



## THE EFFECT OF WORKLOAD ON WORK PRODUCTIVITY OIL PALM HARVESTER

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### ABSTRACT

Work productivity at work is very important for a company to produce a product to achieve targets and as a form of consideration to achieve success in a company. The purpose of this study was to determine the effect of workload on the labor productivity of oil palm harvesters. The research method used quantitative research with Cross Sectional design and data analysis on univariate tests using frequency distribution tables and Paired tests on pulse samples with sig. < 0.05 values. A sample of 48 respondents who were oil palm harvesters at PT. Merbaujaya Indahraya, Aek Kuo District, using total sampling. The measurements in this questionnaire use the Likert scale, and check the pulse on the arteries in the respondent's wrist, and see the results of the achievements obtained by the respondent. The results showed that the workload had a positive and significant effect on the work productivity of oil palm harvesters at PT Merbaujaya Indahraya, Aek Kuo District, with a significance value (sig) of  $0.000 < 0.05$ . This study came to the conclusion that the work productivity of oil palm harvesters at PT Merbaujaya Indahraya is in the good category, but there must be improvements to increase the work productivity of oil palm harvesters to remain stable and increase for the success of a company.

Keywords: pulse; work productivity; workload

**First Received**

7 May 2024

**Revised**

10 May 2024

**Accepted**

15 May 2024

**Final Proof Received**

17 May 2024

**Published**

01 June 2024

### How to cite (in APA style)

Hasanah, W., Susanti, N., & Agustina, D. (2024). The Effect of Workload on Work Productivity Oil Palm Harvester. *Indonesian Journal of Global Health Research*, 6(3), 1699-1710. <https://doi.org/10.37287/ijghr.v6i3.3368>.

## INTRODUCTION

Indonesia is one of the countries with a tropical climate. The majority of Indonesia is planted with oil palm trees. Data-driven (Direktorat Statistics of Food Crops, Horticulture, 2023) Indonesia has an area of 16,833,985 Ha of oil palm. Oil palm plantations are partly held by a company, both public and private. Every company must pay attention to the work productivity of employees. Work productivity is a problem that often arises in a company. Productivity is identical to the achievement of a target that has been determined by a company. In oil palm plantation companies, namely companies that need workers as oil palm harvesters. Work as an oil palm harvester, is a job that is done outdoors. Oil palm harvesters always carry out activities to take plantation products or oil palm production in the form of fresh fruit bunches (FFB). Tools for harvesting and loading palm oil are by using dodos and egrek tools for harvesting and carts or angkong for loading and transporting. Some types of tools or technologies have been widely introduced and used today, for some conditions these tools / technologies are quite effective, but for some other conditions it is difficult or less economical to apply. Manual harvesting activities also have the potential to cause occupational safety and health (K3) problems.

Based on data from Ministry of Manpower of the Republic of Indonesia (2022) The number of cases of work accidents and occupational diseases was recorded as many as 7,298 people caused by workloads that were too heavy to cause accidents to their workers, and there were 9,224 victims. It can be seen that heavy workloads can also result in accidents in workers. Workload is one of the factors that can affect work productivity in oil palm harvesting. According to Tarwaka & Bakri (2016) The human body is designed to be able to perform daily work activities. All muscle mass in the body affects the movement of the body in doing work. In other words, every worker is a burden for the person concerned in carrying out his activities or work.

According to research Holy (2023) The workload that has been given to employees must be completed within the time determined by the company. According to research A. Yulia, T. Bernhard (2019) Workload is all forms of work that must be done by employees and completed according to predetermined targets and time. Workloads that are too heavy or light will have an impact on work productivity. Can be seen in the research Fathoni (2020) That degree of influence Workload on work productivity on employees as large as 60,9%. According to Sulastri (2020) The workload on employees will increase and feel heavy if superiors continue to demand their employees to always work according to the specified target, while the work done is not in accordance with the number of employees in the workplace so that it makes workers feel burdened and not work optimally. Physical workload measurement is an objective measurement of workload using quantitative data in the form of heart rate or pulse rate measurements and energy consumption. Heart rate or pulse rate is widely used to measure a person's workload from muscle movement. In addition, the pulse is also used to estimate a person's physical condition or physical freshness. Heart rate or pulse rate (measured per minute) to be able to assess the level of the body's ability to work. Can be seen in the research Wirataco & Noble, (2022) The percentage of heavy workload (11.97% - 25.16%) and the percentage of light workload (32.41% - 39.78%) were obtained, indicating the need for additional rest time, so that the workload was lighter and the pulse rate returned to normal.

According to research Prabawati & Lidiana (2021) The level of work productivity owned by workers can see and determine the success of a company in competition in the business world. The existence of a company depends on the high and low productivity of the company. There are several key or important elements that can increase the total productivity of the company, namely, labor, capital, production, organization, and marketing. Harvest labor is the spearhead of the company as the most vital element for the company. The harvest workforce should be employees who are specialized and have mastered how to harvest, so that the harvested fresh fruit bunches (FFB) can meet the requirements of the harvest maturity criteria. Errors in harvesting will have a negative impact on the FFB results obtained, so a harvest worker should have understood the characteristics of fruit maturity and have skills in harvesting activities.

Based on the phenomenon described above, this can also happen at PT. Merbaujaya Indah Raya which is one of the companies that processes oil palm fresh fruit bunches into Crude Palm Oil and Palm Kernel Oil. This company is owned by natives who were established in 1995 and inaugurated on December 12, 1996 with an area of 4,928 Ha. PT Merbaujaya Indahraya is an oil palm plantation located in Aek Kuo sub-district. PT Merbaujaya Indahraya also has workers in the palm oil harvester. Working as an oil palm harvester is a very likely job with complaints due to the workload it has. This can be seen in the following table: Monthly target for production of palm oil harvesters at PT. Merbaujaya Indahraya was

1,266,687.85, while the actual achievement was 621,814. Based on the sentence above, the targets and achievements achieved by oil palm harvesters can be seen. Targets and achievements are the result of an achievement in the company PT. Merbaujaya Indahraya is still lacking. This indicates that there is a workload that is not in accordance with the educational background, skills, experience, and time provided. So that it can trigger the non-achievement of the targets set by the company, so that the work productivity of oil palm harvesters decreases. The target set for oil palm harvesters at PT Merbaujaya Indahraya is 1,000.00 kg in a day for each oil palm harvester. Basically, the achievement of target in increasing work productivity will always increase or decrease by 4% (Chen & Zhang, 2021).

Based on the background description above, researchers were interested in conducting research at PT Merbaujaya Indahraya on "The Effect of Workload on the Work Productivity of Oil Palm Harvesters at PT. Merbaujaya Indahraya, Aek Kuo District". The formulation of the problem in this study is how the workload affects the work productivity of oil palm harvesters at PT Merbaujaya Indahraya, Aek Kuo District. The purpose of this study is to see the effect of workload on the work productivity of oil palm harvesters at PT. Merbaujaya Indahraya, Aek Kuo District. The benefit of this research is that it can be used as input to increase knowledge about the effect of workload on the work productivity of oil palm harvesters at PT Merbaujaya Indahraya, can be used as a consideration or input for PT. Merbaujaya Indahraya that workload with labor productivity affects oil palm harvesters.

## **METHOD**

This research was conducted at PT. Merbaujaya Indahraya, as for the location of this research in the Merbaujaya Plantation located in Aek Kuo District. This study uses Quantitative method research with research design to determine the influence on two variables. According to Hardani, et al (2022) Quantitative research is research to reveal symptoms holistically-contextually through collecting data from natural settings by utilizing the researcher as a key instrument. The population in this study is oil palm harvesters located at PT. Marbaujaya Indahraya as many as 48 people. The sampling technique in this study was Total Sampling, by taking all the population of oil palm harvesters at PT. Merbaujaya Indahraya, and samples taken as many as 48 people. The dependent variable in this study is workload, while the independent variable in this study is work productivity. In collecting data in this study through several stages, the first stage is the preparation stage, where researchers ask permission for the distribution of questionnaires and pulse checks. In the second stage, researchers checked the pulse accompanied by a midwife and distributed questionnaires carried out questionnaires carried out by repondents, namely oil palm harvesters. The third stage, carrying out data processing, moving data to SPSS, coding, and data entry. The questionnaire used has also been tested for validity and reliability. The data were analyzed by univariate analysis using distribution tables, and conducted normality tests and faired tests on the results of data from pulse checking obtained on palm oil harvester respondents.

Validity Test is a test that can be done to find out and ensure a scale to measure a concept in question, in other words, validity test can be used to measure the validity or validity of a liket scale or questionnaire. A liket scale or questionnaire can be considered valid if a statement of the questionnaire can reveal something that the liket scale will measure. Validity test is a test that can be carried out to find out and confirm a scale for measuring a concept in question, in other words a validity test can be used to measure the legitimacy or validity of a liket scale or questionnaire. The Liket scale or questionnaire can be said to be valid if a statement from the questionnaire can reveal something that will be measured by the Liket scale. Test the validity of the workload variable or X: Based on the results of the workload validity test, respondents

were able to answer all statements where the results of the 7 workload indicator statements were declared valid. test the validity of work productivity or variable Y:

Based on the results of the productivity validity test or variable y, respondents can answer all statement items where the results of the 7 work productivity indicator statements are declared valid. The reality test is an index that shows the extent to which a measuring instrument can measure the consistency of a questionnaire which is an indicator of a variable, so it can be called reliable. Test the reliability of the workload variable (X). Based on the data obtained, a Cronbach's alpha value was obtained of 0.711, which means that the reliable value is the same as an alpha greater than 0.7. So the questionnaire is called reliable. Test the reliability of the work productivity variable (Y) Based on the data obtained, the reliable value of the work productivity variable from the 7 statement items shows a Cronbach's Alpha value of 0.784 where the Alpha is 0.7 greater, namely 0.784, greater than 0.7, meaning the questionnaire is called reliable.

## RESULTS

### Pulse Check

Data collection on workers by measuring / checking the worker's pulse. This work pulse measurement is one to determine the workload. This is done by feeling the pulse in the radial artery of the wrist. Checking is done manually without aids It can be felt with the help of a stopwach to calculate the pulse at a set time.

### Questionnaire

The rating scale on the questionnaire is the Likert scale in the statement on the questionnaire used for each respondent is to give a value or score to each statement. Rating scale 1-5 where scale 1 (strongly disagree) and scale 5 (strongly agree).

## Results and Discussion

### Univariate Analysis

Table 1.  
Distribution of Respondents Based on Age

Age	f	%
18-31	25	52.1
32-46	23	47.9
Total	48	100.0

Based on the table above, from 48 respondents of oil palm harvesters at PT Merbaujaya Indahraya, Aek Kuo District, 25 (52.1%) were obtained in the 18-31 years group.

Tabel 2.  
Gender

Gender	f	%
Man	48	100.0

Based on the table above, it is known that from 48 respondents of oil palm harvesters at PT Merbaujaya Indahraya, Aek Kuo District, it was found that all male genders were 48 (100%). Based on (Tarwaka, 2016), the risk of male sex having work fatigue is 1,833 times greater due to the workload carried out.

Tabel 3.  
Education

Level of education	f	%
Elementary School	27	56.3
Junior High School	11	22.9
High School/High School	10	20.8
Total	48	100.0

Based on the table above, it is known that from 48 respondents of oil palm harvesters PT Merbaujaya Indahraya, Aek Kuo District, more recent education was found in elementary school education as many as 27 (56.3%).

Tabel 4.  
Job title

Job title	f	%
Palm oil harvester	48	100.0

Based on the table above, it is known that of the 48 respondents at PT Merbaujaya Indahraya, Aek Kuo District, as many as 48 (100%) have positions as oil palm harvesters. Based on (Tarwaka, 2016) positions that have a lot of physical activity, will experience a decrease in work productivity at each job.

Tabel 5.  
Years of service

Years of service	f	%
< 1 Tahun	5	10.4
1-2 Tahun	28	58.3
2-3 Tahun	10	20.8
>3 Tahun	5	100.0
Total	48	

Based on the table above, it is known that from 48 respondents of PT Merbaujaya Indahraya oil palm harvesters, Aek Kuo District, more work period was obtained in 1-2 years with a frequency of 28 and a presentation of 58.3%.

Tabel 6.  
Workload

Kategori	f	%	Valid %	Cum
No Fatigue Occurs	1	2.1	2.1	
Work in a short time	7	14.6	14.6	
Immediate action is required	29	60.4	22.9	
No activities are allowed	11	22.9	100.0	
Total	48	100.0		

Based on the table above, it is known that from 48 respondents of PT Merbaujaya Indahraya oil palm harvesters, Aek Kuo District, 29 frequencies (77.1%) were found to have a workload in the category of requiring immediate action, meaning that there was a problem with the workload of oil palm harvesters at PT Merbaujaya Indahraya, Aek Kuo District, however, this problem could not still be fixed, but if not acted on immediately to have a fatal impact, and the workload problem will get bigger and bigger.

Tabel 7.  
Productivity

Category	f	%	Valid %	Cumulative %
Good	26	54.2	54.2	54.2
Exceed Target	22	45.8	45.8	100.0
Total	48	100.0	100.0	

Based on the table above in the productivity table, it is known that from 48 respondents of PT Merbaujaya Indahraya oil palm harvesters, Aek Kuo District, 26 frequencies (54.2%) were obtained in the good category.

Tabel 8.  
Achievement

Category	f	%	Valid %	Cumulative %
Not enough	23	47.9	47.9	47.9
Good	13	27.1	27.1	75.0
Exceed target	12	25.0	25.0	100.0

Based on the table above in the achievement table, it is known that out of 48 respondents of PT Merbaujaya Indahraya oil palm harvesters, Aek Kuo District, less achievements were obtained at a frequency of 23 (47.9%) and were declared valid. In the achievements obtained by oil palm harvesters at PT Merbaujaya Indahraya, Aek Kuo District, they have not reached the target set by the company.

### Physical Workload

Physical workload measurement was carried out by calculating the percentage of *Cardiovascular Load (CVL)* in respondents of oil palm harvesters PT Merbaujaya Indahraya, Aek Kuo District. The first stage carried out when processing data with the *Cardiovascular Load (CVL)* method is the results of data uniformity tests for resting pulse, work pulse, and maximum pulse rate.

### DNI TEST

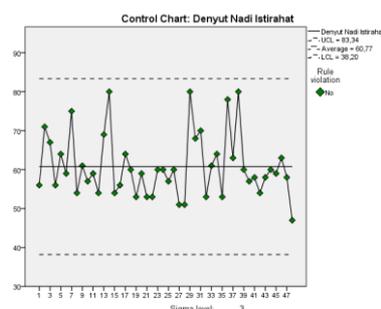


Figure 1. Resting Pulse

### DNK TEST

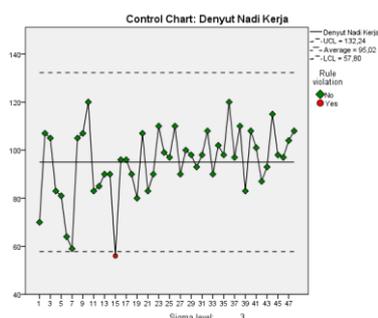


Figure 2. Work pulse

### DNM TEST

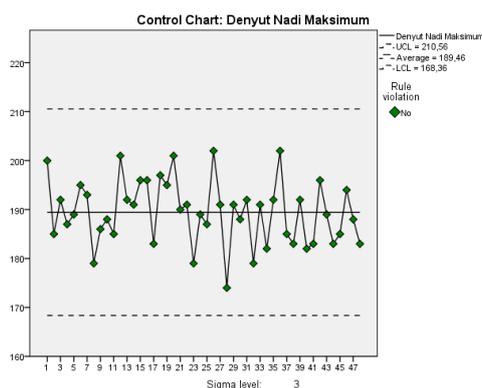


Figure 3. Maximum pulse rate

The second stage in processing data using the *Cardiovascular Load (CVL)* method is to conduct a normality test. The following are the data normality test results for resting pulse, working pulse, and maximum pulse rate.

### UJI NORMALITAS DNI

Tabel 9.  
One-Sample Kolmogorov-Smirnov Test

		Denyut nadi istirahat
<i>Normal Parameters<sup>a,b</sup></i>	Mean	60.77
	Std. Deviation	8.009
<i>Most Extreme Differences</i>	Absolute	.184
	Positive	.184
	Negatif	-.103
	Kolmogorov-Smirnov Z	1.276
		Asymp. Sig. (2-tailed)
		.077

Based on the results of the DNI one sample Kolmogorov Smirnov test, it shows that the results of Asymp. Sig  $0.077 > 0.05$ , this indicates that the DNI test has a normal distribution.

### UJI NORMALITAS DNK

Tabel 10.  
One-Sample Kolmogorov-Smirnov Test

		Denyut nadi kerja
<i>Normal Parameters<sup>a,b</sup></i>	Mean	95.02
	Std. Deviation	14.174
<i>Most Extreme Differences</i>	Absolute	.112
	Positive	.083
	Negatif	-.112
	Kolmogorov-Smirnov Z	.773
		Asymp. Sig. (2-tailed)
		.588

### UJI NORMALITAS DNM

The third stage in processing Cardiovascular Load (CVL) method data is carrying out a Paired sample test. The following are the results of the Paired sample test for DNI, DNK, and DNM.

Tabel 11.  
ONE-SAMPLE KOLMOGOROV-SMIRNOV TEST

		N	Denyut nadi kerja
Normal Parameters <sup>a,b</sup>	Mean	48	189.46
	Std. Deviation		6.546
Most Extreme Differences	Absolute		.078
	Positive		.078
	Negatif		-.072
Kolmogorov-Smirnov Z			.541
Asymp. Sig. (2-tailed)			.932

**UJI PAIRED SAMPEL DNI**

Tabel 12.  
PAIRED SAMPLES TEST

		Paired Differences				t	Df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
<b>PAIR 1</b>	Resting Pulse Rate – CVL	30.750	17.973	2.594	25.531	35.969	11.853	47	.000

Hypothesis in the paired sample t test resting pulse rate:

T count: 11,853

T table: 2.011

Sig value. (2-tailed) is 11.853 > 2.011, then H0 is accepted and Ha is rejected. which means there is an influence on workload with resting heart rate.

**UJI PAIRED SAMPEL DNK**

Tabel 13.  
Paired Samples Test

		Paired Differences				t	Df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
<b>PAIR 1</b>	Working Pulse Rate – CVL	65.000	18.672	2.695	59.578	70.422	24.118	47	.000

Hypothesis in the paired sample t test working pulse:

T count: 24,118

T table: 2.011

Sig value. (2-tailed) is 24.118 > 2.011, so H0 is accepted and Ha is rejected, which means there is an influence on workload and work pulse.

**UJI PAIRED SAMPEL DNM**

Hypothesis in the paired sample t test maximum pulse rate.

T: 69,703

T table: 2.011 = 69.703 > 2.011

This means that H0 is rejected and Ha is accepted, because it is greater 69 than 2. Which means there is an influence on the workload with the maximum pulse rate. The fourth stage in

processing the Cardiovascular Load (CVL) method data is calculating the CVL percentage (%) of oil palm harvesters at PT. Merbaujaya Indahraya Aek Kuo.

Tabel 14.

*Paired Samples Test*

Pair	Maximum Pulse Rate – CVL	Paired Differences				t	Df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
1		159.438	15.848	2.287	154.836	164.039	69.703	47	.000

The following is a recapitulation of the results of calculating the average percentage of CVL for oil palm harvesters:

Tabel 15.

The recapitulation of the results of calculating the average percentage of CVL for oil palm harvesters

No	Name	Age	DNM	DNI	DNK	%CVL
1	Muhammad Fattah Sitorus	20	200	56,07	70,17	9,80%
2	Muhammad Hasan	35	185	71,61	107,07	31,27%
3	Edi Harmoko	28	192	67,44	105,64	30,67%
4	Afdul pahri	33	187	56,07	83,33	20,90%
5	Ary Wahyudi	31	189	64,8	81,8	13,10%
6	Possidius Amesakha mendropa	25	195	59,1	64,72	4,13%
7	Riky Mahendra	27	193	7,5	59,1	27,82%
8	Kusdani	43	179	54,15	105,04	40,73%
9	Zaya fahlevi	34	186	61,86	107,8	37,00%
10	Dani Lesmanto	32	188	57,86	120,1	47,82%
11	Ahmad Suhendri	35	185	59,1	83,33	30,31%
12	Rusman Halawa	19	201	54,15	85,47	19,28%
13	Megy Handako	28	192	69,1	90,5	17,41%
14	Miswanto	29	191	80,6	90,14	8,64%
15	Lohot Harahap	38	196	54,7	56,7	65,51%
16	Aris Prasetyo	24	196	56,7	96,5	20,58%
17	NasoZisokhi zai	37	183	64,5	96,3	26,83%
18	Bima Santoso	23	197	60,1	90,43	22,15%
19	Stianus Halawa	25	195	53,7	80,93	19,27%
20	Iman Jaya	19	201	59,1	107,07	33,80%
21	Yusman hulu	30	190	53,4	83,9	22,32%
22	Budi Ardi	29	191	53,8	90,1	26,45%
23	Herianto	41	179	60,5	110,39	43,10%
24	Yepidemi gulo	31	189	60,14	99,18	30,29%
25	Solikin	33	187	57,1	97,3	30,94%
26	Riski Firmansyah	18	202	60,38	110,05	35,07%
27	Muhammad Rama Dana	29	191	51,9	90,91	28,04%
28	Samsul Bahri	46	174	51,9	100,1	35,11%
29	Ali yuda	29	191	80,1	98,71	16,78%
30	Supriadi	32	188	68,43	93,8	21,21%
31	Jofan Pius halawa	28	192	70,15	98,5	23,26%
32	Junaidi Simatupang	41	179	53,4	108,15	39,60%
33	Darman Endi putra z	29	191	61,33	90,15	22,22%
34	Riadi	38	182	64,5	102,5	32,34%
35	Fitalis ferdianus	28	192	53,7	98,41	32,32%
36	Aluiwanolo halawa	18	202	78,14	120,13	33,90%
37	Hadi Lesmana	35	185	63,13	97,14	27,90%
38	Ayeh Telaumbanua	37	183	80,14	110,5	30%
39	Meligus Gulo	28	192	60,4	83,19	17,31%

No	Name	Age	DNM	DNI	DNK	%CVL
40	Muliamin	38	182	57,41	108,15	40,72%
41	Tumidi	37	183	58,19	101,4	34,62%
42	Liadi	34	196	54,11	87,6	23,60%
43	Oda olius gulo	31	189	58,15	93,21	26,79%
44	Julian	37	183	60,18	115,4	44,96%
45	Tehego bulolo	35	185	59,19	98,33	31,12%
46	Padian	26	194	63,18	97,13	25,93%
47	Herianto	32	188	58,17	104,5	35,68%
48	Toloni nduru	37	183	47,92	108,17	44,60%

In the table above, it can be seen that oil palm harvesters have the largest percentage of CVL at 65.51%, with a resting pulse rate (DNI) of 80.6, a work pulse of 120.1. Meanwhile, of the 48 oil palm harvesters who had the smallest CVL percentage of 4.135, resting pulse rate was 7.5 and work pulse was 56.7. Of the 48 palm oil harvester respondents who received > results, 30% of the CVL calculation results were categorized as fatigue due to percentage values, and in this case action was needed.

## DISCUSSION

The results of research conducted by researchers at PT. Merbaujaya Indahraya, Aek Kuo District in 2024 regarding the effect of workload on the work productivity of oil palm harvesters. From the results of the study, that the workload has a positive and significant effect on the work productivity of oil palm harvesters at PT Merbaujaya Indahraya, Aek Kuo District. This is shown from the results of the signification value (sig)  $0.000 < 0.05$ . This is in line with research Fausiah, (2023) That workload also has a positive effect on work productivity with a significant value of  $0.000 < 0.05$ . Basically, a person's workload has its own standard of work. If most employees work up to standard, there will be no problems; However, if they work outside the standard, there will be work overdone (Kantor et al, 2022).

Basically, heavy workload can affect the increase in work productivity, this can also be seen from the workload that can be measured from the pulse of oil palm harvester workers who have been studied. From the paired sample test results t test resting pulse rate on T count: 11.853 and T table: 2.011, Sig value. (2-tailed) of  $11.853 > 2.011$ , then  $H_0$  is accepted and  $H_a$  is rejected. which means there is an influence on the workload with the pulse of Rest. In the paired sample t test of the work pulse test, there is a sig value. (2-tailed) of  $24.118 > 2.011$ , then  $H_0$  is accepted and  $H_a$  is rejected, which means that there is an influence on the workload with the work pulse, and on the paired sample t test results the maximum pulse rate sig value. (2-tailed) of  $69,703 > 2,011$ . This means that  $H_0$  is rejected and  $H_a$  is accepted, because it is greater than 69 to 2. which means there is an influence on the workload with maximum pulse. And based on the largest %CVL of 65.51%, with a resting pulse (DNI) of 80.6, a work pulse (DNK) of 120.1. Meanwhile, of the 48 oil palm harvesters who had the smallest CVL percentage of 4.135, resting pulse rate was 7.5 and work pulse was 56.7. Of the 48 palm oil harvester respondents who received > results, 30% of the CVL calculation results were categorized as fatigue due to percentage values, and in this case action was needed. It is also, in line with research Munte, (2021) The employees studied also experienced a physical workload of 32.38% CVL with information that improvements were needed.

Basically, the length of physical work carried out by workers in the field can cause fatigue in workers so that work is more slowly completed. This can be done by giving enough rest time, so that the oil palm harvester can rest so that his pulse can return to normal, so that the work done can be completed properly (Industry et al., 2021). The provision of rest time to workers must continue to be considered so that the health of workers is maintained and the work done by workers can be carried out optimally and optimally. The worker's work pulse that occurs

abnormally can basically interfere with the length of time the worker completes the work (Arsyada & Cahyawati, 2024). Based on the results of the study, 29 frequencies (77.1%) were obtained in the category of urgent action, meaning that there was a problem with the workload of oil palm harvesters at PT Merbaujaya Indahraya, Aek Kuo District. From achieving the target of oil palm harvesters at PT. Merbaujaya Indahraya, Aek Kuo District, achieved in the less category at a frequency of 23 (47.9%). In the achievements obtained by oil palm harvesters at PT Merbaujaya Indahraya, Aek Kuo District, they have not reached the target set by the company. From the results of research on the work productivity of oil palm harvesters at PT. Merbaujaya Indahraya, Aek Kuo District, it is known that from 48 respondents of PT Merbaujaya Indahraya oil palm harvesters, Aek Kuo District, 26 frequencies (54.2%) were obtained in the good category. In this regard it is also in line in research Widoto, (2023) that Work productivity owned by workers will increase and decrease, so that work productivity of 66.97% is obtained which has decreased, but is still in the good category.

## **CONCLUSION**

Based on the results of the research conducted that the workload has a positive and significant effect on the work productivity of oil palm harvesters at PT Merbaujaya Indahraya, Aek Kuo District. This is shown from the results of the signification value (sig)  $0.000 < 0.05$ . Measurements based on the pulse rate to workload of 48 oil palm harvesters which had the smallest CVL percentage of 4.135, resting pulse rate of 7.5 and working pulse of 56.7. Of the 48 palm oil harvester respondents who received > results, 30% of the CVL calculation results were categorized as fatigue due to percentage values, and in this case action was needed. And for the achievement of targets for work productivity, achievements were obtained in the less category at a frequency of 23 (47.9%). In the achievements obtained by oil palm harvesters at PT Merbaujaya Indahraya, Aek Kuo District, they have not reached the target set by the company. However, from the results of research on the work productivity of oil palm harvesters at PT. Merbaujaya Indahraya, Aek Kuo District, it is known that from 48 respondents of PT Merbaujaya Indahraya oil palm harvesters, Aek Kuo District, 26 frequencies (54.2%) were obtained in the good category.

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