# Working Conditions and Quality Evaluation of Pendodos Workers in Indonesian Palm Oil Plantations: Challenges and Solutions

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This research aims to determine the quality of work of Palm oil workers who work to harvest, transport, and sell palm oil products called pendodos and to analyze the strengthening of the capacity of pendodos in increasing palm oil productivity. This research uses Quality of Working Life to examine the work quality of pendodos in their work environment. This study was conducted in North Labuhan Batu Regency and South Labuhan Regency. The data collection method used a qualitative and quantitative descriptive approach through in-depth interviews, questionnaires, observation, and documentation. The informants in this research consisted of community workers and plantation owners. The research results show that people's plantations in this area are still based on trust and social networks. The recruitment of pendodos to work on plantations is based on social networks through kinship and family ties. Plantation owners recruit employees to harvest on plantations without special qualifications. A work system not based on a written work contract means no strong work bond between the dodos owner and the plantation owner. This results in no efforts to improve the quality and capabilities of pendodos by garden oil palm plantation owners. A bonded relationship is a mutualistic bond that is mutually beneficial economically. A pendodos income is determined by the quantity of harvest he they produce. The greater the crop, the greater the wages received by the pendodos.

Keywords: Palm Oil, Pendodos, Quality of Working Life, Harvesting.

## Introduction

Palm oil plantation commodities have bright prospects in the future because the processed products have uniform uses and quite broad market opportunities, both domestically and abroad. Processed palm oil products are not only consumed as inputs for the food industry but also for non-food industries and animal feed. Palm oil management set up by ownership includes stateowned plantations, private plantations, and even individual plantations owned by the (local) people (Febrian & Yuza, 2023). In just the past few decades, Indonesia has become the world's largest producer of CPO (crude palm oil). In 2022, Indonesia produced 45.58 million metric tons of palm oil. Indonesia leads the highest amount of palm oil production, followed by Malaysia, with total production from these two countries reaching 85% of the total production globally (Afriyanti et al., 2016; Shigetomi et al., 2020). One process that plays an essential role in producing Fresh Fruit Signs (FFS) is the harvesting process. Those involved in the Fresh Food Bunches (FFB) harvesting process, namely picking the fruit so it can be transported for processing, are called pendodos. Pendodos carry out the process of harvesting palm oil manually (Mohamad et al., 2023; Ramli et al., 2023), starting from cutting the fronds, harvesting fresh fruit bunches (FFB) with dodos and egrek, loading the FFB into rickshaws with a tojok (a tool for lifting palm fruit), pushing the rickshaw

containing the FFB to the harvest container (TPH) and loading the FFB into the transport truck with a sledgehammer (Myzabella et al., 2019). This harvesting process is still done manually using traditional tools. Several technological tools as CKAT and motorised cutter then began to be created to create effectiveness and efficiency in increasing palm oil productivity (Bakar et al., 2018).

However, some of these tools cannot be used properly because they are not effective enough, workers lack the skills to use them and they endanger worker safety (Sugarindra et al., 2017; Susana et al., 2024). Dodos consists of a knife with a chisel shape at the end, connected to a long pipe. This tool is used to pick palm trees with a tree height of 2-5 meters. Fauzi studied plantations in Indonesia and stated that traditional tool requires more (Christian, 2018) power for workers because cutting FFB is done with a stabbing motion. A study conducted by Shokripour and colleagues regarding the manual FFB harvesting process states that traditional harvesting workers must be able to cut fruit bunches and leaves with a tree height of up to 9 meters. The worker must lift the *dodos* tool and place the tip of the dodos knife into the tree canopy. Timeliness and the proper cutting system determine the quality and quantity of fresh oil palm fruit bunches produced. 2 cutting systems are carried out traditionally, namely the system of cutting leaves and bunches, and then the system of bringing the tip of the cutting knife close to the fruit

bunch (Hamed Shokripour et al., 2012). The quality of the employees' work makes a significant contribution to increasing productivity. Several factors influence the level of performance of workers, such as wages, incentives, motivation, and work environment, training and development (Prasasti, 2020; Tambunan et al., 2019).

Motivation, training, and development are the factors that most influence employee performance. The factors affecting employee performance are age, number of dependents, and land conditions (Hanisah et al., 2023). Nabila (Nabila et al., 2019) also noted that age, experience, number of dependents, and income significantly affect workforce productivity of workers. The land topography and the trees' height cause pendodos to experience difficulties in harvesting, coupled with the use of traditional tools. Pendodos experience fatigue when the land's topography sloping, and the trees become taller. The use of sophisticated technology can be applied done to reduce worker fatigue. Pendodos have an essential role in harvesting and increasing palm oil products. Therefore, this present research aims to enquire into how to increase the capacity and both the quality work and working life of pendodos in increasing palm oil productivity.

#### Literature Review

#### Quality of Working Life

Quality of working life (QWL) is an old concept that emerged in 1970, first introduced by Walton. It was designed with a socio-technical system in mind that aims to ensure an optimal work system with working conditions that suit the social and psychological needs of workers (Abebe & Assemie, 2023; Jokinen & Heiskanen, 2013). This concept first created concepts and theories regarding "Human Working Life". Nowadays, QWL as a concept is attracting more attention globally. This is because in today's modern society, people spend approximately more than a third of their lives at work (Herpertz, 2022; Lefebvre, 2017). Therefore, the importance of QWL for an organization is arguably unmatched and unquestionable (Ahmad, 2013; Jin, 2022). QWL is also a combination of strategies, procedures, and atmosphere related to the workplace that overall increase and maintain employee satisfaction to improve working conditions for the organization's employees (Hammond et al., 2023; Leitão et al., 2021). Walton (Mamaghaniyeh et al., 2019; Sabonete et al., 2021) provides 8 categories for assessing and finding QWL, namely:

Categories of QWL	Definition
Adequate and fair compensation	Related to pay, work situation, responsibilities, and training. Other parameters, such as the distribution of profits and results, the relationship between supply and demand, and the average salary of workers, can reflect wage fairness in the organization. Other aspects that are additional to this dimension such as fair compensation, salaries commensurate with the results of their work, bonuses as a form of appreciation for work results, and additional costs for food, transportation,
Safe and healthy working conditions	medical, etc. for workers (Sabonete et al., 2021) This dimension includes physical conditions, working hours and overtime pay, and work safety, such as personal protective equipment. Work situations that do not harm workers while working, such as pollution, noise, and odors are aimed at. In other words, this dimension includes health and the work environment.
Opportunity to use and develop human capacities;	Factors relevant to capability development include providing autonomy and recognition of workers' skills and knowledge. Workers are given tasks, and then their performance is evaluated. Upon the performance assessment (at least if promising), the worker is then given freedom to make decisions.
Opportunity for growth and security	This dimension is related to capacity and knowledge development, opportunities to advance in rank, and the possibility of being expressive and creative with their new knowledge and skills. This dimension is related to the relationships that exist between workers. The absence of prejudice,
Social integration in the work organisation	equality, mobility, relationships, and a sense of togetherness characterises this. Transforming interpersonal relationships into both peer and supervisor relationships and staff and colleague commitment is the aim.
Constitution in the work organisation Work and total life span	This dimension is related to the rules that regulate and protect workers in the organization, such as freedom of expression, justice and equality before the law, labor rights, and labor protection. This category relates to work's influence on family routines, recreation possibilities, free time, and rest. In other words, the influence on family routines is described as the influence of work on family life.
Social relevance of work life	This is related to a company's (organization's) image in society associated with production quality; marketing techniques show the quality of workers at work. In this case, pride in getting a job is replaced with pride in working (there) because the company's (organization's) image is good in society.

#### Methodology

This study uses a qualitative and quantitative descriptive approach using Quality of Working Life with 8 dimensions, which is applied to the working life of *Pendodos*, one of the range of actors involved in palm oil production. The *pendodos* in this study are workers working on community-owned plantations in North Labuhan Batu and South Labuhan Batu Regencies. Specifically, the number of

respondents which participated in this study was 300 respondents, consisting of *pendodos* on their own land or other people's land. Data collection was carried out using both in-depth interviews and distributing questionnaires to *pendodos*. Data collection was carried out by distributing questionnaires to pendodos. To deepen the data from the results of distributing the questionnaire, in-depth interviews were conducted with 5 pendodos and 5 oil palm plantation owner. Data analysis was carried out using the data

triangulation method, namely analysing findings in the field by comparing the results of interview data, observations, previous published research, and other documents related to the focus of the study on Quality of Working Life.

#### **Result and Discussion**

#### Adequate and Fair Compensation

This category is related to pay and aspects such as work situation, responsibilities, and training. Other parameters,

such as the distribution of profits and results, the relationship between supply and demand, and the average salary of workers, can reflect wage fairness in the organization. Other aspects that are additional to this dimension such as fair compensation, salaries commensurate with the results of their work, bonuses as a form of appreciation for work results, and additional costs for food, transportation, medical, etc. for workers (Sabonete et al., 2021). The results of research in the field show the categories of adequate and fair compensation mentioned in Table 1 as below:

Table 1: Aded	quate and	Fair Com	pensation.
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No.	Statements	SA	Α	D	DA	SDA
1	The salary I receive now is sufficient for my basic daily needs, including those with a family, including wife and children.	22 (4,3%)	116 (38,7%)	14 (4,7%)	88 (29,3%)	30 (20%)
2	The salary I receive now is commensurate with the tasks I do	44 (14,7%)	112 (37,3%)	20 (6,7%)	72 (24%)	52 (17,3%)
3	The salary I receive now is the same as colleagues of the same type as me	62 (20,7%)	202 (67,3%)	8 (2,7%)	26 (8,7%)	2 (0,7)
4	The salary I receive now is according to the responsibilities I have been given and by usual work standards.	32 (10,7%)	150 (50%)	4 (1,3%)	80 (26,7%)	34 (11,3)
5	The welfare assistance I receive from where I work, such as medical treatment, hospital fees, food allowance, transport allowance, personal loans, etc., is satisfactory.	36 (12%)	54 (18%)	12 (4%)	102 (34%)	96 (32%)
6	The bonus I receive at the end of each year or during the holidays is satisfying because it is adjusted to my achievements	46 (15,3%)	160 (53,3%)	18 (6%)	54 (18%)	22 (7,3%)

Source: Data Processing in SPSS, 2023

The first statement concerns whether the salary received by the respondent is sufficient to meet basic daily needs. From the field study, the answers from the respondents were obtained. In this case, the basic needs referred to are daily living, ranging from food to clothing. Judging from the majority of responses, respondents appear to agree with the statement above that the wages they receive are sufficient for their daily living needs. Some respondents even added that they must be able to manage their salaries to meet their needs (though that in itself does not automatically signal full satisfaction). Most of respondents stated that they had to look for other jobs to meet their living needs. Apart from working as pendodos, people in this area also have other jobs as cattle breeders. Pendodos usually have cattle which is a form of assistance provided by the government through farmer groups.

The second statement concerns the salary respondents receive per the tasks they have carried out. This statement seeks to probe the conformity between performance and wages received by *pendodos* regarding the welfare of workers on oil palm plantations. Data from the field shows that most answers given by respondents where the answer option "Agree" with a total of 56 people (37.3%) where, according to the workers, the wages they received were based on their work tasks to be performed. However, 26 respondents (17.3%) stated that they strongly disagreed with this statement since they also calculated the work risks and time, they spent grinding palm fruit.

The third statement concerns the similarity in the salary received with fellow dodos. Data found in the field shows that several respondents stated that the wages for each *dodos* could differ depending on how much palm fruit the worker could produce. However, unlike *pendodos* who work as a team, their wages usually will be the same as their

teammates. Data from the questionnaire results show that pendodos who work at the research location have the same wages as their fellow *pendodos* teammates, as stated by 101 respondents (67.3%) who agreed and 31 respondents who strongly agreed (20, 7%) with this proposition. In contrast, 13 respondents (8.7%) said they did not agree with this statement, and 1 respondent (0.7%) said they strongly disagreed. This is supported by facts in the field where pendodos can both work as a team and as individuals. In other words, pendodos can be asked to work in the palm oil plantation by the palm oil plantation owner as an individual or a group. The following statement concerns the salary received by the pendodos by the responsibilities and conditions of usual work standards. According to the most significant number of respondents, namely 75 people (50%), who agreed with this statement,, their wages as pendodos were in line with the responsibilities and performance they carried out while doing fruit dodos. The wages received by pendodos vary depending on whether or not they have means of transportation or vehicles. Pendodos who own vehicles earn higher wages than pendodos who do not own vehicles. This is because the transportation process is easier if the pendodos have a vehicle. The plantation owner will provide money for oil or transportation for pendodos who have vehicles. Usually, the cost of transporting palm oil is IDR 200/kilo. As stated by one informant who is a plantation owner in Aek Pamingke as follows:

"... the cost of dodos per kilogram is not the same. In my place, the price hasn't changed for almost 11 years, the price is 200 silver per kilogram. In other places, there are still 150 per kilogram...

The fifth statement concerns welfare assistance that *pendodos* have received while working on the plantation, such as medical treatment, hospital fees, food money, etc.

The most common answer, namely by 51 respondents (34%), disagreed with this statement. This was supplemented by the responses of 48 respondents (32%) who chose the answer option of strongly disagreeing with this statement. Based on data from in-depth interviews with one of the pendodos (namely AR, 33 years old and residing in Sei Tualang Village), welfare assistance like this has never been received by pendodos working on privately-owned plantations. It is different if pendodos work at PTPN or other private plantations; pendodos will receive assistance like the statement above. Before working as, a pendodos on a people's plantation, the informant (Mr AR) had worked on a state-owned plantation. This informant conveved his experience while working on the PTPN Plantation. According to him, workers' training and welfare are given priority, in contrast to workers on people's plantations who receive training activities from the farmer groups they participate in. According to AR, workers are always given financial aid, health, and bonuses because contracts with plantations bind workers. In contrast, workers on privately owned plantations are not bound by agreements and work on different plantations; their chances of receiving such assistance are minimal. However, if a worker experiences a work accident, the plantation owner will help with the worker's medical costs. However, informants admitted that work pressure on government-owned plantations was greater than on community-owned plantations.

The sixth statement concerns bonuses received by respondents on big holidays or at the end of the year. Based on the most frequent type of answer, respondents returned the answer option "Agree", with the number of respondents being 80 people (53.3%) followed by 23 respondents (15.3%). Data obtained from in-depth interviews show that

even though *pendodos* are not bound to work or do not have a work contract with the plantation owner, this does not deny workers the opportunity to receive end-of-year bonuses. As stated by one of the heads of farmer groups who is also a plantation owner as follows (Mr LT- 36 years):

"Our workers don't have a work contract, because they are only hired during the harvest so there's no need to use a contract. So, there's a possibility that the workers will change, but there are also those who stay and that's the one we employ. It all depends on the quality of work and the trust that exists between us"

The solidarity and culture that is still strong in this plantation community, which means that the attitude of sharing with others is still maintained. Therefore, it is common for workers to receive year-end bonuses even though they no longer work with the plantation owner. This section shows that there are differences in wages received by *pendodos*. *Pendodos* who have transportation will get higher wages compared to *pendodos* who do not have transportation. *Pendodos* have transportation work, from harvesting and transporting fruit to marketing the fruit to the toke. This is different from *pendodos*, which do not have a means of transportation and only work for harvesting activities. This is what causes the emergence of wage inequality for *pendodos*.

## Safe and Healthy Working Conditions

This dimension includes physical conditions, working hours and overtime pay, work safety such as personal protective equipment. Work situations are not meant to harm workers while working, such as by pollution, noise and stink. In other words, this dimension includes health and work environment. The statements regarding this dimension are:

Table 2: Safe and Healthy Working Condition.

No.	Statements	SA	Α	D	DA	SDA
1	My work environment is safe (not dangerous for my physical and mental safety), comfortable (avoids danger, pollution, and noise and diseases	84 (28%)	152 (50,7%)	26 (8,7%)	28 (9,3%)	10 (3,3%)
2	My workplace has work safety equipment (helmets, gloves, etc.) and work infrastructure (dodos, egrets, etc.) that function well.		64 (21,3%)	18 (6%)	84 (28%)	120 (40%)
3	The plantation where I work is willing to bear all risks due to work accidents, has minimized work accidents, and pays attention to K3 and BPJS (Health Insurance)	18 (6%)	44 (14,7%)	20 (6,7%)	94 (31,3%)	124 (41,3%)
4	The farm where I work pays attention to the age limits of workers and their safety	14 (4,7%)	28 (9,3%)	2 (0,7%)	86 (28,7%)	170 (56,7%)

Source: Data Processing in SPSS, 2023

The first statement is regarding a safe and comfortable working environment for workers on plantations. Data from distributed questionnaires showed that 152 respondents (50.7%) stated that their work environment was safe and comfortable. The majority of plantation environments in Aek Pamingke Village and Sei Tualang Village are plantations owned by the people themselves. Several interviews conducted indicated that plantation owners need to provide facilities and infrastructure to protect the safety, comfort, and security of their workers. However, workers admitted that they never used personal protective equipment such as helmets, gloves, glasses, and so on when chopping fruit. As mentioned by Suryadi, a harvester (pendodos) from

Aek Pamingke Village with 15 years of experience as a *dodos*, this appears to look as follows:

"We never use personal protection like that here. We've been doing dodos for a long time, so we know how to dodos properly so that the thorns don't hit us. ... "So, you could say that because we have experience, sometimes wearing personal protection is no longer necessary. Even if we want to wear a work helmet, whether we like it or not, we can buy it ourselves using our money ..."

Related to worker comfort, previous research in palm oil mills in North Sumatra also discussed the comfort felt by workers related to the pain experienced after work (Henry et al., 2015; Sukadarin et al., 2016). Palm oil plantation workers

feel pain in the back, waist, neck, hands, etc. This is the impact of the manual use of tools. This kind of pain is indeed experienced by Pendodos who work on this people's plantation. However, their long experience makes them feel that this pain is not a problem and they can solve it themselves. In other words, personal protective equipment appears perhaps rather to be the responsibility of each worker, so equipping themselves with personal protective equipment is a task and something that workers must prepare themselves. As informant S mentioned above, he spends his own money to protect himself from dangerous things while working. Many respondents considered that working as a dodos is a safe job. Not many work accidents occurred while they were working. However, there were still cases of work accidents that occurred among pendodos workers. As mentioned by informant A, his co-worker had experienced a work accident where when he was chopping palm fruit: a palm thorn fell and hit his co-worker in the eye. As a result of this accident, his co-worker was taken to hospital for treatment. Another case is a palm fruit falling on the head of a pendodos. Another informant, namely A, actually provided differences and views regarding work safety on people's plantations and private plantations as follows:

"When it comes to that, it's very different. There is no personal protective equipment in this palm oil plantation whereas we only provide these dodos. It's different from private plantations; my brother used to work on private plantations. Everything is given, the salary is big, the bonuses are big, everything comes with it. That's all I often want; the work pressure is high."

From the interview extract above, it can be seen that private and state-owned plantations pay more attention to the safety of their workers when they are working, in contrast to people-owned plantations. This is caused by work contracts, since people's plantations do not have work contracts with their workers, so there is no continuous relationship between workers and plantation owners. The above characterization is related to the following statement regarding the availability of work safety equipment in the workplace. Most respondents "strongly disagreed" with this statement

(40%), followed by 84 respondents (28%) who "disagreed". This data further strengthens the fact above that these people's plantations do not provide safety equipment for their workers. Only a few of these plantations offer safety equipment for their workers. The unavailability of work safety equipment on people's plantations makes workers increasingly vulnerable to work accidents while crushing palm fruit. Pendodos consider that they are professional workers, and work accidents may occur when and when bad luck strikes. So, what if a work accident occurs on a plantation? Are the risk owners willing to bear the risks experienced by their workers? Based on data obtained from distributed questionnaires, it is known that plantation owners do not want to take the risk of work accidents experienced by *pendodos*. The final statement from this dimension concerns working age restrictions applied by plantation owners. The data obtained shows that plantation owner set no age limit for workers who work on their plantations. The informants stated that plantation owners on people's plantations in South Labuhan Batu and North Labuhan Batu districts did not care about the age of their workers. The plantation owner only looks at a person's ability and performance in crushing palm fruit. If he can, the plantation owner will invite them to work on his plantation. As mentioned in Table 2, several respondents in this study revealed that the respondents had worked on plantations for a long time. This shows that some respondents have worked on plantations since they were teenagers. Some respondents also stated that they had started working in the palm oil plantation to help their parents when they were young.

## Opportunity to Use and Develop Human Capacities

This dimension discusses factors relevant to capability development, such as providing autonomy for workers and recognition of workers' skills and knowledge. Workers are given tasks and then evaluated on their performance. The performance assessment (if promising at least) is then followed up with the freedom to make decisions. An explanation of this dimension is then described as follows:

Table 3: Opportunity to Use and Develop Human Capacities.

No.	Statements	SA	A	D	DA	SDA
	In general, I have the right and influence in making important					_
1.	decisions regarding my work, without having to be influenced	52 (17,3%)	88 (29,3%)	22 (7,3%)	94 (31,3%)	44 (14,7%)
	by the plantation owner or other superiors					
2.	I was given the opportunity to make plans and evaluations related to the area I wanted to work on	52 (17,3%)	102 (34%)	14 (4,7%)	96 (32%)	36 (12%)
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3.	We always have the latest information about work processes and conditions from the palm oil plantation owner	102 (34%)	128 (42,7%)	10 (3,3%)	34 (11,3%)	26 (8,7%)
	The plantation owner provides sufficient facilities for					
4.	attending education and job training	14 (4,7%)	6 (2%)	10 (3,3%)	154 (51,3%)	116 (38,7%)
	I will continue to work as a dodos worker, because I feel					
5.	satisfied with the tasks given, it turns out they have important	42 (14%)	96 (32%)	40 (13,3%)	88 (29,3)	34 (11,3%)
	meaning for improving my career, knowledge and future.	. ,				

Source: Data Processing in SPSS, 2023

The first statement concerns workers' rights to make their own decisions regarding their work independently without any intervention from any party, especially from the plantation owner. The data shows that *pendodos* do not appear to have the right to make decisions in managing the

plantation. The plantation owner decides on all plantation activities. The second statement concerns the opportunity given to workers to make plans and evaluations related to the plantation area they work on. The data in the table above shows that the 102 respondents (34%) representing the most

significant number of respondents stated that they agreed with the opportunity to make plans and evaluations, and this was not much different from the 52 respondents (17.3%) who gave a "strongly agree" answer to this statement. In other words, the pendodos can evaluate the plantation area he is working on. The third statement regards the information provided by the plantation owner regarding the work process and condition of the plantation to the workers. The data obtained regarding this matter is as follows: 128 respondents (42.7%), representing the most significant number of respondents, "agreed" with the availability information in plantation, followed by 102 other respondents (34%) who strongly agreed. The plantation owner informs pendodos and dodos about his plantation area, especially regarding which areas need to be harvested. The fourth statement concerns the provision of facilities / support plantation owners provide to workers participating in job training and education.

The most significant number of respondents, namely 154 respondents (51.3%), "disagreed" with, the availability of job training and education in workplace and 116 respondents (38.7%) stated they "strongly disagreed" with the proposition posed. The fifth statement concerns the respondent's views on continuing to work as a teacher and their satisfaction with their job. The standard deviation value of this statement is 1.275, which shows the varied distribution of the data. Some workers feel satisfied with their current situation or their situation as a worker, but there are still workers who feel bored with their current job. Based on the results of interviews conducted with pendodos, it can be deduced that the work system carried out in these smallholder plantations is different from the work system in either the state or the privately-owned oil palm plantations. The loose work system in people's plantations means workers' job opportunities are nomadic and that they have erratic schedules. Pendodos will work if there is a call from the plantation owner to help harvest the palm oil. If there is no call or invitation to work for harvesting (*mendodos*), then *pendodos* does not work. Therefore, many *pendodos* look for other jobs, such as raising cattle. This detachment from regular or permanent work causes the working relationship between the *dodo's* owner and the plantation owner to be temporary.

When pendodos are asked to do dodos, usually their work will be supervised by the palm oil plantation owner or a supervisor appointed by the palm oil plantation owner. This is why *pendodos* do not have the right or freedom to express their opinions regarding the plantation area they work on. When they work the working relationship that exists is only temporary. Every pendodos has the freedom to work in the garden only. However, each pendodos is bound by an oral agreement with the garden owner. Pendodos have their schedule in each different garden. For example, every 1st, 11th, 21st, and 31st, pendodos will work in garden A, and every 2nd, 12th, and 22nd work in garden B and so on. Therefore, there needs to be training or activities carried out by plantation owners to improve the abilities of their workers. This differs from PTPN or other private plantations, which have specific terms and regulations. Workers are given training on how to do dodos correctly and well, and how not damage the palm fruit. After the worker has passed the training, the worker is responsible for harvesting palm fruit. Each performance of the pendodos is assessed and evaluated by the plantation.

# Opportunity for Growth and Security

This dimension is related to the development of capacity and knowledge, opportunities to advance in rank and the possibility of being expressive and creative with their new knowledge and skills. The data found related to this dimension are as follows:

Table 4: Opportunity to Growth and Security.

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No.		SA	Α	D	DA	SDA		
1.	The place I work at provides me with the opportunity to improve my knowledge and skills.	36 (12%)	110 (36,7%)	20 (6,7%)	110 (36,7%)	24 (8%)		
2.	The company leader / work group head / my boss does not waste our work abilities and is responsible for improving our work and making it easy for workers to advance.	44 (14,7%)	114 (38%)	32 (10.7%)	96 (32%)	14 (4,7%)		
3.	The company leader / work group head / my boss often motivates us to improve and increase the quality of work.	56 (18,7%)	138 (46%)	14 (4,7%)	68 (22,7%)	24 (8%)		
4.	The company leader / work group head / my boss often urges and directs his team members to develop themselves and advance their careers.	42 (14%)	110 (36,7%)	14 (4,7%)	96 (32%)	38 (12,7%)		
5.	The company leader / work group head / my boss always reminds us about BPJS, which is helpful for us.	6 (2%)	36 (12%)	6 (2%)	130 (43,3%)	122 (40,7%)		
6.	I don't need to worry about work safety or traffic/vehicle accidents.	22 (7,3%)	156 (52%)	8 (2,7%)	64 (21,3%)	50 (16,7%)		

Source: Data Processing in SPSS, 2023

The first statement for this dimension is with regard to the respective respondent's workplace, in terms of providing opportunities for workers to increase their knowledge and self-independence. The results of the questionnaire data processing show data displayed in the table just above where 110 respondents (36.7%), gave a "disagree" response, and 110 respondents said "agreed". This data shows that there are the same number of people who respond to this

statement. However, the responses that pendodos gave were contradictory. A total of 110 workers said they had increased their knowledge and abilities at work, while another 110 workers said that their knowledge and abilities had not increased at work. Further studies were carried out to find out more complex facts in plantation communities. From interview data conducted with MU informants who are treasurers of the Farmers' Group in Aek Pamingke, it is

stated that workers gain knowledge and work skills from childhood. The workers acquired this knowledge and ability from their parents when they were invited to work in the gardens from childhood. People are used to plantation activities because it is a hereditary activity. Therefore, MU informants stated that the initial knowledge and skills came from the family. However, as time goes on and more plantations are worked on, the workers become more trained and understand the performance on the plantation.

The second statement concerns company leaders / work group heads / superiors in terms of whether use their workers' working abilities effectively and actively seek to develop them further. These more senior staff at least in principle or nominally at least are responsible for carrying out work improvement activities and making it easier for workers to advance. From the results of distributed questionnaires, it can be concluded that plantation owners apparently predominantly provide convenience and freedom for their workers to improve their abilities to be even better. The third statement concerns company leaders /work group heads / superiors in terms of how often they motivate their workers to improve their work quality. The data found through data processing of the distributed questionnaires revealed the following: The highest number of respondents, namely 138 respondents (46%), was returned an affirmative answer, which shows that plantation owners do not provide motivation and direction for their workers to improve their performance. This statement emerged as a result of the lack of binding work contracts between the plantation owners and workers. This is a characteristic of the people's plantations in Labuhan Batu and North Labuhan Batu. The relationship that occurs between workers and plantation owners is an economic relationship to improve their economy and not the productivity of the harvest. Apart from that, evaluation activities on employee performance should be carried out so there is no effort to increase and improve the performance of the pendodos. The fourth statement concerns company leaders / heads of work groups / superiors, in terms of how often they urge and direct their team members to develop themselves and advance their careers. The data processing revealed that most respondents' answers were in the "agree" answer option, with 110 respondents (36.7%). This data shows that plantation owners tend to support workers who want to develop their careers, especially if they plan to look for other work.

The fifth statement regards whether company leaders / work group heads / superiors always remind their workers about BPJS, which benefits them. 130 respondents (43.3%) gave "disagree" answers, followed by 122 respondents (40.7%) who "strongly disagreed" with this statement. Based on this data, it can be concluded that the superiors, including plantation owners, hardly ever remember to do this and do not intervene regarding the BPJS used or owned by his workers. Conceptually, the relationship between workers and superior's / plantation owners could be described as a patron-client relationship or a symbiotic relationship of mutualism that should mutually benefit each other. Workers work in plantations to earn wages, and plantation owners need workers to manage and harvest their plantation products. The workers who work on this plantation are nomadic or move around, giving each worker a different experience. Some workers who have established strong social relationships with plantation owners will talk about matters related to BPJS, but most workers never talk about BPJS. And their superiors do not seem to correct this.

The sixth statement concerns whether workers worry about work safety or traffic/vehicle accidents. The standard deviation value for this statement is 1.298. Based on the data found in Table 4, it is known that 156 respondents (52%) stated that they did not feel worried about safety during work. The experience they have over the years adds to workers' confidence that they are used to and can deal with work accidents that might occur. When they have an accident at work, they just assume that they were just unlucky that day *Social Integration in the Work Organization* 

This dimension is related to the relationships that exist between workers. It is probing into the absence or presence of prejudice, equality, mobility, relationships and a sense of togetherness describes this. Transforming interpersonal relationships into peer and supervisor relationships and staff and colleague commitment is desirable. The obtained data for this dimension is as follows:

Table 5: Social Integration in the Work Organization.

No.	Statements	SA	Α	D	DA	SDA
1.	In terms of fellow workers, we do not have feelings of envy, prejudice and social discrimination.	128 (42,7%)	144 (48%)	10 (3,3%)	10 (3,3%)	8 (2,7%)
2.	Even though there are differences between superiors and subordinates, we are still close, and superiors do not look down on us and are willing to work with us.	144 (48%)	144 (48%)	4 (1,3%)	6 (2%)	2 (0,7%)
3.	The working relationship between harvest workers is good, and they respect each other's feelings.	146 (48,7%)	150 (50%)	4 (1,3%)	0	0
4.	My co-workers care about the difficulties I face.	120 (40%)	152 (50,7%)	16 (5,3%)	10 (3,3%)	2 (0,7%)
5.	I feel like I am part of the work group in the garden I work on.	132 (44%)	156 (52%)	12 (4%)	0	0
	I have the opportunity to be appointed as an employee at					
6.	the plantation where I work, considering my experience and work performance.	16 (5,3%)	32 (10,7%)	16 (5,3%)	128 (42,7%)	108 (36%)

Source: Data Processing in SPSS, 2023

The first statement regarding fellow workers posits that workers do not have feelings of envy, prejudice and social discrimination. 144 respondents (48%) "agreed" with this, and 128 respondents (42.7%) stated that they "strongly

agreed" with this statement. This suggests that workers on this plantation still uphold family values and solidarity among themselves. The second statement is, "Even though there are differences between superiors and subordinates, workers remain close, and superiors do not look down on them and are willing to cooperate with workers". The standard deviation value for this statement is 0.685, with the data distribution as follows: the most frequent type of response was in the "agree" and "strongly agree" answer choices, each with 144 (48%).

The third statement proposed that the working relationship between harvesting (*men dodos*) workers is good, and that they respect each other's feelings. Data in the field showed that 150 respondents (50%) gave an "agree" response, followed by 146 respondents (48.7%) who "strongly agreed" with this statement. One can conclude from this that the relationship that occurs between workers on people's plantations is good, and that they care for each other's feelings. Solidarity between plantation workers appears to be still well established by the characteristics found of plantations located in rural areas.

The fourth statement concerns the material presence of initiatives to help work partners experiencing difficulties. The standard deviation value for this statement is 0.762. 152 respondents (50.7%) gave an "agree" answer to this statement, followed by 120 respondents (40%) who gave a "strongly agree" response. The fifth statement concerns

whether workers were feeling part of the workgroup on the plantation. The standard deviation value for this statement is 0.567, with the most frequent answer, by 156 respondents (52%), was affirmative of this. The sixth statement concerns the opportunities that workers have to be appointed as employees on the plantation where they work, based on the worker's experience and work performance. "Disagree" with that that they were afforded those was the answer choice most often chosen by respondents with 128 respondents (42.7%), followed by 108 other respondents (36%) who "strongly disagreed" with this statement. On the other hand, 320 respondents (10.7%) gave an "agree" answer, and 16 respondents (5.3%) "strongly agreed" with this statement. In contrast, 16 respondents (5.3%) hesitated to answer this statement. The standard deviation for this statement is 1.149.

# Constitutionalism in the Work Organization

This dimension is related to the rules that regulate and protect workers in the organization. Such as freedom of expression, justice and equality before the law, labour rights and labour protection.

Table 6: Constitutionalism in the Work Organization.

No.	Statements	SA	Α	D	DA	SDA
1.	I am satisfied with my rights and freedom to express my opinions at work.	62 (20,7%)	176 (58,7%)	22 (7,3%)	38 (12,7%)	2 (0,7%)
2.	I am satisfied with the services of the company / organization where I work in handling matters relating to the interests and rights of workers.	42 (14%)	118 (39,3%)	40 (13,3%)	86 (28,7%)	14 (4,7%)
3.	Leaders demonstrate an open and understanding attitude towards differences of opinion in open communication regarding employee duties.	66 (22%)	178 (59,3%)	14 (4,7%)	38 (12,7%)	4 (1,3%)
4.	There are elements of corruption, collusion, nepotism and red tape in the division of labour in the field/plantation.	18 (6%)	24 (8%)	18 (6%)	144 (48%)	96 (32%)

Source: Data Processing in SPSS, 2023

The first statement concerns whether workers are satisfied with their personal rights and freedom to express opinions at work. From the data in the table just above based on the field results obtained, it can be seen that 176 respondents (58.7%) "agreed" that they were satisfied in this regard, followed by 62 respondents (20.7%) who gave "strongly agree" response. It can be concluded therefore that most workers who work on people's plantations feel free to express their opinions regarding their work to the plantation owners. An interview informant confirmed that freedom of opinion was given by the plantation owner regarding the work process that the workers would carry out. The informant Mr MU gave his statement regarding workers' freedom to express their opinions:

"It all depends on the owner of the garden. There are garden owners who are willing to accept input or suggestions from the workers but there are also those who don't accept it. It's true that the ones who know the situation of the garden are the workers so there's actually no harm in listening to what the workers have to say. In the end the decision is taken by the garden owner"

However, this does not mean that the plantation owner follows all opinions expressed by workers. Workers only provide opinions or solutions related to the field of work they are part of, and even that may or may not be actioned upon. The second statement concerns workers whether are satisfied with the company's services, especially in handling matters relating to workers' interests and rights. From the data in the table above, it appears that most respondents were satisfied with the services provided by plantation owners in handling their interests and rights as workers since118 respondents (39.3%) who "agreed" with this statement, followed by 42 respondents (14%) who "strongly agreed". However, some pendodos feel dissatisfied or even dissatisfied with the services provided by plantation owners regarding their interests and rights since 86 respondents (28.7%) "disagreed" with the proposition and 14 respondents (4.7%) "strongly disagreed". 40 respondents (13.3%) were hesitant to answer regarding this statement. The third statement concerns whether leaders demonstrate an open and understanding attitude towards how to handle differences of opinion regarding employee duties. The field data shows that respondents gained experience working with palm oil plantation owners with palm oil plantation owners who have an open and communicative attitude concerning their division of tasks. The most frequent t response, that is by178 respondents (59.35%), chose answer option "agree", followed by 66 respondents (22%) who "strongly agreed" with the

positive proposition. A smaller number of relatively respondents had experience working with palm oil plantation owners who needed to be more communicative and open with *dodos*, as can be seen from 38 respondents (12.7%) who disagreed, followed by 4 respondents who strongly disagreed. The fourth statement concerns elements of KKN and red tape that occur in the division of labour in the field/ palm oil plantation The data returned by respondents appears to shows no experience from the *pendodos* regarding KKN (corruption, collusion and nepotism) activities in the division of labour on the plantations where they work. This is represented by 144 respondents (48%) who gave a "disagree" answer to this statement proposing an existence of KKN/red tape, followed

by 96 respondents (32%) who gave a "strongly disagree" answer. This differs from 24 respondents (8%) who gave an "agree"-response and 18 respondents (6%) who "strongly agreed" with the statement put to them. Seemingly, *Pendodos* still have experience with KKN and red tape activities in the division of labour on the plantation, although this appears to occur only to a small extent.

## Work and Total Life Space

This dimension relates to the influence of work on family routines, recreation possibilities, free time and rest. In other words, the influence on family routines is described as the influence of work on family life.

Table 7: Work and Total Life Space.

No.	Statements	SA	Α	D	DA	SDA
1.	I am satisfied with my current job because I still have time for family matters and events with my neighbours.	178 (59,3%)	114 (38%)	6 (2%)	2 (0,7%)	0
2.	After finishing work, I am still strong enough to carry out activities outside of routine work, such as pursuing hobbies, chatting with friends or neighbours, exercising, attending community/family events, etc.	<sup>J</sup> 182 (60,7%)	104 (34,7%)	6 (2%)	6 (2%)	2 (0,7%)
3.	There is no high work pressure when carrying out work, such as too heavy a load, often exceeding work time limits, insufficient rest time, etc.	138 (46%)	136 (45,3%)	8 (2,7%)	14 (4,7%)	4 (1,3%)
4.	I am satisfied that I can carry out various other jobs freely without disturbing my routine work and work responsibilities.	162 (54%)	132 (44%)	4 (1,3%)	2 (0,7%)	0
5.	The quality of my daily life outside of work hours, is fun and joyful and fulfilling.	158 (52,7%)	138 (46%)	0	4 (1,3%)	0

Source: Data Processing in SPSS, 2023

The first statement is about *pendodos* in terms of whether they feel satisfied with their current job, due to still having time for family matters and events with neighbours. The standard deviation value of responses to this statement is 0.572. Based on the data in the table, it can be seen that workers on people's plantations in this location (Labuhan Batu and North Labuhan Batu) are satisfied with the work they are currently doing as a 'pendodos'. Respondents felt that with their work as pendodos they still had free time to attend family events or quality time with their family. This is in accordance with the predominant pattern in respondents' answers choosing the response option "strongly agree" with 178 respondents (59.3%), followed by 114 respondents (38%) who gave an "agree" return. Working as a dodo's worker is a seasonal job where workers are only needed when the harvest season arrives. If the harvest season has not yet arrived or is over, pendodos do not have work; therefore, the field data confirmed that pendodos in this area have other jobs in order to support the family and household needs.

The second statement regarding the activities carried out by *pendodos* after finishing work, and probes into whether *pendodos* think they are still strong enough to carry out activities outside of routine work such as pursuing hobbies, chatting with friends or neighbours, exercising, attending community/family events, etc. Based on the obtained field data above, it appears that *pendodos* consider that they are still able to carry out other activities outside of their routine work as stated by

182 respondents (60.7%) who "" strongly agreed with this proposition. Furthermore, 104 respondents (34.7%) also gave affirmative ("agree") responses to this statement.

The third statement concerns the posited absence of high work pressure when carrying out work, such as burdens that are too heavy, often exceeding work time limits, not enough rest time, etc. The majority of respondents in this study indicated did not have a high work pressure when doing their work, as stated by 138 respondents (46%) who chose "strongly agree" answer, and 136 respondents (45.3%) who gave also gave an affirmative answer ("agree") to this statement. In contrast to this, 14 respondents (4.7%) stated that they had work experience with a high pressure by choosing the "disagree" response option to this statement. Working hours are only carried out during the palm harvest season, causing *pendodos* not to have high work pressure all the time from this occupation.

The fourth statement concerns worker satisfaction in carrying out various other jobs freely without disturbing their routine work and job responsibilities. The field data obtained shows that overwhelmingly pendodos appear to be satisfied with the other work they do because it seemingly does not interfere with their routine work. This was indicated by 162 respondents (54%) who gave a "strongly agree" answer to this statement and by 132 respondents (44%) who gave an affirmative ("agree") answer to this statement.

The fifth statement is regarding the quality of workers' daily life outside working hours in terms of being fun,

joyful and satisfying. The standard deviation for this statement is 0.575. From the data above it appears that workers have a pleasant and joyful quality of life. This means that workers do not experience depression or stress after doing their work. This was indicated by 158 respondents (52.7%) opting for the answer choice "strongly agree", followed by 138 respondents (46%) with an "agree" return to this statement.

### Table 8: The Social Relevance of Work Life.

#### The Social Relevance of Work Life

This is related to the company's image in society related to production quality and marketing techniques for fronting the quality of worker's experience at and in relation to work. In this case, pride in getting a job is replaced with pride in working because a company's image is good in society.

No.	Statements	SA	Α	D	DA	SDA
1.	The plantation where I work always pays attention to positive social activities for workers such as Independence Day, recreation for the family, halal bil halal, etc.	42 (14%)	90 (30%)	16 (5,3%)	96 (32%)	56 (18,7%)
2.	I feel that in the palm oil plantation where I work there is attention to environmental sustainability or attention to people affected by calamities/disasters such as: floods, earthquakes and so on.	42 (14%)	106 (35,3%)	24 (8%)	92 (30,7%)	36 (12%)
3.	The palm oil plantation where I work takes part in advancing national education, such as helping to provide scholarships for workers' children, training for good harvests, training in determining good fruit for harvest, etc.	8 (2,7%)	16 (5,3%)	12 (4%)	108 (36%)	156 (52%)
4.	Donations that are not directly related to plantation operations should still be made, such as: apparatus costs, mass organization costs, etc.	12 (4%)	22 (7,3%)	14 (4,7%)	94 (31,3%)	158 (52,7%)
5.	Farm owners need to be involved in maintaining the morale of their workers	6 (2%)	16 (5,3%)	6 (2%)	116 (38,7%)	156 (52%)

Source: Data Processing in SPSS, 2023

The first statement regarding the palm oil plantation where it is postulated in the testing statement that the pendodos's work environment also always focuses on positive social activities for workers, such as Independence Day, recreation for the family, halal bil halal, etc. From the field data obtained, it can be seen that respondents gave varied answers to this statement with similar frequency across answer options provided to them. The standard deviation value for this statement is 1.386. Several respondents had experiences where the plantation where they worked paid attention to positive social activities for their workers, as mentioned by 90 respondents (30%) who gave an affirmative ("agree") answer, followed by 42 respondents (14%) who "strongly agreed" to this statement. However, other respondents indicated that the plantation where they work does not pay attention to social activities for or of their workers, as stated by 96 respondents (32%) who "disagreed" with this statement and 56 respondents (18.7%) "strongly disagreed" with this statement. Meanwhile, 16 respondents (5.3%) stated that social activities carried out by plantation owners were only carried out occasionally and not routinely. Therefore, these respondents gave a hesitant response to this statement.

The second statement is regarding as to whether the palm oil plantation where *pendodos* work pays attention to environmental sustainability or to communities affected by disasters such as floods and earthquakes and is beneficial. The answers from respondents obtained was varied, with similar frequencies across different options provided. The standard deviation for this statement is 1.303. It appears that several palm oil plantations where *pendodos* work pay attention to preserving the environment or communities experiencing disasters. This was stated by 106 respondents (35.3%) who gave an "agree" answer to this statement, followed by 42 respondents (14%) who "strongly agreed".

The third statement concerns the palm oil plantation where *pendodos* work, advancing national education such as by helping to provide scholarships for workers' children, training pendodos for good harvests, training pendodosin determining what would constitute a good fruit for harvest, etc. The standard deviation value for this statement is 0.965. Based on the data in Table 8 above, it is known that as many as 108 workers or 36% of workers did not receive educational or training assistance from the plantation where they lived. It can be concluded from the field responses that the plantation where the *pendodos* work does not advance national education, especially in providing educational assistance to the workers' children or in activities to improve the workers' skills.

The fourth statement is regarding donations not directly related to plantation operations which arguably should still be made for, apparatus costs, mass organization costs, etc. Respondents gave varied answers to this statement, with a standard deviation value for this statement of 1,089. From the field data obtained, it seems that respondents "disagree" that donations that are not directly related to plantation operations are made by the plantation owners. The fifth statement concerns moral enforcement among workers, in terms of whether it needs to be interfered with by plantation owners. From the field data, I can be surmised that upholding morals among workers does not need to be interfered with by plantation owners in the workers' view. One informant, Mr. A, even stated that moral matters are a person's rights or privacy and do not need to be interfered with by the plantation owner. Informant A's statement is contained in the following interview excerpt:

"In my opinion, moral matters return to each individual's business and do not need to be taken care of by the plantation owner. This means that moral matters are different from work matters. Moral matters are personal matters and do not need to be managed by other people, but if it is a family matter we can still accept it"

People's plantations can be said to be independent plantations. The community, namely as the owner of the plantation, manages the plantation from planting to harvesting without any intervention from other parties. They try to solve the problems faced by plantation owners by asking for help from farmer groups in their area. Next, the farmer group tries to find a solution that is felt by the plantation owner. One of the problems faced by plantation owners is the falling price of palm fruit which affects workers' income and wages. Low income will affect plantation productivity. This is due to the ability of the garden owner to buy fertilizer. It is not uncommon for garden owners to reduce the intensity of fertilization for their land from 1 year to 4 times to 1 year to 3 times fertilization. If the plantation owner cannot afford fertilizer, then the palm oil is not fertilized. The existence of farmer groups is also unable to help plantation owners overcome the ease of access to obtain fertilizer. This is because there is no schedule or information regarding when subsidized fertilizer from the government will be provided. To get cheaper fertilizer prices, plantation owners still depend on subsidized fertilizer provided by the government. This is different from Harianto (Harianto, 2019), who saw that the fall in palm oil prices had a positive impact on plantations with other types of crops. According to him, with the fall in palm oil prices, farmers will switch to planting other crops such as rubber, cocoa and coffee. However, for people in smallholder plantations it is no longer possible to change the type of crop, especially rubber. This is because this plantation is a transition from rubber plantations. As a result of the low price of rubber and its economic unprofitability, people in this area changed their crops to oil palm. When people start planting oil palm, the community's economy begins to improve and become more prosperous.

## Conclusion

Pendodos who work on people's plantations have the task of harvesting, transporting and selling the harvest. Pendodos in those settings have no contractual relationship with the plantation owner, so during harvest, Pendodos can work on 2 or 3 plantation areas at once. This source of a likely lack of engagement between workers and plantation owners with types of plantations owned by the community means that there are no efforts to increase skills and training activities carried out by plantation owners. The lack of written attachment between the pendodos and the plantation owner means that the pendodos cannot intervene on the plantation land. This is different from state-owned and private plantations which often provide training to their workers. Training activities carried out include maintenance processes, harvesting, safety training and so on. In other words, increasing the productivity of palm oil products does not involve the *pendodos* and is not the task of the pendodos. Plantation owners have made various efforts to increase their palm oil productivity. However, palm oil plantation owners need help with

getting quality fertilizer and seeds. Falling palm oil prices are also a crucial problem for plantation owners. If palm oil prices continue to fall, it will become increasingly difficult for plantation owners to buy fertilizer. It is concluded that the existence of farmer groups cannot help plantation owners overcome the ease of access to obtain fertilizer. This is because there is no schedule or information regarding when subsidized fertilizer from the government will be provided. The community in Labuhan Batu has experienced economic improvements since switching from rubber plantations to oil palm plantations. However, efforts are still needed to increase palm oil productivity to have implications for improving the livelihoods of workers and their households / families. Based on the data above, it can be concluded that Pendodos's quality of working life is still low. Quality of working life does not even affect plantation productivity.

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#### References

- Abebe, A., & Assemie, A. (2023). Quality of work life and organizational commitment of the academic staff in Ethiopian universities. *Heliyon*, *9*(4), e15139. doi: <a href="https://doi.org/10.1016/j.heliyon.2023.e15139">https://doi.org/10.1016/j.heliyon.2023.e15139</a>
- Afriyanti, D., Kroeze, C., & Saad, A. (2016). Indonesia palm oil production without deforestation and peat conversion by 2050. *Science of the total environment*, 557, 562-570. doi: <a href="https://doi.org/10.1016/j.scitotenv.2016.03.032">https://doi.org/10.1016/j.scitotenv.2016.03.032</a>
- Ahmad, S. (2013). Paradigms of quality of work life. *Journal of Human Values*, 19(1), 73-82. doi: https://doi.org/10.1177/0971685812470345
- Bakar, M. A., Rashid, N. F. A., & Syahlan, S. (2018). Comparison of an effective working hour and harvesting cost between manual harvesting (chisel and sickle) and mechanised harvesting (CKAT and motorised cutter) in oil palm plantation. *International Journal of Engineering & Technology*, 7(2), 282-286. doi: <a href="https://doi.org/10.14419/ijet.v7i2.29.13333">https://doi.org/10.14419/ijet.v7i2.29.13333</a>
- Christian, A. (2018). Unjuk Kerja Alat Pemotong Pelepah Sawit Tipe Dodos Secara Manual Dan Mekanis Menggunakan Mesin Husqvarna 327 Ldx. *Jurnal Teknik Pertanian Lampung (Journal of Agricultural Engineering)*, 7(1), 15. doi: <a href="https://doi.org/10.23960/jtep-l.v7i1.15-24">https://doi.org/10.23960/jtep-l.v7i1.15-24</a>
- Febrian, R. A., & Yuza, A. F. (2023). Plantation Sector Policy Governance by the Regional Government of Riau Province (Leading Commodities Study). *Jurnal Ilmiah Peuradeun (JIP), the Indonesian Journal of the Social Sciences, 11*(1), 345-362. doi: <a href="https://doi.org/10.26811/peuradeun.v11i1.802">https://doi.org/10.26811/peuradeun.v11i1.802</a>

- Hamed Shokripour, H. S., Wan Ishak, W., Ramin Shokripour, R. S., & Zahra Moezkarimi, Z. M. (2012). Development of an automatic cutting system for harvesting oil palm fresh fruit bunch (FFB). *African Journal of Agricultural Reseearch* 7(17), 2683–2688. doi: <a href="https://doi.org/10.5897/AJAR11.1648">https://doi.org/10.5897/AJAR11.1648</a>
- Hammond, M., Owusu, N. O., Nunoo, E. K., Boampong, G., Osman, A., Panin, A., et al. (2023). How quality of work-life influence employee job satisfaction in a gas processing plant in Ghana. *Discover Sustainability, 4*(1), 10. doi: <a href="https://doi.org/10.1007/s43621-023-00127-9">https://doi.org/10.1007/s43621-023-00127-9</a>
- Hanisah, H., Hanjani, M., Supristiwendi, S., Gustiana, C., & Mastuti, R. (2023). The Analysis of Factors Influencing Employee Performance in Palm Oil Harvesting at PT. Semadam. *JIA (Jurnal Ilmiah Agribisnis): Jurnal Agribisnis dan Ilmu Sosial Ekonomi Pertanian, 8*(5), 441-449. doi: https://doi.org/10.37149/jia.v8i5.733
- Harianto. (2019). *Palm oil spills on the performance of non-palm plantations in Indonesia: an empirical analysis.*Paper presented at the IOP Conference Series: Earth and Environmental Science, 336(1), 012011. https://doi.org/10.1088/1755-1315/336/1/012011
- Henry, L. J., Jafarzadeh Esfehani, A., Ramli, A., Ishak, I., Justine, M., & Mohan, V. (2015). Patterns of workrelated musculoskeletal disorders among workers in palm plantation occupation. *Asia Pacific journal of* public health, 27(2), NP1785-NP1792. doi: <a href="https://doi.org/10.1177/1010539513475657">https://doi.org/10.1177/1010539513475657</a>
- Herpertz, S. (2022). Beschleunigung und Entschleunigung, ein vielschichtiges Problem. *Die Psychotherapie*, 67(5), 367-373. https://doi.org/10.1007/s00278-022-00593-v
- Jin, J. (2022). Factors associated with the quality of work life among working breast cancer survivors. *Asia-Pacific Journal of Oncology Nursing*, 9(2), 97-104. doi: <a href="https://doi.org/10.1016/j.apjon.2021.11.005">https://doi.org/10.1016/j.apjon.2021.11.005</a>
- Jokinen, E., & Heiskanen, T. (2013). Is the measured good quality of working life equivalent to strategically strong HRM system? *Procedia-social and behavioral sciences*, 81, 131-141. doi: <a href="https://doi.org/10.1016/j.sbspro.2013.06.401">https://doi.org/10.1016/j.sbspro.2013.06.401</a>
- Lefebvre, H. (2017). Everyday life in the modern world (1st Ed ed.). Routledge. doi: <a href="https://doi.org/10/4324/9781351318280">https://doi.org/10/4324/9781351318280</a>
- Leitão, J., Pereira, D., & Gonçalves, Â. (2021). Quality of work life and contribution to productivity: Assessing the moderator effects of burnout syndrome. *International Journal of Environmental Research and Public Health*, 18(5), 2425. doi: <a href="https://doi.org/10.3390/ijerph18052425">https://doi.org/10.3390/ijerph18052425</a>
- Mamaghaniyeh, M., Sadeghi, M., & Amani, S. (2019). The quality of working life among employees. *International Journal of Human Capital in Urban Management*, 4(3), 213-222. doi: <a href="https://doi.org/10.22034/IJHCUM.2019.03.06">https://doi.org/10.22034/IJHCUM.2019.03.06</a>
- Mohamad, M. F., Sowat, S. N., Selamat, H., Azaman, A., & Harith, H. H. (2023). Structural Design of A Passive Wearable Exoskeleton To Assist Oil Palm Harvesting Operation. *Journal of Oil Palm Research*, *35*(4), 653-667. doi: https://doi.org/10.21894/jopr.2022.0075

- Myzabella, N., Fritschi, L., Merdith, N., El-Zaemey, S., Chih, H., & Reid, A. (2019). Occupational health and safety in the palm oil industry: a systematic review. *The International Journal of Occupational and Environmental Medicine*, 10(4), 159–173. doi: https://doi.org/10.15171/ijoem.2019.1576
- Nabila, A., Pratiwi, R., & Usman, O. (2019). Effect of work experience, age of employee, training, emotional intelligence, of work productivity. SSRN Electronic Journal, 17. doi: <a href="https://doi.org/10.2139/ssrn.3313230">https://doi.org/10.2139/ssrn.3313230</a>
- Prasasti, I. (2020). Pengaruh Lingkungan Kerja Terhadap Kinerja Karyawan Pada LLDIKTI Wilayah III Jakarta. *Widya Cipta: Jurnal Sekretari Dan Manajeme*, 4(1), 76-82. doi: <a href="https://doi.org/10.31294/widyacipta.v4i1.7699">https://doi.org/10.31294/widyacipta.v4i1.7699</a>
- Ramli, A. S., Bakri, M. A. M., Ahmad, M. R., Mustaffa, N. K., Khalid, M. R. M., & Azaman, I. H. (2023). Performance Comparison of Harvesting Performance of Different Harvesting Methods in Oil Palm Plantation. *Advances in Agricultural and Food Research Journal*, 4(2), 1-8. doi: https://doi.org/10.36877/aafrj.a0000410
- Sabonete, S. A., Lopes, H. S. C., Rosado, D. P., & Reis, J. C. G. d. (2021). Quality of work life according to Walton's model: Case study of the higher institute of defense studies of Mozambique. *Social Sciences*, 10(7), 244. doi: <a href="https://doi.org/10.3390/socsci10070244">https://doi.org/10.3390/socsci10070244</a>
- Shigetomi, Y., Ishimura, Y., & Yamamoto, Y. (2020). Trends in global dependency on the Indonesian palm oil and resultant environmental impacts. *Scientific Reports, 10*(1), 20624. doi: https://doi.org/10.1038/s41598-020-77458-4
- Sugarindra, M., Suryoputro, M. R., & Novitasari, A. T. (2017). *Hazard identification and risk assessment of health and safety approach JSA (Job Safety Analysis) in Plantation Company*. Paper presented at the IOP Conference Series: Materials Science and Engineering, 215, (1), 012029. <a href="https://doi.org/10.1088/1757-899X/215/1/012029">https://doi.org/10.1088/1757-899X/215/1/012029</a>
- Sukadarin, E. H., Deros, B. M., Nawi, N. S. M., Ghani, J. A., Ismail, A. R., & Zakaria, J. (2016). Back pain and the observed factors among oil palm workers. *International journal of engineering technology and sciences, 3*(1), 70-78. doi: <a href="https://doi.org/10.15282/ijets.5.2016.1.9.1048">https://doi.org/10.15282/ijets.5.2016.1.9.1048</a>
- Susana, I. G. B., Putra, I. K. P., & Adhi, I. G. (2024). Aplikasi Alat Bantu Ergonomis Pada Kerja Manual Berdasarkan Kajian Ergo-Mechanical Untuk Petani Kecil. *Energy, Materials and Product Design, 3*(1), 176-183. doi: <a href="https://doi.org/10.29303/empd.v3i1.4505">https://doi.org/10.29303/empd.v3i1.4505</a>
- Tambunan, K. K., Dalmiyatun, T., & Satmoko, S. (2019). Faktor-Faktor Yang Mempengaruhi Kinerja Karyawan Di Perusahaan Perkebunan Kelapa Sawit Pt. Musam Utjing. *JSEP (Journal of Social and Agricultural Economics)*, *12*(1), 29-40. doi: https://doi.org/10.19184/jsep.v12i1.9898