

Social sustainability orientation and supply chain performance

Subjects: Management

Contributor: Miguel Reyna-Castillo, Paola Selene Vera Martínez, Lisette Farah-Simón, Nadima Simón

The Brundtland Report implicitly assumes that environmental and social care are linked to economic performance. Although subsequent international conventions have sought to be increasingly precise about what sustainable actions mean, it remains an academic and strategic challenge to delineate what these dimensions mean at the individual, organizational, and sociocultural levels.

Keywords: predictive capability ; social-resource-based view (SRBV) ; capability approach ; Social sustainability ; supply chain performance ; LATAM ; Social Resource-Based View (SRBV)

1. Introduction

The Brundtland Report ^[1] implicitly assumes that environmental and social care are linked to economic performance. Although subsequent international conventions have sought to be increasingly precise about what sustainable actions mean, it remains an academic and strategic challenge to delineate what these dimensions mean at the individual, organizational, and sociocultural levels ^[2]. The same challenge exists in the business context and the various links in the supply chain. In recent decades, academia has sought to explain the reality linking supplier business and sustainability from different conceptual frameworks and various theories: social responsibility (SR) ^{[3][4]}, stakeholders ^{[5][6]}, Resource-Based Theory ^[7], Institutional Theory ^[8], and Socio-Ecological and Complex Models ^{[2][9]}.

Although the Our Common Future report ^[1] warns that sustainable triple-bottom-line performance (economic, social, and environmental) is not short-term, studies reveal that consideration of environmental and social aspects of the company brings positive performance-related effects. To understand the effects of sustainable actions on Supply Chain Performance, Resource-Based Theory (RBT) has been one of the most recurrent theories, as shown in the literature reviews of Touboulis and Walker ^[10], Mardani et al. ^[11], and Govindan et al. ^[12]. Based on this theory, research has leaned towards the environmental dimension of sustainability, intending to explore the relationships between financial efficiency and so-called green practices.

The work of Hart ^[13], based on the Resource-Based Theory (RBT), identifies the reduction in environmental impact of a company as a valuable internal resource related to the efficient use of resources and, in turn, to cost reduction. This trend paved the way for a theoretical extension called Natural-Resource-Based View (NRBV), which Barney himself recognizes as a successful extension of Resource-Based Theory (RBT) ^[14]. Based on the NRBV hypothesis, works have sought to demonstrate that natural resource care is a valuable internal factor that builds capability for business performance, including supply chain management performance ^{[15][16][17][18]}.

On the other hand, the social dimension of sustainability has only recently received attention compared with the environmental dimension ^{[19][20][21]}. Although, in the last decade, it has gained increasing attention from scholars, the novelty of the study also shows the peculiar challenges in studying the social dimension. The ontological and anthropological challenges remain open when establishing variables that reflect what sustained human well-being means in its universal and contextual sense ^[22]. The variable of social sustainability still keeps the semantic challenge, since reducing it to a few contingent issues of altruism is far from defining long-term well-being ^{[23][24]}. Social sustainability has also been considered a capability due to its positive effect on business performance ^[25]. Therefore, the philosophical challenge is followed by the belonging of theoretical frameworks that can contribute to explaining social performance within the firm, as well as society as a factor of business performance.

A proper theoretical framework for studying the relationship between social sustainability and performance in the business context is proposed by Tate and Bals ^[26], who, like Hart ^[13], took Resource-Based Theory (RBT) as a basis and proposed the theoretical extension of the Social-Resource-Based View (SRBV). The central hypothesis of SRBV is that social

aspects, in the triple-bottom-line framework, are internal resources of the firm that can be capabilities to generate performance. Empirical research initiates the hypothetical contrast from the SRBV theoretical extension argument, proposing that the social dimension of sustainability is a valuable internal capability that positively affects firm performance. For example, the empirical casework of Arena et al. [27], who explored the social dimension as a capability within the energy sector in Italy, as well as Solovida and Latan [28], who, for their part, showed a positive relationship between social performance and economic performance within the triple bottom line of manufacturing companies listed on the Indonesian stock exchange. Regarding the aspect that explores sustained social performance, Amartya Sen's [29] capabilities approach, from Aristotelian philosophy, reconciles the problem of the antagonism between the universal and the contextual in the welfare issue and proposes a philosophical–economic framework for measuring social performance. It argues that health, education, gender equity, and fair work are essential for sustained well-being but also places value on the issue of subjective well-being [29]. This approach has been used to assess social sustainability in the context of Latin American supplier companies [30][31].

2. Social Sustainability as a Corporate Capability

For over a decade, Trebeck [32] discussed the distinction between corporate social responsibility and sustainability and, while highlighting the relationship between the two concepts, suggested a difference between the two practices. However, some research has taken Corporate Social Responsibility (CSR) and Corporate Sustainability as synonymous (e.g., Hutchins and Sutherland [3]). This manuscript starts from a semantic and ontological distinction between these concepts. Social sustainability is not considered to be a very altruistic action on the part of the company, but rather the actions of the company that favor the sustainable remediation of the social footprint caused by contexts of injustice in people's quality of life.

Sen [29] criticizes the reductionist bias that hides the classic measurements of social welfare and sees it as more than a distributive action and altruistic assistance. For Sen [29], sustained interest lies in the capacity/opportunity to self-generate the goods value for one's quality of life, i.e., social empowerment. The conclusion reached by Nussbaum and Sen [33] is that four factors trigger social empowerment in a community (capacity to self-generate sustained well-being): education, health, adequate income, and gender equity. Therefore, under this assumption, corporate sustainability is the sustainable intra- and extramural capabilities generated by the company. It reflects how companies can contribute to a development that recognizes the needs of future generations by ensuring social norms and safeguarding the natural environment [34]. Or, in a positive sense, they are actions of the company that generate capacity for social welfare. For example, the company can generate remedial or promotional actions that favor the interest of the society involved with its environment.

From Brundtland's [1] point of view, sustainable development also implies economic development for the company. Corporate social sustainability is seen as an exogenous contextual resource and a capacity that means performance for the company [26]. Of the three dimensions that comprise sustainability, the social sphere is the least studied [5][20]. One of the first influential research works that places the issue of social sustainability in business at the center is that of Hutchins and Sutherland [3], in which they delineate indicators to measure social sustainability in the U.S. The main themes were equity at work, health, safety, and philanthropy.

On the other hand, Ehrgott et al. [5], in an empirical study of 244 manufacturing companies in the U.S. and Germany, focused on identifying the motives of companies from developed countries to request social sustainability indicators from their suppliers in emerging economies. As can be seen in this work, a focused approach to socially sustainable issues is already beginning to take off, although still as a matter of corporate social responsibility (CSR); later, CSR will be seen as one of the dimensions of social sustainability. From the works of Hutchins and Sutherland [3] and Ehrgott et al. [5], guidelines are established for future research, taking a double general trend in social sustainability: the study of the supply chain and the study of emerging countries.

Of note in emerging countries is the study in India by Rajak and Vinodh [35], who modeled a more detailed set of indicators to assess social sustainability performance in manufacturing companies and proposed four corporate enablers: internal human resources, external population, stakeholders, and macrosocial performance. Moreover, in India, Mani et al. [36] identified 14 enablers and their interrelationships in the adoption of social sustainability measures in the manufacturing supply chain. On the other hand, Khan [37] breaks through another approach to corporate social sustainability and, in a conceptual exercise, presents the relationship between social sustainability and frugal innovation in business by measuring the impact on business development from social and ethical dimensions. Finally, in Korea, Jung [38] continues to focus on suppliers and assesses social sustainability in the supply chain through third-party logistics.

In emerging Romania, Costache et al. ^[39] tested a direct connection between social responsibility and profitability in consumer goods companies. In the work above, CSR is a synonym for social sustainability. In emerging South Africa (under community governance, gender equity, security, education, and promotion of civil and human rights), Masocha ^[40] found a positive association between social sustainability and financial performance in small and medium-sized enterprises. Likewise, in emerging Asia, Ketprapakorn and Kantabutra's ^[41] work examined the relationships between corporate sustainability practices and sustainability performance outcomes by sampling 500 employees of a social health company in Thailand. Additionally, researchers desired to focus on developed economies; Sroufe and Gopalakrishna-Remani ^[42] demonstrated relationships between management, social sustainability, reputation, and financial performance in an empirical study of U.S. companies. In summary, various research shows evidence that the social dimension of sustainability is a corporate aspect that can build capacity for firm performance in emerging economy contexts.

3. Social Sustainability as a Corporate Capability

In studies on social sustainability in the emerging supply chain, Mani et al. ^[43] describe supply chain social sustainability as addressing social issues within the upstream and downstream supply chains. Additionally, in this sense, research started from the perspective of developed economies. It focused on analyzing company actions for the performance of supply chain social sustainability ^[3] and the study of the motivations that lead firms to select emerging suppliers with socially sustainable performance ^[5]. Some findings, also from a developed country perspective, provided evidence of strong positive links between such selection of socially sustainable emerging suppliers and supply chain management performance in countries such as the U.S. and Germany (e.g., Ehrgott et al. ^[5]), as well as in New Zealand (Biggemann et al. ^[44]).

Work on supply chains in emerging economies also focused on understanding the performance of social sustainability and the enablers that led firms to adopt these measures. Among the seminal research that sought to investigate why suppliers in developing countries are adopting socially sustainable practices is that of Huq et al. ^[45], conducted in Bangladesh. In their findings, they found that a motivating factor for social care is the avoidance of staff turnover and, as a barrier, ambiguity in Western codes of conduct. In addition, the practice of audits and dialogue is presented as an enabler.

In the context of emerging countries, studies in India stand out, where measurement models on social sustainability in the supply chain have been developed. Mani et al. ^[36] qualitatively validated, through experts, a model with five dimensions relevant to the manufacturing sector. Subsequently, Mani et al. ^[43] statistically validated those measures by linking them to Supply Chain Performance (upstream and downstream) in the manufacturing sector. The model offered six significant themes: equity, philanthropy, safety, health and well-being, ethics, and human rights. This team of researchers has tested them in the context of other countries, different company sizes, and their theoretical model, analyzing the relationship between sustainability and chain and Supplier Performance (e.g., Mani et al. ^[7] and Mardani et al. ^[11]).

Moreover, from the Asian approach, Badri Ahmadi et al. ^[46] used a fuzzy method to validate measures of a social sustainability model with 38 supply chain experts from different turns of Iranian companies. As a result, they obtained eight relevant criteria in the industrial sector. On the other hand, Nath and Agrawal ^[47], in their study of Indian manufacturing companies, validated a model using structural equations and categorized the degree of involvement of a supply chain with social sustainability. The first level is the level of orientation or coincidence that the company may have concerning the issue, followed by basic practices and the highest level of involvement, which are advanced.

In emerging Latin America, the study by Rodríguez et al. ^[48] linked social aspects with value creation in industrial cooperatives in Ecuador, Peru, Guatemala, and El Salvador. In Latin America, Reyna-Castillo et al. ^[31] confirmed measures of social sustainability linked to corporate commitment in Mexico and Colombia, subsequently associating it with the resilience of the supply chain of suppliers in Mexico and Chile within the context of the pandemic ^[49].

Brazil is a leading region in research on the social dimension of sustainability in the supply chain in Latin America. It started by searching for a theoretical framework to understand the phenomenon's reality, such as the work of De Moraes and Barbieri ^[50]. Their study sought to shed additional light by providing a theoretical explanation and exploring concepts of social problems and governance mechanisms. It presents a framework for the adoption and management of social sustainability in supply chains, considering three guiding theories: stakeholder theory, behavioral theory, and contingency theory. In addition, other works have taken up the issue of motivations for the adoption of social measures in the supply chain, as is the case of Moraes and Silvestre ^[20], who, through an empirical case study in six focal companies, analyzed why and how companies implement and manage social sustainability in their supply chains. They found that the involvement of primary stakeholder groups (e.g., consumers and suppliers) generally occurs in extrinsically motivated

social initiatives. In contrast, the participation of secondary stakeholders (e.g., NGOs and the community) is based on intrinsic motivation.

Kamali et al. ^[51], from the biofuels sector in Brazil, identified social and governance problems using a statistical, empirical study as a method. The results show highly relevant (but less reliable) problems in human health and safety, labor rights, and working conditions. Recently, in the Brazilian context, Martins et al. ^[52] designed a roadmap through a Delphi methodology of experts and established indicators of social sustainability in logistics practice. The construction was based on three stakeholders: employees (e.g., safety, health, gender equity, and fair wages), community (e.g., employment of locals, monitoring of operational impact, drinking water, and sanitation), customers (e.g., ethical behavior and subsidies), and society (e.g., respect for legislation and anticorruption). In turn, Morais and Barbieri ^[53], based on stakeholder theory and contingency theory, conducted an empirical study of multiple cases in Brazilian focal companies. They proposed an archetype for approaching social issues to clarify them from the perspective of business complexity. The essential elements of their model were (1) the proximity of social problems, (2) governance mechanisms, and (3) contingency factors.

The relationship between social sustainability and Supply Chain Performance in emerging contexts was explored. On the one hand, studies link management actions with social sustainability performance (e.g., Acevedo Tirado, et al. ^[54]) or the link between sustainable social performance and supply chain management performance (e.g. Mani et al. ^[7]). In emerging Mexico, the study by Acevedo Tirado, et al. ^[54] evidenced how the efficiency of public administration improves the distribution chain of a subsidized milk program, thus achieving better access and equity in the receipt of the social benefit. For their part, Mani et al. ^[7] in India, from the Resource-Based Theory, found evidence of the positive relationship between supplier social sustainability practices and Supply Chain Performance mediated by Supplier Performance. Croom et al. ^[55] and Mardani et al. ^[11] have found how socially sustainable orientation and practices bring advantages to supply chain operational performance in the medium and long term. Sudusinghe and Seuring ^[56] showed how socially sustainable performance positively affects even economic performance in South Asia's supply chain of the Sri Lankan garment manufacturing sector.

Social sustainability is a topic that has been linked to the business environment. Motivations, barriers, and even the performance of the social dimension in the supply chain have been explored. Lately, studies have shown social sustainability as a business capability, so the theoretical contrast of the effects of corporate social sustainability capability in the supply chain continues to be studied from the supplier approach in LATAM emerging markets.

References

1. Brundtland, G. Our common future—Call for action. *Environ. Conserv.* 1987, 14, 291–294.
2. Zehendner, A.G.; Sauer, P.C.; Schöpflin, P.; Kähkönen, A.K.; Seuring, S. Paradoxical tensions in sustainable supply chain management: Insights from the electronics multi-tier supply chain context. *Int. J. Oper. Prod. Manag.* 2021, 41, 882–907.
3. Hutchins, M.; Sutherland, J. An exploration of measures of social sustainability and their application to supply chain decisions. *J. Clean. Prod.* 2008, 16, 1688–1698.
4. Staniškienė, E.; Stankevičiūtė, Z. Social sustainability measurement framework: The case of employee perspective in a CSR-committed organisation. *J. Clean. Prod.* 2018, 188, 708–719.
5. Ehr Gott, M.; Reimann, F.; Kaufmann, L.; Carter, C. Social Sustainability in Selecting Emerging Economy Suppliers. *J. Bus. Ethics* 2011, 98, 99–119.
6. Panigrahi, S.S.; Rao, N.S. A stakeholders perspective on barriers to adopt sustainable practices in MSME supply chain. *Res. J. Text. Appar.* 2018, 22, 59–76.
7. Mani, V.; Gunasekaran, A.; Delgado, C. Enhancing Supply Chain Performance through supplier social sustainability: An emerging economy perspective. *Int. J. Prod. Econ.* 2018, 195, 259–272.
8. Farrukh, A.; Mathrani, S.; Sajjad, A. A natural resource and institutional theory-based view of green-lean-six sigma drivers for environmental management. *Bus. Strategy Environ.* 2022, 31, 1074–1090.
9. Wohlfahrt, J.; Ferchaud, F.; Gabrielle, B.; Godard, C.; Kurek, B.; Loyce, C.; Therond, O. Characteristics of bioeconomy systems and sustainability issues at the territorial scale. A review. *J. Clean. Prod.* 2019, 232, 898–909.
10. Touboulic, A.; Walker, H. Theories in sustainable supply chain management: A structured literature review. *Int. J. Phys. Distrib. Logist. Manag.* 2015, 45, 16–42.

11. Mardani, A.; Kannan, D.; Hooker, R.; Ozkul, S.; Alrasheedi, M.; Tirkolaee, E. Evaluation of green and sustainable supply chain management using structural equation modelling: A systematic review of the state of the art literature and recommendations for future research. *J. Clean. Prod.* 2020, 249, 119383.
12. Govindan, K.; Shaw, M.; Majumdar, A. Social sustainability tensions in multi-tier supply chain: A systematic literature review towards conceptual framework development. *J. Clean. Prod.* 2021, 279, 123075.
13. Hart, S.L. A Natural-Resource-Based View of the Firm. *Acad. Manag. Rev.* 1995, 20, 986–1014.
14. Barney, J.B.; Ketchen, D.J.; Wright, M. The Future of Resource-Based Theory. *J. Manag.* 2011, 37, 1299–1315.
15. Ashby, A. Developing closed loop supply chains for environmental sustainability: Insights from a UK clothing case study. *J. Manuf. Technol. Manag.* 2018, 29, 699–722.
16. He, Q.; Gallea, D.; Ghobadian, A.; Ramanathan, R. Managing knowledge in supply chains: A catalyst to triple bottom line sustainability. *Prod. Plan. Control* 2019, 30, 448–463.
17. Ji, L.; Yuan, C.; Feng, T.; Wang, C. Achieving the environmental profits of green supplier integration: The roles of supply chain resilience and knowledge combination. *Sustain. Dev.* 2020, 28, 978–989.
18. Suleiman, M.A. The impact of tourism supply chain on sustainable performance in sub-Saharan Africa: Evidence from Tanzania. *Manag. Environ. Qual. Int. J.* 2022.
19. Khokhar, M.; Hou, Y.; Rafique, M.; Iqbal, W. Evaluating the social sustainability criteria of supply chain management in manufacturing industries: A role of BWM in MCDM | Ocena kryteriów zrównoważoności społecznej w zarządzaniu łańcuchem dostaw w przemyśle wytwórczym: Rola BWM w MCDM. *Problemy Ekorozwoju* 2020, 15, 185–194.
20. Morais, D.O.; Silvestre, B.S. Advancing social sustainability in supply chain management: Lessons from multiple case studies in an emerging economy. *J. Clean. Prod.* 2018, 199, 222–235.
21. Munasinghe, M.; Jayasinghe, P.; Deraniyagala, Y.; Matlaba, V.J.; dos Santos, J.F.; Maneschy, M.C.; Mota, J.A. Value–Supply Chain Analysis (VSCA) of crude palm oil production in Brazil, focusing on economic, environmental and social sustainability. *Sustain. Prod. Consum.* 2019, 17, 161–175.
22. Reyna-Castillo, M.; Martínez, P.S.V.; Ferretiz, L.E.J. Ontological Reconciliation for Corporate Social Sustainability I Conciliación Ontológica Para la Sustentabilidad Social Corporativa; Facultad de Contaduría y Administración de la Universidad Nacional Autónoma de México (FCA-UNAM): Ciudad de México, Mexico, 2019; pp. 1–25.
23. Foladori, G. Advances and Limits of Social Sustainability as an Evolving Concept. *Can. J. Dev. Stud./Rev. Can. d'études Du Dév.* 2005, 26, 501–510.
24. Reyna-Castillo, M.; Ferretiz, L.E.J.; Morales, A.M.C. A bibliometric review of corporate social sustainability I Una revisión bibliométrica de la sustentabilidad social corporativa. *Manag. Rev.* 2018, 3, 48–60.
25. Popovic, T.; Barbosa-Póvoa, A.; Kraslawski, A.; Carvalho, A. Quantitative indicators for social sustainability assessment of supply chains. *J. Clean. Prod.* 2018, 180, 748–768.
26. Tate, W.L.; Bals, L. Achieving Shared Triple Bottom Line (TBL) Value Creation: Toward a Social Resource-Based View (SRBV) of the Firm. *J. Bus. Ethics* 2018, 152, 803–826.
27. Arena, M.; Azzone, G.; Piantoni, G. Shared value creation during site decommissioning: A case study from the energy sector. *J. Clean. Prod.* 2020, 251, 119587.
28. Solovida, G.T.; Latan, H. Achieving triple bottom line performance: Highlighting the role of social capabilities and environmental management accounting. *Manag. Environ. Qual. Int. J.* 2021, 32, 596–611.
29. Sen, A. Development as Expansion of Capabilities I O desenvolvimento como expansão de capacidades. *Lua Nova Rev. De Cult. e Política* 1993.
30. Reyna-Castillo, M.; Martínez, P.S.V.; Domínguez, N.S. Assessing social sustainability in Latin America's manufacturing supply chain: A capability approach. *Reg. y Desarro. Sustentable* 2022, 22, 1–22.
31. Reyna-Castillo, M.; Ferretiz, L.; Domínguez, N. Social Sustainability in the Supply Chain: A Challenge for Emerging Latam Countries; Universidad Autónoma de Tamaulipas y Colofón: Tamps, Mexico, 2021; Volume 1, pp. 173–187.
32. Trebeck, K. Corporate responsibility and social sustainability: Is there any connection? In *Power, Culture, Economy: Indigenous Australians and Mining*; Altman, J., Martin, D., Eds.; Number 30 in Research Monograph of the Centre for Aboriginal Economic Policy Research; The Australian National University Press: Canberra, Australia, 2009; pp. 127–147.
33. Nussbaum, M.; Sen, A. *The Quality of Life*; Oxford University Press: Oxford, UK, 1993.
34. Vildåsen, S.S.; Keitsch, M.; Fet, A.M. Clarifying the Epistemology of Corporate Sustainability. *Ecol. Econ.* 2017, 138, 40–46.

35. Rajak, S.; Vinodh, S. Application of fuzzy logic for social sustainability performance evaluation: A case study of an Indian automotive component manufacturing organization. *J. Clean. Prod.* 2015, 108, 1184–1192.
36. Mani, V.; Agrawal, R.; Sharma, V. Social sustainability in the supply chain: Analysis of enablers. *Manag. Res. Rev.* 2015, 38, 1016–1042.
37. Khan, R. How Frugal Innovation Promotes Social Sustainability. *Sustainability* 2016, 8, 1034.
38. Jung, H. Evaluation of Third Party Logistics Providers Considering Social Sustainability. *Sustainability* 2017, 9, 777.
39. Costache, C.; Plesea, D.; Buzatu, A.I. Social sustainability and the impact in the business development. *Qual. Access Success* 2019, 20, 202–207.
40. Masocha, R. Social Sustainability Practices on Small Businesses in Developing Economies: A Case of South Africa. *Sustainability* 2019, 11, 3257.
41. Ketprapakorn, N.; Kantabutra, S. Sustainable Social Enterprise Model: Relationships and Consequences. *Sustainability* 2019, 11, 3772.
42. Sroufe, R.; Gopalakrishna-Remani, V. Management, social sustainability, reputation, and financial performance relationships: An empirical examination of U.S. firms. *Organ. Environ.* 2019, 32, 331–362.
43. Mani, V.; Agrawal, R.; Sharma, V.; Kavitha, T. Socially sustainable business practices in Indian manufacturing industries: A study of two companies. *Int. J. Logist. Syst. Manag.* 2016, 24, 18–44.
44. Biggemann, S.; Williams, M.; Kro, G. Building in sustainability, social responsibility and value co-creation. *J. Bus. Ind. Mark.* 2014, 29, 304–312.
45. Huq, F.; Stevenson, M.; Zorzini, M. Social sustainability in developing country suppliers: An exploratory study in the ready made garments industry of Bangladesh. *Int. J. Oper. Prod. Manag.* 2014, 34, 610–638.
46. Ahmadi, H.B.; Kusi-Sarpong, S.; Rezaei, J. Assessing the social sustainability of supply chains using Best Worst Method. *Resour. Conserv. Recycl.* 2017, 126, 99–106.
47. Nath, V.; Agrawal, R. Agility and lean practices as antecedents of supply chain social sustainability. *Int. J. Oper. Prod. Manag.* 2020, 40, 1589–1611.
48. Rodríguez, J.A.; Giménez, C.; Arenas, D. Cooperative initiatives with NGOs in socially sustainable supply chains: How is inter-organizational fit achieved? *J. Clean. Prod.* 2016, 137, 516–526.
49. Reyna-Castillo, M.; Santiago, A.; Martínez, S.I.; Rocha, J.A.C. Social Sustainability and Resilience in Supply Chains of Latin America on COVID-19 Times: Classification Using Evolutionary Fuzzy Knowledge. *Mathematics* 2022, 10, 2371.
50. De Moraes, D.O.C.; Barbieri, J.C. Social Sustainability in Supply Chain Management. *Rev. Ciênc. Adm.* 2019, 24.
51. Kamali, F.P.; Borges, J.; Osseweijer, P.; Posada, J. Towards social sustainability: Screening potential social and governance issues for biojet fuel supply chains in Brazil. *Renew. Sustain. Energy Rev.* 2018, 92, 50–61.
52. Martins, V.W.B.; Anholon, R.; Quelhas, O.L.G.; Filho, W.L. Roadmap to enhance the insertion of social sustainability in logistics systems. *Int. J. Product. Perform. Manag.* 2022. ahead-of-print.
53. Moraes, D.O.; Barbieri, J.C. Supply Chain Social Sustainability: Unveiling Focal Firm's Archetypes under the Lens of Stakeholder and Contingency Theory. *Sustainability* 2022, 14, 1185.
54. Tirado, A.; Morales, M.; Lobato-Calleros, O. Additional Indicators to Promote Social Sustainability within Government Programs: Equity and Efficiency. *Sustainability* 2015, 7, 9251–9267.
55. Croom, S.; Vidal, N.; Spetic, W.; Marshall, D.; McCarthy, L. Impact of Social Sustainability Orientation and supply chain practices on operational performance. *Int. J. Oper. Prod. Manag.* 2018, 38, 2344–2366.
56. Sudusinghe, J.I.; Seuring, S. Social Sustainability Empowering the Economic Sustainability in the Global Apparel Supply Chain. *Sustainability* 2020, 12, 2595.