

The Effect of Work Safety and Health (K3) on Production Departement Employee Performance at The Sugar Factory of PT. Nusantara Plantation XIV (Persero) in Takalar District

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ABSTRACT

This study aims to determine how the influence of Work Safety and Health on the Performance of Production Section Employees either Simultaneously or Partially where the Takalar Sugar Factory PT. Nusantara Plantation XIV (Persero) became the object of his research. This research uses quantitative research. Data collection techniques used are primary data collection (observation, interviews and questionnaires) and secondary data collection (library review and documentation). The sample used is the sample formulated by Slovin as many as 70 respondents. The data obtained from the research results were processed using data analysis and using the help of the SPSS version 25 software program which consisted of validity tests, reliability tests on research instruments as well as descriptive statistical analysis techniques and inferential statistical analysis of the data that had been obtained. The results showed that the indicators used for each variable indicated that the occupational safety and health variables had a significant effect on the Performance of Production Section Employees at the Takalar Sugar Factory PT. Nusantara Plantation XIV (Persero). This is evidenced by the Correlation Test and the t-test and F-test and the Coefficient of Determination Test on the data that has been obtained.

Keywords: Work Safety, Work Health, Employee Performance, Production Departement.

INTRODUCTION

In the current era of globalization, most industrial companies use sophisticated process technology. Process technology includes machines, tools, and devices that contribute to operations processing materials or information to add value. With high-tech machines, it needs to be balanced with improving the quality of the workforce that is able to improve employee performance so that the resulting production will be maximized, but high-tech machines can also endanger employees, especially the production department. Lack of knowledge and carelessness by employees can lead to

very fatal work accidents. Therefore, every company needs to pay attention to the process of monitoring equipment and machining processes as the main thing, besides aiming to avoid unexpected events from the machining process, it also aims to maintain safety for workers. Therefore, the application of Occupational Safety and Health (K3) to employees is a norm that must be applied by the company.

Occupational safety and health is quite interesting to be discussed further because there are still quite a lot of companies both in small, medium and large scale that still do not fully pay attention to K3. Employee performance is an aspect that must be considered by the company because it will have a direct impact on the company's overall performance. Occupational safety and health is the right of every employee to his company according to their field of work and different levels of risk. Given the great influence of occupational safety and health on human resources, it is appropriate to receive attention from the government, one of which is Law No. 13 of 2003 concerning manpower.

In determining the success or failure of an organization in maintaining its existence, it starts from efforts to manage human resources, especially in improving employee performance to the fullest. Human resources, if used properly, will certainly have a good influence on the company's performance. The role of human resources is the basic capital in determining company goals. Without the role of human resources, activities within the company will not run well. Humans always play an active and dominant role in every organizational activity, because humans become planners, actors, and determinants of the realization of organizational goals (Hasibuan, 2012).

The company also strives to improve the performance of all its employees so that they are able to compete with other companies because they can produce goods or services in a more efficient manner. Performance is the level of success of a person as a whole within a certain period in carrying out tasks compared to various possibilities such as work standards, targets, targets or criteria that have been determined in advance and have been mutually agreed upon.

PT. Perkebunan Nusantara or commonly referred to as PTPN is a State-Owned Enterprise (BUMN) which has the authority to manage plantations in Indonesia. The commodities that are authorized to be cultivated are oil palm, rubber, sugar cane, coffee, cocoa, tobacco, various woods, fruits, and various plants which are developed using heavy equipment and machines. PTPN X itself has managed three sugar factories in South Sulawesi in recent years after the Ministry of BUMN assigned PTPN X to work on three sugar factories, namely Arasoe Sugar Factory and Camming Sugar Factory located in Bone Regency, and Takalar Sugar Factory located in Takalar Regency.

This research focuses on the PTPN XIV (Persero) Takalar Sugar Factory located in Takalar Regency. The raw material used is sugar cane, while the process of

milling sugar cane into sugar products requires several stages such as milling, purification, evaporation, cooking (boiling), centrifuge, and packaging. The milling process in 2021 will last for 4 months, within 24 hours without stopping (non-stop) as long as raw material supplies are still available. The Takalar Sugar Factory was built with a milling capacity of 3,000 tons of sugarcane per day (TTH), which was easily expanded to 4,000 TTH. According to research conducted by the world body, the International Labor Organization (ILO), it concludes, every day on average 6,000 people die, equivalent to one person every 12 seconds or 2.2 million people per year due to illness or accidents related to their work. More than twice as many men died as women, because they were more likely to do dangerous jobs. Overall workplace accidents have killed 350,000 people. The rest died due to illness suffered in work such as dismantling toxic chemicals. (Suardi, 2007)

The purpose of establishing Occupational Safety and Health (K3) is to minimize the costs incurred by the company in the event of an accident or occupational disease. For this reason, Occupational Health and Safety needs to be a top priority for every company, but there are also companies that do not understand the importance of K3 and how to implement it properly in the company's environment, especially in the production section.

Based on the results of the researchers' initial observations conducted on October 7, 2021, by conducting direct interviews with the processing or production department at the Takalar Sugar Factory, he explained that in carrying out operational activities, PTPN XIV involves workers who are directly dealing with the production process using machines. mechanical machines, hot, and sharp, so the level of risk of work accidents is also high. The company has implemented work safety programs for employees in the production department, such as providing work safety equipment including safety shoes, helmets, glasses, gloves and so on. However, there are still tragedies of heavy and light work accidents that occur in the workplace. This is what causes production disruptions due to loss of working hours and reduces employee performance (Interview with Ahmad Said, October 7, 2021)

The following is a report on heavy work accidents in 2017-2020 at the Takalar Sugar Factory PT. Perkebunan Nusantara XIV (Persero)

Table 1.1 Work Accident Report for Production/Installation Section

NO.	SESION	SECTION	SUBSECTION	NUMBER OF EMPLOYESS
1	2017	Instalasi	Stasiun Boiler	2
2	2018	-	-	0
3	2019	-	-	0
4	2020	Instalasi	Stasiun Gilingan	2

(Source: Personnel of the Takalar Sugar Factory PT. Perkebunan Nusantara XLV (Persero) 2020)

Based on table 1.1 above, it is explained that there were heavy work accidents that occurred at the Takalar Sugar Factory PT. Perkebunan Nusantara XIV (Persero) due to lack of supervision and carelessness of employees. As for the heavy work accidents that occurred, such as exposure to hot steam, body parts affected by welding electrodes, and accidents that caused permanent paralysis. Meanwhile, minor work accidents that often occur are like body parts being cut by sharp objects, but minor work accidents like this are not recorded by the company. However, they are still being treated.

Likewise with the implementation of the occupational health program which is still lacking, this is indicated by the lack of supporting facilities and infrastructure in the factory environment, such as the lack of toilets available around the factory and air ventilation conditions which slightly result in the air temperature tends to be hot during the day. The phenomenon of working environment conditions at the Takalar Sugar Factory PT. The inadequate plantations of Nusantara XIV (Persero) pushed down the sugar production that occurred.

The following is a graph of sugar production in 2016-2021 at the Takalar Sugar Factory PT. Perkebunan Nusantara XIV (Persero)

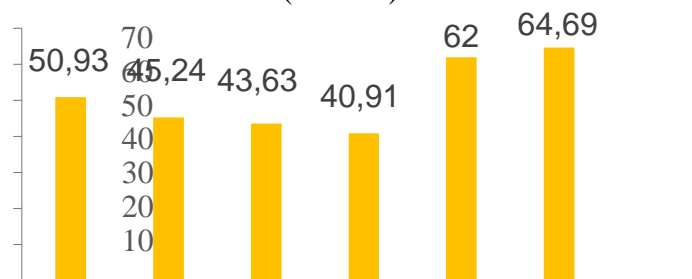


Figure 1.1 Sugar Production TH 2016-2021 (Source: Profile of Takalar Sugar Factory 2021)

Figure 1.1 above shows that in 2019 sugar production began to decline to 40.91 tons compared to previous years, while sugar production in 2020 to 2021 increased but did not reach 70,000 tons. For this reason, by getting special attention and being managed as well as possible from the company so that the welfare, safety, and health of employees can be achieved, of course, employee performance will increase and make an optimal contribution to the achievement of organizational goals.

The data on the achievement of employee performance based on the objective matrix scale data grouping and then the recapitulation clarification was processed using the TrafficLight System (TLS) method in the Production section of the Takalar Sugar Factory PT. Perkebunan Nusantara XIV (Persero) as follows:

Table 1.2 Data is processed using the Traffic Light System (TLS) method

		Periode	
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		2017	2018	2019	2020	
15	Jumlah penghargaan dan pengakuan kerja atau jenjang karir dari perusahaan	3	4	2	5	GB
16	Presentase pembayaran gaji atau upah sesuai dengan standart ditetapkan	79%	87%	85%	85%	NB
17	Presentase cuti dan liburan yang sesuai dan cukup	12.5 %	12.5%	12 %	12.5%	NB
18	Jumlah peningkatan Jaminan sosial tenaga kerja	20	18	22	20	GB
19	Prosentase kehadiran karyawan yang tepat waktu	94%	96%	97%	98%	GB
20	Jumlah kecelakaan kerja yang terjadi	2	1	1	2	SB
REKAPITULASI						
Hijau	KPI 15, KPI 17					
Kuning	KPI 19					
Merah	KPI 16, KPI 18, KPI 20					
Jumlah Nilai Pencapaian					0.608	

(Source: Personnel of the Takalar Sugar Factory PT. Perkebunan Nusantara XLV (Persero) 2020)

Table 2.1 above shows that based on the objective matrix scale data grouping, the data used is calculated from quarterly data before 2020 or can be called using data from 2017, 2018 and 2019. And for 2020 data, it is used as achievement data or comparative data from the data. before. After determining the score for each known KPI (Key Performance Indicator), then it is clarified using the Traffic Light System method with 3 color indicators. If the resulting KPI scores are red and yellow, it is necessary to make improvements. While the resulting KPI score in green indicates that the achievement of a performance indicator has reached the target. Furthermore, in the measurement and performance assessment carried out using the traffic light system method, the total achievement of the performance of the production division employees is 0.60800, which means that the achievement of performance is in the poor category, indicated by the achievement in the traffic light system method. Of the total 6 KPIs that have been identified, 2 KPIs are in the green category, 1 KPI is in the yellow category and 3 KPIs are in the red category. From this data, the company has data to evaluate the KPIs that are still in the yellow and red categories so that the company's performance can be improved.

However, the main thing that becomes the main issue is whether the Sugar Factory PT. Perkebunan Nusantara XIV (Persero) in Takalar Regency continues to implement an occupational safety and health (K3) program for every employee in the production section, oversees the completeness of Personal Protective Equipment (PPE)

at work, and checks machines regularly and periodically checks employees as an effort to find out the diseases that will arise as a result of work. This is a top priority for every employee, especially the production department, to stay safe and comfortable at work so that it will have a positive impact on employee performance, especially in the production section and can improve company performance as expected. Based on the description of the problem above, the researchers are interested in conducting a deeper study with the research title "The Effect of Occupational Safety and Health (K3) on the Performance of employees in the production department at the Sugar Factory of PT. Nusantara XIV (Persero) Plantation in Takalar Regency"

METHOD

The research approach used is a quantitative approach using multiple linear regression analysis techniques assisted by the SPSS for windows program. Quantitative method is a method that uses a sampling system from a population and uses a structured questionnaire as a data collection tool. Meanwhile, according to Sugiyono (2012), quantitative data can be interpreted as a research method based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, data analysis is quantitative/statistical, with the aim of testing predetermined hypotheses. . The quantitative approach is used to seek detailed factual information and identify problems or to obtain validation of the current state and activities. The type of research used is descriptive and associative. Descriptive research method according to Sugiyono (2012) is a descriptive research approach to determine the existence of independent variables, either only on one variable or more, while what is meant by associative research according to Sugiyono (2012) is research that aims to determine the influence or relationship between two variables or more. Researchers hope that through this approach and type of research, they can find out the effect of occupational safety and health on employee performance.

RESEARCH RESULTS AND DISCUSSION

The instrument used in this research is a list of statements (questionnaire). The total number of statements is 29 statement items, namely 9 statement items for the Occupational Safety variable (X1), 9 statement items for the Occupational Health variable (X2), and 11 statement items for the Employee Performance variable (Y). Descriptive analysis in this study was obtained from distributing questionnaires to 70 respondents in the production section of the Takalar Sugar Factory PT. Perkebunan Nusantara XIV (Persero). The questionnaire contains a description of the respondents and answers to the statements given. The characteristics of the respondents in this study were based on age, gender, last education, and employee status. Based on the results of the Multiple Linear Regression Analysis test that the value of Constant (α) = 7.229 and for the value of Occupational Safety (X1) = 0.903, the value of

Occupational Health (X_2) = 0.501. So the equation from multiple linear regression analysis can be formulated $Y = 7.229 + 0.903X_1 + 0.501X_2 + e$. The value of the Employee Performance Constant (Y) is 7.229, which states that if the occupational safety and health variable is equal to zero, then the employee performance is 7.229. The work safety coefficient (X_1) is 0.903, which means that for every 1% increase in the X_1 variable, the employee's performance will increase by 0.903 or about 90.3%. Conversely, if there is a 1% decrease in the X_1 variable, then the employee's performance will also decrease by 0.903 or around 90.3%. This shows that the work safety variable has a unidirectional influence on the employee performance variable by looking at the calculated value in the beta column coefficients table which is positive which proves that an increase in the X_1 variable will also positively affect the increase in the Y variable.

The coefficient of occupational health (X_2) is 0.501, which means that for every 1% increase in the X_2 variable, the employee's performance will increase by 0.501 or about 50.1%. On the other hand, if there is a decrease in the X_2 variable by 1%, then employee performance will also decrease by 0.501 or around 50.1%. From the description above, it can be concluded that the variables of Occupational Safety (X_1) and Occupational Health (X_2) in this study have an influence on the Employee Performance variable (Y). The basis for making conclusions to determine whether or not the influence of each variable is multiple linear regression is based on the determination of the value shown from the calculation of data obtained from respondents and data processing carried out using SPSS 25 software by looking at the multiple linear regression equation formula proving that there is an effect variables X_1 and X_2 to the dependent variable Y .

CONCLUSION

Based on the discussion and elaboration of the results of the research that has been carried out and seeing the purpose of this research, it can be concluded that the work safety variable has a partial significant effect on the performance of employees in the production department at the Takalar Sugar Factory, this can be seen from the partial test (t test) which shows value Sig. of $0.000 < 0.05$ and the t -count value is $5.954 > t$ -table 1.668 then, it can be said that H_0 is rejected and H_a is accepted. Occupational health variable has a significant partial effect on the performance of employees in the production section at the Takalar Sugar Factory, this can be seen from the partial test (t test) which shows the value of Sig. of $0.000 < 0.05$ and the value of t arithmetic $4.184 > t$ table 1.668 then, it can be said that H_0 is rejected and H_a is accepted. Occupational Safety and Health variables have a significant simultaneous effect on the performance of employees in the production section at the Takalar Sugar Factory, this can be seen from the results of Simultaneous testing (F test) which shows the calculated F value of $55.513 > F$ table 2.35 and the significant value is at the 0.000 means $0.000 <$

0.05. However, the variable that dominates and has a major contribution to employee performance is known through this research is the work safety variable.

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