value, you can look at the R-square (R2) value. Based on the regression output, the R2 value is 0.466, meaning that the influence of the harvest premium can be explained well through the regression model built in this research of 46.6%.

Keywords: *Employee, Premiums, Palm Harvest.*

## 1. INTRODUCTION.

Palm oil is Indonesia's leading and main plantation commodity. Palm oil has an important meaning for national development. Apart from being able to create jobs that lead to community welfare, it is also a source of foreign exchange earnings for the country. (Yan Fauzi, 2012). The palm oil industry is currently developing rapidly, both increasing production and area, as well as increasing public demand. Oil palm plantations increased by 14,824.60 hectares in 2020. In terms of area, Indonesian oil palm plantations will occupy 16,381,000 hectares in 2020. (Minister of Agriculture, 2020). Many palm oil companies were founded in Aceh and PT. Agro Sinergi Nusantara is one of the many companies in Aceh that operates in the oil palm plantation sector. Aceh also encourages the development of the CPO industry and its derivative goods by increasing production value. Boestami, D (2020). PT. Krueng Luas plantation unit oil palm plantation. Agro Synergy Nusantara is a subsidiary of PT Perkebunan Nusantara I and PT Perkebunan Nusantara IV which is engaged in producing crude palm oil through sustainably managed plantations.

The age of the workforce is the productive age for each individual. Productive age where each individual is able to provide services to other individuals. (Yasin and Priyono, 2016). Age is a very important factor in an employee's work productivity. Because the level of work participation is determined by the factor of productive age or not, so that if the worker's age increases, the level of productivity of the employee will increase because the worker is in the position of productive age and if the worker gets older then the level of work productivity will also decrease due to limitations. physical and health factors that influence (Yasin and Priyono, 2016). Palm oil harvesting is one of a series of very important activities for producing palm oil companies. (Perdamean, 2017). Indirectly, the amount of FFB production produced by plantations and oil palm companies is very dependent on oil palm harvesters. (Sunarko, 2014) in (Prihartini et al, 2019) states that harvest employees are employees who are tasked with harvesting oil palm fruit, picking up brodolam and transporting the harvest, harvest employees are people who are in charge of harvesting FFB, transporting the harvest, and collecting loose fruit. so harvesters need to pay close attention.

According to (Maruli, 2017) stated that harvest employees should be harvesters who have been trained in the sense of the word experienced because to maintain the quality and quantity

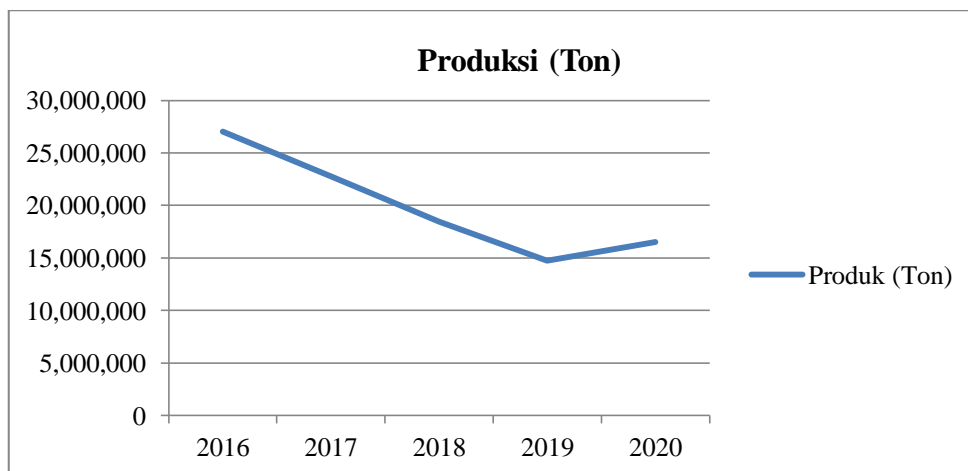
of harvest results, the harvest is not done haphazardly so the company must deploy permanent employees so that the harvest workforce remains available and produces products. and good quality. Harvest yields are one of the most important production factors in a plantation company. The ability of workers to complete harvesting tasks, such as cutting old fruit bunches and collecting fallen fruit, compared to predetermined harvest targets is known as the productivity of oil palm harvesters (Palm Oil Research Center, 2009). The quantity of fresh fruit bunches per unit time (Kg FFB/day) can be seen as a measure of labor productivity in the context of oil palm plantations.

Harvest yields are one of the important production factors in a plantation company. Employees who perform their work well during harvest are given bonuses. This bonus can increase employee incentives to work hard and increase the quality and quantity of harvests. (Ginting et al, 2022). Palm oil plantation companies, whether privately managed or state managed, generally implement a premium system for harvesters with the aim of encouraging employee performance so that harvesters are more active, thereby increasing the quality and quantity of FFB and this will have an impact on company profits. (Harahap, 2021). Giving premiums to employees is not only a sign of the company's gratitude to employees for exceeding the targets that have been implemented but also the company's way of retaining employees. An appropriate premium system is able to improve employee performance, where premiums are able to increase employee morale in attendance. Companies must apply premiums fairly and appropriately, in the sense of the word fair, the amount of wages received by employees must be adjusted to work performance, type of work, job risks and employee position, while fair means wages received are able to improve employee welfare. (Ano, 2022)

The existence of a premium can affect the performance of employees in a company and also affect the age, attendance and also the employee's crop production. Usually, with an employee premium, attendance will increase because employees will be more enthusiastic about working and employees will arrive on time. (Daulay and Azis, 2022). From the description above, the researcher wants to conduct a study "Factors that Influence Harvest Premiums for Palm Oil Employees in the Krueng Luas Plantation of PT. Agro Synergy Nusantara".

The following is data showing the amount of production within a 5 year period at PT. Agro Synergy Nusantara Kebun Krueng Luas.

**Table.1 Palm Oil Production in Plantation Units**



Source: Krueng Luas Gardens, 2021

Judging from the data above, it can be concluded that the highest oil palm production in 2016 was 27,023,030 tons/ha. Meanwhile, the lowest production in 2019 was 14,750,085 tons/ha in the Krueng Luas plantation.

## 2. IMPLEMENTATION METHOD

### Method of collecting data

The data collection technique used in this research uses secondary data. Secondary data is data obtained from a second source, through written sources (library study). Secondary data used are company archives, manuals or reading books related to research problems, journals obtained from the internet and previous theses.

### Population and sample

The sampling technique in this research uses a saturated sampling method, namely a sampling technique when the entire population is used as a sample (Sugiyono, 2019). In determining the sample in this study, researchers obtained population data from the company PT. Agro Sinergi Nusantara, where there are 87 harvest employees in divisions 1, 2 and 3, so there are 87 samples in this study.

### Data analysis method

The analysis used in this research is multiple linear regression analysis. This analysis is used to analyze factors that are thought to influence the oil palm harvest premium (Y). In this case Attendance (X1) Production (X2). Mathematically formulated in the following equation:

$$Y = b_0 + b_1X_1 + b_2X_2 + e$$

Where:

Y	= Premium (Y)
b <sub>0</sub> , b <sub>1</sub> , b <sub>2</sub>	= Regression coefficient
X <sub>1</sub>	= Production (kg)
X <sub>2</sub>	= Presence(day)
e	= Standard error

According to (Ghozali, 2018) Multiple Linear Regression is a regression model that involves more than one independent variable. Multiple linear regression analysis was carried out to determine the direction and how much influence the independent variable has on the dependent variable. The test used in multiple linear regression is the t-count, F-count and R<sup>2</sup> test. The regression equation is carried out at the end of the analysis because the interpretation of the regression equation will be more accurate if its significance is known.

## 3. RESULTS AND DISCUSSION

### Demographic Conditions of Research Locations

PT. Agro Sinergi Nusantara is a subsidiary of PT. Perkebunan Nusantara I and PT. Perkebunan Nusantara IV. The company's locations are spread across 5 regencies/cities in Aceh Province, namely Aceh Jaya, West Aceh, Nagan Raya, South Aceh and Subulussalam. PT. Agro Synergy Nusantara is one of the companies in Indonesia that produces crude palm oil through plantations that are managed sustainably. Krueng Luas Gardens is a unit garden of PTPN-I with a managed land area of 8,649 Ha. Krueng Luas Gardens is located in Aceh Province, South Aceh Regency.

### Respondent Characteristics

Respondents in this study were oil palm harvesting employees in subdivisions 1, 2 and 3 of the Krueng Luas plantation of PT. Agro Synergy Nusantara.

**Table. 2 Frequency Distribution of Respondents based on age**

Age	Amount	Percentage
15 - 20	9	10.3 %
21 – 35	57	65.5 %
36 – 45	17	19.5 %
46 - 55	4	4.6 %
Amount	87	100

In the results of table 2, the age level of PT respondents. Agro Sinergi Nusantara is more likely to be aged 21-35 years with a percentage of 65.5%. Age can affect premium income because the number of workers in this productive age is sufficient to determine success in carrying out work, both physical and non-physical. In general, young workers have strong physical abilities. (Amron, 2009). This group of people of working age is called the productive workforce. (Simanjuntak, 1985).

**Table. 3 Frequency distribution of respondents based on education**

Education	Amount	Percentage
elementary school	19	21.8 %
JUNIOR HIGH SCHOOL	10	11.5 %
SENIOR HIGH SCHOOL	58	66.7 %
Amount	87	100

In table 3, the results of the percentage of education above show that the high school level is higher, namely 66.7%, so education is an important factor in developing human resources. Education not only increases knowledge but also improves work skills, thereby increasing work productivity and will affect employee premium income. (Idris, 2016). A person's formal education and non-formal education can also have an influence on time management in completing work. Employee education will influence the learning process, so the higher a person's education, the easier it is for that person to receive information both from other people and from the mass media. Because the more information that comes in, the more knowledge you gain. Education will influence performance because of the amount of knowledge they gain and make it easier for them to work. So that the production income they harvest increases. (Notoatmodjo, 2010).

**Table. 4 frequency distribution of respondents based on work experience.**

Work experience	Amount	Percentage
1	61	70.1 %
2	4	4.6 %
5	10	11.5 %
9	7	8 %
16	5	5.7 %
Amount	87	100

Data source: primary data processed 2021

In table.4work experience reflects the experience the harvester has in harvesting FFB. Harvesters who have worked for a long time are better able to understand the ins and outs of the problems they face, so they are better able to overcome them. Work that has been done repeatedly over a long period of time will make a person more agile and skilled in carrying out their duties. However, in the results of the percentage of work experience in this plantation, there is more experience than 1 year, namely 70.1%, which means that long work experience does not guarantee an effect on premium income, because it affects age, so the more experience and the longer they work, the more energy they have. they are decreasing, due to the effects of fatigue. Fatigue occurs after doing work. (Badrun, 2015).

#### **FFB Production Premium**

The FFB production premium is given if the harvester's FFB production reaches above the wholesale base of IDR 60/Kg. Wholesale basis (Kg) for pure FFB production (Without Brondolan) based on weighing results.

**Table. 5 employee wholesale base**

Description	Wholesale basis (kg)
Old TM	600
TT 2012 & 2013	500
TT 2014	500

Data source: 2021 secondary data

The wholesale base that has been determined is calculated on a daily basis. If the harvest production in a day does not reach or is below the wholesale basis (Kg), then the shortfall from the wholesale basis becomes a fine. If the harvester's production in a day reaches or is above the wholesale basis (Kg), then in addition to being given wages, a premium is added. Meanwhile, the harvest premium for harvesters is IDR 150,-/Kg, where the calculation is based on the results of the weighing at the TPH.

### Harvester Craft Premium

The harvester craft premium is given if the production of FFB plus loose fruit reaches the provisions according to the table as follows.

**Table. 6 Craft Premiums**

Service employees	
Wholesale Base (Kg)	Craft premium
$\geq 160\%$	IDR 50,000,-
$\geq 200\%$	Rp. 67,000,-

Data source: 2021 secondary data

The wholesale base that has been determined is calculated on a daily basis. If the harvest production in a day does not reach or is below the wholesale basis (Kg), then the shortfall from the wholesale basis becomes a fine. If the harvester's production in a day reaches or is above the wholesale basis (Kg), then in addition to being given wages, a premium is added. Meanwhile, the premium for harvesting brondolan for harvesters is paid at IDR 150/Kg, where the calculation is based on the results of the weighing at the TPH.

### Example of calculation for official employee harvesters

Harvester A harvests 1,000 kg, so the calculation of the wholesale premium will be:

Base 500 Kg

Premium over base = 1,000 Kg – 500 Kg = 500 X IDR 60,000/Kg  
= IDR 30,000,-

Craft premium  $\geq 200\%$  = IDR 67,000,-

Service employee wages/day = IDR 126,000,-

Total revenue capacity 1,000Kg = Harvest premium + Craft premium + Wages  
= IDR 30,000,- + IDR 67,000,- + IDR 126,000,-  
=Rp. 223,600,-

### Relationship of Harvest Premium to Dependent Variable

Factors that influence PT palm oil harvest employee premiums. Agro Sinergi Nusantara Krueng Luas plantation is presence (X1) production (X2). Results of multiple linear regression model analysis with harvest premium (Y).

From the results of data analysis, the following regression equation can be obtained:

$$Y = 26,797.0210 X_1 + 0.247 X_2$$

#### a. Coefficient of Determination

To identify the coefficient of determination value, you can look at the R-square (R<sup>2</sup>) value. based on the linear regression output, the value (R<sup>2</sup>) is 0.466, meaning that 46.6% of the variables influencing the harvest premium can be explained by the presence (X1) and production (X2) variables, the remaining 53.4% is explained by other variables outside the model.

### t test

This analysis is used to see the influence of each independent variable individually on the dependent variable which can be seen in

**Table 7. t test results**

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	26,797	,998		26,859	,000
	Attendance (X1)	,210	,078	,253	2,687	,009
	Production (X2)	,247	,065	,356	3,769	,000

a. Dependent Variable: Premium (Y)

Data source: Secondary data processed by SPSS

Based on Table. 3. Several t-test results that have an individual influence can be explained as follows.

a. Attendance (X1)

Based on Table 3 above, it shows that the significance value for the effect of harvest premium (Y) on attendance (X1) is  $0.009 < 0.05$  and the t value is  $2.687 > t$  table 1.660. Because t-count  $> t$ -table,  $H_0$  is rejected and  $H_1$  is accepted. This shows that presence influences the harvest premium.

b. Production (X2)

Based on Table 3 above, it shows that the significance value for the influence of the harvest premium on production (X2) on the harvest premium (Y) is  $(0.000 < 0.05)$  and the t-count value is  $3.769 > t$ -table 1.660, because t-count  $> t$ -table, then  $H_0$  is rejected and  $H_1$  is accepted. This shows that the production variable (X2) has a real effect on the harvester's premium (Y). The regression coefficient has a positive sign, meaning that variables (X1) and (X2) have an effect on the premium variable (Y).

### Test f

F-Test Results The significance value for the influence of Variables X1, X2 on Variable Y can be seen in :

**Table 8. F-Test Results**

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27,494	3	9,165	6,391	.001b
	Residual	137,666	96	1,434		
	Total	165,160	99			

a. Dependent Variable: Premium (Y)

b. Predictors: (Constant), Production (X2), Attendance (X1)

The F-calculated value is 6.391 with a significance of 0.001 at the  $\alpha = 0.05$  level. This shows that the significance value of F is smaller than the probability value  $(0.000 < 0.05)$ . This



means that the variable; presence (X1) and production (X2) simultaneously have a significant effect on satisfaction with the influence of the oil palm harvest premium. This value implies that all independent variables are simultaneously declared to have a significant influence on the oil palm harvest premium.

#### Coefficient of Determination (R<sup>2</sup>)

The coefficient of determination is used to determine the level of influence of independent variables such as Presence (X1), dProduction (X2) and the level of influence on the harvest premium variable (Y) for palm oil. The results of the analysis of the coefficient of determination are clearly presented in

**Table 9. R<sup>2</sup> Value Results**

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.608a	.466	.140	1,198

a. Predictors: (Constant), Production (X3), Age (X1), Attendance (X2)

Data Source: primary data processed by SPSS

Based on Table 5 above, it can be explained that the accuracy of the regression model used can be shown by the value of the coefficient of determination (R<sup>2</sup>) obtained, which is 0.466, which shows the value of the harvest premium variable is 46.6% while the remaining 53.4% is influenced by other variables outside the regression model. contained in this research.

#### 4. CONCLUSION

The results of statistical tests on the effect of harvest premium on age, attendance and production influence the level of harvest premium. The results of the f-test  $\alpha=0.05$  show a significant influence on the production variable (X2) on Variable Y (premium). To identify the coefficient of determination value, you can look at the R-square (R<sup>2</sup>) value. Based on the regression output, the R<sup>2</sup> value is 0.466, meaning that the influence of the harvest premium can be explained well through the regression model built in this research of 46.6%.

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