



Rewards and Work Environment as Predictors of Employee Job Satisfaction at PTPN IV Regional I

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Abstract

Employee job satisfaction remains an important human resource management issue in plantation companies because employees work under diverse operational and environmental conditions that influence their perceptions of organizational rewards and workplace quality. Despite extensive research on job satisfaction, empirical evidence regarding the relationships between rewards, work environment, and employee job satisfaction in Indonesia's plantation sector remains limited. Therefore, this study examined whether rewards and work environment are associated with employee job satisfaction at PT Perkebunan Nusantara IV Regional I Bandar Betsy. This study employed a quantitative explanatory survey involving 80 employees selected through stratified random sampling. Data were collected using a structured questionnaire and analyzed using multiple linear regression. The findings indicate that rewards are positively and significantly associated with employee job satisfaction. Likewise, the work environment is positively and significantly associated with employee job satisfaction. Furthermore, rewards and work environment jointly explain a substantial proportion of the variation in employee job satisfaction. These findings support the applicability of Herzberg's Two-Factor Theory in the plantation-sector context by demonstrating that both organizational rewards and workplace conditions are important predictors of employee job satisfaction. Practically, the findings provide empirical evidence that may assist the management of plantation companies in developing fair reward systems and supportive workplace conditions to enhance employee job satisfaction.

Keywords: *Employee Job Satisfaction, Rewards, Work Environment, Human Resource Management, Quantitative Survey, Multiple Linear Regression, Plantation Employees.*

INTRODUCTION

Employee job satisfaction is widely recognized as a critical indicator of organizational effectiveness because it is associated with employee motivation, organizational commitment, absenteeism, productivity, and retention (Robbins & Judge, 2017). In labor-intensive industries such as plantation companies, maintaining employee job satisfaction is particularly important because operational performance depends heavily on employees working under diverse physical, environmental, and organizational conditions. Plantation employees perform different tasks across plantation fields, processing facilities, warehouses, engineering units, administrative offices, and personnel departments, each of which presents distinct workplace characteristics and managerial challenges. Consequently, organizations must ensure that employees perceive organizational policies, workplace conditions, and compensation systems as fair and supportive to sustain workforce performance and organizational productivity (Dessler, 2020; Armstrong & Taylor, 2020).

PT Perkebunan Nusantara IV Regional I Bandar Betsy is one of Indonesia's state-owned plantation companies engaged in plantation cultivation and agro-industrial production. Its operational activities rely on employees distributed across several divisions, including Personnel,

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Administration, Plantation, Warehouse, and Engineering, where employees experience different physical working environments, operational responsibilities, and organizational interactions (PTPN, 2025). These differences may create varying perceptions regarding reward fairness and workplace quality, both of which are important determinants of employee job satisfaction. For management, ensuring that employees remain satisfied is essential because dissatisfaction may reduce employee commitment, increase absenteeism, weaken organizational performance, and ultimately affect operational effectiveness in a labor-intensive plantation environment. Therefore, identifying organizational factors that contribute to employee job satisfaction represents an important managerial issue for PTPN IV Regional I Bandar Betsy.

Job satisfaction refers to an employee's positive emotional evaluation of his or her job resulting from the comparison between work expectations and actual work experiences (Robbins & Judge, 2017). Employees who are satisfied with their jobs generally demonstrate stronger organizational commitment, lower absenteeism, higher work motivation, and better performance than those who experience dissatisfaction (Judge et al., 2017). Because job satisfaction reflects employees' overall evaluation of their work experiences, understanding the organizational factors that shape employee satisfaction remains an important concern in human resource management.

Among the organizational factors associated with job satisfaction, reward systems have consistently been identified as one of the most influential. Rewards represent both financial and non-financial forms of organizational recognition provided in return for employees' contributions and performance (Dessler, 2020). Financial rewards include salaries, incentives, bonuses, and allowances, whereas non-financial rewards include recognition, promotion opportunities, career development, and appreciation for employee achievements (Armstrong & Taylor, 2020). Fair, transparent, and performance-based reward systems strengthen employees' perceptions of organizational justice and organizational support, which are positively associated with employee job satisfaction (Armstrong & Taylor, 2020). At PTPN IV Regional I Bandar Betsy, employee compensation and benefits are regulated through the Collective Labor Agreement (CLA) between the Board of Directors of PTPN IV and the Plantation Workers Union (SP-Bun PTPN Persero), as presented in Table 1.

Table 1. Employee Rewards or Compensation at PTPN IV Regional I Bandar Betsy

No.	Type of Reward/Compensation	Time of Distribution
1	Basic Salary	Monthly
2	Fixed Allowance	Monthly
3	Religious Holiday Allowance (THR)	Annually
4	Annual Bonus	Annually
5	Overtime Pay	Based on Overtime Hours Worked

Source: Collective Labor Agreement (CLA) between the Board of Directors of PTPN IV and the Plantation Workers Union (SP-Bun PTPN Persero), Period 2025–2026.

Besides reward systems, the work environment also plays an important role in shaping employee job satisfaction. The work environment includes both physical conditions, such as workplace safety, lighting, temperature, cleanliness, equipment, and workplace layout, and psychosocial conditions, including communication, interpersonal relationships, organizational climate, and supervisory support (Sedarmayanti, 2017). In plantation organizations, employees frequently work under different environmental and operational conditions, making workplace quality an important aspect of employee well-being. A supportive work environment enables

employees to perform their duties more comfortably, safely, and effectively while strengthening organizational commitment and job satisfaction (Judge et al., 2017; Sedarmayanti, 2017).

Empirical evidence further highlights the importance of reward systems and work environment in explaining employee job satisfaction. A national employee survey conducted by the Katadata Insight Center reported that work environment (55.3%) and compensation or rewards (46.2%) were the two most influential factors affecting employee job satisfaction among Indonesian employees (Katadata Insight Center, 2023). Likewise, the Employee Satisfaction Survey conducted by JAC Recruitment Indonesia found that approximately 76% of employees were not fully satisfied with their jobs, indicating that employee satisfaction remains an important organizational challenge across industries (JAC Recruitment, 2025). These findings suggest that organizations should continuously evaluate both reward policies and workplace conditions to maintain employee satisfaction and organizational effectiveness.

Although numerous studies have examined the relationships between rewards, work environment, and employee job satisfaction, existing empirical evidence has primarily been derived from service, manufacturing, education, healthcare, and financial organizations (Apriyanti et al., 2021; Kurniawan et al., 2024). Comparatively, empirical studies focusing on plantation companies remain limited despite the distinctive characteristics of plantation organizations, including labor-intensive operations, geographically dispersed workplaces, diverse physical working conditions, and heterogeneous employee responsibilities. Consequently, managers of plantation companies still have limited empirical evidence regarding how reward systems and work environment jointly relate to employee job satisfaction within plantation settings. This represents an important practice gap, particularly for state-owned plantation enterprises such as PTPN IV Regional I Bandar Betsy, where employee satisfaction is closely associated with workforce stability, operational effectiveness, and organizational sustainability.

Based on this practice gap, this study aims (1) to examine the influence of rewards on employee job satisfaction at PTPN IV Regional I Bandar Betsy, (2) to examine the influence of the work environment on employee job satisfaction, and (3) to examine the simultaneous influence of rewards and the work environment on employee job satisfaction.

This study contributes both theoretically and practically. Theoretically, it extends the application of Herzberg's Two-Factor Theory by examining how reward systems and work environment explain employee job satisfaction within the context of Indonesia's plantation industry, thereby providing additional empirical evidence from a labor-intensive organizational setting (Herzberg et al., 1959; Alrawahi et al., 2020). Practically, the findings are expected to assist the management of PTPN IV Regional I Bandar Betsy in developing more effective reward policies and improving workplace conditions that support employee job satisfaction, organizational commitment, and sustainable operational performance.

LITERATURE REVIEW

Herzberg's Two-Factor Theory as the Theoretical Foundation

Herzberg's Two-Factor Theory distinguishes factors that create job satisfaction (motivator factors) from those that primarily prevent job dissatisfaction (hygiene factors) (Herzberg et al., 1959). Motivator factors include achievement, recognition, responsibility, advancement, and opportunities for personal growth, whereas hygiene factors consist of organizational policies, salary, supervision, interpersonal relationships, and working conditions. According to Herzberg, the absence of hygiene factors causes dissatisfaction, while the presence of motivator factors encourages employees to experience higher job satisfaction.

Although Herzberg originally classified salary and compensation as hygiene factors, contemporary human resource management studies suggest that modern reward systems extend

beyond financial compensation to include recognition, career advancement, and performance appreciation. Consequently, rewards may simultaneously fulfill hygiene and motivational functions because they satisfy employees' economic expectations while strengthening intrinsic motivation and organizational commitment (Alrawahi et al., 2020). Likewise, supportive work environments not only reduce dissatisfaction but also encourage employees to evaluate their jobs more positively through improved organizational support, workplace safety, and interpersonal relationships. Therefore, Herzberg's theory provides a suitable theoretical foundation for explaining the relationships between rewards, work environment, and employee job satisfaction in plantation organizations.

Employee Job Satisfaction

Employee job satisfaction represents an employee's overall positive evaluation of work resulting from the comparison between job expectations and actual work experiences (Robbins & Judge, 2017). Job satisfaction is considered one of the most important human resource management outcomes because it reflects employees' attitudes toward their work, organization, and working conditions. Employees with higher levels of job satisfaction generally demonstrate stronger organizational commitment, lower absenteeism, higher motivation, and improved job performance (Judge et al., 2017).

Previous empirical studies consistently support this relationship. Nasution et al. (2019) found that remuneration, motivation, and job satisfaction significantly influenced employee performance at UIN Sumatera Utara, indicating that employee satisfaction serves as an important mechanism linking organizational policies with performance outcomes. These findings suggest that job satisfaction functions not only as an employee attitude but also as a strategic organizational outcome that reflects the effectiveness of human resource management practices. Accordingly, this study positions employee job satisfaction as the dependent variable influenced by reward systems and work environment.

Rewards and Employee Job Satisfaction

Rewards are widely recognized as an important organizational mechanism for acknowledging employee contributions and encouraging positive work attitudes. Contemporary reward systems comprise both financial rewards, such as salaries, incentives, bonuses, and allowances, and non-financial rewards, including recognition, promotion opportunities, career development, and appreciation for employee achievements (Armstrong & Taylor, 2020). Rather than functioning merely as compensation, rewards signal organizational appreciation and fairness, thereby strengthening employees' perceptions of organizational support.

Recent empirical evidence consistently demonstrates that reward systems positively influence employee job satisfaction. Apriyanti et al. (2021) reported that fair compensation practices contribute to higher employee satisfaction because employees perceive greater organizational justice. Similarly, Afida and Zainarti (2025) found that reward systems implemented transparently and based on employee performance significantly enhanced employee motivation and work performance, indicating that rewards encourage employees to perceive organizational appreciation more positively. Although their study primarily examined motivation and performance, the findings support Herzberg's proposition that recognition and achievement constitute important motivational factors associated with employee satisfaction.

Furthermore, Nasution et al. (2019) demonstrated that remuneration contributes positively to employee satisfaction and subsequently improves employee performance. Collectively, these findings indicate that financial and non-financial rewards create positive employee perceptions that strengthen job satisfaction. However, most previous studies have been

conducted in educational institutions, insurance companies, or service organizations, leaving limited empirical evidence from plantation companies. Therefore, examining reward systems in the plantation sector represents an important extension of previous research.

Based on the theoretical and empirical arguments presented above, the following hypothesis is proposed:

H1: Rewards have a positive and significant influence on employee job satisfaction at PTPN IV Regional I Bandar Betsy.

Work Environment and Employee Job Satisfaction

The work environment consists of physical and psychosocial conditions surrounding employees while performing their work. Physical aspects include workplace safety, temperature, lighting, equipment, facilities, and cleanliness, whereas psychosocial aspects include communication, teamwork, organizational climate, leadership support, and interpersonal relationships (Sedarmayanti, 2017). Together, these dimensions shape employees' daily work experiences and influence their perceptions of organizational support.

Empirical evidence consistently indicates that favorable work environments positively affect employee job satisfaction. Safrida et al. (2023) found that work environment significantly enhanced employee loyalty through increased job satisfaction, suggesting that supportive workplace conditions strengthen employees' attachment to the organization. Likewise, Harahap and Qarni (2026) reported that supportive work environments improve employee performance, whereas poor workplace conditions and excessive work stress reduce organizational effectiveness. Although their study focused primarily on employee performance, the findings reinforce the importance of workplace conditions in shaping employees' attitudes toward their jobs.

These findings are consistent with Herzberg's Two-Factor Theory, which identifies working conditions as hygiene factors. While favorable work environments primarily prevent dissatisfaction, contemporary empirical evidence suggests that supportive physical and psychosocial conditions also contribute directly to higher levels of employee job satisfaction by strengthening employees' perceptions of comfort, security, and organizational support.

Accordingly, the following hypothesis is proposed:

H2: Work environment has a positive and significant influence on employee job satisfaction at PTPN IV Regional I Bandar Betsy.

Integrated Conceptual Model and Hypothesis Development

Herzberg's Two-Factor Theory suggests that employee job satisfaction is shaped by the interaction of motivational and hygiene factors rather than by a single organizational practice. Reward systems provide employees with financial recognition and appreciation for their contributions, while supportive work environments create comfortable and psychologically safe conditions for performing organizational responsibilities. Employees generally evaluate both organizational rewards and workplace conditions simultaneously when assessing their overall work experiences.

Previous empirical studies have commonly investigated rewards and work environment separately. However, organizational human resource practices operate as an integrated system. Employees who receive fair rewards but work in unfavorable environments may still experience dissatisfaction, whereas supportive work environments without equitable rewards may reduce the motivational effects of organizational recognition. Consequently, examining both variables simultaneously provides a more comprehensive explanation of employee job satisfaction, particularly in labor-intensive plantation organizations where employees work under diverse operational and environmental conditions.

The conceptual relationship among the variables examined in this study is illustrated in Figure 1.

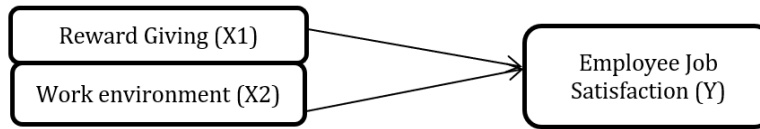


Figure 1. Proposed Analytical Model
Source: Processed by the researcher (2026)

Based on Herzberg's theoretical framework and previous empirical findings, the following hypothesis is proposed:

H3: Rewards and work environment simultaneously have a positive and significant influence on employee job satisfaction at PTPN IV Regional I Bandar Betsy.

RESEARCH METHOD

This study employed a quantitative explanatory research design using a survey approach to examine the relationships between rewards, work environment, and employee job satisfaction. Explanatory quantitative research is intended to explain the statistical relationships among variables and test hypotheses using empirical data collected at a single point in time (Sugiyono, 2022). A survey approach was considered appropriate because it enabled the researcher to collect standardized responses from employees regarding their perceptions of the reward system, work environment, and job satisfaction.

The study was conducted at PT Perkebunan Nusantara IV Regional I Bandar Betsy, located in Bandar Betsy Estate, Bandar Huluan District, Simalungun Regency, North Sumatra, Indonesia. The population consisted of 100 employees distributed equally across five organizational divisions, namely Personnel, Administration, Plantation, Warehouse, and Engineering, with each division comprising 20 employees. Since the employees were assigned to different operational divisions with different work characteristics, stratified random sampling was employed to ensure proportional representation from each division (Sugiyono, 2022).

The sample size was determined using the Slovin formula with a 5% margin of error, as follows:

$$n = \frac{N}{1+N(e)^2} \dots\dots\dots (1)$$

$$n = \frac{100}{1 + 100(0,05)^2}$$

$$n = 80$$

Accordingly, the minimum required sample consisted of 80 respondents. Based on proportional allocation, 16 respondents were randomly selected from each of the five divisions, resulting in a total sample of 80 employees.

Table 2. Population and Sample Distribution

Division	Population	Sample
Personnel	20	16
Administration	20	16
Plantation	20	16

Division	Population	Sample
Warehouse	20	16
Engineering	20	16
Total	100	80

Primary data were collected using a structured questionnaire distributed directly to the selected respondents between 28 and 30 March 2026. Before data collection, permission to conduct the study was obtained from the management of PT Perkebunan Nusantara IV Regional I Bandar Betsy. Respondents were informed about the purpose of the study and assured that their participation was voluntary and that all responses would remain confidential and be used exclusively for academic purposes. After the questionnaires had been returned, each response was screened to ensure completeness and consistency. Only fully completed questionnaires were included in the analysis. All 80 returned questionnaires satisfied the screening criteria and were therefore considered valid for statistical analysis.

The research instrument consisted of a structured questionnaire measured using a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire comprised 15 statement items, including five items measuring rewards, five items measuring work environment, and five items measuring employee job satisfaction. The indicators of the reward variable were adapted from Armstrong's Handbook of Human Resource Management Practice ([Armstrong & Taylor, 2020](#)), the work environment indicators were adapted from Sedarmayanti's Human Resources and Work Productivity ([Sedarmayanti, 2017](#)), while the employee job satisfaction indicators were adapted from Organizational Behavior by [Robbins and Judge \(2017\)](#).

Table 3. Operational Definition of Variables

Variable	Dimension	Indicators	Items	Scale	Source
Rewards (X_1)	Financial and Non-financial Rewards	Salary, incentives, recognition, promotion opportunities, appreciation	X1.1–X1.5	Likert (1–5)	Armstrong and Taylor (2020)
Work Environment (X_2)	Physical and Psychosocial Environment	Workplace safety, facilities, communication, organizational climate, interpersonal relationships	X2.1–X2.5	Likert (1–5)	Sedarmayanti (2017)
Employee Job Satisfaction (Y)	Employee Satisfaction	Satisfaction with work, supervision, rewards, working conditions, organizational support	Y1–Y5	Likert (1–5)	(Robbins & Judge, 2017)

Before testing the proposed hypotheses, the research instrument was evaluated through validity and reliability testing. Item validity was assessed using the Pearson Product-Moment correlation coefficient, in which questionnaire items were considered valid when the calculated correlation coefficient exceeded the critical r-table value at a significance level of 0.05 ([Ghozali, 2016](#)). Instrument reliability was evaluated using Cronbach's Alpha, where a coefficient of 0.60 or higher indicated satisfactory internal consistency ([Hair et al., 2022](#)).

The data were analyzed using IBM SPSS Statistics. Since this study examined the relationships between two independent variables, namely rewards and work environment, and one

dependent variable, employee job satisfaction, multiple linear regression analysis was employed. The regression model is expressed as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where Y represents employee job satisfaction, X_1 represents rewards, X_2 represents work environment, α is the constant, β_1 and β_2 are the regression coefficients, and ε denotes the error term.

Before regression analysis, the data were examined through classical assumption tests consisting of normality, multicollinearity, and heteroscedasticity tests to ensure that the regression model satisfied the assumptions required for linear regression (Ghozali, 2016). The hypotheses were subsequently tested using the t-test to examine the partial influence of each independent variable and the F-test to evaluate their simultaneous influence on employee job satisfaction at a significance level of 5% ($\alpha = 0.05$). Finally, the coefficient of determination (Adjusted R^2) was calculated to determine the proportion of variance in employee job satisfaction explained by rewards and work environment.

FINDINGS AND DISCUSSION

Validity Test

The validity test was conducted to determine whether each questionnaire item accurately measured the intended research construct. Item validity was assessed using the Pearson Product-Moment correlation coefficient by comparing the calculated correlation coefficient (r-count) with the critical r-table value. With a sample size of 80 respondents and a significance level of 5%, the degree of freedom ($df = n - 2$) was 78, resulting in an r-table value of 0.2199 (Ghozali, 2016). Questionnaire items were considered valid when the calculated correlation coefficient exceeded the critical value.

The results presented in Table 3 indicate that all indicators measuring the Reward variable (X_1) produced correlation coefficients ranging from 0.600 to 0.835, all exceeding the minimum requirement of 0.2199. Therefore, every indicator of the Reward variable was considered valid and suitable for subsequent statistical analysis.

Table 4. Results of the Validity Test for the Reward Variable (X_1)

Variable	Indicator	r count	r table	Description
Rewards	X1.1	835	2,199	Valid
	X1.2	784	2,199	Valid
	X1.3	817	2,199	Valid
	X1.4	736	2,199	Valid
	X1.5	600	2,199	Valid

Source: SPSS Processed Data (2026).

Similarly, the validity test results for the Work Environment variable (X_2), presented in Table 5, show that all calculated correlation coefficients ranged from 0.673 to 0.802, exceeding the critical value of 0.2199. These findings confirm that all questionnaire items successfully measured the intended dimensions of the work environment variable.

Table 5. Validity Test Results for the Work Environment Variable (X2)

Variable	Indicator	r count	r table	Description
Work environment	X2.1	785	2,199	Valid
	X2.2	742	2,199	Valid
	X2.3	802	2,199	Valid
	X2.4	751	2,199	Valid
	X2.5	673	2,199	Valid

Source: Processed Data from SPSS (2026)

The validity test for the Employee Job Satisfaction variable (Y) also demonstrated satisfactory results. As shown in Table 6, all indicators produced correlation coefficients between 0.687 and 0.866, which were substantially higher than the required r-table value. Consequently, all questionnaire items used to measure employee job satisfaction were declared valid.

Table 6. Validity Test Results for the Employee Job Satisfaction Variable (Y)

Variable	Indicator	r count	r table	Description
Employee job satisfaction	Y.1	750	2,199	Valid
	Y.2	812	2,199	Valid
	Y.3	866	2,199	Valid
	Y.4	858	2,199	Valid
	Y.5	687	2,199	Valid

Source: Processed Data from SPSS (2026)

Overall, the validity testing confirms that every questionnaire item possesses adequate construct validity and appropriately measures the variables examined in this study.

Reliability Test

Following the validity assessment, instrument reliability was evaluated using Cronbach's Alpha to determine the internal consistency of the questionnaire. According to [Hair et al. \(2022\)](#), a Cronbach's Alpha coefficient of 0.70 or higher indicates satisfactory reliability. The reliability results are presented in Table 7.

Table 7. Reliability Test

Variable	Cronbach's Alpha Standard	Cronbach's Alpha Coefficient	Description
Reward (X1)	0.6	0.903	Reliable
Work Environment (X2)	0.6	0.893	Reliable
Employee Job Satisfaction (Y)	0.6	0.9	Reliable

Source: Processed Data from SPSS (2026)

The findings indicate that the Reward variable achieved a Cronbach's Alpha coefficient of 0.903, while the Work Environment and Employee Job Satisfaction variables recorded coefficients of 0.893 and 0.900, respectively. Since all coefficients exceeded the recommended threshold, the research instrument demonstrated excellent internal consistency. Therefore, the questionnaire was considered reliable and appropriate for hypothesis testing.

Classical Assumption Tests

Before multiple linear regression analysis, the data were examined through classical assumption tests consisting of normality, heteroscedasticity, and multicollinearity tests to ensure that the regression model met the assumptions required for linear regression analysis (Ghozali, 2016).

Normality Test

The normality test was conducted using the Kolmogorov–Smirnov test. A significance value greater than 0.05 indicates that the residuals follow a normal distribution. The results presented in Table 8 show a Kolmogorov–Smirnov significance value of 0.200, which is greater than the required significance level of 0.05.

Table 8. Normality Test Results

Parameter	Statistic	Unstandardized Residual
N		80
Normal Parameters ^{a,b}	Mean	0
	Std. Deviation	6.21703384
Most Extreme Differences	Absolute	0.047
	Positive	0.047
	Negative	-0.047
Test Statistic		0.047
Asymp. Sig. (2-tailed)		.200 ^{c,d}

Source: SPSS Processed Data (2026)

These findings indicate that the residuals were normally distributed. Furthermore, the test statistic of 0.047 demonstrates only a minimal deviation from normality, confirming that the regression model satisfied the normality assumption.

Heteroscedasticity Test

The heteroscedasticity test was performed using the Glejser method, where significance values greater than 0.05 indicate the absence of heteroscedasticity.

As presented in Table 9, the significance values for the Reward and Work Environment variables were 0.516 and 0.857, respectively.

Table 9. Glejser Test Results

Model	Variable	Unstandardized Coefficients (B)	Unstandardized Coefficients (Std. Error)	Standardized Coefficients (Beta)	T	Sig.
1	(Constant)	8,226	4,095	–	2,008	48
	Reward	-181	278	-119	-652	516
	Lingkungan Kerja	45	247	33	181	857

Source: Processed data from SPSS (2026)

Since both significance values exceeded 0.05, the regression model was free from heteroscedasticity, indicating constant residual variance across observations.

Multicollinearity Test

Multicollinearity was assessed using Tolerance and Variance Inflation Factor (VIF) values. According to [Ghozali \(2016\)](#), multicollinearity is absent when the tolerance value exceeds 0.10, and the VIF value is below 10. The results are presented in Table 10.

Table 10. Multicollinearity Test Results

Model	Variable	Tolerance	VIF
441	(Constant)	–	–
	Reward	0.39	2.567
	Lingkungan kerja	0.39	2.567

Source: Processed Data from SPSS (2026)

Both independent variables recorded tolerance values of 0.390 and VIF values of 2.567. Since these values satisfied the recommended criteria, no multicollinearity was detected between the independent variables. Consequently, the regression model fulfilled all classical assumptions and was considered appropriate for further statistical analysis.

Multiple Linear Regression Analysis

Multiple linear regression analysis was employed to examine the influence of rewards and work environment on employee job satisfaction. This analytical technique was selected because the study investigates the simultaneous effects of two independent variables on one dependent variable. The regression results are presented in Table 11.

Table 11. Results of the Multiple Linear Regression Test

Model	Variable	Unstandardized Coefficients (B)	Unstandardized Coefficients (Std. Error)	Standardized Coefficients (Beta)	T	Sig.
1	(Constant)	1,908	1,189	–	1,605	113
	Reward	465	81	451	5,773	0
	Lingkungan kerja	464	72	506	6,469	0

a. Dependent Variable: Y

Source: SPSS Processed Data (2026)

The estimated regression equation is expressed as follows:

$$Y = 1.908 + 0.465X_1 + 0.464X_2 + \varepsilon$$

The regression equation indicates that both independent variables positively contribute to employee job satisfaction. The constant value of 1.908 represents the estimated level of employee job satisfaction when both independent variables are assumed to be constant. The regression coefficient for Rewards ($\beta = 0.465$) indicates that a one-unit increase in the Reward variable increases employee job satisfaction by 0.465 units, assuming the Work Environment variable remains constant. Likewise, the regression coefficient for Work Environment ($\beta = 0.464$) indicates that each one-unit improvement in the work environment increases employee job satisfaction by 0.464 units, holding the Reward variable constant.

These positive regression coefficients suggest that improvements in organizational reward systems and workplace conditions are associated with higher levels of employee job satisfaction at PTPN IV Regional I Bandar Betsy.

Hypothesis Testing

Hypothesis testing was conducted using the t-test to examine the partial effects of Rewards and Work Environment on Employee Job Satisfaction. At the same time, the F-test was employed to evaluate the simultaneous effect of both independent variables. In addition, the coefficient of determination (Adjusted R^2) was analyzed to assess the explanatory power of the regression model.

Partial Test (t-test)

The results of the t-test are presented in Table 12.

Table 12. Results of the Partial Test (t-test)

Model	Variable	Unstandardized Coefficients (B)	Unstandardized Coefficients (Std. Error)	Standardized Coefficients (Beta)	T	Sig.
1	4(Constant)	1,908	1,189	-	1,605	113
	Reward	465	81	451	5,773	0
	Lingkungan kerja	464	72	506	6,469	0

a. Dependent Variable: Y

Source: Processed SPSS Data (2026).

The t-test was performed at a significance level of 5% ($\alpha = 0.05$) with 77 degrees of freedom ($df = n - k - 1$), resulting in a critical t-value of 1.991.

The Reward variable (X_1) produced a calculated t-value of 5.773, which exceeded the critical value ($5.773 > 1.991$) with a significance value of 0.000, indicating that Reward has a positive and statistically significant effect on Employee Job Satisfaction. Therefore, H_1 is accepted. Similarly, the Work Environment variable (X_2) yielded a calculated t-value of 6.469, which exceeded the critical value ($6.469 > 1.991$) and had a significance value of 0.000. These findings indicate that

Work Environment has a positive and statistically significant effect on Employee Job Satisfaction. Accordingly, H_2 is accepted.

Simultaneous Test (F-test)

The simultaneous influence of Rewards and Work Environment on Employee Job Satisfaction was examined using the F-test. The results are presented in Table 13.

Table 13. Results of the Simultaneous Test (F-test)

Model	Source	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	385,722	2	192,861	17,135,344	,000b
	Residual	86,665	77	1,126	–	–
	Total	472,387	79	–	–	–

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

Source: Processed SPSS Data (2026).

The regression model produced an F-value of 171.353 with a significance level of 0.000, which is lower than the predetermined significance level of 0.05. These findings indicate that Rewards and Work Environment simultaneously exert a significant influence on Employee Job Satisfaction. Therefore, H_3 is accepted. The significant F-test confirms that the regression model is appropriate for explaining employee job satisfaction at PTPN IV Regional I Bandar Betsy.

Coefficient of Determination (Adjusted R^2)

The coefficient of determination was used to evaluate the proportion of variance in Employee Job Satisfaction explained by the independent variables.

Table 14. Coefficient of Determination (Adjusted R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,904a	817	812	1,061

a. Predictors: (Constant), X2, X1

Source: Processed SPSS Data (2026).

The analysis produced an Adjusted R^2 value of 0.812, indicating that 81.2% of the variation in Employee Job Satisfaction can be explained jointly by Rewards and Work Environment. The remaining 18.8% is attributable to other factors not included in the present study. Furthermore, the correlation coefficient ($R = 0.904$) indicates a very strong relationship between the independent variables and Employee Job Satisfaction, demonstrating that the regression model possesses substantial explanatory power.

Discussion

Effect of Rewards on Employee Job Satisfaction

The findings indicate that Rewards have a positive and significant influence on Employee Job Satisfaction, as evidenced by the regression coefficient ($\beta = 0.465$) and the significance value (p

< 0.001). This result suggests that employees who perceive organizational rewards as fair, transparent, and aligned with their performance are more likely to experience higher levels of job satisfaction.

These findings support Herzberg's Two-Factor Theory, which proposes that employee satisfaction is influenced by motivator factors that encourage positive attitudes toward work (Herzberg et al., 1959). Although Herzberg originally classified salary and compensation as hygiene factors, contemporary human resource management literature argues that modern reward systems extend beyond financial compensation by incorporating recognition, promotion opportunities, and career development. Consequently, rewards may simultaneously function as hygiene factors by preventing dissatisfaction and as motivator factors by enhancing employees' sense of achievement and organizational appreciation (Alrawahi et al., 2020; Armstrong & Taylor, 2020).

The present findings are consistent with previous empirical studies. Apriyanti et al. (2021) reported that fair compensation significantly improved employee job satisfaction because employees perceived stronger organizational justice. Similarly, Nasution et al. (2019) found that remuneration positively affected employee satisfaction, which subsequently enhanced employee performance. More recently, Afida and Zainarti (2025) demonstrated that transparent reward systems strengthened employee motivation and organizational commitment. Although their study primarily examined motivation and performance, the findings reinforce the important role of rewards in shaping positive employee attitudes toward work.

Within the context of PTPN IV Regional I Bandar Betsy, employee rewards are regulated through the Collective Labor Agreement (CLA), which provides financial compensation as well as various employee benefits. The significant positive effect identified in this study indicates that implementing fair and performance-based reward policies can strengthen employees' perceptions of organizational support, thereby improving overall job satisfaction.

Effect of Work Environment on Employee Job Satisfaction

The statistical analysis also demonstrates that Work Environment has a positive and significant influence on Employee Job Satisfaction ($\beta = 0.464$; $p < 0.001$). This finding indicates that employees working in supportive physical and psychosocial environments tend to report higher levels of job satisfaction.

This result is consistent with Herzberg's Two-Factor Theory, which identifies working conditions as hygiene factors that prevent employee dissatisfaction. However, contemporary studies suggest that favorable workplace conditions contribute not only to reducing dissatisfaction but also to increasing job satisfaction by fostering workplace comfort, effective communication, interpersonal trust, and organizational support (Alrawahi et al., 2020).

The findings are also supported by previous empirical studies. Safrida et al. (2023) reported that a supportive work environment significantly increased employee satisfaction and loyalty. Likewise, Harahap and Qarni (2026) found that favorable workplace conditions improved employee performance, whereas poor work environments and excessive work stress reduced organizational effectiveness. These findings collectively indicate that both physical facilities and psychosocial workplace conditions play important roles in shaping employees' attitudes toward their work.

In plantation companies such as PTPN IV Regional I Bandar Betsy, employees perform their duties under diverse operational and environmental conditions. Consequently, maintaining workplace safety, adequate facilities, effective communication, and supportive interpersonal relationships becomes essential for sustaining employee satisfaction and organizational performance.

Simultaneous Effect of Rewards and Work Environment on Employee Job Satisfaction

The simultaneous testing results indicate that Rewards and Work Environment jointly have a significant influence on Employee Job Satisfaction, as demonstrated by the F-value of 171.353 ($p < 0.001$) and the Adjusted R^2 value of 0.812. These findings suggest that both variables collectively explain a substantial proportion of employees' job satisfaction.

From a theoretical perspective, these findings reinforce Herzberg's Two-Factor Theory, which argues that employee satisfaction cannot be explained solely by either motivator factors or hygiene factors. Instead, employees evaluate multiple organizational factors simultaneously when forming overall perceptions of their jobs. In this study, rewards represent organizational appreciation for employee contributions, while the work environment reflects the quality of employees' daily working conditions. The interaction between these two factors creates a more comprehensive explanation of employee job satisfaction than either factor considered independently.

The present findings extend previous research by providing empirical evidence from the plantation sector, which has received relatively limited attention compared with service, manufacturing, education, and financial organizations. Unlike many previous studies focusing on employee performance or organizational commitment, this study specifically examines Employee Job Satisfaction as the primary outcome variable within a labor-intensive plantation company. The findings therefore broaden the application of Herzberg's Two-Factor Theory in plantation organizations and demonstrate that integrating equitable reward systems with supportive workplace conditions can substantially improve employee job satisfaction.

From a practical perspective, the results suggest that the management of PTPN IV Regional I Bandar Betsy should not rely solely on improving financial compensation. Equal attention should also be directed toward maintaining a safe, comfortable, and supportive work environment. By simultaneously strengthening reward policies and workplace conditions, the company can enhance employee satisfaction, strengthen organizational commitment, and ultimately improve organizational performance.

CONCLUSIONS

This study examined the relationships between rewards, work environment, and employee job satisfaction at PT Perkebunan Nusantara IV Regional I Bandar Betsy. The findings indicate that rewards are positively and significantly associated with employee job satisfaction, supporting the first research objective and confirming H1. Employees who perceive organizational rewards as fair and performance-based tend to report higher levels of job satisfaction. The study also found that the work environment is positively and significantly associated with employee job satisfaction, supporting the second research objective and confirming H2. Employees working in supportive physical and psychosocial environments generally experience higher job satisfaction. Furthermore, the results demonstrate that rewards and work environment jointly serve as significant predictors of employee job satisfaction, supporting the third research objective and confirming H3. Together, these two variables explain 81.2% of the variation in employee job satisfaction, indicating that they are important predictors of employees' overall work experiences.

From a theoretical perspective, the findings support the application of Herzberg's Two-Factor Theory within the plantation-sector context. The results suggest that rewards and work environment are both important factors associated with employee job satisfaction. While rewards provide recognition and appreciation for employees' contributions, the work environment creates supportive physical and psychosocial conditions that encourage positive work experiences. These findings indicate that Herzberg's theoretical framework remains relevant for explaining employee job satisfaction in labor-intensive plantation organizations, where employees simultaneously

evaluate organizational rewards and workplace conditions when assessing their overall satisfaction.

From a practical perspective, the findings provide several implications for the management of PT Perkebunan Nusantara IV Regional I Bandar Betsy. Management should continuously evaluate the fairness and transparency of reward policies by ensuring that both financial rewards, such as salaries, incentives, and allowances, and non-financial rewards, including recognition and career development opportunities, are implemented consistently based on employee performance. In addition, efforts to improve employee job satisfaction should include maintaining workplace safety, improving physical facilities, creating comfortable working conditions, strengthening communication, and fostering positive relationships between supervisors and employees. Integrating these human resource management practices is expected to strengthen employee satisfaction and support organizational performance.

This study is limited to employees of PT Perkebunan Nusantara IV Regional I Bandar Betsy and employs a cross-sectional survey design; therefore, the findings should be interpreted as statistical associations rather than causal relationships. Future research is encouraged to include additional organizational and individual factors, such as leadership style, organizational culture, work motivation, or employee engagement, as well as broader samples from plantation companies or other labor-intensive industries to improve the generalizability of the findings.

LIMITATION & FURTHER RESEARCH

This study has several limitations. First, the findings are limited to employees of PT Perkebunan Nusantara IV Regional I Bandar Betsy, which may reduce their applicability to other organizational settings. Second, the analysis considered only rewards and the work environment, whereas employee job satisfaction may also be shaped by other factors, including leadership, organizational culture, career advancement, work motivation, and work-life balance. In addition, the cross-sectional design and self-administered questionnaires may not fully capture changes in employee perceptions over time.

Future research should involve a wider range of organizations and industries to improve the generalizability of the findings. Further studies are also encouraged to incorporate additional determinants of job satisfaction and adopt longitudinal or mixed-methods designs to provide a deeper understanding of the factors influencing employee job satisfaction.

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