FACTORS OF PALM OIL HARVESTERS PRODUCTIVITY

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Abstract

Work productivity is a way to measure how well the workforce performs and the production power used to obtain the work results that the individual or company wants to achieve. The aim of this research is to determine the level of harvester productivity at PT. Gunung Mas Raya and Knowing the factors that influence harvester productivity at PT. Mount Mas Raya. The research method used is quantitative descriptive analysis method. The sample determination method was carried out using simple random sampling, the division sample determination was carried out randomly. The data collection techniques used were interviews, documentation and questionnaires using the Guttman scale based on indicators (age, work experience, number of dependents, highest level of education, premium). Data analysis techniques use validity tests, reliability tests, Multiple Linear Regression tests, t tests, f tests and coefficient of determination. Data processing in this research used SPSS software (version 25). Based on the research results, it shows that work experience and number of dependents influence productivity, while age, highest level of education and premiums do not influence productivity at PT. Mount Mas Raya.

Keywords: ***Productivity, Palm oil, Harvest employees***

1. INTRODUCTION

In Indonesia, oil palm is the leading and main plantation commodity. This plant, whose main products consist of CPO (Crude Palm Oil) palm oil and PKO (Palm Kernel Oil) palm kernel oil, has high economic value and is one of the largest contributors to the country's foreign exchange compared to other plantation commodities. Until now, oil palm has been cultivated in the form of plantations and palm oil processing factories to become oil and derivative products. Thus, palm oil has an important meaning for the economy in Indonesia (Fauzi, 2012). The potential resources possessed by the workforce can be used as an effort to achieve success in achieving individual or organizational goals. The resources possessed by the workforce are in the form of energy, time and abilities, both physical and mental, which can be used in an integrated and optimal manner for the common good.

Therefore, labor has an important function in an industry. If the workforce can work effectively and efficiently and produce production according to standards while working, there will be an increase in productivity in an industry (Ayu, 2021). Work productivity is a way to measure how well the workforce performs and the production power used to obtain the work results that the individual or company wants to achieve. For workers, productivity is a measuring tool to improve performance at work and performance compensation. Meanwhile, for industry, productivity is a measuring tool to determine production achievements to balance budget and service quality (Agung & Suratni, 2020). Regarding achieving good productivity, management needs to pay attention to what factors can increase and maintain employee productivity. Because productivity does not immediately arise without a good plan from management to make it happen. It was further explained that low productivity in a company is caused by two factors, namely the ability of the available workforce is low and the company does not have a good motivation system for employee productivity (Thamrin et al, 2014). Harvesting is an activity to take garden or palm oil production

in the form of fruit bunches. In harvesting activities, it is mandatory to thoroughly harvest all ripe oil palm fruit. Collect and pick all the loose nuts and arrange the bunches at the harvest collection point after harvest. So that the maturity of the harvested fruit is optimal and the oil content reaches a maximum (Bery et al, 2020). Lubis (2020), states that harvest workers are workers who have special skills as harvesters. Harvest specialists are expected to be able to harvest according to the criteria and minimize yield losses due to harvest errors. In activities that usually involve calculating the number of workers for the area to be harvested based on established harvest norms. Companies really need harvest workers who have high productivity in carrying out their work so that the company obtains good quality for the company's progress (Ariawan, 2013).

In achieving company/organization goals, namely increasing productivity, employees are not only objects but also subjects (actors). An employee or employee is a permanent worker who works under the orders of another person who receives compensation and guarantees and each person who works sells his or her labor to a company who receives compensation according to regulations or agreements. Employees can be planners, implementers or controller who plays an active role in achieving company goals, and has thoughts, feelings and desires that influence his attitude towards work. Employees contribute to the company in the form of their abilities, expertise and skills, while the company is expected to provide rewards and appreciation to employees expertly so that they can provide satisfaction, and ultimately the employee is able to increase their work productivity in achieving company goals (Manurung, 2012).

PT. Gunung Mas Raya is a subsidiary of PT. Salim Ivomas Pratama who operates in the agribusiness sector. Especially in palm oil processing. Located in Bangko Pusako sub-district, Rokan Hilir Regency, Riau Province, which has an area of 3,470 Ha. The topography of the oil palm plantation area in Sungai Bangko Estate consists of mineral land and peat land. The types of seeds used are from PPKS Marihat, Socfin, Rispa, and Lonsum. The problem of harvester labor productivity greatly affects production results in almost every large company and oil palm developing company. At PT. Gunung Mas Raya can be seen from production data in 2022, there is a decrease in production targets. Based on the previous description, I am interested in researching the problem, namely the factors that influence the productivity of harvest workers who are increasingly productive and unproductive at work. Because conditions in the field indicate that there are several supporting factors that are still unstable in the productivity of oil palm harvesters at PT. Mount Mas Raya. The factors that will be analyzed in this research are variables that influence the productivity of oil palm harvesters, such as age, work experience, number of dependents, years of education and premiums. At PT. Gunung Mas Raya harvest employees use a fixed herding system and calculate daily output, namely janjang/kg. The production base for harvesters varies according to the planting year.

Table 1 1 Unit Palm Oil Production

Section	Area / Ha	Production Data Tons/Year	
		2021	2022
I	915	15,956	15,367
II	995	16,478	16,090
III	945	15,980	15,435

Source: Data from Sungai Bangko Gardens

Production targets at PT. Gunung Mas Raya annually reaches 16,000 tons/year with an area of Sungai Bangko Division Plantation of 2,855 Ha which can be seen in attachment

2. IMPLEMENTATION METHOD

Place and time

This research was carried out at Sungai Bangko Estate Gardens, PT Gunung Mas Raya, Riau Province. Geographical location of the garden 100.68ºBT and 1.58ºL.S. The research was carried out from May to July 2023.

Research methods

The method used in this research is quantitative descriptive analysis. Quantitative data is data that is formed into numbers (Thoifah, 2015). The quantitative data in this research is the result of respondents' responses regarding factors that influence harvest employee productivity through questionnaires distributed to harvest employees and analyzing one variable indicator with another variable indicator or how one variable indicator affects other variable indicators.

Population and Sample

Population

Population is a generalized area consisting of objects or subjects that have certain qualities and characteristics determined by research to be studied and then conclusions drawn (Thoifah, 2015). The population in this study were all harvest employees who worked at Sungai Bangko Estate PT. Mount Mas Raya.

Table 3.1 Research Population

No	Division	Harvest employees
1	Division I	37
2	Division II	38
3	Division III	39
Total		114

Sample

The sample determination method was carried out using simple random sampling, the division sample determination was carried out randomly. By considering population, costs, time and energy, according to Thoifah (2015), the sample is part of the population to be studied and which is considered to describe the population. The number of samples was determined based on the Slovin technique. Mathematically, the Slovin formula used to determine the number of samples is as follows: The number of samples is determined based on the Slovin technique. Mathematically, the Slovin formula used to determine the number of samples is as follows:

= 53 samples Remarks:

N = Total population

n = Number of samples

e = Error tolerance limit

So the number of samples in this research was 53 harvest employees, where 18 employees were taken from each division as research samples, the division sample was determined randomly.

3. RESULTS AND DISCUSSION

Sample Characteristics

The research sample is the object that will be studied, the sample is employees who work at the plantation company PT. Gunung Mas Raya can be seen in appendix 3 and sample interview images in appendix 6. The following explains the characteristics of employees at the research site according to:

Age

Age is a component that is related to an employee's performance, in this case the employee is the sample. Based on the age of the sample, the results obtained are as shown in the following table:

Table 4.1 Distribution of Sample Employees Based on Age

No	Age group (Years)	Number (Souls)	Percentage (%)	Productivity (Kg)
1	31 – 40	20	37.70%	10,831.60
2	41 – 50	18	34%	10,339
3	20 – 30	13	24.50%	9,877
4	50 >	2	3.80%	9,197.50
	Amount	53	100%	40,245.56

Source: 2023 Questionnaire Data Processing Results

Based on Table 4.1 above, it can be seen that the age of the oil palm harvesting workforce at PT. Gunung Mas Raya aged 31 – 40 years was 20 people or 37.7% with the highest productivity of 10,831.60 Kg, harvesters aged 41 – 50 years were 18 people or 34% with productivity 10,339 Kg, aged 20 – 30 years as many as 13 people or 24.5% with a productivity of 9,877.46 Kg, harvesters aged 51> years as many as 2 people or 3.8% with the lowest productivity of 9,197.50 Kg.

Work experience

Work experience is the length of time an employee has worked for a company which is calculated over a certain period of time or in years. For more details, see the following table.

Table 4.2 Distribution of Sample Employees Based on Work Experience

No	Kelompok usia (Tahun)	Jumlah (Jiwa)	Persentasi (%)	Produktivitas (Kg)
1	31 – 40	20	37,70%	10.831,60
2	41 – 50	18	34%	10.339
3	20 – 30	13	24,50%	9.877
4	50 >	2	3,80%	9.197,50
	Jumlah	53	100%	40.245,56

Source: 2023 Questionnaire Data Processing Results

Based on Table 4.2 above, it can be seen that there are 12 people or 23% with the longest work experience of 14 - 20 years with the highest productivity of 10,235.42 kg, harvesters who have worked for 7 - 13 years are 10 people or 19% with a productivity of 9,966.50 kg, harvester that works for 1 – 6 years as many as 31 people or 58% with the lowest productivity of 9,369.23 kg.

The number of dependents

The number of family dependents referred to is all people living in one house or soul whose physical and mental needs are the responsibility of the harvesting employees. For more details, see the following table:Table 4.3 Distribution of Sample Employees Based on Number of Dependents

NO	Lama Bekerja (Tahun)	Jumlah (Jiwa)	Persentase (%)	Produktivitas (Kg)
1	14 - 20>	12	23%	10.235,42
2	7 - 13	10	19%	9.966,50
3	1 - 6	31	58%	9.369,23
	Jumlah	53	100%	28.971,15

Source: 2023 Questionnaire Data Processing Results

Based on Table 4.3 above, it can be seen that the maximum number of dependents is 4 6 as many as 6 people or 34% with the highest average productivity of 0,603.33Kg, the number of dependents 1 – 3 as many as 29 people or 55% with a productivity of 10,254.45Kg, the number of dependents 0 or unmarried is 6 people or 11% with the lowest productivity 10,216.17 kg.

Last education

Education is believed to greatly influence a person's skills, behavior and attitudes and this should be related to work productivity. For more details, see the following table:

Table 4.4 Distribution of Sample Employees Based on Last Education

NO	Last education	Number (Souls)	Percentage (%)	Productivity (Kg)
1	JUNIOR HIGH SCHOOL	15	28%	10,796.73
2	SENIOR HIGH SCHOOL	15	28%	10,337.47
3	elementary school	23	43%	10,109.70
	Amount	53	100%	31,243.90

Source: 2023 Questionnaire Data Processing Results

Based on Table 4.4 above, it can be seen that as many as 15 people or 28% are junior high school graduates with a productivity of 10,796.73 kg, 15 people or 28% are high school graduates with a productivity of 10,337.47 kg, 23 people or 43% are elementary school graduates with a productivity 10,109.70 Kg.

Premium

Premiums are more pay given by the company because employees have to work harder in various situations or less comfortable working conditions. For premium rates at PT. Gunung Mas Raya is calculated in (rupiah/head) and adjusted to the planting year. For more details, see the following table:

Table 4.5 Calculation of Premium IDR/jjg

No	Tahun Tanam	Basis Panen	Lebih borong 1		Lebih borong 2		Lebih borong 3	
			Jjg	Rp/Jjg	Jjg	Rp/Jjg	Jjg >	Rp/Jjg
1	1988	48	7	1.200	12	1.750	13	2.400
2	1989	49	7	1.150	12	1.725	13	2.300
3	1990	49	7	1.100	12	1.650	13	2.200
4	1994	67	5	950	14	1.425	15	1.900
5	1995	69	5	900	15	1.300	16	1.800
6	1996	75	5	850	15	1.275	16	1.700
7	1997	72	6	850	15	1.725	15	1.700
8	1998	91	7	800	18	1.200	19	1.600
9	1999	91	7	750	18	1.125	19	1.500
10	2000	109	10	750	25	1.125	26	1.500
11	2009	115	11	600	28	900	28	1.200
Rata-rata		**76**	**7**	**900**	**17**	**1.382**	**18**	**1.800**

Source: Sungai Bangko Gardens

Based on Table 4.5 above, it can be seen that the premium calculation (Rp/jjg) varies according to the year of planting to be harvested. The wholesale premium has 3 levels, the more wholesale premiums you get, the more wages you will get.

The Influence of Harvest Employee Variables Based on Indicators on Harvester Productivity at PT. Mount Mas Raya

Research Instrument Test Results

Before the research questionnaire is used in the actual research, the questionnaire is tested first, which can be seen in Appendix 5 using:

Validity Results

This validity test is used to determine whether or not a questionnaire that has been researched is valid. In calculating the r table, where it is known that the number of samples or N is 53 respondents with a significance of 5% (95% confidence level), the r table value is found to be 0.270. An indicator is declared valid if it has a coefficient value greater than or equal to 0.270. The results of the validity test can be seen in the following table:

Tabel 4.6 Hasil Pengujian Validitas

	Variabel	Validitas	Keterangan
1	Umur		
	pernyataan 1	0,440	Valid
	pernyataan 2	0,509	Valid
	pernyataan 3	0,619	Valid
	pernyataan 4	0,442	Valid
2	Pengalaman Kerja		
	Pernyataan 1	0,474	Valid
	pernyataam 2	0,407	Valid
	pernyataan 3	0,396	Valid
	pernyataan 4	0,408	Valid
3	Jumlah		
	Tanggungan	0,385	Valid
	Pernyataan 1	0,407	Valid
	Pernyataan 2	0,387	Valid
	Pernyataan 3	0,407	Valid
	Pernyataan 4		
4	Pendidikan		
	Terakhir	0,543	Valid
	Permyataan 1	0,632	Valid
	Permyataan 2	0,632	Valid
	Permyataan 3	0,565	Valid
	Permyataan 4		
5	Premi		
	Pernyataan 1	0,439	Valid
	Pernyataan 2	0,430	Valid
	Pernyataan 3	0,476	Valid
	Pernyataan 4	0,432	Valid

Sumber : Hasil olah data Primer 2023

Based on table 4.6, it can be seen that variables based on indicators, namely Age (X1), Work Experience (X2), Number of Dependents (X3), Last Education (X4), Premium (X5), on Productivity have a value greater than 0.270 so it is said to be a research questionnaire valid and can be used for further statistical analysis.

Reliability Results

The reliability test of the questionnaire was carried out using the split half technique. For this purpose, the questionnaire items were split into two even questionnaire groups, then the scores from each group were compiled individually and then the total score between the even and even groups was searched for correlation. The minimum critical correlation limit is 0.70, which means that the measuring instrument is said to be precise, stable and reliable. The results of the reliability test can be seen in the following table:

Table 4.7 Reliability Test Results

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.263
		N of Items	13[a]
	Part 2	Value	.579
		N of Items	12[b]
	Total N of Items		25
Correlation Between Forms			.707
Spearman-Brown Coefficient	Equal Length		.828
	Unequal Length		.828
Guttman Split-Half Coefficient			.598

a. The items are: p1, p2, p3, p4, p5, p6, p7, p8, p9, p10, p11, p12, p13.

b. The items are: p13, p14, p15, p16, p17, p18, p19, p20, p21, p22, p23, p24, p25.

Sumber : Hasil olah data primer 2023

Based on table 4.7, it can be seen that the statements in the questionnaire have a minimum critical correlation limit of 0.828, which is greater than 0.70, meaning that all of them have a high reliability value. It can be concluded that the research instruments used are trustworthy and reliable.

Multiple Linear Regression Analysis

Multiple linear regression analysis is an analysis that functions to see the influence between the independent variables and the dependent variable used. According to Sunyoto (2014), multiple linear regression analysis aims to determine the influence of two or more independent variables (X1, X2, X3, X4, and X5) on the dependent variable (Y). Based on the results of multiple linear regression analysis calculations, the independent variables used are as follows:

Table 4.8 Multiple Linear Regression Results

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	7559,357	909,893		8,308	0,00
	Umur	-24,324	24,437	-145	-995	3,25
	Pegalaman Kerja	145,726	26,212	716	5,560	0,00
	Jumlah tanggungan	316,545	124,854	330	2,535	0,01
	Pendidikan terakhir	217,534	176,541	144	1,232	2,24
	Premi	573	369	168	1,550	1,28

a. Dependent Variable: Produktivitias

Source: 2023 primary data processing results

Based on the table above, you can see the multiple linear regression equation as follows:

Y = 4.875 + 0.474X1 + 0.352X2 + 0.322X3 - 0.138X4 + 0.338X5

Information:

Y = Productivity of Palm Oil Harvesters
X1 = Age
X2 = Work experience
X3 = Number of dependents
X4 = Last education
X5 = Premium
α = constant

The multiple linear regression equation above can be seen that:

The constant value is 7559.357, meaning that if age, work experience, number of dependents, highest level of education and premiums are ignored, the labor productivity of oil palm harvesters is 7559.357. The regression coefficient for the age variable is -24.324, meaning that if age increases by 1 year assuming that work experience, number of dependents, latest education, premiums are ignored then the productivity of the oil palm harvester workforce will increase by -25.324. The regression coefficient for the work experience variable is 145.726, meaning that if work experience increases by 1 year with the assumption that age, number of dependents, last education, premiums are ignored then the productivity of oil palm harvesters will increase by 145.726.

The regression coefficient for the variable number of dependents is 316,545, meaning that if the number of dependents increases by 1 year with the assumption that age, work experience, recent education, premiums are ignored, then the productivity of oil palm harvesters will increase by 316,545. The regression coefficient for the last education variable is 217.534, meaning that if the last education has increased by 1 year assuming that age, work experience, number of dependents, premiums are ignored then the productivity of oil palm harvesters will decrease by 217.534. The regression coefficient for the premium variable is 573, meaning that if the premium increases by 1 year assuming age, work experience, number of dependents, last education, the premium is ignored, then the productivity of oil palm harvesters will increase by 573.

Determinant Coefficient Test Results (R^2)

The coefficient of determination is a quantity that shows the magnitude of the variation in the dependent variable that can be explained by other defensive variables. The value of the coefficient of determination R2 which is close to 1 for the independent variables explains almost all the information needed to predict the dependent variable. In multiple linear regression, it is used to determine the percentage influence of independent variables consisting of age, work experience, number of dependents, highest level of education, premium on labor productivity of oil palm harvesters. The determination results can be seen in table 4.9 as follows:

Table 4.9 Table of R2 Test Results

	Summar Model	**Y**
Model	R	R Square	Adjusted R Square
1	,726a	,528	,478

Predictors: (Constant), Premium, Last level of education, Work experience, Number of dependents, Age

Based on Table 4.9 above, the correlation/relationship value (R2) is obtained, namely 0.726 and the percentage influence of the independent variable on the dependent variable is explained from the results of squaring R. From this output, the adjusted R square value is 0.478, which means that the ability of the independent variables (age, work experience, number of dependents, highest level of education, premium) influence the dependent variable (labor productivity of oil palm harvesters) by 72.6%, while the remaining 27.4% is influenced by other variables not used in this research.

F Results

The regression coefficient test together (simultaneously) is carried out using the F test (ANOVA), where this test is used to find out whether the independent variables together (simultaneously) have a significant effect on the dependent variable or to find out whether the regression model can be used to predict the variable. Dependent or not significant means that the relationship that occurs can apply to the population (can be generalized). The F test is used to test the hypothesis from the research which states that the variables age, work experience, number of dependents, highest level of education, premiums have an influence on the workforce for oil palm

harvesters. The results of joint (simultaneous) hypothesis testing can be seen in table 4.10 below:

Table 4.10 F Test Results

Tabel 4.10 Hasil Uji F

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44608251,113	5	8921650,223	10,505	,000[b]
	Residual	39917089,868	47	849299,784		
	Total	84525340,981	52			
a. Dependent Variable: Produktivitias						
b. Predictors: (Constant), Premi, Pendidikan terakhir, Pegalaman Kerja,						

Source: 2023 primary data processing results

Based on Table4.10 above, the fcount value is 10.505, and for the ftable value it is obtained at 2.40, so it can be seen that the fcount value > ftable. Meanwhile, the significance value obtained is 0.00, meaning 0.00 < α 0.05. From these values it can be concluded that the independent variables have a significant effect simultaneously/together on the dependent variable.

T Test Results

The T test was used to show the significant influence of the independent and partial dependent variables. Where this test compares significant probabilities with an alpha (α) of 0.05. In conclusion, if the significant value is smaller than alpha (α) 0.05 then H0 is rejected and H1 is accepted. If the significant value is greater than alpha, it means that there is an influence of the independent variable on dependent variable. The T Test results can be seen in table 4.11 below:

Table 4.11 T Test Results

No	Variabel Independen	Signifikan	Alpha	T hitung	T tabel	keterangan
1	Umur	3,25	0,05	-995	2,01174	Tidak Berpengaruh (+)
2	Pengalaman Kerja	0,00	0,05	5,560	2,01174	Berpengaruh (+)
3	Jumlah Tanggungan	0,15	0,05	2,535	2,01174	Berpengaruh (+)
4	Pendidikan Terakhir	2,24	0,05	1,232	2,01174	Tidak Berpengaruh (-)
5	Premi	1,28	0,05	1,550	2,01174	Tidak Berpengaruh (+)

Source: 2023 primary data processing results

The independent variable has a partial effect on the dependent variable if the t value > t table. To find out the ttable value, use the following formula:

$$T \text{ table} = t\ (\alpha/2, nk-1)$$

Based on the formula above, the t value is obtainedtableamounting to 2.011, for each variable used, the results obtained were that the work experience variable and the number of dependents had a significant effect. Meanwhile, the variables age, last education, premium do not have a significant effect on the productivity of harvesters at PT. Mount Mas Raya.

Analysis of Factors That Influence the Productivity of Palm Oil Harvesters at PT.Gunung Mas Raya

To find out how factors influence the productivity of oil palm harvesters at PT. Gunung Mas Raya is based on the responses of respondents who have filled out a questionnaire with the Guttman scale, where the research questionnaire consists of 24 question items which have been declared valid with a sample size of 53 respondents, answers are made using the highest score of 2 and the lowest score of 1. The way to weight the scores is to "YES" is given a value of 2 and "NO" is given a value of 1, and the "Poorly Good" criteria limits are from 0 - 50% and the "Good" criteria limits are from 50 - 100% can be seen in attachments 2 and 4. Based on the research results What was done was to determine the respondents' responses to variable indicator factors that influence oil palm harvest productivity, among others.

Age

The results of descriptive analysis regarding age which influences productivity at work are as follows:

Age level greatly influences harvest work. For Bad criteria limits are from 0 – 50% and Good criteria limits are from 50 – 100%. The results of the analysis are expressed as a frequency distribution, good in absolute figures and in percentage terms, accompanied by quantitative explanations. (Abidin et al, 2014).

Table 4.12 Average results of statements for 1 age of harvester

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	47	89%
No	1	6	11%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.12, it can be seen that of the 53 respondents, 47 respondents (89%) answered "Yes". Meanwhile, 6 respondents (11%) answered "No". That the respondent's assessment of the 1 age statement was 89% categorized as "Good". Older age affects the harvester's ability to workTable 4.13 Average results of 2 harvester age statements

Answer Scale	Value Weight	Frequency
Yes	2	40
No	1	13
Total		53

Source: Primary data processing 2023

Based on Table 4.13, it can be seen that of the 53 respondents, 40 respondents (75%) answered "Yes". Meanwhile, 13 respondents (25%) answered "No". That the respondents' assessment of the 2 age statements was 75% categorized as "Good".

Younger age provides better ability to harvest palm fruit

Table 4.14 Average results of statements for 3 ages of harvesters

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	31	58%
No	1	22	42%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.14, it can be seen that of the 53 respondents, 31 respondents (58%) answered "Yes". Meanwhile, 22 respondents (42%) answered "No". That the respondents' assessment of the 3 age statements was 58% categorized as "Good".
The higher the age of the harvester, the higher the level of work productivity of harvest employees

Table 4.15 Average results of 4 age statements

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	33	62%
No	1	20	38%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.15, it can be seen that of the 53 respondents, 33 respondents (62%) answered "Yes". Meanwhile, 20 respondents (38%) answered "No". That the respondent's assessment of the 4 age statements was 62% categorized as "Good". Based on the results of data processing in Table 4.11, it can be seen that the t valuecountfor the age variable is -995 < ttable2.011 and the significant value is 3.25 > 0.05. What this means is that the age variable does not have a significant effect on the productivity of harvest workers at PT. Gunung Mas Raya (Ho received by H1rejected). This research is in line with research by Asmaida & Ramos Manik, 2021 that age has no effect on productivity. In PT. Then the harvesters aged 51> years were 2 people or 3.8% with the lowest productivity being 9,197.50 Kg. It can be seen that the age of harvesters from 20 – 45 years is included in the productive age which has the physical and energy and is able to increase productivity in the company. At the age of over 45 years, physical abilities begin to decline or decline for each person.

Work experience

Job training from the company

For Bad criteria limits are from 0 – 50% and Good criteria limits are from 50 – 100%. The results of the analysis are expressed as a frequency distribution, both in absolute numbers and in percentages, accompanied by a quantitative explanation. (Abidin et al, 2014).

Table 4.16 Average results of statement 1 work experience

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	14	26%
No	1	39	74%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.16, it can be seen that of the 53 respondents, 14 respondents (26%) answered "Yes". Meanwhile, 39 respondents (74%) answered "No". That the respondent's assessment of the 1 age statement was 74% categorized as "Not good". The work experience that harvest employees have is able to help complete harvest work efficiently

Table 4.17 Average results for Statement 2 Work experience

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	49	92%
No	1	4	8%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.17, it can be seen that of the 53 respondents, 49 respondents (92%) answered "Yes". Meanwhile, 4 respondents (8%) answered "No". That the respondent's assessment of the 2 age statements was 92% categorized as "Good". Harvest employees can complete the palm oil harvest quickly because of their work experience

Table 4.18 Average results of 3 work experience statements

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	31	58%
No	1	22	42%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.18, it can be seen that of the 53 respondents, 31 respondents (58%) answered "Yes". Meanwhile, 22 respondents (42%) answered "No". That the respondents' assessment of the 3 age statements was 58% categorized as "Good". Work experience helps me reduce mistakes made when harvesting palm fruit and follow harvest SOPs

Table 4.19 Average results of 4 work experience statements

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	49	92%
No	1	4	8%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.19, it can be seen that of the 53 respondents, 49 respondents (92%) answered "Yes". Meanwhile, 4 respondents (8%) answered "No". That the respondent's assessment of the 4 age statements was 92% categorized as "Good". Based on the results of data processing in Table 4.11, it can be seen that the t valuecountfor the work experience variable is 5.560 > ttable2.011 and the significant value is 0. 00 <0.05. What this means is that the work experience variable has a significant effect on the productivity of harvest workers at PT. Gunung Mas Raya (Ho rejected by H1accepted). This research is in line with research by Fradilla et al, 2019 that work experience influences productivity. In PT. Kg. The length of time a person has worked can be defined as the time a person has worked (worked) in a particular field. In essence, the longer a person works in a particular job, the higher the level of skills they have to obtain and produce production.

The number of dependents

Family responsibilities make harvest workers enthusiastic about working. For the Bad criteria limits are from 0 - 50% and the Good criteria limits are from 50 - 100%. The results of the analysis are expressed as a frequency distribution, both in absolute numbers and in percentages, accompanied by a quantitative explanation. (Abidin et al, 2014).

Table 4.20 results of the average statement 1 number of family dependents

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	52	98%
No	1	1	2%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.20, it can be seen that of the 53 respondents, 52 respondents (98%) answered “Yes”. Meanwhile, 1 respondent (2%) answered “No”. That the respondent’s assessment of the 1 age statement was 98% categorized as “Good”. The company provides harvest vehicle facilities (motorized rickshaws)Table 4.21 Average results of statements for 2 numbers of family dependents

Answer Scale	Value Weight	Frequenc y	Percentage
Yes	2	23	43%
No	1	30	57%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.21, it can be seen that of the 53 respondents, 23 respondents (43%) answered "Yes". Meanwhile, 30 respondents (57%) answered "No". That the respondent's assessment of the 2 age statement was 57% categorized as "Not Good". The company provides coverage for education costs and school facilitiesTable 4.22 Average results of statements for 3 number of family dependentsIt can be seen that of the 53 respondents, 39 respondents (74%) answered "Yes". Meanwhile, 14 respondents (26%) answered "No". That the respondent's assessment of the 3 age statements was 74% categorized as "Good".

Last education

The harvester's higher education makes it easier to make decisions. For the Bad criteria limits are from 0 - 50% and the Good criteria limits are from 50 - 100%. The results of the analysis are expressed as a frequency distribution, good in absolute figures and in percentage terms, accompanied by quantitative explanations. (Abidin et al, 2014).

Table 4.24 Average results of statement 1 on last education

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	15	28%
No	1	38	72%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.24, it can be seen that of the 53 respondents, 15 respondents (28%) answered "Yes". Meanwhile, 38 respondents (72%) answered "No". That the respondent's assessment of the 1 age statement was 72% categorized as "Not Good". With higher education, the harvester's way of thinking will be more advancedTable 4.25 Average results of statement 2 on last education

Answer Scale	Value Weight	Freque ncy	Percent age
Yes	2	16	30%
No	1	37	70%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.25, it can be seen that of the 53 respondents, 16 respondents (30%) answered "Yes". Meanwhile, 37 respondents (70%) answered "No". That the respondent's

assessment of the 2 age statement was 70% categorized as "Not Good". Higher education is better in morals and ethics.

Table 4.26 Average results of statement 3 on last education

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	15	28%
No	1	38	72%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.26, it can be seen that of the 53 respondents, 15 respondents (928%) answered "Yes". Meanwhile, 38 respondents (72%) answered "No". That the respondent's assessment of the 3 age statements was 72% categorized as "Not Good". With higher education, harvest employees are more easily given directionTable 4.27 Average results of the last 4 educational statements

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	16	30%
No	1	37	70%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.27, it can be seen that of the 53 respondents, 16 respondents (30%) answered "Yes". Meanwhile, 37 respondents (70%) answered "No". That the respondent's assessment of the 4 age statements was 70% categorized as "Not Good". Based on the results of data processing, it can be seen that the t valuecountfor the last education variable is 1.232 > ttable2.011 and the significant value is 2.24 > 0.05. What this means is that the last education variable does not have a significant effect on harvest labor productivity at PT. Gunung Mas Raya (Ho received by H1rejected). This research is in line with research by Mashadi et al, 2018 which states that education has no real effect on productivity.

At PT.Gunung Mas Raya, 15 people or 28% were junior high school graduates with a productivity of 10,796.73 kg, 23 people or 43% were elementary school graduates with a productivity of 10,109.70 kg. Education level of oil palm harvesters at PT. Gunung Mas Raya has 23 people at the Elementary School (SD) level with a percentage of 43%. This means that palm oil harvesters at PT. Gunung Mas Raya is still classified as having a low level of education. This happens because the results of observations in the field provide an indication that high or low levels of formal education are not used as an indicator in the recruitment of oil palm harvesting workers at PT. Mount Mas Raya. In the process of harvesting activities, the most important thing every harvest employee has is maximum or strong energy and sufficient work experience.

Premium

The amount of premium (in the form of money) given by the company is in accordance with the achievements or performance of the harvest employees For Bad criteria limits are from 0 – 50% and Good criteria limits are from 50 – 100%. The results of the analysis are expressed as a frequency distribution, both in absolute numbers and in percentages, accompanied by a quantitative explanation. (Abidin et al, 2014).

Table 4.28 Average results of 1 harvest premium statement

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	34	64%
No	1	19	36%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.2, it can be seen that of the 53 respondents, 34 respondents (64%) answered "Yes". Meanwhile, 19 respondents (36%) answered "No". That the respondent's assessment of the 1 age statement was 64% categorized as "Good". The company provides the amount of harvest premium based on the amount of excess bulk harvest (FFB), ready-to-buy withdrawals, sanction/fine rates

Table 4.29 Average results of 2 harvest premium statements

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	48	91%
No	1	5	9%
Total		53	100%

Source: Prim9er 2023 data processing

Based on Table 4.2, it can be seen that of the 53 respondents, 48 respondents (91%) answered "Yes". Meanwhile, 5 respondents (9%) answered "No". That the respondent's assessment of the 2 age statements was 91% categorized as "Good". The company provides premiums (in the form of money) to increase motivation and morale of harvest employees

Table 4. 30 Average results of 3 harvest premium statements

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	31	58%
No	1	22	42%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.30, it can be seen that of the 53 respondents, 31 respondents (58%) answered "Yes". Meanwhile, 2 respondents (42%) answered "No". That the respondents' assessment of the 3 age statements was 58% categorized as "Good". Are you satisfied with the premium you get every time you finish harvesting work?

Table 4.31 Average results of 4 harvest premium statements

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	27	51%
No	1	26	49%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.30, it can be seen that of the 53 respondents, 27 respondents (51%) answered "Yes". Meanwhile, 26 respondents (49%) answered "No". That the respondent's assessment of the 4 age statements was 51% categorized as "Good". Based on the results of data

processing, it can be seen that the t valuecountfor the Premium variable is 1.550 <ttable2.011 and the significant value is 1.28 > 0.05. What this means is that the premium variable does not have a significant effect on the productivity of harvest workers at PT. Gunung Mas Raya (Ho received by H1rejected). This research is in line with research by Abednego & Said Rizal, 2019 which states that premiums have no effect on productivity.

It can be seen that the harvest workers on average are able to get more work up to a level of more work 3, this shows that the premium is able to make the harvest workers more active in increasing production. Because the more work you get, the more wages you will get in the future. Palm Oil Harvester Labor Productivity at PT. Mount Mas RayaThe results of the descriptive analysis of the productivity of oil palm harvesters are as follows: Harvesting palm fruit must comply with the ripe criteria for harvesting brondol 3 on the plate

Table 4.32 Average results of question 1 labor productivity.

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	29	55%
No	1	24	45%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.32, it can be seen that of the 53 respondents, 29 respondents (55%) answered "Yes". Meanwhile, 24 respondents (45%) answered "No". That the respondent's assessment of the 1 age statement was 55% categorized as "Good".Achieve the base target every time you do harvest workTable 4.33 Average results of question 1 labor productivity.

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	45	85%
No	1	8	15%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.33, it can be seen that of the 53 respondents, 45 respondents (85%) answered "Yes". Meanwhile, 8 respondents (15%) answered "No". That the respondent's assessment of the 2 age statements was 85% categorized as "Good". Quotes brondolan on the plate

Table 4. 34 Average results of question 1 labor productivity.

Answer Scale	Value Weight	Frequency	Percentage
Yes	2	36	68%
No	1	17	32%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.33, it can be seen that of the 53 respondents, 36 respondents (68%) answered "Yes". Meanwhile, 17 respondents (32%) answered "No". That the respondents' assessment of the 3 age statements was 68% categorized as "Good". Harvesters master the work of harvesting oil palm and follow harvest SOPs

Table 4. 35 Average results of question 1 labor productivity.

Answer Scale	Value Weight	Frequency	Percentage

Yes	2	37	70%
No	1	16	30%
Total		53	100%

Source: Primary data processing 2023

Based on Table 4.36, it can be seen that of the 53 respondents, 37 respondents (70%) answered "Yes". Meanwhile, 16 respondents (30%) answered "No". That the respondents' assessment of the 4 age statements was 70% categorized as "Good". The following are the production results produced by harvest workers totaling 53 samples during 6 days of harvest which can be seen below.

Table 4.36 Harvester labor productivity for 6 working days

Sample	Production (Kg)/day	Sample	Production (Kg)/day
1	10,041	28	15,118
2	10,410	29	11,032
3	9,705	30	12,984
4	13,622	31	8,793
5	11,947	32	12,664
6	13,080	33	10,427
7	8,479	34	8,435
8	9,511	35	8,991
9	11,515	36	10,176
10	7,055	37	12,330
11	8,365	38	14,139
12	9,951	39	13,010
13	10,726	40	14,485
14	8,950	41	12,245
15	10,633	42	8,164
16	16,031	43	10,270
17	9,061	44	10,279
18	8,338	45	11,006
19	10,336	46	14,336
20	6,151	47	12,534
21	13,412	48	8,444
22	11,811	49	6,023
23	12,868	50	11,638
24	13,181	51	11,597
25	13,489	52	9,256
26	11,355	53	9,139
27	9,998		
Amount	290,021		287,515

Sample	Production (Kg)/day	Sample	Production (Kg)/day
Total 290,021 + 287,515 = 577,536 Average = 10,896			

Source: 2023 primary data processing results

The following is the average labor productivity of oil palm harvesters at PT. Gunugn Mas Raya using the formula, namely:

Rata-rata;

$$Y = \frac{10.896/6}{HK}$$

$$Y = \frac{1.816}{HK}$$

$$Y = 1.816 \text{ Kg/HK}$$

Based on the research results, it shows that the productivity of oil palm harvesters at PT. Mount Mas Raya is relatively high. This is in accordance with the harvest criteria and company standards that have been set for 2022, which are as follows:

Low (1,000 kg/day)
Medium (1,500 kg/day)
High (2,000 kg/day)

Labor productivity of palm oil harvesters at PT. Gunung Mas Raya, the average level of labor productivity is 10,896 in 6 working days 1,816 Kg/day. This shows the productivity of the palm oil harvesting workforce at PT. Mount Mas Raya is relatively high. That the base set by the company is 2,000 Kg/HK with an average bushel weight of 23 kg for mineral areas, while the base for peat areas is 1,500 Kg/HK with an average bushel weight of 13.70 Kg/HK. Labor productivity of palm oil harvesters at PT. Gunung Mas Raya is influenced by a workforce that is still classified as productive. Apart from that, the harvesting workers also have sufficient experience in their work..

4. CONCLUSION

Based on the conclusions above, the author will provide suggestions for this research as follows:

For Companies

In an effort to increase the productivity of oil palm harvesting workers, this is done by looking at the ability of the workforce to produce optimal production. This is because four of the five variables created have a significant influence on the productivity of oil palm harvesters.

For Researchers

Further research needs to be carried out to include relevant variables directly related to the productivity of oil palm harvesters, such as harvest rotation, harvest density figures, worker satisfaction and the facilities provided so that the research results are more satisfying and have much greater benefits for researchers.

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