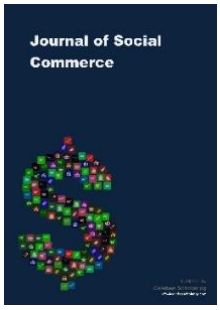

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The Influence of Corporate Social Responsibility Effectiveness on Community Welfare: A Study of Social Value Exchange in Rural Infrastructure Development

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Abstract

Corporate Social Responsibility has increasingly been positioned as a mechanism through which private enterprises engage with community welfare, particularly in contexts where public development efforts face structural limitations. This study examines the effectiveness of a Corporate Social Responsibility program in the form of road infrastructure development and its relationship with community welfare in Kampung Lalang Hamlet, North Sumatra. Using a quantitative approach, data were collected from 72 community members through structured questionnaires measuring perceived CSR effectiveness and welfare across educational, health, and economic dimensions. The data were analyzed using validity and reliability testing, classical assumption testing, and simple linear regression analysis. The results indicate a positive and statistically significant relationship between CSR program effectiveness and community welfare, with a substantial proportion of welfare variation explained by the effectiveness of the CSR intervention. These findings suggest that infrastructure-oriented CSR programs can shape community welfare through improved accessibility, service utilization, and economic activity when implemented in ways that align with local needs and social conditions.

Introduction

Development is not merely a technical process of economic expansion but a socially embedded transformation that unfolds through interactions among the state, market actors, and communities. Contemporary development theory increasingly recognizes that the sustainability of development outcomes depends on how effectively social value is generated and distributed across these actors, rather than on growth indicators alone. Within this perspective, welfare is understood as a multidimensional condition shaped by access to infrastructure, social services, economic opportunity, and collective agency. While governments remain central in coordinating development agendas, their capacity to address

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persistent structural inequalities is often constrained by fiscal, administrative, and geographical limitations, particularly in rural and peripheral areas (Probosiwi, 2016; Ristiawan & Lestari, 2019).

In this context, the private sector has emerged as a critical complementary actor in development processes. The expansion of corporate activity into rural and resource adjacent regions has intensified debates on the social responsibilities of firms whose operations generate both economic value and social externalities (Aguilera-Caracuel & Guerrero-Villegas, 2018; Lund-Thomsen et al., 2016). When left unaddressed, these externalities can exacerbate inequality, environmental degradation, and social vulnerability, despite overall economic growth. This tension has reinforced the normative and regulatory relevance of Corporate Social Responsibility as a mechanism through which firms internalize social obligations and contribute to public welfare beyond profit maximization (Sunaryo, 2013). In Indonesia, this responsibility is not merely voluntary but institutionally grounded through Law No. 40 of 2007, which mandates CSR implementation for companies operating in or related to natural resources.

The evolution of CSR scholarship reflects a shift from philanthropic and image driven activities toward more strategic and development-oriented interventions. Early CSR practices were often episodic and charity based, providing short term relief without altering underlying structural conditions. More recent frameworks emphasize shared value creation, stakeholder engagement, and long-term community development, positioning CSR as an integral component of sustainable development strategies rather than an auxiliary corporate function (Supada, 2020; Fedotova et al., 2023; Baumgartner, 2014). Within this paradigm, infrastructure-based CSR programs, particularly in transportation and access related facilities, have gained prominence due to their multiplier effects on education, health, and local economic systems.

Road infrastructure occupies a critical position in rural welfare dynamics. Empirical development studies consistently demonstrate that improved road access reduces transaction costs, enhances market integration, facilitates access to education and healthcare, and strengthens social connectivity in previously isolated communities (Kuncoro, 2016; Calderón & Servén, 2014). When infrastructure provision is integrated into CSR initiatives, it potentially bridges gaps left by public investment while aligning corporate presence with tangible community benefits. However, the effectiveness of such interventions depends not on infrastructure provision alone but on how these programs are designed, implemented, and perceived by beneficiary communities. Despite the growing prominence of CSR in development discourse, empirical findings on its impact on community welfare remain inconclusive. Several studies report positive associations between CSR initiatives and welfare improvement, particularly when programs address basic needs and local priorities (Renyaan et al., 2019; Naser & Bandrang, 2020). Other studies, however, highlight weak or even negative effects, often attributing these outcomes to misalignment between corporate programs and community expectations, limited participation, or symbolic compliance with regulatory requirements (Astiti & Saitri, 2017). These mixed findings suggest that CSR effectiveness is highly context dependent and cannot be assumed a priori.

Currently, a significant proportion of CSR research in developing country contexts relies on qualitative or descriptive approaches that privilege narrative accounts over measurable outcomes. While such approaches provide valuable contextual insight, they limit the ability to assess the magnitude and statistical significance of CSR impacts on welfare indicators. Quantitative assessments that operationalize CSR effectiveness and empirically test its relationship with welfare outcomes remain relatively underrepresented, particularly in the

domain of infrastructure-based CSR in rural settings (Rahmadani et al., 2018; Sandy et al., 2020).

Responding to this gap, the present study examines the effectiveness of a CSR program focused on road construction implemented by a plantation and palm oil processing company in Kampung Lalang Hamlet, North Sumatra. By employing a quantitative approach grounded in community perceptions, this study seeks to assess whether and to what extent infrastructure-oriented CSR contributes to improvements in education, health, and economic dimensions of welfare. Rather than assuming CSR as inherently beneficial, the study positions effectiveness as an empirical question, thereby contributing to a more critical and evidence-based understanding of corporate roles in rural development. Through this focus, the study aims to advance CSR literature in three ways. First, it situates CSR within a social value exchange framework that emphasizes reciprocal relationships between firms and communities. Second, it empirically examines infrastructure-based CSR as a welfare enhancing mechanism in a rural Indonesian context. Third, it addresses methodological limitations in prior studies by providing statistically testable evidence that complements existing qualitative insights. In doing so, the study contributes to ongoing scholarly and policy debates on how CSR can be designed as a credible and accountable instrument for sustainable community welfare improvement.

Literature Review

Corporate Social Responsibility as Social Value Exchange

Corporate Social Responsibility has increasingly been conceptualized not merely as a moral obligation or compliance mechanism, but as a form of social value exchange between firms and their surrounding communities. This perspective emphasizes reciprocity, where corporate interventions generate social benefits that, in turn, contribute to social legitimacy, trust, and long-term operational stability for firms. Rather than treating communities as passive beneficiaries, CSR is framed as a relational process that shapes mutual expectations, responsibilities, and outcomes. Within this framework, CSR effectiveness depends on how well corporate programs align with local needs, social structures, and development priorities. Rosalinda et al. (2022) and Rahmadani et al. (2018) argue that CSR initiatives are most effective when they are embedded within community contexts and address tangible social constraints rather than symbolic or reputational concerns. This alignment is particularly critical in rural areas, where infrastructure deficits and limited public services amplify the social relevance of corporate interventions.

Infrastructure Based CSR and Community Welfare

Infrastructure development represents one of the most consequential forms of CSR intervention due to its broad and enduring welfare effects. Roads, in particular, function as enabling infrastructure that facilitates access to markets, education, healthcare, and social networks. Development economics literature consistently shows that rural road improvements contribute to poverty reduction, income diversification, and human capital development by lowering transportation costs and reducing spatial isolation (Kuncoro, 2016; Calderón & Servén, 2014). When infrastructure provision is carried out through CSR programs, its welfare impact is shaped not only by physical outcomes but also by governance processes, community participation, and maintenance sustainability. Renyaan et al. (2019) demonstrate that infrastructure-oriented CSR programs yield stronger development outcomes when communities are involved in planning and monitoring processes. Conversely, Astiti and Saitri (2017) show that poorly targeted CSR initiatives may fail to translate infrastructure provision

into perceived welfare gains, highlighting the importance of effectiveness rather than program presence alone.

Dimensions of Community Welfare

Community welfare is widely recognized as a multidimensional construct encompassing educational access, health conditions, and economic capacity. In the education dimension, infrastructure improvements such as road access have been linked to increased school attendance, reduced travel risk, and improved teacher mobility, particularly in rural contexts (Siddique et al., 2019; Sukmasari, 2020; Francisco & Tanaka, 2019; Wanke et al., 2024). These effects position infrastructure as an indirect but critical determinant of educational outcomes. In the health dimension, improved transportation infrastructure enhances access to medical facilities, emergency services, and health outreach programs. Empirical studies indicate that reduced travel time and improved road quality significantly affect healthcare utilization and health outcomes in rural populations (Calderón & Servén, 2014; Naser & Bandrang, 2020). From a CSR perspective, these health related benefits strengthen community perceptions of corporate contribution to quality of life. Economically, road infrastructure supports local markets by facilitating the movement of goods, labor, and services. Improved accessibility enables households to expand economic activities beyond subsistence levels, integrate into regional markets, and stabilize income flows. Kuncoro (2016) emphasizes that such infrastructure driven economic effects are cumulative and reinforce broader welfare improvements when sustained over time.

CSR Effectiveness and Empirical Evidence

Empirical studies on CSR effectiveness reveal heterogeneous outcomes, underscoring the contextual nature of CSR impacts. While several studies report positive relationships between CSR initiatives and community welfare indicators, others find limited or insignificant effects, often due to weak program design or inadequate alignment with community needs (Naser & Bandrang, 2020; Sandy et al., 2020; Barnett et al., 2020; Idemudia & Osayande, 2018). These inconsistencies highlight the need to operationalize CSR effectiveness as a measurable construct rather than assuming its impact. The present study builds on this literature by operationalizing CSR effectiveness through community relations, company involvement, program benefits, and awareness and commitment. These dimensions reflect both process and outcome aspects of CSR implementation and directly correspond to the welfare indicators examined in the empirical analysis. By integrating these constructs within a quantitative framework, the study provides a theoretically grounded and empirically testable model that links CSR effectiveness to multidimensional community welfare outcomes.

Methods

This study employs a quantitative approach. According to Ghanad (2023), quantitative research is a systematic approach used to objectively manage and analyze data to solve research problems or test hypotheses for the development of general principles. The quantitative approach was selected because it enables structured measurement of community perceptions regarding CSR program effectiveness and welfare using numerical instruments. Although perception-based measurement does not fully represent factual program performance, this design is considered adequate for an exploratory study, allowing the findings to describe empirical tendencies without claiming broad causal generalizations. The hypothesis was formulated based on theoretical relationships between CSR program effectiveness and community welfare as elaborated in the literature review and prior empirical studies. The hypothesis adopts a directional form based on prevailing findings in previous research.

H1: CSR Program Effectiveness has a positive effect on Community Welfare.

H0: CSR Program Effectiveness does not have a positive effect on Community Welfare.

Since the research model involves only one independent variable, the hypothesis testing is intended to provide preliminary insights into the relationship, rather than explain all determinants of community welfare.

Population and Sample

The study population consists of 260 residents of Dusun Kampung Lalang in North Sumatra. A simple random sampling technique was used to ensure each member of the population had an equal chance of selection. The sample size was calculated using the Slovin formula, which is appropriate when the total population is known:

$$n = \frac{N}{1 + Ne^2}$$

N = 260

e = 0,10 (*margin of error* 10%)

$$n = \frac{260}{1 + 260(0,1)^2} = \frac{260}{1 + 260(0,01)} = \frac{260}{3,6} = 72,22$$

Thus, the sample used in this study consists of 72 respondents. The 10% margin of error was determined as a realistic balance between representativeness and resource constraints; therefore, the findings are indicative rather than intended for broad statistical generalization.

Types and Data Collection

Primary data were obtained directly from respondents through questionnaires measuring perceptions of CSR program effectiveness and community welfare. A Likert scale was used to assess respondents' attitudes, opinions, and perceptions. Secondary data were collected from official documents and publications related to the CSR program from government agencies and companies (Abdussamad et al., 2021). As the study relies solely on perceptual data without triangulating objective welfare indicators, the results reflect respondents' subjective assessments rather than verified factual outcomes this limitation is acknowledged as part of the research design.

Data Analysis Technique

Data were analyzed using simple linear regression to assess the influence of the independent variable (CSR program effectiveness) on the dependent variable (community welfare). Prior to regression analysis, validity, reliability, and classical assumption tests were conducted to ensure data feasibility. Given that the model includes only one independent variable and does not incorporate control variables, the results are interpreted cautiously and emphasize the observed empirical relationship rather than asserting absolute causal claims.

Results and Discussion

This section presents the empirical results of the study examining the effectiveness of the CSR program and its relationship with community welfare in Kampung Lalang Hamlet. The analysis begins by reporting the results of the instrument testing, including validity and reliability assessments, followed by classical assumption tests to ensure the suitability of the data for regression analysis. Subsequently, the findings from the simple linear regression, partial significance testing, and coefficient of determination are presented to describe the statistical

relationship between CSR program effectiveness and community welfare based on respondents' perceptions.

Validity Test

The validity test refers to the process of evaluating how accurately an instrument measures the concept it is intended to assess. In quantitative research, the main objective is to ensure that each item in the questionnaire truly reflects the construct or variable being studied. According to Sugiyono (2017), "Validity indicates the degree of accuracy between the actual data obtained from research subjects and the data presented by the researcher." If each item in the instrument has a high correlation with the total score, the instrument is considered valid (r-count > r-table and sig < 0.05).

R Table

(df) = n – 2 =

Df = 72 – 2 = 70 (**0,231**)

X (Community Relations Indicator)

Table 1. Validity Test Results

Indicator	Item	r-count	Significance Value
Community Relations	HDM.1	0,797	0,00
	HDM.2	0,866	0,00
	HDM.3	0,885	0,00
	HDM.4	0,763	0,00
Company Involvement	KP.1	0,908	0,00
	KP.2	0,910	0,00
	KP.3	0,866	0,00
	KP.4	0,847	0,00
Program Benefits	MP.1	0,853	0,00
	MP.2	0,893	0,00
	MP.3	0,852	0,00
	MP.4	0,776	0,00
Awareness and Commitment	KK.1	0,873	0,00
	KK.2	0,864	0,00
	KK.3	0,867	0,00
	KK.4	0,794	0,00
Education	Pend.1	0,887	0,00
	Pend.2	0,867	0,00
	Pend.3	0,872	0,00
	Pend.4	0,783	0,00
Health	Kes.1	0,857	0,00
	Kes.2	0,896	0,00
	Kes.3	0,894	0,00
	Kes.4	0,852	0,00
Economy	Eko.1	0,870	0,00
	Eko.2	0,886	0,00
	Eko.3	0,811	0,00
	Eko.4	0,796	0,00

Source: Processed by the researcher

All question items under each indicator were found to have r-count values greater than the r-table value (0.231) and significance levels below 0.05. This indicates that all the indicators above meet the validity criteria.

Reliability Test

To verify whether the research instrument can produce consistent results upon repeated measurements, a reliability test was conducted. The reliability test used Cronbach's Alpha (α), which indicates that an instrument is reliable when the value is greater than 0.60 (Ghozali, 2016).

Table 2. Reliability Test Results

Variable	Indicator	α
X	Community Relations	0,846
	Company Involvement	0,905
	Program Benefits	0,866
	Awareness and Commitment	0,868
Y	Education	0,874
	Health	0,898
	Economy	0,861

Source: Processed by the researcher

The data analysis shows that all α values for the indicators are above 0.60, indicating that the questionnaire is reliable and that the research instrument meets the reliability criteria for subsequent analysis stages.

Normality Test

To evaluate the distribution of research data, a normality test (Kolmogorov-Smirnov) was conducted to examine whether the sample data fit the theoretical normal distribution. This test is crucial in linear regression analysis because one of its main assumptions is that the residuals must be normally distributed.

Table 3. Normality Test Results

Asymp. Sig. (2-tailed)	**0,058**

Source: Processed by the researcher

The normality test produced an Asymp. Sig. (2-tailed) value of 0.058. Since this value is greater than 0.05, the residuals are considered normally distributed, allowing the linear regression analysis to proceed.

Heteroscedasticity Test

To examine the stability of residual variance in the regression model, the Glejser method was used. If the significance value (Sig.) of each independent variable exceeds 0.05, it indicates that heteroscedasticity is not present.

Table 4. Heteroscedasticity Test (Glejser) Results

Significance Value	0,783

Source: Processed by the researcher

The Glejser heteroscedasticity test produced a significance value of 0.783 (> 0.05), indicating that the regression model is free from heteroscedasticity and meets the assumption of homoscedasticity.

Linearity Test

A linearity analysis was performed to determine whether the relationship between the independent and dependent variables in the regression model is linear, as required by the basic assumptions of linear regression. The linearity test was conducted using the Analysis of Variance (ANOVA) approach, particularly by analyzing the "Linearity" and "Deviation from Linearity" outputs.

Table 5. Linearity Test Results

Linearity	0,000
Deviation from Linearity	0,094

Source: Processed by the researcher

The Linearity significance value of 0.000 (< 0.05) indicates a significant linear relationship between variables X and Y. The Deviation from Linearity value of 0.094 (> 0.05) shows no deviation from linearity, thus confirming that the linearity assumption is fulfilled.

Regression Equation Model

The relationship between the independent and dependent variables can be described mathematically through a form known as the Linear Regression Model. The simple linear regression model is used in this study because it involves only one independent variable, namely the CSR program, and one dependent variable, namely community welfare. The simple linear regression can be formulated as follows:

$Y = a + bX$

Here, Y represents community welfare, X represents the effectiveness of the CSR program, a is the constant (intercept) that shows the value of Y when X = 0, and b is the regression coefficient that indicates the amount of change in Y caused by a one-unit change in X. This model serves as the basis for measuring the strength and direction of CSR's influence on community welfare and acts as a reference for prediction and decision-making processes based on field data.

Table 6. Regression Equation Model Results

Constant Value	16,622
Regression Coefficient Value	0,700

Source: Processed by the Researcher

The calculation results using SPSS produce the following regression equation:

$Y = 16.622 + 0.700X$

This regression model means:

Constant (a = 16.622):

If there is no CSR program effectiveness (X = 0), the baseline value of community welfare is estimated at 16.622 units. This represents the basic level of welfare without CSR program intervention.

Regression Coefficient (b = 0.700):

For every one-unit increase in the effectiveness of the CSR program, community welfare increases by 0.700 units. This means that the more effective the CSR program (for example, in road construction), the greater the improvement in community welfare. The CSR program has a positive and linear effect on community welfare. The higher the effectiveness of CSR (such

as road construction), the greater its contribution to improving welfare aspects such as education, health, and the economy.

t-Test (Partial Test)

The significance of the influence of the independent variable on the dependent variable was tested using the **t-test**, with the criterion of significance < 0.05 or a calculated *t* value greater than the *t-table* value, indicating a significant influence.

Formula for t-table:

t table = t (α / 2; n − k − 1)

Given:

α = 0,05 (two-tailed test → 0,05 divided by 2 = 0,025)

n = 72 (number of respondents)

k = 1 (number of independent variables: X)

df = n − k − 1 = 72 − 1 − 1 = 70

With α/2 = 0.025 and df = 70, the *t-table* value based on the t-distribution is 1.994.

Table 7. Partial Test Results

Significance Value	0,000
t-Count	9,757

Source: Processed by the Researcher

The partial t-test shows that CSR (X) significantly affects Community Welfare (Y), indicated by a significance value of 0.000 (<0.05) and a t-count of 9.757 (>1.994).

Coefficient of Determination Test

To determine the extent of the independent variable's influence in explaining changes in the dependent variable, the coefficient of determination (R Square) was analyzed.

Table 8. Coefficient of Determination Test Results

R Square Value	0,641

Source: Processed by the Researcher

Based on the regression analysis, the R Square value obtained was 0.641, meaning that 64.1% of the variation in Community Welfare can be explained by the variable Effectiveness of the CSR Program (X), particularly in the form of road construction. Meanwhile, the remaining 35.9% is influenced by other factors not included in this model, such as government policies, community participation, geographical conditions, or other social and economic factors.

CSR Effectiveness and Community Welfare Dynamics

The empirical relationship between CSR program effectiveness and community welfare observed in this study reflects a deeper development logic in which infrastructure operates as a social catalyst rather than a standalone physical asset. Road construction, as implemented through CSR, reshapes everyday mobility, alters temporal access to services, and reconfigures how rural communities interact with economic and institutional systems. Development studies have long argued that infrastructure affects welfare indirectly by reorganizing opportunity structures rather than by delivering immediate material gains, a position consistently supported in rural development research across Asia and Sub Saharan Africa (Jacoby, 2000; Gibson &

Rozelle, 2003; Calderón & Servén, 2014). Within this frame, the strong association identified in the regression analysis suggests that CSR driven infrastructure does not simply supplement public development efforts but actively mediates how welfare is experienced and evaluated by communities. This helps explain why effectiveness, as perceived through program relevance and execution, carries such explanatory weight in the model.

What becomes particularly salient in this study is that CSR effectiveness appears to function through relational credibility rather than infrastructural presence alone. The literature on stakeholder-based CSR emphasizes that community welfare outcomes are shaped by how corporate initiatives are socially embedded, negotiated, and sustained over time (Fordham et al., 2018; Gultian, 2025; Khan, 2025). In rural settings, where historical marginalization often informs community perceptions of external actors, infrastructure provided through CSR acquires meaning through trust, visibility, and continuity of engagement. Empirical CSR studies in developing economies have shown that programs perceived as responsive and participatory are more likely to translate into welfare gains because communities integrate them into everyday practices rather than treating them as temporary interventions (Ko et al., 2025; Ngulube et al., 2024). The findings in this study resonate with this perspective, indicating that the observed welfare improvements are inseparable from how the CSR program was implemented and socially received.

The education and health dimensions of welfare identified in the results further illuminate the structural nature of infrastructure-based CSR impacts. Improved road access reduces the physical and psychological costs associated with schooling, particularly in rural contexts where distance and safety concerns often limit attendance and teacher mobility. Prior studies consistently demonstrate that transportation infrastructure influences educational participation not through curriculum or pedagogy but through accessibility and reliability of movement (Hoelscher et al., 2022; Hopson et al., 2024; Ganzar et al., 2022; Modisane, 2025). Similarly, the health-related implications of road development extend beyond emergency response to include preventive care utilization and continuity of treatment, as reduced travel time and improved connectivity lower the barriers to accessing health services (Chen et al., 2023; Oluyede et al., 2022). These mechanisms suggest that the welfare effects observed in this study reflect cumulative changes in daily life rather than isolated outcomes, reinforcing the interpretation that infrastructure-oriented CSR interventions operate through long term social pathways.

From an economic perspective, the findings align with a substantial body of literature linking rural road development to market integration and livelihood diversification. Improved connectivity enables households to access broader markets, stabilize supply chains, and reduce post-harvest losses, particularly in agrarian economies where transportation constraints directly suppress income potential (Fan & Chan Kang, 2008; Donaldson, 2018; Asher & Novosad, 2020). When road infrastructure is delivered through CSR, its economic effects are amplified by reduced coordination frictions between communities and corporate actors, especially in plantation-based regions where companies and local economies are spatially intertwined. Prior CSR research has noted that infrastructure-based programs tend to outperform philanthropic interventions in generating durable economic effects precisely because they embed themselves within production and exchange systems rather than providing episodic assistance (Salamon, 2014; Kolk & van Tulder, 2010). The strength of the relationship observed in this study reflects this embeddedness, suggesting that welfare improvements emerge through repeated economic interactions facilitated by improved access.

At the same time, the findings should be interpreted against critical CSR scholarship that cautions against universalizing positive outcomes. Studies documenting weak or insignificant

CSR impacts often point to symbolic compliance, misalignment with community priorities, or lack of post implementation accountability as key explanatory factors (Blowfield & Frynas, 2005; Astiti & Saitri, 2017). The clarity of the relationship identified here does not negate these critiques but instead underscores their conditional nature. It suggests that CSR effectiveness is neither inherent nor automatic but contingent upon contextual fit, implementation quality, and the extent to which programs address structurally binding constraints faced by communities. In this sense, the findings reinforce a more grounded understanding of CSR as a development practice whose welfare implications depend on how corporate interventions intersect with local social and economic realities.

Conclusion

The findings of this study demonstrate that the effectiveness of a CSR program centered on road infrastructure development is closely associated with perceived improvements in community welfare. The relationship observed reflects how infrastructure influences welfare not only through physical access but through broader social and economic processes that structure daily life in rural communities. Improved road access facilitates educational participation, enhances access to health services, and supports local economic activity, indicating that infrastructure based CSR interventions operate through interconnected welfare pathways rather than isolated outcomes. The results further indicate that CSR effectiveness is shaped by more than the presence of infrastructure alone. Community perceptions of program relevance, corporate involvement, and sustained commitment appear central in translating physical development into meaningful welfare experiences. This suggests that CSR functions most effectively when it addresses structurally binding constraints faced by communities and when implementation processes foster trust and social legitimacy. In this context, road construction serves not merely as a technical solution but as a medium through which corporate engagement becomes integrated into community life.

Nevertheless, the study is bounded by several limitations that shape the interpretation of its findings. Welfare was assessed through subjective community perceptions rather than objective socioeconomic indicators, and the cross sectional design limits the ability to capture long term welfare dynamics. In addition, the focus on a single CSR intervention and a single community context constrains broader generalization. These boundaries do not diminish the empirical relevance of the findings but indicate the need for caution in extending them beyond similar rural and infrastructure focused settings. Future research may benefit from incorporating longitudinal designs, comparative community contexts, or mixed method approaches to further explore how infrastructure based CSR interventions interact with social institutions and local governance over time. Expanding welfare measurement to include objective indicators alongside community perceptions would also provide a more comprehensive understanding of CSR related development processes. Such directions would allow for deeper examination of how corporate engagement intersects with public development efforts in shaping sustainable community welfare.

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