

# The Role of Leadership and Community Involvement in Sustainable Development

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## ABSTRACT

Indonesia is an archipelagic nation that has a variety of difficulties when it comes to the delivery of products and services. There are a number of challenges experienced in the field of logistics in Indonesia, including poor transportation infrastructure in a number of different places. Sustainable development is a concept that aims to find a balance between people's needs now and their ability to meet those needs in the future. The research aimed to identify and analyze the relationship between leadership and community involvement (also known as community participation or engagement) in sustainable development in the shipping industry. The research used the Partial Least Squares-Structural Equation Model (PLS-SEM) with a sample of 103 shipping companies to analyze data. The research results show that leadership positively and significantly impacts sustainable development, confirming the importance of the leader's role in implementing sustainable practices in company operations. Meanwhile, community involvement shows a positive but insignificant impact on sustainable development, indicating that the community needs to be reconsidered in the context of sustainable development in the shipping industry. The results also provide information for companies and leaders to strengthen sustainable development efforts by implementing more integrated policies focused on community involvement. Moreover, the research offers a chance to encourage cooperation between industrial actors and local populations. By harmonizing objectives, expectations, and actions, it is feasible to develop projects that strengthen sustainable practices within the ocean freight transportation business and promote the well-being of the communities it interacts with.

**Keywords:** community involvement, leadership, sustainable development

## INTRODUCTION

Indonesia is an archipelagic country with a large territory and various challenges in delivering goods and services. Some of the problems encountered in logistics in Indonesia include inadequate transportation infrastructure in multiple regions. Therefore, the correct political direction is needed in developing the shipping sector in 2020–2024 to support national maritime connectivity by increasing the connectivity of facilities and infrastructure and establishing international hub ports, regulations, and information technology (Assagaf, 2023).

In recent years, sustainable development has received much attention as a fundamental and forward-thinking idea. It focuses on achieving a delicate balance between the present demands of humanity and the capacity of future generations to meet their needs (Kagama, 2018). This principle holds that the decisions people make today should not jeopardize the well-being and opportunities of the generations. A peaceful cohabitation of economic, social, and environmental aspects is one of the critical goals of sustainable development, which aims to minimize the negative impacts of human activity on the environment (Rieckmann, 2018). It aims to ensure longevity and

prosperity not only for particular individuals but also for the whole community.

The strategy places a strong emphasis on ensuring long-term economic viability. It emphasizes prudent resource management and financial policies that do not deplete vital resources or undermine the economic prospects for the future (Porter & Kramer, 2019). In essence, it promotes the establishment of financial structures that result in the accumulation of wealth without compromising the capacity of succeeding generations to achieve the same. Equally important is social sustainability, which focuses on the health and happiness of both the current generation and the generations to come. It involves ensuring that everyone, regardless of where they come from or their situation, has the same possibilities regarding education, healthcare, and other things (Bouzguenda et al., 2019). The pursuit of social sustainability involves creating communities that are welcoming to people of all backgrounds, encouraging personal growth, and ensuring no one is left behind.

The concept of environmentally responsible development is perhaps the most well-known aspect of sustainable development. It entails ensuring the protection of the world's ecosystems and natural resources (Dincă et al., 2022). The ability of the earth to sustain life and maintain ecological balance in the future must not be jeopardized by actions made in the present. Conservation of resources and making proper use of those resources are essential aspects.

Therefore, sustainable development is seen as an all-encompassing strategy to ensure people's continued prosperity and the planet's health over the long term. It challenges people to contemplate the long-term effects of the activities, make responsible choices, and design policies that emphasize the welfare of future generations. As people continue to struggle with global issues, such as climate change, the depletion of resources, and inequality, the principles of sustainable development become increasingly more relevant. It directs people toward a fairer, more sustainable, and more prosperous future for everyone.

In maritime transport logistics, sustainable development can guide the industry in optimizing the use of resources, reducing emissions, and increasing efficiency (Wang et al., 2020). Shipping companies can invest in environmentally friendly technologies, such as ships with alternative fuels or technologies that reduce energy consumption (Iris & Lam, 2019). In addition, the implementation of sustainable development can also encourage companies to prioritize the well-being of the crew on the ship, such as providing safe and decent working conditions and protecting their human rights (Labadi et al., 2021).

Next, leadership is a multifaceted concept crucial in various aspects of life, from the workplace to community, organizations, and others. At its core, leadership revolves around an individual's capacity to inspire, motivate, and guide individuals or groups toward attaining shared objectives (Klevering & McNae, 2018). This ability to influence and inspire

others is not limited to a position or title but is rooted in a leader's vision, values, and behavior.

The capacity to establish and express a good vision is one of the critical facets of successful leadership. A leader must have a clear and compelling future vision that connects with the team's or organization's objectives (Klevering & McNae, 2018). This vision acts as a compass, directing people's efforts and resources toward a single purpose.

In addition, leaders must demonstrate principles that connect with their people. Integrity, honesty, empathy, and inclusiveness must be firmly established in a leader's behaviors and choices. They are not simply words (Jung, 2022). When leaders consistently demonstrate these values, they create a culture of trust and authenticity within the group, fostering loyalty and commitment. Leadership involves making the best judgments, especially in difficult situations. Influential leaders are problem-solvers who can confidently traverse ambiguity and hardship (Lacerda, 2019). They encourage innovation and progress by encouraging team members to take measured risks. Possibly one of the most effective components of leadership is setting a good example. A leader who demonstrates exceptional work ethic, devotion, and professionalism will motivate others to do the same (Chaudhary et al., 2023). Leaders who lead by example infuse the whole group with a culture of responsibility and excellence.

Leadership in ocean freight logistics is a crucial factor in meeting the challenges and maximizing the potential of this industry (Tijan et al., 2021). In a dynamic and complex environment, leaders must be able to steer the business in facing rapidly evolving technological, regulatory, and market changes (Schoemaker et al., 2018). Effective leadership in shipping logistics means optimizing supply chains, improving operational efficiency, and ensuring compliance with maritime regulations. Leaders must also build strong collaborations with business partners, customers, and other stakeholders.

Leadership and sustainable development are closely linked to achieving a sustainable future for the earth and people. In response to the complexity of global challenges, leaders from various sectors must adopt a sustainable approach in their decision-making and actions (Bengtsson et al., 2018). Furthermore, sustainable leadership is not only the responsibility of politicians and rulers but also companies and other organizations. Business leaders are expected to play an active role in ensuring the sustainability of their operations and reducing negative impacts on the environment and society (Ilic et al., 2023).

Several studies analyze leadership and sustainable development. Examining the importance of leadership in achieving Sustainable Development Goals (SDGs) highlights how leaders can influence the SDGs through social media platforms like Twitter (Grover et al., 2021). The research findings show that most leaders discuss the SDG targets of partnership for the goals and peace, justice, and strong institutions. However, previous research related to leaders in

maritime business about sustainable development has been conducted by Baylon and Dragomir (2022). The sustainable development approach in marine education and training is an innovative step to meet the challenges of higher education for global sustainable development initiatives. Hence, the first hypothesis highlights that leadership affects sustainable development.

H1: Leadership influences sustainable development positively.

Community involvement (also known as participation or engagement) is crucial for developing strong, resilient, and prosperous communities. It involves the active engagement and involvement of community members in various activities and initiatives directly related to the common interests and well-being of the whole community (DiBella et al., 2023). Active engagement is one of the essential components of community involvement. It requires people to actively shape their community's destiny and go beyond physical presence (Smithies & Webster, 2018). Active participation is the lifeblood of a flourishing community, whether by volunteering for local events, joining community groups, or engaging in neighborhood clean-up projects.

Participation in the community generates a feeling of belonging and ownership in its members. Individuals establish a stronger connection to their community and a higher sense of responsibility for its well-being when actively engaging in community initiatives and events (Cicognani et al., 2020). It may result in enhanced civic pride and a dedication to making the city a better place for everyone. Moreover, community involvement dramatically affects a community's social fabric. It improves social cohesiveness by bringing individuals from varied backgrounds together, developing social ties, and strengthening the links of trust within the community. These ties may result in beneficial collaborations and partnerships for the whole community. Moreover, community involvement may more effectively solve local concerns and difficulties. When citizens actively recognize issues and seek solutions, they may use the community's pooled knowledge and resources. It may result in novel solutions and a more effective use of resources (Gui & MacGill, 2018). Through collaboration, volunteerism, and donations, communities strive to create positive change and strengthen social ties around them (Emery & Flora, 2020).

In ocean freight logistics, community involvement plays a crucial role. Active community involvement supports the availability of local labor and enhances the regional economy. Logistics companies can identify and address local logistics issues through community collaboration, reduce social conflicts, and increase community acceptance (Jami & Walsh, 2017). By involving the community in the planning and implementation of shipping projects, the industry can optimize efficiency and positively impact the

growth and well-being of society as a whole.

The connection between community involvement and sustainable development is vital and complex, constituting a linchpin in the quest for global progress. Social, economic, and environmental sustainability are the three pillars of sustainable development, and community involvement is crucial to developing each of these components (Bouzuenda et al., 2019).

Socially sustainable development demands the participation of the community. The involvement of the community in decision-making processes and contribution to the development agenda ensures that development projects meet the genuine needs and concerns of the local population. It promotes social fairness, generates a feeling of ownership, and strengthens disadvantaged groups, eventually resulting in more equitable societies.

Community involvement may stimulate local economic prosperity. When citizens are actively interested in community projects and initiatives, they typically invest their time, talents, and resources in local companies and enterprises (Bouzuenda et al., 2019). It increases economic activity within the community, offers employment possibilities, and improves the general standard of living for community members. It may also result in the formation of economically viable and locally driven enterprises.

Moreover, community involvement is intimately linked to environmental sustainability. When communities actively invest in environmental conservation and sustainable practices, they may safeguard their natural resources, decrease waste, and advance environmentally friendly activities (El Moslem Badr, 2022). This grassroots approach to ecological stewardship may significantly influence climate change mitigation and ecosystem preservation for future generations.

Involvement in the community also promotes education and understanding of sustainability problems. Through community-led projects, individuals may learn about sustainable practices, such as renewable energy, trash reduction, and responsible consumerism (Joshi & Yenneti, 2020). This information may enable community members to make educated decisions and advocate for sustainable policies and procedures at several levels of government.

Community involvement is fundamental to inclusive and sustainable development. It denotes the participation of community people in all phases of decision-making processes concerning initiatives and development projects that directly affect their lives. This engagement includes planning, execution, and monitoring, and it is essential to accomplishing the overriding objective of long-term prosperity for all community members (Oosterhof, 2018).

On the other hand, sustainable development refers to meeting the needs and aspirations of the present without compromising the ability of future generations to meet their own needs. Sustainable development aims to create a fair, inclusive, and

environmentally friendly system, providing balanced social, economic, and environmental benefits (Bansard et al., 2019). Hence, the second hypothesis highlights that community involvement impacts sustainable development.

H2: Community involvement influences sustainable development positively.

The research aims to identify and analyze the relationship between leadership and community involvement in sustainable development in the shipping industry. Figure 1 presents the framework constructed using the literature and the findings of earlier studies. The researchers propose that leadership affects sustainable development (H1), and community involvement has an impact on sustainable development (H2).

A transition from conventional and control-oriented leadership to more inclusive and stakeholder-centric leadership is needed, as supported by the existing literature on sustainable thinking and leadership. Effective responses to the intricate sustainability issues necessitate this organizational transition (Gerard et al., 2017). However, there is a gap in the integration of leadership and sustainability, which needs more research in this area. Moreover, another research also further underlines the significance of sustainable leadership in achieving a balance between social, economic, and environmental objectives and urges additional research to investigate sustainable leadership's causes and effects (Liao, 2022).

Research on leadership in logistics has found several crucial domains that warrant additional investigation. Previous research has highlighted the need for a more comprehensive understanding of industry leadership, particularly logistics processes (Janczewska, 2019). Another previous research underscores the importance of specific leadership competencies in the logistics industry, such as business orientation and decision-making (Jakubowski, 2020).

Another previous research has systematically reviewed the relationship between leadership and supply chain management, identifying significant areas for further investigation. Collectively, it points to the need for more in-depth research on the role of leadership in logistics, particularly in the context of the shipping industry and the strategic use of logistical competence (Prabhu & Srivastava, 2023). Nonetheless, more investigation is required to bridge the gap concerning sustainability and leadership.

Significant gaps in the current literature on sustainable development and community involvement are evident. Despite sustainability's direct influence on clients, it has emphasized its oversight in social work practice. For sustainability, protected areas and local populations must engage in more effective collaboration. The necessity for more robust connections between green infrastructure, cities, and ecosystem services to accomplish the SDGs is emphasized by Hawken et al. (2021). Lastly, corporate social responsibility initiatives have a beneficial effect on the well-being of communities, specifically concerning social, economic, environmental, and spiritual progress. The previous research collectively emphasizes the criticality of incorporating sustainability principles into diverse facets of community involvement (Magdalena et al., 2018).

## METHODS

The research applies a quantitative method. The research utilizes shipping businesses in Greater Jakarta as its unit of analysis. Data collection is the systematic collection of information for research purposes. To deal with self-selection bias, the researchers use purposive sampling to lessen the influence of voluntary involvement. The research ascertains that the sample appropriately reflects the target population. Meanwhile, to reduce bias, the researchers use proper data-collecting techniques, maintain consistency, and offer clear instructions to participants. It also considers

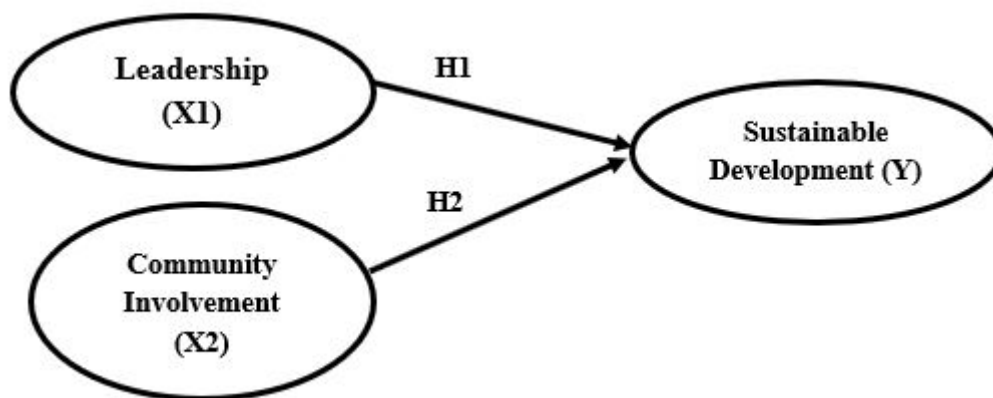


Figure 1 The Research Framework

undertaking non-response follow-ups to minimize bias from non-participation. The researchers also regularly examine and adjust data-gathering techniques to ensure data quality and impartiality. These behaviors contribute to the reliability and validity of acquired data, making it more representative of the community under the research and less prone to self-selection bias. The investigation was conducted between May and July of 2022.

According to Hair Jr. et al. (2019), the minimum sample size is at least five times larger than the number of items in the question to be investigated. The research samples are 103 SMEs since there are 15 question items. Interviews and questionnaires are used to collect data. Google Forms is used to complete questionnaires by 103 of the 125 respondents in the research. The clarity and length of the questions may affect responders' participation. Although only 103 questionnaires are collected, the data analysis may still provide helpful information for the research. Then, the measurement scale used is the Likert scale.

The questionnaire preparation process includes setting study goals, writing straightforward and impartial questions, and performing pretests with varied populations. Questions should be culturally appropriate, eliminate leading language, balance positive and negative phrasing, and randomize answer alternatives to reduce prejudice. In the questionnaire,

the researchers use three indicators for community involvement from Rahman et al. (2022), four indicators for leadership from Koohang et al. (2017), and eight indicators for sustainability development from Chang and Cheng (2019). Indicators of each variable are shown in Table 1.

The research uses the Partial Least Squares-Structural Equation Modeling (PLS-SEM) approach. The analysis process is carried out in several stages: external model, internal model, and relationship between variables. The multivariate statistic used PLS-SEM with the SmartPLS 3.3.2 program. PLS is an alternate approach for analyzing the connection between variables with complicated structures dependent (endogenous), namely sustainability development, and independent (exogenous) variables, namely community involvement and leadership. It helps researchers to understand the dense interconnections and relationships inside the research framework (Zhang & Jedin, 2022). In the research context, SEM, with an emphasis on PLS, as performed by the SmartPLS 3.3.2 software, serves as a reliable multivariate statistical approach. PLS-SEM is an indispensable technique for assessing complicated interactions between variables, especially when dealing with complex and linked constructs.

One aspect that differentiates SmartPLS from

Table 1 Indicators of Variables

Indicators	Code	Author
<b>Community Involvement</b>	CI	(Rahman et al., 2022)
Community participation is needed for sustainable management.	CI1	
Community participation will develop cooperation, collaboration, and social interaction among community members.	CI2	
Community participation will improve two-way communication between residents and local government.	CI3	
<b>Leadership</b>	LD	(Koohang et al., 2017)
Motivation: a leader must motivate and bring out the best in people.	LD1	
Listening: a leader must empower others to do their jobs.	LD2	
Empowerment: a leader must be a good listener and put people at ease.	LD3	
Interpersonal communication: a leader's interpersonal communication is necessary to bring people together to work effectively.	LD4	
<b>Sustainability Development</b>	SD	(Chang & Cheng, 2019)
Ordering costs and logistics costs.	SD1	
Increasing local community employment opportunities and green image.	SD2	
Managers' commitment to green supply chain management.	SD3	
Employees' environmental training.	SD4	
Reducing the use of harmful raw materials.	SD5	
Reducing energy use.	SD6	
Reducing greenhouse gas emissions.	SD7	
Monitoring suppliers' effectiveness.	SD8	

other statistical methods is that it is more tolerant of data that are not normally distributed. In SEM, using SmartPLS assumes that the data must be normally distributed, which is unnecessary (Rahman et al., 2021). However, the research uses homoscedasticity and multicollinearity to clean the data and check other assumptions. It is to ensure that the analysis performed still produces valid results.

In contrast to conventional SEM, PLS-SEM is a flexible method that does not depend on rigid assumptions of multivariate normality, making it well-suited for datasets that do not satisfy these conditions. It is useful when variables may have latent or unobservable characteristics. PLS-SEM is useful when working with small sample sets since it is less susceptible to parameter estimation difficulties. This method enables researchers to model and comprehend the causal links, direct and indirect impacts, and general structural dynamics that affect the results of interest. This analytical skill is essential in domains such as the social sciences, commerce, and economics, where the interactions between variables may be extensive and complex (Hair & Alamer, 2022).

The evaluation of the measuring model (outer model) aims to ascertain its validity and dependability. The assessment of validity incorporates both convergent and discriminant validity. Validity evaluates whether the construct being assessed is distinguishable from other constructs in the model. For the convergent validity test, the outer loading value of each indicator relative to the criterion is examined. It is valid when the outer loading exceeds 0.70 (Ghozali, 2021).

Based on Hair Jr. et al. (2019), convergent validity includes the Average Variance Extracted (AVE). Meanwhile, discriminant validity consists of cross-loading, Composite Reliability (CR), and

Cronbach's alpha (CA). These tests measure validity and reliability in SEM. Meanwhile, the AVE value should be better than 0.5. Meanwhile, the values of cross-loading and CR should be greater than 0.6. Last, CA must be greater than 0.7.

## RESULTS AND DISCUSSIONS

Table 2 provides demographic information consisting of respondents' characteristics. Approximately 17% of the respondents are female, while males comprise the majority (83%). The age of the responders exhibits a high degree of uniformity, with the majority falling within 36 to 45 years (44%). Additionally, the age categories of 26 to 35 years and above 46 years comprise a sizeable majority. For academic backgrounds, the results vary, with 71% of the respondents having a bachelor's degree, 14% having completed high school, and 16% holding postgraduate degrees. Moreover, most respondents have been employed for six to ten years (50%). Groups with work experience ranging from three to five years and over ten years also contribute significantly. It demonstrates the wide range of professional backgrounds of the participants.

The demographic analysis offers valuable insights into the participants' attributes and may contribute to the development of supplementary interpretations of the gathered data. Consideration must be given to whether particular demographic characteristics are distributed uniformly or unevenly since it may impact the applicability of findings and the interpretation of research outcomes. Moreover, comparing demographic groupings may facilitate a more profound comprehension of emerging patterns or trends within the data.

In Figure 2 and Table 3, a significant revelation

Table 2 Respondents' Characteristics

Demographic Profiles	Attributes	Frequency	Percentage (%)
Gender	Male	85	82.50%
	Female	18	17.50%
Age	18–25	11	10.70%
	26–35	24	23.30%
	36–45	45	43.70%
	> 46	23	22.30%
Education	High School	14	13.60%
	Undergraduate	73	70.90%
	Postgraduate	16	15.50%
Time of Working	< 2 years	12	11.65%
	3–5 years	25	24.27%
	6–10 years	51	49.51%
	> 10 years	15	14.56%

(Source: Researchers' Calculation)

arises while analyzing the validity of the variables under discussion. In particular, it is determined that six indicators fail to fulfill the validity requirement since their loading factor values are below the suggested level of 0.7. There are SD1, SD2, SD3, SD4, SD8, and LD1. The result suggests that these indicators may not accurately assess the components they are intended to reflect. In practical terms, it may signal that either the phrasing or construction of these items requires modification, or they may not be tapping into

the desired components of the construct precisely.

In Table 4, the overall evaluation of the variable indicators produces positive findings. Most indicators indicate validity, as proven by loading factor values of 0.6 or more. In addition, the estimated AVE values for each indicator fall between 0.59 and 0.64. It indicates that the variations captured by the constructs are significant and valid measurements of the intended underlying ideas.

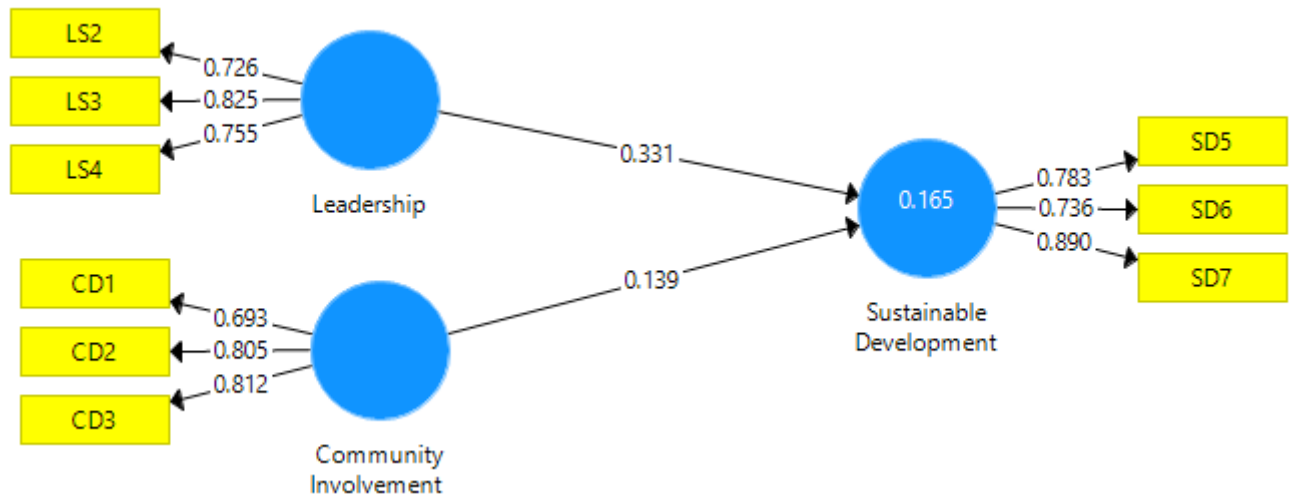


Figure 2 Model of Path Coefficient Output

Table 3 The Results of Outer Loading Value

Variable	Indicators	Description	Outer Loading	Decision
Community Involvement	CI1	Community participation is needed for sustainable management.	0.693	Valid
	CI2	Community participation will develop cooperation, collaboration, and social interaction among community members.	0.805	Valid
	CI3	Community participation will improve two-way communication between residents and local government.	0.812	Valid
Leadership	LD1	Motivation: a leader must motivate and bring out the best in people.	0.564	Not Valid
	LD2	Listening: a leader must empower others to do their jobs.	0.726	Valid
	LD3	Empowerment: a leader must be a good listener and put people at ease.	0.825	Valid
	LD4	Interpersonal communication: a leader's interpersonal communication is necessary to bring people together to work effectively.	0.755	Valid
Sustainability Development	SD1	Ordering costs and logistics costs.	0.365	Not Valid
	SD2	Increasing local community employment opportunities and green image.	0.421	Not Valid
	SD3	Managers' commitment to green supply chain management.	0.495	Not Valid
	SD4	Employees' environmental training.	0.639	Not Valid
	SD5	Reducing the use of harmful raw materials.	0.783	Valid
	SD6	Reducing energy use.	0.736	Valid
	SD7	Reducing greenhouse gas emissions.	0.890	Valid
	SD8	Monitoring suppliers' effectiveness.	0.572	Not Valid

Table 4 The Results of Average Variance Extracted (AVE)

Variable	Value
Sustainable Development	0.648
Leadership	0.592
Community Involvement	0.596

In Table 5, the internal consistency is high for sustainable development, as indicated by the CR score of 0.846. In general, a CR value of 0.7 is deemed satisfactory. The CA value of 0.73 also suggests good dependability while falling short of the widely accepted minimum requirement of 0.8. Meanwhile, leadership exhibits substantial internal consistency, as seen by its CR score of 0.813. Its CA value of 0.659 also falls short of the standard criteria of 0.7, indicating that the scale’s dependability may be improved. Examining the origins of this diminished dependability and contemplating possible adjustments is essential.

Concurrent with leadership, community involvement has a robust internal consistency, as seen by its high CR value of 0.815. Although it is slightly below the acceptable level, its CA value is 0.670. Similar to the scale’s consistency in leadership, more analysis of the components contributing to diminished reliability may reveal possible modifications to improve the scale’s overall dependability.

The CR values suggest generally good internal consistency for all three constructs. Meanwhile, CA values, especially for leadership and community involvement, can benefit from further investigation and potential refinement. It is essential to balance achieving reliability and maintaining construct validity when assessing and refining measurement scales.

Table 5 The Results of Composite Dependability (CR) and Cronbach’s Alpha (CA)

Variable	CR	CA
Sustainable Development	0.846	0.730
Leadership	0.813	0.659
Community Involvement	0.815	0.670

Figure 3 and Table 6 are crucial for analyzing the hypotheses under consideration. In H1, the path coefficient is 0.331. The positive coefficient indicates a proportional relationship between leadership and sustainable development. The magnitude (0.331) serves as an indicator of the relationship’s strength. Additionally, the obtained t-statistic of 2.962 indicates that the result possesses statistical significance. It suggests that the correlation between sustainable development and leadership cannot be attributed to random variation. The p-value of 0.003 is significantly

Table 6 Hypothesis Testing Summary

Relation	Path Coefficients	T-Statistics ( O/STDEV )	T-Statistics ( O/STDEV )	P-Value	Decision
H1 Leadership → Sustainable Development	0.331	2.962	2.962	0.003	H1 is supported
H2 Community Involvement → Sustainable Development	0.139	1.297	1.297	0.195	H2 is rejected

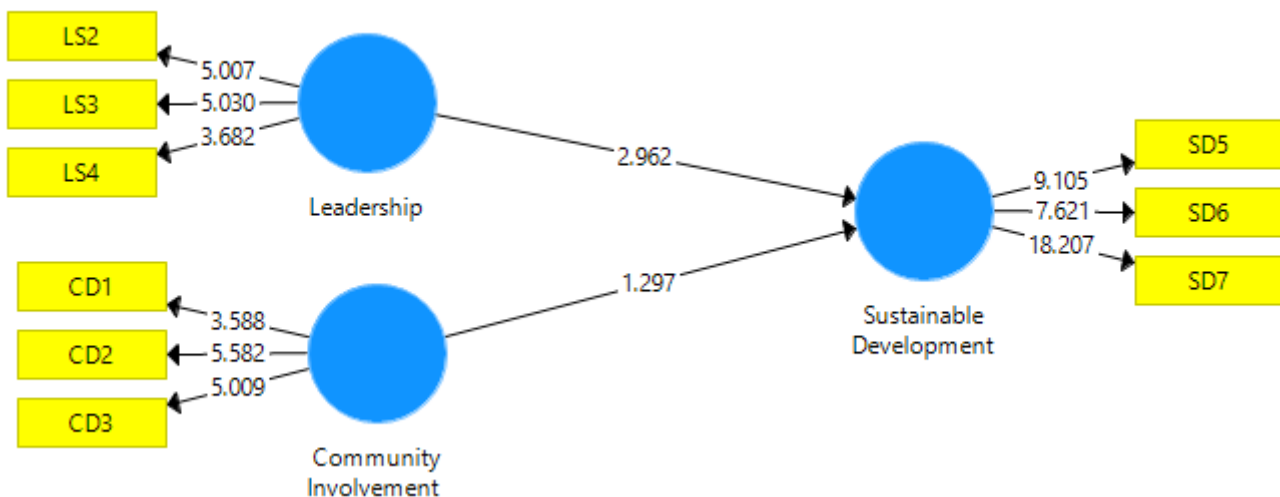


Figure 3 Path Coefficient and T-Test Values of the Model



less than the conventional threshold of 0.05, which offers robust evidence in opposition to the null hypothesis. It supports the notion that leadership influences sustainable development in a statistically significant beneficial way. In light of the statistically significant findings, H1 is strongly supported, indicating a favorable correlation between leadership and sustainable development.

The revelation that leadership positively and considerably affects sustainable development in ocean freight logistics is a significant and hopeful result with far-reaching implications for the maritime sector. This result is consistent with previous research by Wang et al. (2023). It underscores the notion that strong leadership is crucial in generating good improvements in this industry.

This discovery implies that innovative leaders within shipping corporations may accelerate transformational transitions toward more sustainable and accountable maritime freight transportation methods. Such leadership may appear in various ways, including investments in environmentally beneficial projects like using low-emission boats, adopting alternative fuels, and using innovative propulsion technology. These strategic choices correspond with worldwide initiatives to decrease the environmental effect of maritime freight transportation, limit carbon emissions, and embrace social and economic sustainability (Stalmokaite & Yliskylä-Peuralahti, 2019).

Additionally, the ramifications extend due to operational efficiency gains. Effective leadership may create a cultural transformation inside firms, fostering a greater sense of social and environmental responsibility. It may enhance the industry's reputation, attract socially aware investors, and contribute to its long-term profitability.

In the role of community involvement in sustainable development. The path coefficient of 0.139 signifies a positive correlation, suggesting a corresponding improvement in sustainable development as community involvement rises. The t-statistic of 1.297, when evaluated at the 0.05 level, does not exhibit statistical significance. It indicates that random variation may account for the observed link instead of a genuine impact. The obtained p-value of 0.195 exceeds the conventional significance level of 0.05, suggesting that the observed association lacks statistical significance. Insufficient evidence exists to warrant rejecting the null hypothesis. The findings fail to offer adequate evidence in favor of H2, indicating that it does not reveal a statistically significant association between community involvement and sustainable development. H2 is rejected.

The research finding, which demonstrates a positive but statistically insignificant association between community involvement and sustainable growth in ocean freight logistics, underlines the complexity of this dynamic and urges a request for a more extensive analysis. The result contradicts prior research findings (Rahman et al., 2022). To properly

comprehend the complexities of this connection, it is necessary to go further into the contextual aspects that may alter the effect of community involvement. Regional differences, the kind of community involvement, timing, and the breadth of programs must be carefully evaluated. These factors may substantially impact the efficacy of community involvement in promoting sustainability in the ocean freight logistics sector.

By addressing these research gaps, governments, firms, and stakeholders in the ocean freight logistics industry may enhance their plans for participating in sustainable development initiatives with local communities. This improved comprehension may result in more targeted and successful methods, bridging the gap between community involvement and lasting results. Moreover, the research offers a chance to encourage cooperation between industrial actors and local populations. By harmonizing objectives, expectations, and actions, it is feasible to develop projects that strengthen sustainable practices within the ocean freight transportation business and promote the well-being of the communities it interacts with.

## CONCLUSIONS

The consequences for practitioners and organizational leaders are profound as the discovery of a positive and statistically significant correlation between leadership and sustainable development stands. These results can facilitate leadership development in organizations to commit to sustainable development strategies. Investment in leadership development programs that emphasize the comprehension and implementation of sustainable development concepts may be one way to achieve this goal. Assessing and enhancing leadership attributes through providing requisite assistance and identifying areas for improvement is critical in this situation. Assisting firms in establishing a sustainable corporate culture requires an awareness that good leadership may significantly contribute to sustainable development.

Initial results indicate that community involvement and sustainable development are not significantly related. Nevertheless, the result needs more investigation. To improve their influence on sustainable development, practitioners and decision-makers at the local level may choose to contemplate supplementary approaches that augment community involvement. Motivation and augmentation of involvement may be achieved by implementing various strategies, including public discourse forums, collaborations with community groups, and outreach efforts. Advocates can develop more productive strategies to stimulate engagement by acquiring a more profound knowledge of the regional milieu.

Strategic recommendations for the organization's sustainability enable leaders to incorporate sustainable practices into the decision-making processes, which is a critical component of this endeavor. It entails fostering a mindset of

sustainability that surpasses mere adherence to legislation and emphasizes proactive involvement with environmental and social concerns. It is essential to promote the practice of leaders contemplating the enduring consequences of their choices on the entity, its stakeholders, and the environment. It may entail the integration of life cycle thinking, the evaluation of environmental and social hazards, and the identification of innovation prospects that are in line with sustainability objectives. The importance of recognition and reward systems in reinforcing desirable actions is substantial. Through recognizing and commemorating leadership behaviors that positively impact sustainable development objectives, institutions effectively communicate their steadfast dedication to the cause of sustainability. Recognition may manifest in several ways, such as through the bestowal of rewards, public acknowledgment, or incorporation into performance assessments. Implementing such steps inspires existing leaders and serves as a model for aspiring leaders, establishing a virtuous cycle that strengthens a culture focused on sustainability. They undertake an exhaustive examination of existing community involvement efforts.

Active involvement in local communities is fundamental to healthy business operations. It underscores the significance of comprehending and attending to the distinct requirements and apprehensions of individuals immediately affected by the firm's undertakings. It entails the establishment of a reciprocal discourse in which institutions proactively consider the community's input, cultivating reciprocal confidence and collaboration. To operationalize community insights into concrete measures, organizations must devise community-specific initiatives that align with sustainability objectives. By adopting this strategic strategy, endeavors can fulfill urgent requirements and make strides toward more extensive sustainability goals. Such programs may include activities focused on environmental protection, skill development, education, or community empowerment. Organizations foster a mutually beneficial association between the communities and themselves by strategically matching community programming with sustainability objectives. By adopting this strategy, the organization strengthens its social license to function and produces favorable outcomes on both social and environmental fronts. The organization places significant emphasis on a shared value system, in which its success is intricately linked to the welfare and long-term viability of its communities. This sustainable and collaborative strategy cultivates resilience, creates healthy connections, and contributes to the organization's longevity and success.

Leadership development initiatives designed to promote sustainability are fundamental in constructing a group of executives who recognize the interdependence between corporate activities and broader ecological and societal circumstances. These programs may incorporate many facets, such

as social responsibility, ethical decision-making, and environmental stewardship. The training program ought to provide leaders with the requisite information, abilities, and mentality to effectively negotiate the intricate terrain of sustainability concerns. Municipal stakeholders, including nonprofit organizations and local governments, may find the research findings particularly useful in determining how to tailor their community involvement strategies to their particular circumstances.

It is customary for scientific investigations to possess some limits to the applicability of their findings. The direct applicability of these findings to all circumstances or people is questionable. While making judgments, it is essential to consider the distinctive attributes of a specific population or area. Further research can ascertain whether the moderating factors affect the correlation between sustainable development and community involvement. Sociocultural features, community size, and economic development level can significantly influence the magnitude of the impact of community involvement.

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