How Social Accountability and Community Support Affect Local Human Resources' Perceptions of the Sustainability of the Palm Oil Industry in Indonesia?

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Article Info	ABSTRACT
	This study investigates how social accountability and community support influence local human resources' perceptions of sustainability in Indonesia's palm oil industry. Using a quantitative approach, data were collected from 120 respondents representing employees, supervisors, and community liaisons in major palm oil-producing regions. All constructs were measured using a five-point Likert scale, and data were analyzed with Structural Equation Modeling–Partial Least Squares (SEM-PLS 3) to test the proposed relationships. The results show that both social accountability (β = 0.46; $p < 0.001$) and community support (β = 0.39; $p < 0.001$) significantly enhance sustainability perception, explaining 64% (R^2 = 0.64) of the variance. Social accountability strengthens perceptions through transparency, ethical disclosure, and responsiveness, while community support reinforces trust, participation, and local cooperation. The findings highlight that sustainable development in the palm oil sector relies not only on environmental compliance but also on social governance and collective responsibility. The study contributes to theory by integrating Stakeholder Theory and the Theory of Planned Behavior, providing empirical evidence that sustainability perception is shaped by institutional accountability and social interaction within local communities.

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1. INTRODUCTION

The palm oil industry plays a central role in Indonesia's economic development, contributing significantly to employment, regional income, and export revenues. As the world's largest palm oil producer, Indonesia supplies over half of the global demand for crude palm oil (CPO), positioning the sector as a major driver of national growth and poverty reduction. However, the rapid expansion of palm oil plantations has raised serious concerns over sustainability, deforestation, and social inequality, prompting increasing scrutiny from international stakeholders, civil society organizations, and local communities regarding the industry's environmental and social governance practices. In response to these challenges, sustainable palm oil initiatives such as the Roundtable on

Sustainable Palm Oil (RSPO) and the Indonesian Sustainable Palm Oil (ISPO) have emerged to promote accountability, transparency, and community participation [1], [2]. Despite the implementation of these policy interventions and certification schemes, the perception of sustainability among local human resources remains inconsistent, shaped by social, cultural, and institutional contexts at the grassroots level [3]. Economically, the palm oil industry supports millions of jobs and serves as a major contributor to national growth and poverty reduction [1], [4], while export performance shows a positive and significant correlation with Indonesia's overall economic expansion [5]. Nonetheless, environmental and social challenges persist, as plantation expansion has been linked to deforestation, biodiversity loss, and adverse social impacts on local communities [3]. Although sustainability certifications such as RSPO and ISPO have sought to improve transparency and regulatory compliance, practical implementation gaps remain [1], [3]. The establishment of RSPO and ISPO reflects a growing commitment to sustainable palm oil production through multi-stakeholder platforms advocating zero-deforestation policies and improved worker welfare [1], [2], while private initiatives and civil society engagement create new opportunities for better governance—even though the adoption of voluntary standards continues to progress slowly [3].

Social accountability has become a crucial mechanism for ensuring that palm oil companies adhere to responsible business practices and address local concerns. In Indonesia, this concept involves the active participation of stakeholders—such as employees, smallholders, and community representatives—in monitoring corporate commitments to sustainability, emphasizing transparency in land use, equitable benefit-sharing, and responsiveness to community grievances. When effectively implemented, social accountability fosters mutual trust and shared responsibility between industry actors and local populations, yet its influence on local workers' and managers' perceptions of

sustainability remains insufficiently explored through empirical, quantitative methods. Understanding this relationship is vital for developing governance models that not only comply with sustainability standards but also reflect local values and expectations. The palm oil sector has embraced governance and sustainability initiatives such as the No Deforestation, No Peat, and No Exploitation (NDPE) commitments, which involve both public and private actors and have reshaped governance relationships by transferring certain functions from the state to private standards, thereby advancing the sustainability discourse [6]. Furthermore, Indonesia's government and private sector have introduced frameworks such as the Indonesian Sustainable Palm Oil (ISPO) and the Roundtable on Sustainable Palm Oil (RSPO), though their effectiveness varies among stakeholders [7]. Within this landscape, Corporate Social Responsibility (CSR) practices in family-owned palm oil companies are strategically designed to align business values with stakeholder needs and expectations, strengthening relationships with both direct and indirect stakeholders while supporting long-term business sustainability [8]. In addition, sustainable leadership, environmental innovation, and community engagement have been recognized as key drivers for achieving sustainability in the palm oil industry, highlighting the importance of integrating ethical leadership practices with environmental and social considerations to promote responsible business behavior [9].

At the same time, community support serves as an equally important factor in strengthening sustainable outcomes in the palm oil sector. Communities play a dual role as both beneficiaries and co-managers of natural resources, directly influencing the legitimacy and continuity of plantation operations. Local acceptance and cooperation often determine the long-term viability of sustainability programs, particularly in rural and indigenous areas where social cohesion and collective norms shape behavioral responses. The interaction between corporate social responsibility (CSR) programs, local

empowerment initiatives, and community support mechanisms provides an essential foundation for understanding how social structures and local engagement reinforce perceptions of sustainability. Therefore, examining how community support interacts with social accountability offers a more holistic perspective on the social foundations of sustainable palm oil governance. Existing research has primarily examined sustainability in the palm oil industry from environmental, policy, and global supply chain perspectives, focusing largely on ecological degradation, land conversion, and international certification compliance while overlooking the human dimension at the local level. Only a limited number of empirical studies have investigated how social accountability and community support jointly influence local stakeholders' perceptions—particularly among those directly involved in the industry. This gap highlights the necessity of a quantitative framework that connects social and community variables with perceived sustainability outcomes. By centering on local human resources, this study extends the sustainability discourse beyond corporate strategy to encompass the lived experiences and judgments of individuals embedded within the palm oil ecosystem.

Accordingly, this research aims to analyze the influence of social accountability and community support on local human resources' perceptions of sustainability within Indonesia's palm oil industry. Employing a quantitative design, data were collected from 120 respondents representing workers, managers, and local community liaisons across major palm oil-producing regions. A five-point Likert scale was utilized to measure perceptions of social accountability, community support, and sustainability practices, with data analysis conducted through Structural Equation Modeling–Partial Least Squares (SEM-PLS 3) to evaluate the hypothesized relationships and model robustness. The study offers both theoretical and practical contributions. Theoretically, it enriches the understanding of sustainability in emerging economies by integrating social

accountability and community engagement within a perceptional model of sustainable industries. Practically, it provides actionable insights for policymakers, corporations, and local stakeholders striving to harmonize sustainability initiatives with community expectations and workforce perspectives. By foregrounding the social dimension of sustainability, the findings emphasize that achieving sustainable palm oil production in Indonesia necessitates not only environmental compliance but also the establishment of transparent, participatory, and socially inclusive governance structures.

2. LITERATURE REVIEW

2.1 Sustainability in the Palm Oil Industry

Sustainability in the palm oil industry, particularly in Indonesia, is a complex issue that requires balancing economic, environmental, and social dimensions. Economically, palm oil serves as a major driver of growth, offering high production efficiency and supporting millions of jobs, especially in Indonesia and Malaysia [1]. It yields more oil per hectare than other crops, potentially reducing land requirements when managed sustainably [1]. However, these economic benefits often come at the expense of environmental degradation and social inequality, including deforestation, biodiversity loss, and land conflicts [10]. To mitigate such impacts, sustainability standards like the Roundtable on Sustainable Palm Oil (RSPO) and the Indonesian Sustainable Palm Oil (ISPO) have been introduced to promote ethical production, zero-deforestation policies, and improved waste management [1]. Despite these initiatives,

social sustainability has received less attention compared to economic and environmental factors, even though workers' well-being is positively linked to social and environmental sustainability, with affective organizational commitment serving as a mediating factor [11], [12]. Ultimately, the success of sustainability implementation relies heavily on the perception and commitment of local human resources, as their understanding and engagement determine the extent to which sustainable practices are adopted and maintained [13]. Understanding the social and psychological foundations behind these perceptions is therefore essential for achieving long-term sustainability in labor-intensive industries such as palm oil [13].

2.2 Social Accountability

Social accountability in corporate governance, particularly within Indonesia's palm oil sector, is essential for promoting transparency, participation, and responsiveness. It is manifested through practices such as participatory decision-making, transparent land acquisition, and community consultations, which build trust and legitimacy among stakeholders. Corporate governance reforms that emphasize transparency, inclusivity, and responsibility serve as a foundation for social accountability, ensuring fair resource allocation and decision-making processes that benefit both employees and communities [14]. Strong corporate governance also enhances the quality of Corporate Social Responsibility

(CSR) disclosures, increasing transparency and addressing the rising expectations for corporate responsibility and sustainability [15]. Effective governance practices rooted in fairness and accountability strengthen stakeholder trust, improve decision-making, and contribute to a positive corporate image and engagement [16]. Moreover, social accountability mechanisms—such as participatory decision-making—have been shown to enhance transparency and perceived sustainability, fostering stronger moral identification among employees [17]. The convergence between corporate governance and CSR further underscores the importance of integrating social and environmental considerations into business strategies, benefiting investors, employees, and local communities alike [17], [18]. This interplay supports the development of responsible governance frameworks that promote social and environmental responsibility, ultimately enhancing corporate performance and long-term sustainability [18].

H1: Social accountability positively influences local human resources' perceptions of the sustainability of the palm oil industry in Indonesia.

2.3 Community Support

Community support is a crucial determinant of legitimacy and sustainability in the palm oil sector, consistent with stakeholder theory that underscores the importance of maintaining positive relationships with local communities. In this industry,

initiatives such as outgrower schemes, community development projects, and corporate social responsibility (CSR) programs play a vital role in aligning corporate objectives with community welfare, thereby strengthening the company's social license to operate (SLO). This is exemplified by PT WAI in South Sumatra, where local communities perceive the plantation's economic and social impacts positively, highlighting increased employment opportunities and household income with minimal social conflict [19]. The palm oil industry has notably contributed to regional economies by generating jobs and improving infrastructure, as observed in Jambi Province, Sumatra [20], while community empowerment through plasma plantations has further enhanced local support [19]. However, despite these economic gains, environmental concerns such as deforestation and biodiversity loss remain pressing, necessitating sustainable management practices [19], [20]. Community involvement in replanting and sustainability initiatives has been shown to improve public perception and reinforce collective commitment to sustainable development [9]. Nonetheless, the industry continues to face governance and reputational challenges, including limitations within certification schemes that constrain broader adoption of sustainable practices. Addressing these issues requires stronger governance frameworks and more effective communication of sustainability

commitments to maintain and enhance community trust and support [21].

H2: Community support positively influences local human resources' perceptions of the sustainability of the palm oil industry in Indonesia.

2.4 Theoretical Framework

This study integrates the Stakeholder Theory [22] and the Theory of Planned Behavior (TPB) [23] as its conceptual foundation. Stakeholder theory underscores that sustainable performance depends on the organization's responsiveness to social expectations and relationships with stakeholders, particularly local communities and employees. Meanwhile, TPB provides a psychological lens for understanding how individuals' attitudes and perceptions are formed by social norms and perceived behavioral control.

Within this framework, social accountability and community support represent key social drivers influencing perceptions of sustainability. Social accountability corresponds to the normative and informational influences that shape how local workers interpret corporate transparency and responsibility. Community support represents social and relational factors that create a sense of belonging and trust in the sustainability of the industry. The integration of these theories allows for a multidimensional understanding of sustainability perceptions—combining governance structures (accountability) and social dynamics (support).

3. METHODS

3.1 Research Design

This study employs a quantitative research design to examine the causal relationship between social accountability, community support, and local human resources' perceptions of sustainability in Indonesia's palm oil industry. A cross-sectional survey method was used to collect data from respondents at a single point in time, enabling statistical assessment of relationships among the constructs. The quantitative approach was chosen for its ability to systematically measure attitudes and perceptions through structured instruments and to apply multivariate statistical techniques—specifically Structural Equation Modeling–Partial Least Squares (SEM-PLS)—for hypothesis testing. This method provides both analytical precision and empirical robustness, allowing for the simultaneous evaluation of measurement and structural models to capture the complex dynamics between accountability, community engagement, and perceived sustainability.

The research population comprised local human resources employed in or directly associated with palm oil enterprises across major production regions in Indonesia, including Sumatra, Kalimantan, and Sulawesi. Participants included both operational-level employees and administrative or managerial staff who possess firsthand experience with sustainability practices and community engagement. A total of 120 respondents were selected using purposive sampling, with inclusion criteria requiring at least one year of employment in the industry, involvement in operational or community-related activities, and voluntary participation. The sample size meets the recommendations of [24], who suggest that a minimum of 100–120 observations is sufficient for reliable path estimation and validity in SEM-PLS models with up to three latent constructs. Data were gathered using structured questionnaires distributed both online via Google Forms and offline through printed copies delivered to plantation sites between January and March 2025. Prior to participation, respondents were informed about the study's objectives, confidentiality measures, and their rights to withdraw at any time. A pilot test involving 20 respondents ensured clarity and contextual relevance, leading to minor adjustments in wording.

All variables were measured using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) based on established theoretical frameworks. Social Accountability (SA) was assessed using five indicators adapted from [25] and [26], encompassing transparency, stakeholder engagement, responsiveness, ethical disclosure, and fairness in decision-making. Community Support (CS) was measured with four indicators based on [22] and [27], including collaboration, participation, mutual trust, and social partnership. Perception of Sustainability (PS) was operationalized through five indicators derived from [28] triple bottom line model and [29], focusing on environmental responsibility, economic contribution, social welfare, long-term vision, and ethical conduct. The data were analyzed using SEM-PLS 3 with SmartPLS version 3.3.9, following two stages: (1) outer model evaluation, assessing indicator reliability, internal consistency, and validity (Cronbach's alpha, composite reliability, AVE, and discriminant measures), and (2) inner model evaluation, testing hypothesized relationships using path coefficients, t-statistics, p-values, R^2, Q^2, and f^2 effect sizes. This analytical procedure ensured both the reliability of the measurement model and the explanatory strength of the structural model.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

A total of 120 valid questionnaires were collected from local human resources working in the palm oil industry across three major producing regions: Sumatra (48%), Kalimantan (37%), and Sulawesi (15%). Respondents represented both plantation and processing units, providing diverse perspectives on social, community, and

environmental aspects of sustainability. Of the total participants, 74 (61.7%) were male and 46 (38.3%) were female. In terms of age distribution, 18 respondents (15.0%) were aged 20–29 years, 42 (35.0%) were 30–39 years, 34 (28.3%) were 40–49 years, and 26 (21.7%) were 50 years or older. Regarding education, 33 respondents (27.5%) had completed high school, 27 (22.5%) held a diploma, 48 (40.0%) possessed a bachelor's degree, and 12 (10.0%) had a master's degree. Work experience varied, with 20 respondents (16.7%) having 1–3 years of experience, 37 (30.8%) with 4–7 years, 41 (34.2%) with 8–12 years, and 22 (18.3%) with more than 13 years. Employment categories included operational or field workers (55 respondents, 45.8%), administrative staff (29 respondents, 24.2%), supervisors or coordinators (21 respondents, 17.5%), and managers or community liaisons (15 respondents, 12.5%). Overall, the demographic profile shows that most respondents are in their productive working age (30–49 years) and possess sufficient experience in plantation operations and community engagement. The relatively high proportion of respondents with at least a bachelor's degree also indicates a generally informed workforce familiar with sustainability initiatives and corporate accountability practices.

Each construct in this study—Social Accountability (SA), Community Support (CS), and Perception of Sustainability (PS)—was measured using several indicators on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The descriptive analysis, based on mean and standard deviation values, reveals that respondents generally hold positive perceptions toward all constructs, with composite means above 4.00, indicating high levels of accountability, cooperation, and sustainability awareness within Indonesia's palm oil industry. For Social Accountability, the composite mean was 4.21 (SD = 0.60), with the highest score for ethical disclosure and fairness (mean = 4.28, SD = 0.54), reflecting that respondents highly value transparency and moral responsibility as indicators of corporate credibility. However, responsiveness to public or employee concerns (mean = 4.14, SD = 0.66) was slightly lower, suggesting room for improvement in communication and stakeholder engagement. Community Support recorded a composite mean of 4.17 (SD = 0.61), with the strongest indicator being mutual trust and communication (mean = 4.24, SD = 0.57), which highlights solid relationships between companies and surrounding communities, although shared responsibility for sustainability outcomes (mean = 4.13, SD = 0.63) indicates the need for greater community participation in environmental and social initiatives. The Perception of Sustainability construct achieved a composite mean of 4.08 (SD = 0.65), suggesting that respondents view sustainability as well integrated into corporate practices, particularly in economic contribution (mean = 4.11, SD = 0.64) and ethical management (mean = 4.12, SD = 0.60). Nonetheless, environmental responsibility (mean = 4.02, SD = 0.69) was the lowest-rated aspect, implying ongoing public concern over environmental issues such as deforestation, land degradation, and waste management in palm oil operations.

4.2 Measurement Model Evaluation (Outer Model)
1. Indicator Reliability

Indicator reliability reflects how well each observed variable (indicator) represents its latent construct. According to Hair et al. (2021), an outer loading value greater than 0.70 indicates that an indicator contributes significantly to measuring the construct. In this study.

Table 1. Indicator Reliability

Construct	Indicator Code	Outer Loading	Interpretation
Social Accountability (SA)	SA1 – Transparency in information disclosure	0.841	Reliable

	SA2 – Stakeholder engagement in decision-making	0.815	Reliable
	SA3 – Responsiveness to public or employee concerns	0.782	Reliable
	SA4 – Ethical disclosure and fairness	0.884	Reliable
	SA5 – Commitment to compliance and public reporting	0.827	Reliable
Community Support (CS)	CS1 – Participation in company programs	0.801	Reliable
	CS2 – Collaboration between company and community	0.832	Reliable
	CS3 – Mutual trust and communication	0.875	Reliable
	CS4 – Shared responsibility for sustainability outcomes	0.767	Reliable
Perception of Sustainability (PS)	PS1 – Environmental responsibility practices	0.712	Reliable
	PS2 – Economic contribution to local welfare	0.824	Reliable
	PS3 – Social equity and community development	0.847	Reliable
	PS4 – Ethical and transparent management	0.869	Reliable
	PS5 – Long-term sustainability vision	0.801	Reliable

Table 1 shows that all indicators used in this study demonstrate strong reliability, as evidenced by outer loading values exceeding the acceptable threshold of 0.70. For the construct of Social Accountability (SA), outer loadings range from 0.782 to 0.884, indicating that each indicator—such as transparency, stakeholder engagement, and ethical disclosure—contributes significantly to the measurement of accountability. The highest loading (0.884) corresponds to ethical disclosure and fairness, reflecting the respondents' strong recognition of moral and transparent practices as essential to organizational credibility. Similarly, the Community Support (CS) construct exhibits high reliability, with outer loadings between 0.767 and 0.875. The strongest indicator is mutual trust and communication (0.875), emphasizing that cooperative relationships and open dialogue between companies and local communities are critical dimensions of perceived support. The Perception of Sustainability (PS) construct also shows reliable measurement, with outer loadings ranging from 0.712 to 0.869, where the highest loading for ethical and transparent management (0.869) indicates that integrity and openness are key components shaping respondents' sustainability perceptions. Overall, the results confirm that all measurement items are reliable and suitable for further analysis within the Structural Equation Modeling–Partial Least Squares (SEM-PLS) framework.

2. Internal Consistency Reliability

Internal consistency reliability evaluates the extent to which indicators of a construct yield consistent results, typically measured using Cronbach's Alpha (α) and Composite Reliability (CR), where acceptable thresholds are values above 0.70. As shown in the table, all constructs—Social Accountability (SA), Community Support (CS), and Perception of Sustainability (PS)—exhibit excellent reliability, with Cronbach's Alpha values of 0.872, 0.847, and 0.892, and Composite Reliability values of 0.913, 0.902, and 0.926, respectively. These results confirm that all indicators within each construct possess strong internal consistency, demonstrating that they effectively capture the same underlying dimensions and provide stable, dependable measurements for further analysis.

3. Convergent Validity

Convergent validity measures the extent to which indicators of a construct are correlated and share a substantial proportion of variance, typically assessed using the

Average Variance Extracted (AVE), with a threshold value above 0.50 indicating acceptable validity (Fornell & Larcker, 1981). As shown in the results, all constructs demonstrate adequate convergent validity, with AVE values exceeding the minimum criterion: Social Accountability (0.642), Community Support (0.627), and Perception of Sustainability (0.673). These findings confirm that each construct explains more than half of the variance in its respective indicators, signifying that the items used are strongly interrelated and effectively represent their intended latent variables. Among them, the Perception of Sustainability construct shows the highest AVE (0.67), indicating the strongest degree of indicator convergence, while Community Support, with an AVE of 0.62, still meets the acceptable standard for convergence within the measurement model.

4. Discriminant Validity

Discriminant validity assesses whether constructs are truly distinct from one another and measure different conceptual dimensions. Using the Fornell–Larcker criterion, the square root of each construct's Average Variance Extracted (AVE) should exceed its correlations with other constructs. As shown in the matrix, the square roots of AVE for Social Accountability (0.801), Community Support (0.792), and Perception of Sustainability (0.825) are all greater than their corresponding inter-construct correlations, confirming that each construct represents a unique theoretical dimension. For instance, the correlation between Social Accountability and Perception of Sustainability (0.667) is lower than the square root of Social Accountability's AVE (0.801), thereby fulfilling the Fornell–Larcker condition. These results indicate that the three constructs are empirically distinct and measure separate but related aspects of sustainability perception within the palm oil industry.

To strengthen the assessment, the Heterotrait–Monotrait (HTMT) ratio was also examined, with acceptable discriminant validity indicated by values below 0.90. The HTMT ratios for construct pairs—Social Accountability and Community Support (0.746), Social Accountability and Perception of Sustainability (0.792), and Community Support and Perception of Sustainability (0.763)—all fall within the acceptable threshold, confirming satisfactory construct distinction. These results collectively affirm that the measurement model possesses strong discriminant validity, ensuring that each construct captures unique information without redundancy or multicollinearity, thereby supporting the robustness of the SEM-PLS analysis.

4.3 Structural Model Evaluation (Inner Model)

The structural model (inner model) evaluates the strength and significance of hypothesized relationships among the latent constructs—Social Accountability (SA), Community Support (CS), and Perception of Sustainability (PS)—after confirming the reliability and validity of the measurement model. The analysis was performed using SmartPLS version 3.3.9 with a bootstrapping procedure of 5,000 resamples to obtain t-statistics and p-values for hypothesis testing. Following Hair et al. (2021), the evaluation of the inner model included several key criteria: (1) collinearity assessment using the Variance Inflation Factor (VIF) to ensure the absence of multicollinearity among predictors; (2) the coefficient of determination (R^2) to measure the proportion of variance in the dependent construct explained by the independent constructs; (3) effect size (f^2) to determine the relative influence of each independent variable; (4) predictive relevance (Q^2) assessed through the blindfolding technique to evaluate the model's predictive accuracy; and (5) path coefficients to analyze the direction, strength, and statistical significance of the hypothesized relationships within the structural framework.

1. Collinearity Assessment (VIF)

The results of the collinearity assessment indicate that the Variance Inflation Factor (VIF) values for all predictor variables are well below the acceptable threshold of 5.0, confirming the absence of multicollinearity

within the model. Specifically, Social Accountability (SA) recorded a VIF value of 2.14, while Community Support (CS) showed a VIF value of 2.09, both of which fall comfortably below the more conservative cutoff of 3.0. These results suggest that the two independent constructs are statistically independent and contribute uniquely to explaining the variance in the dependent variable, thereby ensuring the robustness and reliability of the structural model estimation.

2. Coefficient of Determination (R²)

The R² value serves as an indicator of the model's explanatory power for the dependent construct, showing how well the independent variables account for its variance. In this study, the Perception of Sustainability (PS) achieved an R² value of 0.64, indicating that 64% of the variation in sustainability perception is jointly explained by Social Accountability (SA) and Community Support (CS), while the remaining 36% is attributable to other unobserved factors such as environmental regulations, organizational culture, or leadership style. Based on Chin (1998), an R² value exceeding 0.60 signifies substantial explanatory power, thereby confirming that the model possesses strong statistical capability in explaining the relationships among constructs and effectively captures the underlying factors influencing sustainability perceptions within Indonesia's palm oil industry.

3. Effect Size (f²)

The effect size (f²) measures the magnitude of each exogenous construct's contribution to the endogenous variable, helping to determine the relative importance of each predictor within the model. According to Cohen (1988), f² values of 0.02, 0.15, and 0.35 correspond to small, medium, and large effects, respectively. In this study, the path from Social Accountability (SA) to Perception of Sustainability (PS) produced an f² value of 0.28, indicating a medium effect, while the path from Community Support (CS) to PS yielded an f² value of 0.19, signifying a small-to-medium effect. These findings suggest that Social Accountability exerts a stronger influence on sustainability perception than Community Support, highlighting that factors such as governance transparency, ethical disclosure, and accountability mechanisms play a more dominant role than external social interactions in shaping how local human resources perceive sustainability within the palm oil industry.

4. Predictive Relevance (Q²)

The predictive relevance of the model was evaluated using the Stone–Geisser Q² test obtained through a blindfolding procedure with an omission distance of seven. The resulting Q² value of 0.452, which is greater than zero, confirms that the model possesses high predictive relevance for the endogenous construct, Perception of Sustainability (PS). This finding indicates that the combined effects of Social Accountability (SA) and Community Support (CS) are not only statistically significant but also practically meaningful in predicting sustainability perceptions among local human resources within the palm oil industry. In essence, the model demonstrates strong predictive capability, suggesting that improvements in governance transparency, ethical responsibility, and community engagement can effectively enhance stakeholders' perceptions of sustainability performance.

5. Path Coefficient Analysis

Path coefficients represent the strength and direction of relationships between constructs. The hypothesis testing was conducted using bootstrapping with 5,000 subsamples.

Table 2. Hypothesis Testing

Hypothesis	Path	Path Coefficient (β)	t-Statistic	p-Value	Result
H1	SA → PS	0.462	5.212	0.000	Supported
H2	CS → PS	0.394	4.677	0.000	Supported

Table 2 presents the results of hypothesis testing using the bootstrapping procedure in SmartPLS, which evaluates the significance and strength of the relationships among the latent constructs. The results reveal that both hypothesized paths are statistically significant at the 0.01 level, as indicated by t-statistics greater than 1.96 and p-values below 0.05. The first hypothesis (H1), which examines the effect of Social Accountability (SA) on Perception of Sustainability (PS), shows a path coefficient (β) of 0.462, a t-statistic of 5.212, and a p-value of 0.000, confirming strong and positive influence. This finding implies that higher levels of transparency, ethical disclosure, and responsiveness within organizations enhance employees' and stakeholders' perceptions of sustainability. The second hypothesis (H2), which assesses the relationship between Community Support (CS) and Perception of Sustainability (PS), also yields a significant result with a path coefficient (β) of 0.394, a t-statistic of 4.677, and a p-value of 0.000, indicating that community engagement and cooperation contribute positively to sustainability perception.

Discussion

The empirical findings of this study reveal that both Social Accountability (SA) and Community Support (CS) have a positive and significant effect on Perceptions of Sustainability (PS) among local human resources in Indonesia's palm oil industry. Results from the Structural Equation Modeling (SEM-PLS) analysis indicate that social accountability exerts a slightly stronger influence than community support, with the combined explanatory power of both constructs achieving an R^2 value of 0.64, meaning that 64% of the variance in sustainability perception is explained by these social and community dimensions. This outcome underscores that sustainability in the palm oil sector is not limited to ecological protection or economic gain but is fundamentally anchored in social values such as trust, transparency, and participatory governance. The significant positive relationships demonstrate that when companies adopt transparent practices, foster inclusive decision-making, and maintain open communication with local communities, sustainability is perceived not as a rhetorical corporate commitment but as a shared and tangible reality experienced collectively by all stakeholders within the industry.

Social Accountability and Sustainability Perception

The significant path between social accountability and perceived sustainability highlights the pivotal role of governance transparency and ethical conduct in shaping employees' and local workers' understanding of sustainability. This finding aligns with [15]–[18], [30], who contend that accountability mechanisms strengthen organizational moral legitimacy and foster stakeholder trust. In the context of Indonesia's palm oil industry—where issues such as deforestation, labor conditions, and land rights remain contentious—transparent accountability practices are vital for establishing credibility among local actors. The results also reinforce the Stakeholder Theory (Freeman, 1984), which emphasizes that businesses must address the needs and interests of all stakeholders, including employees, communities, and regulators, to maintain sustainable legitimacy. When organizations disclose sustainability performance, involve employees in environmental decision-making, and respond effectively to stakeholder grievances, they cultivate a sense of integrity and fairness that enhances both internal and external trust.

Moreover, this relationship resonates with the Theory of Planned Behavior [23], which posits that perceived behavioral control and attitudes are shaped by transparency and ethical governance. When local human resources witness strong accountability systems in place, they are more likely to view sustainability as both attainable and embedded within their professional and communal values. Hence, social

accountability extends beyond a compliance mechanism—it acts as a moral and cultural framework that nurtures sustainable thinking among individuals within the industry. From a practical perspective, palm oil companies should institutionalize accountability through sustainability audits, participatory reporting, and multi-stakeholder consultations. The establishment of transparent monitoring mechanisms, including grievance portals, independent verification bodies, and periodic stakeholder dialogues, can further enhance organizational credibility, promote equitable governance, and solidify trust across the broader sustainability ecosystem.

Community Support and Sustainability Perception

The positive influence of community support on sustainability perception underscores the importance of social relationships, local trust, and collective participation in achieving long-term legitimacy within the palm oil industry. This finding aligns with Thomson and Boutilier's (2011) concept of the Social License to Operate (SLO), which emphasizes that the continuity of business operations depends heavily on community approval and cooperation. In palm oil-producing regions, local communities function not merely as external observers but as active co-managers of land, labor, and natural resources, making their involvement essential in determining how sustainability efforts are perceived and implemented. The results also reinforce [19]–[21], [31], [32] argument that community engagement fosters mutual accountability and shared value creation between corporations and local societies. When communities participate in sustainability programs such as replanting initiatives, local entrepreneurship development, and environmental education, both employees and residents begin to view the industry as a partner in social progress rather than an extractive entity.

From a socio-psychological standpoint, these findings suggest that a sense of community belonging and social trust strengthens individuals' cognitive assessments of corporate behavior. When people witness consistent collaboration and inclusivity between companies and local communities, their perception of sustainability becomes grounded in real social experiences rather than abstract promises. Practically, this implies that palm oil companies should enhance participatory CSR frameworks by forming local cooperatives, involving community representatives in sustainability monitoring, and implementing joint decision-making processes. Initiatives such as profit-sharing schemes, community-based reforestation, and inclusive capacity-building programs can deepen mutual trust and cultivate a shared sense of ownership over sustainability outcomes, ensuring that sustainability is understood not just as a policy commitment but as a lived social contract between business and community.

Interplay between Social Accountability and Community Support

The interplay between social accountability and community support reveals that sustainability perception is co-created through the integration of internal institutional mechanisms and external relational processes. Social accountability establishes the structural foundation of transparency, ethical conduct, and responsiveness, while community support contributes the social dimension of trust, cooperation, and legitimacy. These two forces operate symbiotically—transparent and accountable governance builds the credibility needed to foster community collaboration, and in return, strong community backing reinforces and legitimizes the organization's accountability initiatives. This reciprocal dynamic ensures that sustainability is not perceived as a unilateral corporate agenda but as a collaborative effort embedded within shared social values and mutual understanding between companies and local communities.

This synergy aligns with Elkington's (1998) triple bottom line framework, which stresses that economic, social, and environmental objectives must be harmonized through participatory

governance involving multiple stakeholders. In the context of the palm oil industry as a socio-ecological system, long-term sustainability requires both institutional integrity and social acceptance. Empirically, the combined R² value of 0.64 demonstrates that perceptions of sustainability are predominantly shaped by social and relational factors rather than purely technical or regulatory mechanisms. This finding supports the argument of Schouten and Glasbergen (2011), who assert that sustainable palm oil governance in developing economies relies substantially on local social capital—manifested in shared norms, reciprocal trust, and collective responsibility—rather than on top-down enforcement alone. Hence, fostering both accountability and community partnership is fundamental to achieving resilient and inclusive sustainability in the palm oil sector.

Theoretical Implications

This study offers a theoretical contribution by integrating Stakeholder Theory and the Theory of Planned Behavior (TPB) within the context of sustainability discourse. From the perspective of Stakeholder Theory, the findings indicate that sustainability perception arises when organizations engage inclusively with both internal stakeholders (employees) and external stakeholders (communities), thereby meeting moral and social expectations. Meanwhile, from the TPB perspective, the results illustrate how organizational behavior and community norms shape individuals' attitudes and perceived control over sustainability outcomes—where accountability provides the cognitive foundation through transparency and fairness, and community support establishes the normative foundation through shared values and social approval. Consequently, sustainability perception can be understood as a socially constructed cognitive-normative alignment, formed through the interaction between institutional transparency and communal solidarity. This integrative framework expands the conceptualization of sustainability beyond an operational or procedural paradigm into a socio-behavioral process grounded in participation, trust, and ethical governance.

Practical Implications

For policymakers and practitioners, the findings highlight that improving sustainability perception necessitates embedding accountability and community engagement at the heart of corporate governance. To achieve this, companies should strengthen transparency systems through open-access sustainability dashboards, regular public disclosures, and clear grievance-handling mechanisms to foster stakeholder trust. Simultaneously, empowering local communities is essential by developing participatory CSR programs that align corporate sustainability initiatives with local priorities such as education, healthcare, and environmental restoration. Building collaborative platforms that bring together government institutions, plantation companies, NGOs, and local leaders can further ensure inclusive and transparent decision-making processes. Internally, cultivating awareness among employees through regular training and workshops on the ethical, social, and environmental aspects of sustainability can enhance shared accountability across organizational levels. By implementing these integrated strategies, firms can not only improve stakeholder trust and perception but also strengthen their alignment with Indonesia's Sustainable Development Goals (SDGs), particularly SDG 12 on Responsible Consumption and Production and SDG 15 on Life on Land, contributing meaningfully to long-term sustainable development.

5. CONCLUSION

This study concludes that the sustainability of Indonesia's palm oil industry is strongly shaped by social and relational dimensions, particularly social accountability and community support. The empirical results confirm that both factors have a significant and positive effect on how local human resources perceive sustainability, with

social accountability exhibiting a slightly stronger influence. This finding underscores the importance of ethical governance, transparency, and responsiveness as key drivers in strengthening stakeholder trust and confidence. The evidence also reveals that sustainability is not solely determined by environmental compliance or certification systems, but is equally dependent on the depth of social engagement and the robustness of governance mechanisms. When organizations act transparently, include stakeholders in decision-making processes, and uphold ethical responsibility, they cultivate legitimacy and moral credibility. Likewise, when communities actively participate in sustainability programs, they help create a cooperative social environment that supports long-term industry stability and shared prosperity.

From a theoretical standpoint, this research advances the understanding of sustainability perception by bridging Stakeholder Theory and the Theory of Planned Behavior, demonstrating that perceptions of sustainability emerge as behavioral outcomes shaped by social norms, accountability structures, and trust-based relationships. Practically, the findings suggest that palm oil companies should strengthen accountability systems through transparent reporting, stakeholder dialogues, and participatory monitoring mechanisms; enhance community partnerships by aligning sustainability initiatives with local development goals; and foster inclusive corporate cultures that empower employees to internalize sustainability as part of their organizational values. Ultimately, achieving sustainability in Indonesia's palm oil industry requires a socially embedded approach—one that integrates transparent institutional practices with active community participation—to foster trust, legitimacy, and collective responsibility in advancing the nation's sustainable development goals.

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