

THE IMPACT OF THE CSR (*CORPORATE SOCIAL RESPONSIBILITY*) PROGRAM ON THE WELFARE OF THE COMMUNITY AROUND PTPN IV KEBUN ADOLINA

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Abstract

This study aims to analyze the impact of PTPN IV Kebun Adolina's Corporate Social Responsibility (CSR) program on the welfare of the community surrounding the company's operational area. The study used a descriptive quantitative approach with locations in Pegajahan, Lubuk Pakam, and Perbaungan Districts, Serdang Bedagai Regency. The research sample consisted of 71 respondents determined using the Slovin formula with a purposive sampling technique. Data were collected through questionnaires, interviews, and documentation, then analyzed using multiple linear regression with the help of SPSS. The results of the study indicate that CSR Education has a positive but insignificant effect on community welfare. Meanwhile, CSR Health, CSR Economic, and CSR Social each have a positive and significant effect on community welfare. Simultaneously, all CSR variables have a significant effect on community welfare with a significance value of $0.000 < 0.05$ and F count of 244.374. This indicates that the CSR program as a whole provides a strong contribution to improving the social welfare of the community around PTPN IV Kebun Adolina.

Keywords: CSR, social welfare, health, economy, education, social.

INTRODUCTION

Corporate Social Responsibility (CSR) is a company's commitment to contribute to sustainable economic development by improving social welfare and preserving the environment. In Indonesia, implementing CSR is a company obligation, as stipulated in Law No. 40 of 2007 concerning Limited Liability Companies (Law of the Republic of Indonesia No. 40 of 2007). CSR implementation not only serves to improve the company's image but also plays a role in supporting community development in the areas where the company operates. Various studies have shown that CSR programs can improve community welfare by improving access to education and healthcare, economic empowerment, and infrastructure development. Furthermore, well-targeted CSR programs can strengthen relationships between companies and communities and increase community participation in development (Nurozi & Sisdiyanto, 2024). However, the effectiveness of CSR programs depends heavily on their alignment with community needs, so their impact is not always immediately felt.

One company actively implementing CSR is PT Perkebunan Nusantara IV (PTPN IV) Adolina Unit in Serdang Bedagai Regency, North Sumatra. Its CSR programs include social assistance, education, health, community economic development, and environmental conservation. In July–August 2024, PTPN IV Adolina Unit distributed Rp103,700,000 in CSR assistance to the surrounding community in the form of funds, goods, and the construction of public facilities aimed at improving community welfare (MediaAdvokasi.id, 2024). The community around the operational area of PTPN IV Unit Adolina mostly works as farmers, plantation laborers, small traders, and informal workers. Although the poverty rate in Serdang Bedagai Regency is recorded at 7.84%, various welfare challenges remain, such as low community income, relatively low education levels, and limited access to clean water and health services in some rural areas (BPS Serdang Bedagai Regency, 2024; Serdang Bedagai Regency Education Office, 2023; Serdang Bedagai Regency Health Office, 2023). On the other hand, the community has responded positively to the company's presence due to its contribution in creating jobs and providing social benefits through its CSR program, although there are still hopes that the program will be more equitable and sustainable, especially in the fields of education, health, and productive economic development

(KabarDaerah.com, 2024). Although various CSR programs have been implemented, studies measuring the actual impact of CSR on the welfare of surrounding communities are still limited. Therefore, this study aims to analyze the impact of PTPN IV Unit Adolina's CSR program on the welfare of the surrounding community and evaluate its effectiveness as a basis for developing recommendations for developing a more sustainable and targeted CSR program.

THEORETICAL BASIS

Definition and Dimensions of Corporate Social Responsibility (CSR)

Corporate Social Responsibility (CSR) is a company's commitment to contribute to sustainable development by considering economic, social, and environmental aspects. The concept of CSR emphasizes that companies are not solely focused on profit but also responsible for the well-being of the community and environmental sustainability surrounding their operational areas. Effective CSR implementation can improve corporate relationships with the community, strengthen corporate reputation, and support long-term business sustainability. The main dimensions of CSR include economic, social, and environmental responsibilities, implemented in a balanced manner as part of ethical business practices (Mukhtaruddin & Sugiarto, 2024).

Stakeholder Theory in CSR Implementation

Freeman's stakeholder theory explains that companies must consider the interests of all parties involved in their activities, both internal and external. These stakeholders include employees, the community, the government, customers, investors, and other parties that can be influenced or affect the company's activities. In implementing CSR, stakeholder involvement is crucial because the success of the program depends heavily on the company's ability to understand the needs and expectations of stakeholders. Therefore, CSR is not only seen as a corporate obligation but also as a strategy to create shared value and support corporate sustainability (Riza & Pratama, 2023).

Impact of CSR on Community Welfare

CSR programs can make a real contribution to improving community welfare, particularly through education, health, economic empowerment, and infrastructure development. Well-targeted CSR implementation can improve community access to basic services, expand employment opportunities, and support the development of productive community enterprises. Furthermore, CSR programs can help reduce social disparities and improve the quality of life in communities surrounding the company. Thus, CSR is an instrument that can promote sustainable social and economic development (Khaparde, 2024).

Evaluation of the Effectiveness of CSR Programs

CSR program evaluation is necessary to determine the extent to which the implemented program is able to achieve its stated objectives. One frequently used approach is Social Return on Investment (SROI), a method that measures the social value generated relative to the resources invested. Using SROI helps companies identify the social benefits gained by the community and assess the efficiency of program implementation. The results of this evaluation can serve as a basis for companies to improve the quality and sustainability of future CSR programs (Muzahid & Wahyuningsih, 2023).

Implementation of CSR in Plantation Companies

In the plantation sector, CSR plays a crucial role in supporting community development around company operational areas. Commonly implemented programs include educational assistance, healthcare, economic empowerment, skills training, and the development of community facilities and infrastructure. The success of CSR implementation in the plantation sector is heavily influenced by community participation in program planning and implementation. Community involvement not only increases program effectiveness but also strengthens the relationship between companies and local communities, creating sustainable benefits for both parties (Bidari & Sutanto, 2023).

RESEARCH METHODS

This study uses a descriptive quantitative approach aimed at analyzing the impact of PTPN IV Kebun Adolina's Corporate Social Responsibility (CSR) program on the welfare of the community surrounding the company's operational area. The study was conducted in Pegajahan, Lubuk Pakam, and Perbaungan Districts, Serdang Bedagai Regency, North Sumatra, which are adjacent areas and have the potential to directly benefit from

THE IMPACT OF THE CSR (CORPORATE SOCIAL RESPONSIBILITY) PROGRAM ON THE WELFARE OF THE COMMUNITY AROUND PTPN IV KEBUN ADOLINA

Rikki Pratama et al

the company's CSR program. The research activities were carried out from April to May 2026 (Ferdinand, 2006). The study population was all residents of the three sub-districts, totaling 242,435 people. The sample size was determined using the Slovin formula with a 10% error rate, resulting in 71 respondents. The sampling technique used purposive sampling, selecting respondents who resided around PTPN IV Kebun Adolina and had knowledge or experience related to the company's CSR program (Sugiyono, 2006; Umar, 2005).

The data used in this study consisted of primary and secondary data. Primary data were obtained directly from respondents through questionnaires, interviews, and field observations. Meanwhile, secondary data were obtained from the company's CSR report, official documents of PTPN IV Kebun Adolina, and various other supporting sources relevant to the study. Data collection was conducted using a closed-ended questionnaire with a five-level Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), to measure respondents' perceptions of the implementation of the CSR program and the level of community welfare (Sugiyono, 2013). Data analysis was conducted using SPSS software through descriptive analysis and multiple linear regression analysis. Prior to hypothesis testing, the data were first examined through instrument testing and classical assumption testing to ensure the validity of the research model. Multiple linear regression analysis was used to measure the impact of CSR programs in education, health, economics or community empowerment, and social and infrastructure on the welfare of the community around PTPN IV Kebun Adolina.

RESEARCH RESULT

CLASSICAL ASSUMPTIONS

Normality

The normality test aims to determine whether the residual data in a regression model is normally distributed. The test is conducted using the Kolmogorov-Smirnov method and the Normal Probability Plot (P-Plot). Data are considered normally distributed if the significance value (Asymp. Sig.) is greater than 0.05 and the distribution of points on the P-Plot graph follows a diagonal line.

Table 1. Normality Test Results

Information	Mark
N	71
Mean	0.0000000
Standard Deviation	4.31835903
Test Statistics	0.080
Asymp. Sig. (2-tailed)	0.200

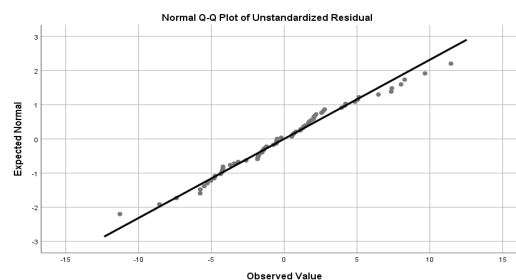


Figure 1. Normality Test Results

Based on the results of the normality test using the Kolmogorov-Smirnov method, the Asymp. Sig. (2-tailed) value was obtained at 0.200. This value is greater than the significance level of 0.05 ($0.200 > 0.05$), so it can be stated that the residual data is normally distributed. The Test Statistic value of 0.080 indicates a relatively small level of residual deviation from the normal distribution. In addition, the residual mean value of 0.0000000 indicates that the residual average is close to zero, while the standard deviation value of 4.31835903 indicates the level of residual spread in the regression model. These results are supported by the Normal Probability Plot (P-Plot) graph which shows that the residual points spread around and follow the direction of the diagonal line. This distribution pattern shows no significant deviation from the normal distribution. Thus, it can be concluded that the residual data has met the assumption of normality, so that the regression model used is feasible and can be continued to the next testing stage .

Multicollinearity

A multicollinearity test is performed to determine whether there is a strong relationship between the independent variables in a regression model. A good regression model should be free of multicollinearity. Multicollinearity testing is performed by examining the Tolerance and Variance Inflation Factor (VIF) values. Data are considered free of multicollinearity if the Tolerance value is >0.10 and the VIF value is <10.

Table 2. Multicollinearity Test Results

Variables	Tolerance	VIF	Information
CSR Education (X1)	0.117	8,511	No Multicollinearity Occurs
Health CSR (X2)	0.132	7,598	No Multicollinearity Occurs
Economic CSR (X3)	0.158	6,331	No Multicollinearity Occurs
Social CSR (X4)	0.115	8,673	No Multicollinearity Occurs

Based on the results of the multicollinearity test, all independent variables have a Tolerance value greater than 0.10 and a Variance Inflation Factor (VIF) value less than 10. The CSR Education variable (X1) has a Tolerance value of 0.117 and a VIF of 8.511, CSR Health (X2) has a Tolerance value of 0.132 and a VIF of 7.598, CSR Economy (X3) has a Tolerance value of 0.158 and a VIF of 6.331, and CSR Social (X4) has a Tolerance value of 0.115 and a VIF of 8.673. These results indicate that there are no symptoms of multicollinearity between the independent variables, so the regression model meets the assumptions of multicollinearity and is suitable for further analysis.

Heteroscedasticity Test

The heteroscedasticity test is performed to determine whether the regression model exhibits unequal residual variances from one observation to another. A good regression model is one that does not experience heteroscedasticity. In this study, the heteroscedasticity test was performed using the Glejser test by examining the significance value of each independent variable. Data are considered free of heteroscedasticity if the significance value is greater than 0.05.

Table 3. Heteroscedasticity Test Results

Variables	Sig.	Sig Standard	Information
CSR Education (X1)	0.987	0.05	No Heteroscedasticity Occurs
Health CSR (X2)	0.537	0.05	No Heteroscedasticity Occurs
Economic CSR (X3)	0.663	0.05	No Heteroscedasticity Occurs
Social CSR (X4)	0.411	0.05	No Heteroscedasticity Occurs

Based on the results of the heteroscedasticity test, all independent variables have a significance value greater than 0.05. The CSR Education variable (X1) has a significance value of 0.987, CSR Health (X2) of 0.537, CSR Economic (X3) of 0.663, and CSR Social (X4) of 0.411. These results indicate that there are no symptoms of heteroscedasticity in the regression model. Thus, the regression model has met the assumption of homoscedasticity and is therefore suitable for use in multiple linear regression analysis.

Simple Linear Regression Analysis

Multiple linear regression analysis was used to determine the influence of independent variables, namely CSR Education (X1), CSR Health (X2), CSR Economy (X3), and CSR Social (X4) on the dependent variable, namely Social Welfare (Y). The results of the multiple linear regression analysis can be seen as follows.

Table 4. Results of Multiple Linear Regression Analysis

Variables	B	t	Sig.
Constant	3,205	1,277	0.206
CSR Education (X1)	0.415	1,288	0.023
Health CSR (X2)	1,442	4,382	0,000
Economic CSR (X3)	0.749	2,494	0.015
Social CSR (X4)	1,210	3,506	0.001

Based on the results of multiple linear regression analysis, the regression equation is obtained.

$$Y = 3.205 + 0.415X_1 + 1.442X_2 + 0.749X_3 + 1.210X_4 + e .$$

THE IMPACT OF THE CSR (CORPORATE SOCIAL RESPONSIBILITY) PROGRAM ON THE WELFARE OF THE COMMUNITY AROUND PTPN IV KEBUN ADOLINA

Rikki Pratama et al

The constant value of 3.205 indicates that if the variables of CSR Education, CSR Health, CSR Economy, and CSR Social are considered constant, then the value of Social Welfare is 3.205. All independent variables have a positive regression coefficient, namely CSR Education of 0.415, CSR Health of 1.442, CSR Economy of 0.749, and CSR Social of 1.210. These results indicate that an increase in each CSR program will be followed by an increase in the Social Welfare of the community, with the greatest influence shown by CSR Health, followed by CSR Social, CSR Economy, and CSR Education. Thus, all CSR variables have a positive direction of influence on the Social Welfare of the community.

HYPOTHESIS TESTING

Partial Test (t-Test)

A t-test is conducted to determine the partial effect of each independent variable on the dependent variable. The test is performed by comparing significance values at a significance level of 0.05. If the significance value is less than 0.05, the hypothesis is accepted.

Table 5. Partial Test Results (t-Test)

Variables	t Count	Sig.	Information
CSR Education (X1)	1,288	0.202	Significant Influence
Health CSR (X2)	4,382	0,000	Significant Influence
Economic CSR (X3)	2,494	0.015	Significant Influence
Social CSR (X4)	3,506	0.001	Significant Influence

Based on the results of the partial test (t-test), the CSR Education variable (X1) has a significance value of 0.202 (> 0.05), so it does not have a significant effect on Social Welfare. This indicates that CSR programs in the field of education have not been able to provide a real contribution to improving community welfare. In contrast, the CSR Health variable (X2) has a significance value of 0.000 (< 0.05), CSR Economy (X3) of 0.015 (< 0.05), and CSR Social (X4) of 0.001 (< 0.05), so that the three variables have a positive and significant effect on Social Welfare. These results indicate that health programs, economic empowerment, and social activities implemented by the company are able to improve the quality of life, income, and social conditions of the community. Thus, increasing the implementation of CSR in the health, economic, and social fields will be followed by an increase in the social welfare of the community, while CSR Education has not had a significant effect.

Simultaneous Significance Test (F-Test)

The F-test is conducted to determine the simultaneous or joint influence of independent variables on the dependent variable. The test is performed by comparing significance values with a significance level of 0.05. If the significance value is less than 0.05, the independent variables simultaneously influence the dependent variable.

Table 5. Significant Test Results

Model	F Count	Sig.
Regression	244,374	0,000

Based on Table 5, the calculated F value was 244.374 with a significance of 0.000 (<0.05), so that CSR Education (X1), CSR Health (X2), CSR Economy (X3), and CSR Social (X4) simultaneously had a significant effect on Social Welfare (Y). This shows that all CSR programs have a strong contribution in improving the social welfare of the community, and the regression model used is declared feasible and able to explain the relationship between variables in this study.

Coefficient of Determination (R²)

The coefficient of determination test is conducted to determine the extent to which the independent variable can explain the dependent variable. The coefficient of determination value can be seen in the Adjusted R Square value.

Table 6. Results of the Determination Coefficient (R²)

Model	R Square	Adjusted R Square
1	0.937	0.933

Based on Table 6, the R Square value of 0.937 (93.7%) indicates that CSR Education (X1), CSR Health (X2), CSR Economy (X3), and CSR Social (X4) are able to explain Social Welfare (Y) by 93.7%, while the

remaining 6.3% is influenced by other variables outside the study. The Adjusted R Square value of 0.933 indicates that the model's ability remains very strong after adjustment, namely 93.3%. This shows that the CSR variable has a very large contribution and the research model has high accuracy in explaining the social welfare of the community.

DISCUSSION

The Influence of CSR Education on Community Social Welfare

The results of the study indicate that CSR Education (X1) does not significantly influence Social Welfare (Y) with a significance value of $0.202 > 0.05$. This indicates that the educational programs provided by the company have not had a direct impact on improving the social welfare of the community. Although educational assistance and supporting activities have been provided, the benefits are still long-term and therefore have not been significantly felt. According to Mukhtaruddin and Sugiarto (2024), CSR is a company's effort to sustainably improve social welfare. However, its effectiveness depends heavily on its alignment with community needs. In this context, community needs are more focused on economic and health aspects than education. This aligns with Freeman's stakeholder theory, as cited in Riza and Pratama (2023), which emphasizes the importance of program alignment with stakeholder needs. Furthermore, the impact of education is long-term and therefore does not directly impact social welfare (Khaparde, 2024). Therefore, CSR education still contributes, but it has not yet become a dominant factor in improving community welfare.

The Influence of Health CSR on Community Social Welfare

CSR Health (X2) has a positive and significant effect on Social Welfare (Y) with a significance value of $0.000 < 0.05$. Health programs such as health services, medical assistance, and health facilities have been proven to have a direct impact on improving the quality of life of the community. According to Khaparde (2024), CSR in the health sector can improve community welfare by increasing access to healthcare services and productivity. This finding is also supported by Riza and Pratama (2023), who stated that meeting stakeholder needs through social programs can strengthen company-community relationships. Thus, health CSR is the most dominant factor in improving social welfare because it is directly related to the basic needs of society.

The Influence of Economic CSR on Community Social Welfare

Economic CSR (X3) has a positive and significant effect on Social Welfare (Y) with a significance value of $0.015 < 0.05$. Programs such as business capital assistance, training, and income enhancement have been proven to help communities improve their economic conditions. According to Khaparde (2024), economic CSR plays a role in creating job opportunities and improving community welfare. Similarly, Bidari and Sutanto (2023) explain that community involvement in economic CSR programs in the plantation sector can increase economic independence. Based on stakeholder theory (Riza and Pratama, 2023), companies are obliged to provide economic benefits to the surrounding community as part of their social responsibility.

The Influence of Social CSR on Community Social Welfare

Social CSR (X4) has a positive and significant effect on Social Welfare (Y) with a significance value of $0.001 < 0.05$. Social programs such as public facility assistance, community activities, and equitable distribution of CSR programs improve social relations and community solidarity. According to Mukhtaruddin and Sugiarto (2024), sustainable CSR can create harmonious relationships between companies and communities. This is reinforced by Bidari and Sutanto (2023), who state that social programs in the plantation sector can strengthen social ties in local communities. Thus, social CSR plays an important role in creating non-material welfare in the form of a sense of security, togetherness, and social harmony.

The Simultaneous Influence of CSR on Education, Health, Economy, and Social Affairs

Simultaneously, CSR Education, Health, Economy, and Social have a significant influence on Social Welfare with a calculated F value of 244.374 and a significance of $0.000 < 0.05$. This indicates that the combination of all CSR programs has a significant contribution to improving community welfare. The Adjusted R Square value of 0.933 indicates that 93.3% of the variation in social welfare can be explained by CSR variables. According to Mukhtaruddin and Sugiarto (2024), integrated CSR will have a more optimal impact on community welfare. In addition, Khaparde (2024) emphasized that CSR plays a role as an agent of social change, while Bidari and Sutanto (2023) stated that sustainable CSR implementation can improve the welfare of society as a whole.

CONCLUSION

Based on the results of research on the influence of Corporate Social Responsibility (CSR) on the social welfare of the community around PTPN IV Kebun Adolina, it can be concluded that CSR Education (X1) has a positive but insignificant effect on social welfare with a significance value of $0.202 > 0.05$, so the hypothesis is rejected. This indicates that the education program has not had a direct impact on improving community welfare. Meanwhile, CSR Health (X2) has a positive and significant effect with a significance value of $0.000 < 0.05$, which means that the health program is able to improve social welfare by increasing access to services and the quality of life of the community.

Furthermore, Economic CSR (X3) also has a positive and significant effect with a significance value of $0.015 < 0.05$, thus indicating that economic empowerment, business assistance, and increased income contribute to community welfare. Social CSR (X4) has a positive and significant effect with a significance value of $0.001 < 0.05$, indicating that social assistance, construction of public facilities, and strengthening social relations can improve community welfare. Simultaneously, all CSR variables of Education, Health, Economy, and Social have a positive and significant effect on the social welfare of the community with a significance value of $0.000 < 0.05$ and F count of 244.374. This shows that together the CSR programs implemented by the company provide a significant contribution to improving the social welfare of the community around PTPN IV Kebun Adolina.

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