
ACCUPATIONAL SAFETY AND HEALTH MANAGEMENT SYSTEM FOR ZERO ACCIDENTS IN PALM OIL PLANTATION COMPANIES IN WEST BORNEO

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ABSTRACT

This research is a qualitative study that aims to explore the impact of implementing the *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3) and Zero Accident on improving employee performance through the knowledge-sharing process. The research method involved in-depth interviews with factory management, supervisors, and employees, as well as on-site observations. Data analysis was conducted using a qualitative approach, highlighting key findings related to the implementation of *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3), Zero Accident, and knowledge-sharing practices in the work environment. The results showed that the implementation of Zero Accident significantly influenced the awareness of occupational safety and health among employees. The knowledge-sharing process was identified as a key factor in improving collective understanding of safety practices, as well as improving overall performance. The findings contribute to further understanding of how *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3) integrity and Zero Accident can be combined with knowledge-sharing practices to achieve a safer and more productive work environment. The implications of this study can provide practical guidance for palm oil mills and similar industries to improve the effectiveness of their safety strategies by considering knowledge sharing as an important component in developing a sustainable safety culture.

INTRODUCTION

In the world of the palm oil processing industry, almost all processes use auxiliary equipment both manual and even mechanized and automated systems, which in the end always refers to work processes that pose a risk to workers (Almost et al., 2018).

From the data that can be collected through labor data and from the *Badan Penyelenggara Jaminan Sosial* (BPJS), it appears that there are quite large work accidents that occur every year. Meanwhile, the industry must run well and measurably without any work accidents arising from the processes carried out (Liu et al., 2020).

All palm oil industries want this palm oil processing process to be committed to a safe and comfortable process for both workers and management, therefore a Standard Operating Procedure (SOP) is regulated that can guarantee the implementation of work with a method that

is also hired by the government by issuing the application of *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3) which aims to ensure that the process at the *Pabrik Kelapa Sawit* (PKS) does not occur work accidents which in the end the Industry can predicate zero accident *Pabrik Kelapa Sawit* (PKS) (Salmah et al., 2023).

Palm oil is a leading commodity in the plantation sector and a major contributor to foreign exchange for Indonesia to date. Palm oil is a very important commodity so that Indonesia can maintain its position as the world's largest palm oil producer and can gradually become a reference for the vegetable oil industry at the international (global) level. Oil palm is one of the plantation crops that produces the largest economic value per hectare in the world (Khaswarina, 2001). The area of oil palm plantations and the production of oil palm plantations in Indonesia continue to increase every year which is estimated to range between 2-4% (Harahap, 2011). Similarly, Crude Palm Oil (CPO) production, especially for export, is expected to continue to increase at an average of 5-6% per year (Arikunto, 2010).

The increasing demand for CPO exports has led to the development of palm oil companies that build palm oil mills to produce CPO using high-tech machines with large capacities that operate even up to 24 hours per day. Indonesia is the world's largest producer and exporter of CPO to meet domestic and foreign needs, followed by Malaysia, Thailand, Nigeria, Colombia, and Papua New Guinea. According to Ferrianta CPO has ranked highest since 2004 in the world vegetable oil market at around 30 million tons with an average growth of 8% per year. This is supported by the data of *Perkebunan Besar Swasta* (PBS) which accounts for 52.49% of the total area and 56.63% of the total production over the *Perkebunan Rakyat* (PR) and *Perkebunan Besar Negara* (PBN)

To keep pace with the development of palm oil mills, human resources are needed in the number and qualifications as needed. These human resources or labor must have the competence to operate the machines or equipment in the palm oil mill correctly, safely, and according to the Standard Operating Procedure (SOP) to avoid accidents to achieve the zero accident target, whether caused by workers or machines. The type of tools or equipment used can also cause various diseases from a non-conductive work environment, such as dusty rooms, dusty work floors, oily work floors, dark and poorly lit spaces, lack of air circulation with no ventilation, and others (Moyce & Schenker, 2018).

Occupational Safety and Security (OSH) is a term that is usually always associated with a state of freedom from accidents or near-misses (Jakarta, 2013). K3 is a thought and effort to ensure the integrity and perfection both physically and spiritually of the workforce, especially humans, their work, and culture towards a just and prosperous society (Chari et al., 2018).

According to The Occupational Safety and Health Administration (OSHA), to reduce the number of victims of workplace accidents in the industrialized world, accidents should be treated as business crimes for which company owners and managers are held accountable. Company owners must also have empathy and serious attention to every accident in the workplace. Companies with poor industrial space conditions will face workplace accidents. Behind that, many workers do not know their rights to be able to work safely. Based on this picture, the implementation of workplace safety is very important for the industrial world today (Darmastuti, 2010).

Several theories on workplace accidents have been developed, especially related to the factors that can cause workplace accidents. In general, two factors cause accidents, namely

unsafe actions (human factors) and unsafe conditions (environmental factors). According to research, 80-85% of accidents are caused by unsafe actions, namely human factors caused by a lack of understanding and ignoring the importance of using Personal Protective Equipment (PPE) when working (da Silva & Amaral, 2019).

In general, Human Resources (HR) is an important factor of a company, in human resource management all employees in the company as one of the main keys that are important to achieve success (Panggabean, 2020). Work discipline is very beneficial both for the benefit of the organization and for all employees. As for the organization, the existence of work discipline will ensure the maintenance of order and smoothness in carrying out tasks, to obtain optimal results (Hadipoetro, 2014). As for employees, it can create a pleasant work atmosphere and will increase their enthusiasm for work and can also complete their work properly. Thus, to achieve the success and success of the company, a protection and order guideline is needed to get very satisfying work results, so that the company profits employees are also profitable and healthy (Rahmawati et al., 2020).

Lack of knowledge about how to work and ergonomic work attitudes are factors that cause these problems. In their activities during work there are risks encountered in the work, ranging from the occurrence of mild risk incidents to severe risks that result in accidents or work accidents, but often in the present time things that become Occupational Safety and Health (K3) tools are always ignored for various reasons such as not feeling comfortable at work. So it is necessary to warn about the quality of human resources in the consistent implementation of the *Sistem Manajemen Keselamatan dan Kesehatan Kerja (SMK3)*. With the implementation of SMK3, there can be an increase in efficiency, and the productivity of the company can be realized properly (Manu et al., 2018).

OHS issues in Indonesia are still often neglected. This is indicated by the high number of work accidents, of course, it is very concerning that the level of concern in the business world for OHS is still low, even though employees are an important asset of the company. Government Regulation (PP) No. 50 the Year 2012 regarding the implementation of SMK3 has been enacted in Jakarta. The Government Regulation is the implementation of Article 87 of the Law. No. 13 of 2003 concerning Manpower, in PP No. 50 of 2012, all employers are required to implement SMK3, especially companies with a minimum workforce of 100 people or companies with a high potential for work accidents. The importance of implementing SMK3 is to achieve company targets and personal protection for employees in reducing the risk of work accidents and applying to employees using personal protective equipment (PPE).

Human resources are the most important determinant of success in implementing and carrying out the vision, and mission, to achieve company targets. Human resources are very important to get more attention from a company, one of which is by providing Occupational Safety and Health (OHS) protection to all employees (Widiyanti & Airlangga, 2018). Attention in the aspect of OHS training and certification in the HR department for prospective employees also ensures they get an evaluation or assessment of performance. In addition to prospective employees, the department must also train all managers to create performance standards that are considered good by making accurate assessments (Sukmanegara, 2020).

The objectives of the research are to Know the overall picture, review and analyze the application of the *Sistem Manajemen Keselamatan dan Kesehatan Kerja (SMK3)* based on Government Regulation No. 50 of 2012 in Palm Oil Plantation Companies in West Kalimantan

Province, Know the overall picture, review and analyze the application of knowledge sharing related to the *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3) within Palm Oil Plantation Companies in West Kalimantan Province, Know the overall picture, Knowing the overall picture, reviewing and analyzing the various efforts that can be made by Palm Oil Plantation Companies in Kalimantan Province to prevent work accidents in order to create a Zero Accident, Knowing the overall picture, reviewing and analyzing the application of the *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3) in Palm Oil Plantation Companies in West Kalimantan Province which is supported by the application of knowledge sharing in preventing work accidents and improving employee performance, Designing a conceptual model of a management system that can be applied within Palm Oil Plantation Companies in West Kalimantan Province so that *Keselamatan dan Kesehatan Kerja* (K3) can be implemented effectively and efficiently.

METHOD RESEARCH

The method used in this research is ethnography. Ethnography is an empirical and theoretical approach that aims to obtain an in-depth description and analysis of culture based on intensive field research. The purpose of ethnographic research is to provide a holistic picture of the research subject with an emphasis on capturing the daily experiences of individuals by observing and interviewing them and others in contact (Ilbahar et al., 2018).

According to (Creswell & Poth, 2016) "to be able to understand the cultural patterns (clustering) of a group, ethnographers usually spend a long time, both for interviews, observations and in collecting supporting research documents". On the one hand, ethnographic research as part of a qualitative approach is difficult to achieve, because it takes a long time, but on the other hand, this long time can convince us more about the results of the research before determining conclusions.

This research uses ethnographic methods to find out whether the *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3) implemented in the Industry which is also controlled by the government can inhibit the rate of work accidents at Palm Oil Mills (PKS), especially in Palm Oil Plantation Companies in West Kalimantan Province.

The research site is PT Kalimantan Argo Pusaka located in Kayong Regency, North which has not implemented SMK3. The time used by researchers for this research was carried from the date of issuance of the research permit in approximately 2 (2) months.

RESULTS AND DISCUSSION

The population in this study includes Oil Palm Plantation Companies in West Kalimantan Province consisting of Foreign *Penanam Model Asing* (PMA) and *Penanam Modal Dalam Negeri* (PMDN) / Local Companies. From so many populations of Oil Palm Plantation Companies in Prov. West Kalimantan which consists of various PMDN and PMA companies, then to get realistic data and focus on research with precision accuracy, 4 representative Palm Oil Plantation Companies are taken, namely PT Sarana Esa Cita, PT Kalimantan Agro Pusaka, PT Sinarmas Group which is a PMDN Company and PT Cargill Group which is a PMA Company. In this study, the Manager and the OHS or legal section of the company concerned are the objects of research.

The Implementation of *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3) based

on Government Regulation No. 50 Year 2012 in Palm Oil Plantation Company of West Kalimantan Province.

Human Resources

The implementation of protection and health for these workers also cannot be separated from the role of qualified resources, wherein the implementation and supervision process there is a need for basic knowledge so that palm oil mills in West Kalimantan Province always conduct training for workers to improve the level of their resources.

This resource is carried out by providing training on related competencies on how to operate work machines, this is because the operation of the machine cannot be done without sufficient experience and competence when operating the machines in the factory cannot be activated carelessly, where previously the responsible workers must first conduct training and direction. This is Alfret Olang's explanation as SPO Assistant & General Expert of PT Kartika Prima Cipta (SINARMAS) below:

"If we usually convey to them, related to SMK3, usually socialization introduces related to the work safety management system in the company, now the most common thing they understand that means they know that we have implemented SMK3 by conveying them every morning related to safe work, then what PPE should be used, how to replace it, how to manage it and maintain it, then if it is to the operator, usually the same, we collect it we convey by giving examples related to how the management system is implemented in the plantation."

This opinion is reinforced by Suprianus Y. Liubana as SPO Officer of PT Persada Graha Mandiri (SINARMAS) as follows:

"We brief them, we socialize them, we always do it every morning, before going to work we always remind them, for example in small things, like using PPE, they have to use it, if they don't use it we have to tell them to go back and get it, because it's for their safety, not ours, even though we tell them every day, it's for them too, not for us."

Several General OHS Experts and SPO Officers from several palm oil mills in West Kalimantan Province have conducted coaching and socialization to field employees by introducing related work safety management systems in the company (Li & Guldenmund, 2018). Socialization of understanding related to the use of PPE in each job according to its type. To carry out the work, people who are qualified to do the job must be selected and receive training. Then also when working it is necessary to apply what is called workformit.

Infrastructure and Facilities

One regulation that includes other bodies is also to provide health facilities for workers if they suffer injuries or accidents at work. In several palm oil mills in West Kalimantan Province, special clinics are also provided for workers if someone is injured at work, where there are medical workers every day, and if the facilities in the clinic are insufficient, the company will involve outside health parties. Provision of safety facilities is also provided by providing first aid boxes in the factory.

The involvement of this other agency is with the *Badan Pemberian Jaminan Sosial* (BPJS), the company involves this agency to provide social security to every worker in the company without exception, to provide guarantees for the safety, health, and welfare of workers of several palm oil mills in West Kalimantan Province.

The provision of safety facilities for workers cannot be separated from communication between workers and superiors in terms of its fulfillment. This is Alfret Olang's explanation as

SPO Assistant & General K3 Expert of PT Kartika Prima Cipta (SINARMAS) below:

"If it's a regular replacement, as long as it means that when it's damaged, there's damage, replace it, damage it, he reports to his supervision so that the supervision will communicate to the office for replacement."

This opinion is reinforced by Suprianus Y. Liubana as SPO Officer of PT Persada Graha Mandiri (SINARMAS) as follows:

"If our procedure is to go to the clinic if he is only sick, he will ask for a letter of introduction, a letter of introduction to treatment, he must inform the foreman after the foreman he will go to the assistant in will ask there for a signature, then he will sign to the KTU, after the KTU then he will take it to the clinic for treatment there."

Some SPO Assistant & General OHS Expert, SPO Officer, Assistant Head, Boiler & Heavy Equipment Operator, and General OHS Expert from several palm oil mills in West Kalimantan Province already have facilities and infrastructure that can support the implementation of SMK3. Starting from the PPE that has been provided by each company. Standard PPE from the company, such as helmets, glasses, face shields, and safety shoes. Clinics provide treatment for employees who have accidents or are unwell. The application of SMK3 is always socialized both from direct superiors and from signs made in the success of the work safety program.

Hazard identification, risk assessment, and control

Control Measures

This inspection aims to be able to find sources that will become hazards before accidents and occupational diseases occur. This inspection has a very important role in the implementation of labor safety and health protection because, in addition to preventing potential hazards, it also aims to control and supervise sources of danger that could arise.

In addition, this inspection also aims to be used as meeting material for workers leaders and management committees regarding issues of health safety in the work area. This inspection is carried out not only by looking at the condition of the working area but also by checking the machines and equipment in the factory by looking at the effectiveness of the machines in each division, by holding this inspection, it will be known whether there are machines that are no longer suitable for function, this aims to prevent the risk of accidents caused by machines that are no longer effective.

This is by the following explanation from Agus Kurnia Utama as Mill Manager of PT Kalimantan Agro Pusaka:

"There is monitoring. O ... at most twice a month but the time is not determined. Random, even then it is carried out by the OHS team from the director's office, not the director's office so we have an OHS team specifically for the plantation and factory later Mr. Priyanto might want to meet the OHS as well."

This opinion was reinforced by Heru Sulistiyono Mill Manager of PT PMA as follows:

"Yes, for monitoring, of course we have supervision, it's in the work location, right, the second is when entering the factory, we have security to ensure that, then we are assisted again with the intervention program, so everyone can intervene with others, right, when they are seen in unsafe conditions, including PPE if they don't wear it, they will be reprimanded directly then inputted, inputted in the inablon, then in the inablon, it will be e... what's the name witnessed by anyone, so who violates, then who e... does not violate well, who does not comply, then stop

work or stop, then what's the name, stop there, then stop the work or stop the work. ... what is the name is witnessed by anyone, so who violates, then who e.. not violating well, who is not compliant, then who reprimands, then what is the name, stop there yes, then stop work or stop his activities, then complete first, then he returns to work, well that's running, that's what we do to this day".

Several Mill Managers and Estate Managers from several palm oil mills in West Kalimantan Province have carried out controls in the form of monitoring that can support the implementation of SMK3. Monitoring is carried out within a certain period, one company conducts it every two months. During monitoring, the completeness of PPE and in general matters related to SMK3 are checked. If there are employees who do not comply with SMK3, a verbal warning will be given, followed by a work stoppage until the employee completes and complies with the SMK3 rules.

Some operators of several palm oil mills in West Kalimantan Province have carried out K3 rules well which can support the implementation of SMK3. The monitoring role of the leadership also makes employees comply with SMK3 rules which can avoid work accidents. Monitoring is carried out by foremen and assistants every day according to their respective shifts to inform them about OHS.

Efforts to Deal with Industrial Accidents and Disaster Emergencies

An emergency is the change of an activity/state or situation that was originally normal to abnormal as a result of an event or incident that was not expected or desired. Emergencies can be in the form of natural disasters, fires, work accidents, environmental pollution, and/or commotion.

Emergency Management is an effort or action taken to overcome a situation that will cause losses so that the unwanted situation or situation can be immediately overcome or normalized and losses are minimized.

This is by the following explanation from Agus Kurnia Utama as Mill Manager of PT Kalimantan Agro Pusaka:

"Identifying it we usually from the K3 team itself there are yes from K3 ita yes from the K3 sir there they identify and they have a work program regarding occupational safety and health then also to identify hazard problems also from each foreman, assistant, even operators we always remind them, so to take care of each other, convey to each other if there are things that need to be improved to support work safety so we always say we have to be pro-active and important so we both take care."

This opinion was reinforced by Heru Sulistiyono Mill Manager of PT PMA as follows:

"Well ... Yes, we have many programs, later related to before work, we have a permit system, right, that is before work, then there is the name shift focus inspection, so we go around once a month, it is already on the agenda which stations we want to visit every month are different, right, then we conduct interviews with employees or operators at the location, when we visit right, Now the risks that exist in them, what we don't see in our eyes, right, so if they do activities sometimes, we don't know whether it's night or stepping where, right, we don't know, now we find out with the interview, now with the interview we can identify hidden dangers, now we do that, it's called ship plan inspection, right, every month we have different locations, then e... we have the name general position, right? we have the name general position, well that's once a month, yes, that's already 2 right, traveling every month, so see the

locations, then at that location what is unsafe, all staff plus, representatives from the operator can see the operation, for example something is missing, something is broken we note it then we make e... track label right, then we have a meeting to make a work plan, then when it closes, that's what guarantees an old factory but still new."

Several Mill Managers and Estate Managers from several palm oil mills in West Kalimantan Province have made efforts to deal with emergency accidents and industrial disasters that can support the implementation of SMK3. K3 in the company identifies and the company has a work program regarding occupational safety and health then also to identify hazard problems from each foreman, assistant, and even operators we always remind them. The company conducts interviews with employees or operators on-site, when the leader visits, the risks that exist in the company, which the leader does not see.

Several operators from several palm oil mills in West Kalimantan Province have made efforts to deal with industrial accidents and disaster emergencies that can support the implementation of SMK3. Workers are equipped with PPE in the form of helmets, safety shoes, and earplugs. Then, when the morning shift changes, the leader informs about K3.

Implementation of Knowledge Sharing Related to *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3) within Oil Palm Plantation Companies in West Kalimantan Province

Knowledge sharing is one of the main processes in knowledge management which is a broad opportunity to learn to all members of the organization so that they can improve their competence independently. With the increase in competence owned by individuals, it is hoped that it can improve the performance of these individuals.

This is by the following explanation from Alfreth Olang as SPO Assistant & General OHS Expert of PT Kartika Prima Cipta (SINARMAS):

"We usually convey to them, related to SMK3, usually socialization introduces related to the work safety management system in the company, now the most common thing they understand that there means they know that we have implemented SMK3 by conveying them every morning related to safe work, then what PPE must be used, how to replace it, how to manage it and maintain it, then if it is to the operator, usually the same, we collect it by giving examples related to how the management system is implemented in the plantation."

This opinion is reinforced by Suprianus Y. Liubana as SPO Officer of PT Persada Graha Mandiri (SINARMAS) as follows:

"Kasi briefing, kasi socialization to them, we always do it every morning, before leaving for work we always remind them, for example in small things, like using PPE, you have to use it, right if you don't use it we have to tell you to go back, get it, because it is for their safety, not ours, was even though we tell them every day, right, for them too, not for us."

Some General OHS Experts and SPO Officers from several palm oil mills in West Kalimantan Province have conducted a knowledge sharing related to SMK3 in the environment of oil palm plantation companies in West Kalimantan Province to field employees by implementing SMK3 by conveying every morning related to safe work, what PPE should be used, how to replace it, how to manage it and maintain it, then if it is to the operator, usually the same, the leader collects and conveys by giving examples related to how the implementation of the management system is in the plantation.

Leaders provide direction, and socialization to workers is always carried out every

morning. Socialization about workers using PPE if they are not wearing PPE, workers must go back and get it, because it is for their safety.

In the inferordot and Safety program, there is the provision of knowledge both in terms of awareness or in general, in general, we provide and there are qualifications. The factory is not only socializing to provide knowledge sharing related to SMK3 in the environment of oil palm plantation companies in West Kalimantan Province but there are also by posting appeals as well, then, while working we socialize questions and answers, yes increasing their knowledge as well, then, also when working we are now implementing what is called workforce.

Sharing knowledge about this SMK3, one of the examples of employees, is one example of evidence that has occurred elsewhere in terms of workplace accidents. Coaching and socialization to field employees by introducing related work safety management systems in the company. Guidance is carried out through training every month, live serving the cargil, and briefings.

The OHS management system is not only one person who must be safe, not leaders who must be safe, however, employees must also be safe or workers must be safe. Leaders must give them an understanding and awareness of the importance related to OHS issues that we must convey to each person in the company.

While walking while working while being trained also new ones in terms of work, the leader said that K3, for example, in implementing dangerous work such as welding or others, there must still be K3, K3 elements must be ready, must be prepared first so when welding whether the fire extinguisher is ready, whether the water hose is ready, whether gloves, glasses, PPE are prepared first, that is the task of the foreman and assistant, preparing it according to the SOP, well if it is not implemented we will give a letter of reprimand.

Special training will be conducted for the speakers, so we also standardize the speakers so that what is delivered in one unit is the same as in other units.

Efforts can be made by Palm Oil Plantation Companies in Kalimantan Province to prevent work accidents in order to create Zero Accident.

Several companies have won the zero accident award in 2023 from the Ministry of Manpower (Kemenaker RI). This achievement is a performance achievement in occupational safety and health (K3). The *Sistem Manajemen Keselamatan dan Kesehatan Kerja (SMK3)* stipulates that companies must identify hazards, assess risks, and determine hazard control.

This is by the following explanation from Alfreth Olang as SPO Assistant & General OHS Expert of PT Kartika Prima Cipta (SINARMAS):

"As long as I am here there is no fatality, if an accident causes disability there is aa ... Here, yes, in us, but in terms of insurance it is still guaranteed, he goes to BPJS Employment, related to work accidents, right, now our way of conveying to bring them to avoid work accidents is the first, we make a plan first, right, planning, there is a name for the term hazard source identification risk control, now from there we plan for socialization, now work identification, socialization plan, so the plan is included in identification and socialization, then use, distribution of PPE, now so after identification for dangerous work, which is this, then we do socialization to each station or per job, We usually do socialization there, related to that, well after we give a presentation related to this socialization regarding the hazards that exist in their work, well then after that we also convey related to the use of PPE, why this

PPE must be used, because of this risk, if not used, For example, why do we have to give them helmets with face shields, because to avoid them in identifying it, there is powder, the powder when the fruit falls, there is powder, small tastes that fall, it is afraid that it will enter their eyes, that's why we socialize to convey this "PPE, please use it", so, before they ee... make the PPE we distribute at least they already understand that why the company distributes its PPE to protect the eyes because of the danger of entering the eyes. . make the PPE we distribute at least they already understand that why the company shares the PPE why the company has to share "Oo ... the danger is actually for the PPE to protect the eyes" the eyes because of the danger of entering foreign objects, when he harvests. That's one example, sir, so we make a plan, identification, socialization, well after everything has been running, we evaluate again, from this evaluation we look back from the implementation of PPE is good or not, then why PPE is not good, back again, the socialization is appropriate or not, by the problems in front, the problem of why it is not implemented, yes so in the evaluation we look again ee... this is what is lacking in terms of socialization. ... this is what is lacking related to socialization, meaning that the understanding of employees related to, for example, socialization is already there, but why are there still those whose eyes feel, enter the plant feeling, well that means we go back again oo ... means not all, well evaluated again, like that sir."

This opinion is different from the explanation of Suprianus Y. Liubana as SPO Officer of PT Persada Graha Mandiri (SINARMAS) as follows:

"If there is no fatality in our place, there hasn't been, if it's like a minor. If it's a zero accident in place, zero accident probably doesn't exist, because there must be something like getting pricked by a thorn, we still have to report it, because that's included, zero accident means nothing at all, right, that's unless it's something that gets pricked by a thorn, we don't report it, only maybe something like a fatality, maybe it's a fall due to a graver, or a cut hand, or a fall of a leaf on the head until this, that's what we report, but if this is it, we don't have it".

Several Assistant Heads and Mill Managers from several palm oil mills in West Kalimantan Province have made efforts to prevent work accidents in order to create Zero Accident. Fatality incidents, thank God, are not, but if they cause medical so workers cannot work for a certain amount of time. There is a company that has been Zero Accident for six months. Another company also had a Zero Accident for two years. This was explained by their leader. Many programs are related to Zero Accident, the company has zero ha moment and training. Then, they have media for socialization and review every week. The review is not just one factory, what happens in all locations is reviewed. Then we track what the problems are inside, working, we have a permit system.

The implementation of the Sistem Manajemen Keselamatan dan Kesehatan Kerja (SMK3) in the Palm Oil Plantation Company of West Kalimantan Province is supported by the application of knowledge sharing in preventing work accidents and improving employee performance.

The existence of knowledge and the development of a knowledge-sharing culture in an organizational environment can produce innovation and creative energy to improve the performance of company people. Effective and efficient engagement leads to optimization in the form of mindfulness, intrinsic motivation, creativity, authenticity, non-defensive communication, and ethical behavior. Increased performance of the company and the business as a whole, employees are more productive and happy with knowledge sharing.

This is by the following explanation from Alfret Olang as SPO Assistant & General OHS Expert of PT Kartika Prima Cipta (SINARMAS):

"If it is important, yes, it must be important, especially since we are mandated by the law to implement a Safety Management System, right, now for the employees themselves, with the existence of a safety management system, at least that before they work they already know for sure that it is safe, right, the first thing they know is that it is safe to work, now when they start the job they are sure that the work they are doing is going well, environmentally safe Because by implementing the management system itself, each of the existing personal must have been equipped with their respective expertise according to that, so we implement the management system at the beginning, it must be in planning, then make the implementation design, then monitoring and then reporting on the management system, so that if he knows that the employee feels he is safe to work, make sure productivity will increase. "

This opinion is different from the explanation of Suprianus Y. Liubana as SPO Officer of PT Persada Graha Mandiri (SINARMAS) as follows:

"As for the application of SMK3 for employees, it is probably quite good, for employees, because it protects them too, to protect them at work, in everyday work, whether it is harvesting, brand, maintenance, or any work, SMK3 must be applied in the work environment to improve."

Several Assistant Heads and Mill Managers from several palm oil mills in West Kalimantan Province provide benefits or positive impacts on the safety of workers in the company. For the benefit of employees, they can work more safely. They can be prosperous and their productivity can be maintained. The benefits of SMK3 obtained from employees are very many, one of which is safety and comfort at work. For management, one of the benefits is that when there are zero accidents, we get one value, the value of trust from the government system. Many benefits are obtained by the company, if employees are safe, of course, we can measure productivity, secondly the cost of risk of losing working hours.

Discussion

Implementation of *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3) based on Government Regulation No. 50 Year 2012 in Palm Oil Plantation Company of West Kalimantan Province.

Human Resources

Every organization needs to implement Occupational Safety and Health (OHS) in its operational activities. Occupational Safety and Health (OHS) protects human resources, namely by preventing accidents and occupational diseases. In Manpower Law No. 13/2003 Article 87 states that every company is required to implement an Occupational Safety and Health Management System that is integrated with the company/organization management system.

Work safety itself is all efforts to be able to maintain the conditions of a safe work environment which includes materials, tools, machines, processing processes, work environment, and procedures for carrying out work. From this explanation, it can be explained that the purpose of work safety is to maintain all resources and be used safely and effectively (Hari, 2018: 6).

The implementation of protection and health for these workers also cannot be separated from the role of qualified resources, wherein the implementation and supervision process there is a need for basic knowledge so that palm oil mills in West Kalimantan Province always

conduct training for workers to improve the level of their resources.

The results showed that several General OHS Experts and SPO Officers from several palm oil mills in West Kalimantan Province have conducted coaching and socialization to field employees by introducing related work safety management systems in the company. Socialization of understanding related to the use of PPE in each job according to its type. To carry out the work, people who are qualified to do the job must be selected and receive training. Then also when working it is necessary to apply what is called workformit.

The process of sharing and creating tacit knowledge through interaction and direct experience (Nonaka and Takeuchi in Tobing, 2007). SOP (Standard Operating Procedure) and work safety rules are mandatory and can support occupational safety and health (OHS) implementation programs. The effectiveness of the success of the occupational safety and health (OHS) program will occur if there is good socialization and implementation between the company and all workers. The program will run better when it starts from the fundamental stage, namely the formation of a culture of occupational safety and health (Sirait, 2020).

Several Assistant Heads and Mill Managers from several palm oil mills in West Kalimantan Province have conducted coaching and socialization to field employees by introducing related work safety management systems in the company. Guidance is carried out through monthly training, live server the cargil, and briefings.

Socialization of understanding related to the use of PPE in each job according to its type. To carry out work, people who are qualified to do the job must be selected and receive training. Then also when working it is necessary to apply what is called workformit. Furthermore, the leadership provides SMK3 direction in implementing dangerous work such as welding or what must still have K3 and K3 elements. Special training will be conducted for employees, the speakers will be standardized so that what is conveyed in 1 unit is the same as other units.

As George Edward, in the book Public Policy by Chazali H. Situmorang, (2016: 228) says that resources are needed to be able to carry out all policies so that implementation can run effectively.

The results showed that several Boiler and Heavy Equipment Operators from several palm oil mills in West Kalimantan Province have received several trainings conducted by companies related to SMK3. Training is carried out both in the recruitment of employees who will work directly in the field, as well as to employees who carry out work that is at high risk of accidents.

Resources, in the implementation of the implementation, resources are needed to be able to implement the policy properly and not let it be deficient during the implementation process, if the policy implementation lacks resources, the implementation will be ineffective (Situmorang, 2016: 228).

Infrastructure and facilities

One regulation that includes other bodies is also to provide health facilities for workers if they suffer injuries or accidents at work. In several palm oil mills in West Kalimantan Province, special clinics are also provided for workers if someone is injured at work, where there are medical workers every day, and if the facilities in the clinic are insufficient, the company will involve outside health parties. Provision of safety facilities is also provided by providing first aid boxes in the factory.

The involvement of this other agency is with the Social Security Administration (BPJS),

the company involves this agency to provide social security to every worker in the company without exception, to provide guarantees for the safety, health, and welfare of workers of several palm oil mills in West Kalimantan Province.

The provision of safety facilities for workers cannot be separated from communication between workers and superiors in terms of its fulfillment, as George Edward, in the book Public Policy by Chazali H. Situmorang, (2016: 228) describes that important aspects when communicating are Transmission, Consistency, and Clarity. This is by knowing the tasks carried out and the policies that must be carried out as well as accurate communication between the two parties.

SPO Assistant & General OHS Expert, SPO Officer, Assistant Head, Boiler & Heavy Equipment Operator, and General OHS Expert from several palm oil mills in West Kalimantan Province already have facilities and infrastructure that can support the implementation of SMK3. Starting from PPE that has been provided by each company. Standard PPE is from the company, helmets, glasses, faces, and safety sapatu. Clinics are provided for treatment for employees who have accidents or are unwell. The application of SMK3 is always socialized both from direct superiors and from signs made in the success of the work safety program.

Hazard identification, risk assessment, and control

Control measures

The results showed that several Mill Managers and Estate Managers from several palm oil mills in West Kalimantan Province have carried out controls in the form of monitoring that can support the implementation of SMK3. Monitoring is carried out within a certain period, one company does it every two months. During monitoring, the completeness of PPE and in general matters related to SMK3 are checked. If there are employees who do not comply with SMK3, a verbal warning will be given, followed by a work stoppage until the employee completes and complies with the SMK3 rules.

According to Asiah (2020), Hazard identification is an effort to find out and estimate the existence of hazards in the activities in the workplace, there are several parts carried out, namely, welding, cutting, and drilling, as well as cold work, carried out at heights such as painting pipe installation repairs, engine/pump repairs, and electrical repairs, civil and mechanic. In every workplace there will be various risks at work, therefore it will be very necessary to prevent and control which can reduce the number of work accidents. The initial stage that must be considered by the agency or company is the identification of hazards and risks at work. In general, the causes of work accidents also occur due to humans and unsafe environments.

OHS experts and assistant heads of several palm oil mills in West Kalimantan Province have carried out controls in the form of monitoring that can support the implementation of SMK3. Make a report or make a report after reprimanding, make a report via cellphone then report it to the system. Inspection of the use of PPE is usually carried out during field visits along with socialization. Every month there is a recap of monitoring the use of PPE, every month it is recapitulated, well that recap is to find out how much PPE is used. Then there is the name 4M here, Seeing, Reprimanding, Stopping, Saving, for example, if he doesn't use PPE, or his PPE is lacking, then he will be reprimanded, to use PPE, then next there are also records of managers and also workers for one month.

Occupational Safety and Health (K3) is all efforts and methods that are held and

implemented to anticipate, minimize, and overcome the occurrence of work accidents that affect the stages of identification, analysis, and efforts to control potential hazards by implementing a hazard control system correctly and implementing legislation related to occupational safety and health (K3) (HARi, n.d.).

Procedures and Work Instructions

The results showed that several Mill Managers and Estate Managers from several palm oil mills in West Kalimantan Province have carried out procedures and work instructions that can support the implementation of SMK3. Using standard hydrants, various kinds of medicine boxes are all audited. Implementation is by the legislation, then implemented, and supervision is carried out in it. Then, the safety culture in the work area will automatically increase employee productivity. K3 is one of the most important things in carrying out operational activities if K3 is related to employee productivity.

Occupational safety and health is a preventive effort whose activities are mainly identification, substitution, elimination, evaluation, and control of risks and hazards. Hazard identification can be done by inspection, survey, and monitoring of the workplace and work environment (Notoatmodjo, 2007).

OHS experts and assistant heads of several palm oil mills in West Kalimantan Province have carried out procedures and work instructions that can support the implementation of SMK3. A job Hazard assessment is carried out, after that, there is just a permit, asking for approval from the mill manager to the director, if there is a potential Highrisk job. Everything is provided even from the SOPs before working, so people work following the SOPs. Provision of standard PPE from the company, helmets, glasses, faces, and safety shoes.

Efforts to Deal with Industrial Accidents and Disaster Emergencies

Mill Managers and Estate Managers of several palm oil mills in West Kalimantan Province have made efforts to deal with emergency accidents and industrial disasters that can support the implementation of SMK3. K3 in the company identifies and the company has a work program regarding occupational safety and health then also to identify hazard problems from each foreman, assistant, and even operators we always remind them. The company conducts interviews with employees or operators on-site, and when the leader visits, the risks that exist in the company, which the leader does not see.

Several OHS experts and assistant heads of several palm oil mills in West Kalimantan Province have made efforts to deal with industrial accidents and disaster emergencies that can support the implementation of SMK3. First, the company observation program, there is what is called Genco (general condition), then there is safety, safe plan inspection which focuses on safe, Serious Injury Fatality, then there is also what we call lab safer, namely lab safer pre-check and labs per begged, then also for workers, they also identify the risk of hazards in the workplace that they will do their work, for example, they want to repair the gaster.

Second, conducting periodic checks, on the safety of the equipment. making a plan first, planning is the name of the term hazard source identification risk control, from there we plan for socialization. Identification of work, and socialization of plans, so the plan is included in the identification and socialization of the use and distribution of PPE. So after identification for hazardous work, then socialization is carried out at each station or per job, usually related socialization is carried out, after being given delivery related to this socialization regarding the hazards that exist in their work, after that, they also convey related to the use of PPE, why this

PPE must be used. This evaluation looks back at the application of good PPE.

Several operators from several palm oil mills in West Kalimantan Province have made efforts to deal with industrial accidents and disaster emergencies that can support the implementation of SMK3. Workers are equipped with PPE in the form of helmets, safety shoes, and earplugs. Then, when the morning shift changes, the leader informs about K3.

Implementation of knowledge sharing related to *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3) within Oil Palm Plantation Companies in West Kalimantan Province

The results showed that several General OHS Experts and SPO Officers from several palm oil mills in West Kalimantan Province have carried out a knowledge sharing related to SMK3 in the environment of oil palm plantation companies in West Kalimantan Province to field employees by implementing SMK3 by conveying every morning related to safe work, what PPE must be used, how to replace it, how to manage it and maintain it, then if it is to the operator, usually the same, the leader collects and conveys by giving examples related to how the application of the management system is in the plantation.

Leaders provide direction, and socialization to workers is always carried out every morning. Socialization about workers using PPE if they are not wearing PPE, workers must go back and get it, because it is for their safety. Knowledge sharing is defined as the process of identifying, disseminating, and utilizing existing knowledge to solve problems correctly. This knowledge exists at various levels of the organization, namely at the individual, team, and organizational levels, but what is important for organizations is knowledge sharing at the individual level (Law and Ngai, 2008).

In the inferordot and Safety program, there is the provision of knowledge both in terms of awareness or in general, in general, we provide and there are qualifications. The factory is not only socializing to provide knowledge sharing related to SMK3 in the environment of oil palm plantation companies in West Kalimantan Province but there are also by posting appeals as well, then, while working we socialize questions and answers, yes increasing their knowledge as well, then, also when working we are now implementing what is called workforce. because individual knowledge will not have much impact on the organization unless it is available to others (Nonaka and Takeuchi, 1995).

According to Liao et al. (2011), knowledge sharing refers to the extent to which organizations share knowledge resources within operational boundaries. The knowledge-sharing process is implemented as a systematic activity to transfer and exchange knowledge and experience between members of a group or organization who share a common goal.

Assistant Heads and Mill Managers from several palm oil mills in West Kalimantan Province have implemented knowledge sharing related to SMK3 within oil palm plantation companies in West Kalimantan Province. The company briefing and there is through training every month. Then, there is the name of the cargil live server, there are 12 live servers, and every month 2 live servers can be discussed.

Sharing knowledge about this SMK3, one of the examples of employees, is one example of evidence that has occurred elsewhere in terms of workplace accidents. Coaching and socialization to field employees by introducing related work safety management systems in the company. Guidance is carried out through training every month, live serving the cargil, and briefings.

The OHS management system is not only one person who must be safe, not leaders who must be safe, however, employees must also be safe or workers must be safe. Leaders must give them an understanding and awareness of the importance related to OHS issues that we must convey to each person in the company.

Knowledge sharing also has an important role for organizations. Knowledge sharing can increase the competence and ability of individuals by sharing information and knowledge. Knowledge sharing can be through tacit knowledge or explicit knowledge (Matzler et al., 2008).

While walking while working while being trained also new ones in terms of work, the leader said that K3, for example, in implementing dangerous work such as welding or others, there must still be K3, K3 elements must be ready, must be prepared first so when welding whether the fire extinguisher is ready, whether the water hose is ready, whether gloves, glasses, PPE are prepared first, that is the task of the foreman and assistant, preparing it according to the SOP, well if it is not implemented we will give a letter of reprimand.

Special training will be conducted for the speakers, so we also standardize the speakers so that what is delivered in one unit is the same as in other units.

Efforts can be made by Palm Oil Plantation Companies in Kalimantan Province to prevent work accidents to create Zero Accident.

The results showed that several General OHS Experts and SPO Officers from several palm oil mills in West Kalimantan Province have made an effort that can be done by oil palm plantation companies in West Kalimantan Province to prevent work accidents in order to create Zero Accident. The company conveys to them that to avoid work accidents is to make a plan, with the term hazard source identification risk control. The company plans for socialization. Then, job identification, socialization of plans and use, and distribution of PPE for dangerous work.

The implementation of SMK3 as an effort to realize zero accidents can be done by: (1) establishing OHS policies, (2) identifying hazards that will occur, (3) providing funds for the implementation of OHS, (4) determining accident risk control, (5) regulations made based on legislation regarding OHS, (6) providing a sufficient number of first aid facilities, (7) a clear division of tasks and responsibilities and (8) implementing controls to manage OHS hazards (Yohana, 2012).

In oil palm companies in West Kalimantan Province, there are no zero accidents, there are several incidents such as being pricked by a thorn that still have to be reported, if zero accidents mean there are no incidents at all. There are exceptions such as things that are pricked by thorns are not reported, only maybe those like fatality.

In implementing zero accidents, where there are procedural errors in carrying out work, the company needs to provide understanding to them. The incident related to the fall of the tile, one of the workers who was found to have his hand crushed by the tile was admitted to the medical head, his condition at that time was lifting the tile with a less competent person.

Indeed, workers in this company have been trained by the external organization that oversees them. Then, for zero accidents for any job, there is a reward. The company encourages the motivation of workers and teams and superiors, so in a year of zero work accidents, there are prizes in the form of clothes and watches. Furthermore, for workers who do not carry out the rules, they will receive a warning. The stages of the reprimand letter are in the form of

warning letters 1, 2, and 3. If we convey the reprimand verbally at first, if he cannot, we also convey it to his direct assistant.

This is to the theory of Kawatu (2012) that the implementation of SMK3 can prevent work accidents, damage, or illness due to work so that companies do not need to incur costs. due to work so that the company does not need to incur costs incurred by the incident.

Assistant Heads and Mill Managers of several palm oil mills in West Kalimantan Province, the efforts that can be made by oil palm plantation companies in West Kalimantan Province to prevent work accidents in order to create Zero Accident. Fatality incidents, thank God, are not, but those that cause medical, so that workers cannot work for a certain amount of time. There is a company that has been Zero Accident for six months. Another company also had a Zero Accident for two years. This was explained by their leader. Many programs are related to Zero Accident, the company has zero ha moment and training. Then, they have media for socialization and review every week. The review is not just one factory, what happens in all locations is reviewed. Then we track what the problems are inside, working, we have a permit system.

By the opinion of Darro Lalu Husni (2006), the implementation of occupational safety and health programs is intended to protect the safety of workers/laborers to realize optimal work productivity. The protection is carried out by applicable laws and regulations. Therefore, by having a zero-accident program, the company has protected workers as required by legislation.

Robina Modjo (2007) states that companies that implement occupational safety and health programs seriously, will be able to reduce the risk of accidents and occupational diseases in the workplace, so that employees who are absent for reasons of work-related injuries and illnesses are also reduced.

Implementation of the *Sistem Manajemen Keselamatan dan Kesehatan Kerja* (SMK3) in Palm Oil Plantation Companies in West Kalimantan Province supported the application of knowledge sharing in preventing work accidents and improving employee performance.

The results showed that several General OHS Experts and SPO Officers from several palm oil mills in West Kalimantan Province have implemented SMK3 in oil palm plantation companies in West Kalimantan Province which is supported by the application of knowledge sharing in preventing work accidents and improving employee performance. The work he is doing is going well, and environmentally safe because by implementing the management system itself, every existing person must have been equipped with their respective expertise according to that, so we implement the management system at the beginning it is definitely in planning, then making the implementation design, monitoring, and then reporting on the management system.

Knowledge sharing is a communication process where the knowledge owner externalizes his knowledge and the knowledge receiver internalizes the knowledge (Hendriks, 1999). According to (Dixon, 2000), there are five main types of knowledge transfer and sharing in organizations, namely serial, near, far, strategic, and expert transfer. Each type differs based on the type of knowledge (tacit or explicit), the nature of the work, and the internal or external source. The nature of work refers to the extent to which a job is frequent or infrequent and there is routine or non-routine. Frequency refers to the extent to which a task is repeated over some time without changing its nature.

In the day-to-day work of the company, whether it is harvesting, brand, maintenance, or any other work, the rules of SMK3 must be applied. SMK3 must be applied in the work environment. There is a company for general K3 to provide an understanding of K3 related to the work environment for PT. KAP employees, we apply the occupational safety and health management system from 2017.

Our programs anticipate from the beginning of work. At the beginning of the work, we are covered by the permit, then there is a pre-job hazard assessment carried out first before doing the work, so the ticket to do work in the PT PMA area must indeed use a permit and PJH, Pre Job Hazard assessment is carried out to obtain a permit. For approval by the mill manager up to the director, if there is a High-risk potential job, then the action reaches the Operating Unit.

Several Assistant Heads and Mill Managers from several palm oil mills in West Kalimantan Province have implemented SMK3 in oil palm plantation companies in West Kalimantan Province which is supported by the application of knowledge sharing in preventing work accidents and improving performance. Providing PPE from the company in the form of helmets, glasses, faces, and safety sapatu. Using standard hydrant standards such as medicine boxes, all of which are audited. Implementation is by the legislation, then implemented, and supervision is carried out in it. Then, the safety culture in the work area will automatically increase employee productivity. K3 is one of the most important things in carrying out operational activities if K3 is related to employee productivity.

Some General OHS Experts and SPO Officers from several palm oil mills in West Kalimantan Province SMK3 provide benefits or a positive impact on the safety of workers in the company. Safety is important, he considers it an additional work, but if the individual knows that safety is important then he considers all of it to be positive, anything related to the safety system is positive.

The 4M intervention of the internal program is implemented to reduce the occurrence of accidents at the work site. When the company intervenes continuously, the potential for accidents to occur is very small, for example, if you want to do welding without PPE, you have been reminded.

Assistant Heads and Mill Managers of several palm oil mills in West Kalimantan Province provide benefits or positive impacts on the safety of workers in the company. For the benefit of employees, they can work more safely. They can be prosperous and their productivity can be maintained. The benefits of SMK3 obtained from employees are very many, one of which is safety and comfort at work. For management, one of the benefits is that when there are zero accidents, we get one value, the value of trust from the government system. Many benefits are obtained by the company, if employees are safe, of course, we can measure productivity, secondly the cost of risk of losing working hours.

CONCLUSION

Based on the results of data analysis and discussion, the conclusions of this study are as follows: General OHS Experts and SPO Officers from several palm oil mills in West Kalimantan Province have conducted coaching and socialization to field employees by introducing related work safety management systems in the company. Socialization of understanding related to the use of PPE in each job according to its type. To carry out the work,

people who are qualified to do the job must be selected and receive training. Then also when working it is necessary to apply what is called workformit.

General OHS Experts and SPO Officers from several palm oil mills in West Kalimantan Province have implemented SMK3 in oil palm plantation companies in West Kalimantan Province which is supported by the application of knowledge sharing in preventing work accidents and improving employee performance. The work he is doing is going well, and environmentally safe because by implementing the management system itself, every existing person must have been equipped with their respective expertise according to that, so we implement the management system at the beginning it is definitely in planning, then making the implementation design, then monitoring, and then reporting on the management system.

General OHS Experts and SPO Officers from several palm oil mills in West Kalimantan Province have made an effort that can be done by oil palm plantation companies in West Kalimantan Province to prevent work accidents in order to create Zero Accident. The company conveys to them that to avoid work accidents is to make a plan, with the term hazard source identification risk control. The company plans for socialization. Then, job identification, socialization of plans and use, and distribution of PPE for dangerous work.

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