

Article

Supply Chain Social Sustainability: Unveiling Focal Firm's Archetypes under the Lens of Stakeholder and Contingency Theory

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Abstract: Sustainable supply chain management (SSCM) has received increasing attention from scholars and practitioners. Despite its importance, we know little about critical aspects of it, as some important gaps are highlighted in the SSCM literature: deepening social dimension, exploring governance mechanisms, and strengthening theoretical development. This research aims to analyze how stakeholder salience and contingency factors influence the extent to which focal firms implement governance mechanisms to address social issues in supply chains. We conduct a multiple case study in six focal firms operating in Brazil. We intend to reduce the shortage of empirical evidence on emerging economies by focusing on a leading emerging country. This study contributes to the literature in three main aspects: (1) We classify social issues into central, peripheral, and remote, based on their priority within SSCM practices from emerging economy cases; (2) We outline three archetypes of social-SCM, namely elementary, selective, and extensive, to reflect the extent that focal firms incorporate social issues within their practices; (3) We also provide a typology to assess the extent to which focal firms address social issues, therefore contributing to reducing the gap regarding the social dimension within SSCM scholarship, combining the stakeholder theory and contingency theory.

Keywords: sustainable supply chain management; social sustainability; governance mechanism; stakeholder salience; contingency factors



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1. Introduction

An increasing number of firms are framing sustainability as a strategic issue [1,2], critical for business survival [3]. The supply chain management (SCM) perspective plays a special role in strategies for sustainability since it incorporates an expanded view of the product from the transformation of raw materials to delivery to the end user [4,5]. Scholarship in sustainable SCM (SSCM) grew rapidly, and research published in the field increased tenfold between 1995 and 2014 [6]. The growth trend continues, as pointed out in recent systematic literature reviews [7–9].

The SSCM social dimension, however, has remained underdeveloped over the years [10–15]. Advancing research in this dimension is crucial to incorporate social issues across the supply chain (SC) [13,16] and thus ensure a comprehensive understanding of the SSCM concept [17]. The attention to social issues in SCM starts to rise, promoted by factors such as: media coverage, responsible finance, ethical consumerism, non-government organisations (NGOs), and institutional pressures [11]. This increasing awareness towards social issues shows how this emergent field has great potential to be explored by researchers to contribute to theory and practice [10].

Social issues in the SC, particularly in developing economies, continue to grow [18] and they have not been explored much by developing economy researchers [7,19–21]. Most

research assumes a developed country perspective that does not reflect the nature of global supply chains and the societies that sustain them [18]. Emerging economies represent a context characterized by business complexity and turbulence [22,23] and pressing social issues [24]. This creates an empirical research gap which calls for insights [25], especially when the practices adopted in emerging economies are based on the developed country perspective, without understanding their contexts [21].

Alongside this empirical shortage, research on SSCM needs to advance in terms of its theoretical contributions. As Touboulic and Walker [26] state, much of the SSCM research contains little or no exploration of concepts, relationships, and predictions. Most papers concerning SSCM do not use a theoretical lens to examine the problems of interest in the area and show an overly descriptive nature, usually without theoretical contribution [26–28]. Beyond that, when a theoretical lens is adopted, an identified trend is the use of multiple theoretical lenses within the same study [5,26,27,29].

Stakeholder theory is a suitable theory to assess some typical challenges in SSCM, such as the extent of CS stakeholders' inclusion in environmental and social organizational practices, in addition to the identification and role of specific stakeholder influences on the SSCM practices [26]. Stakeholder theory has been one of the most cited and discussed theories in the SSCM literature [26,27], which may be linked to the demand of today's global market, in which a company cannot ignore the practices of its suppliers [30]. This theory points to at least three levels of individuals and groups for social issues: (i) internal level, captures aspects such as workforce diversity and management of security; (ii) inter-company level, captures external interactions, where strong economic ties link companies; (iii) other external stakeholders, such as communities, regulators, and NGOs [31].

Contingency theory has also been adopted in studies investigating SSCM [31,32]. Under this lens, there is no single way to manage an organization to achieve the desired results [18,32]. Contingency theory holds as a complementary and promising theory foundation, as well as an accepted theory in SSCM literature [18,23,33,34], including in an emerging economy context [22]. Contingency factors are used to evaluate how focal firms respond in this context to power, material criticality, and dependence, factors proposed by Tachizawa and Wong [32].

We explore stakeholder theory and contingency theory as theoretical lenses to properly analyse supply chain social sustainability (SCSS) as we aim to analyse how stakeholder salience and contingency factors influence the extent to which focal firms implement governance mechanisms to address social issues in supply chains. We focus on governance mechanisms as an explanatory mechanism [35–37]. Governance mechanisms are practices, initiatives, and processes used by the focal firms to manage relationships with internal functions, supply chain members, and stakeholders to implement corporate sustainability [35]. The need for deepening the knowledge on governance mechanisms from a SCM perspective is becoming critical when considering sustainability needs [35,38].

We seek to answer the following research questions: How does stakeholder salience influence the extent to which focal firms implement governance mechanisms to address social issues in supply chains? How do contingency factors (i.e., power, material criticality, dependence) influence the extent to which focal firms implement governance mechanisms to address social issues in supply chains? A focal firm is the SC member that provides leadership and exercises the greatest control over SC decisions and activities [39].

We conduct a multiple case study with six focal firms operating in Brazil. Sustainable development in developing countries is beginning to gain importance and plays an important role when conducting empirical or case study investigations [20]. We intend to reduce the shortage of empirical evidence on emerging economies, focusing on Brazil, a recognized leading emerging country [12,22].

Our study contributes to the literature in three main aspects: (i) we classify social issues from a new standpoint, that is, central, peripheral, and remote, based on their priority within SSCM practices from emerging economies; (ii) we outline three archetypes of socially SSCM, that is, elementary, selective, and extensive, to reflect the extent to which focal firms

incorporate social issues within their practices in an emerging economy context and, as a result of both efforts, (iii) we also provide a typology to assess the extent to which focal firms address social issues, therefore contributing to enrich the gap of the social dimension within SSCM scholarship, combining the stakeholder theory and contingency theory.

2. Theoretical Background

2.1. Supply Chain Social Sustainability

Sustainable supply chain management (SSCM) has established itself over the last decade as an area of interest in the field of SCM [6,29]. An important consensus in this area is that SSCM research is still unbalanced in the dimensions of sustainability, that is, among economic, environmental, and social dimensions. Overall, the first two have been researched considerably more than the last. Supply chain social sustainability (SCSS) is a topic that demands special attention [1,12,25,29,40,41]. The literature on SCSS stands as an emerging academic interest, now acknowledged in the field [40].

Some authors already made important efforts to understand what it means to manage social sustainability within SCM [12,16,24,40,41]. Mani et al. [42] describe SCSS as addressing social issues upstream and downstream, i.e., beyond internal operations, to suppliers and stakeholders, such as the local community, society, and consumers. According to Klassen and Vereecke [31] (p. 103), these social issues in SC regard “aspects related to products or processes that affect human security, well-being and community development”. In a thorough definition, as in Chardine-Baumann and Botta-Genoulaz [43], social issues include: social conditions of work (employment, respect for social dialogue, health and safety, development of human resources); human rights (child and forced labor, freedom of association, discrimination); social commitment (involvement in the local community, education, culture and technological development, job creation, health care, social investment); customer issues (marketing and information, health and safety, protection of privacy, access to essential services); and business practices (fight against corruption, fair trade and promotion of social responsibility in the influence sphere).

Some authors, such as Jorgensen [44] and Simões [45], link social issues with life cycle analysis and follow a social life cycle assessment (SLCA) perspective. Under this view, social issues are divided into four categories of impact (i.e., human rights, labour practices and decent work conditions, society, and product responsibility), which would be final indicators, composed of intermediary indicators. Yawar and Seuring [24] performed a systematic literature review and classified seven major groups of social issues: working conditions; child labour; human rights; health and safety; development of minorities; inclusion of disabled or marginalized persons; and gender. Table A1 (Appendix A) presents a compilation of social issues.

Seeking to consolidate some of the definitions presented so far, Nakamba et al. [40] (p. 527) assess some exemplary definitions of social sustainability [16,31,41,46,47] and evaluate that they “point to the idea that social sustainability is related to the management of practices, capabilities, stakeholders and resources to address human potential and welfare both within and outside the communities of the supply chain”.

In turn, applying the SCSS concept outside the context of developed countries, Mani et al. [12] developed and validated a scale of social sustainability, applied to managers from India and focused on countries of emerging economies. In their findings, the authors consider six major groups of social issues: philanthropy, security, equity, health and well-being; ethics and human rights. Golicic et al. [18] also propose to develop a definition of SCSS from the perspective of those more impacted by it, that is, stakeholders associated with developing countries. The authors state that SCSS is “SCSS is defined as conducting supply chain operations in a way that meets human needs as defined by the people in the communities in which the firms across a supply chain operate, serve, or otherwise affect.” [18] (p. 12). So far, SCSS concerns have been increasingly addressed along the years, but further research still needs to be performed to achieve more inclusive social supply chains [10].

Based on the definitions presented, the present study adopts the definition by Mani et al. [42], where SCSS is understood to address upstream and downstream social issues. However, for a broad understanding of social issues, it includes the issues pointed out by Jorgensen [44], Simões [48], Yawar and Seuring [24], and Mani et al. [42], thus encompassing child labour, community, disabled/marginalized inclusion, equity, ethic, gender, health and safety, health and wellbeing, human rights, minorities development, philanthropy, product responsibility, society, training education and personal skills, and working conditions (see Appendix A).

2.2. Supply Chain Governance Mechanism

From an SCM perspective, sustainability is an issue that extends beyond the limits of a single company [49] and proves to be very useful for companies that can no longer ignore socio-environmental practices of their suppliers, nor fail to monitor pressures from interested parties [30,45]. Effective governance within the supply chain is crucial to attain sustainable objectives [50] and knowledge on governance mechanisms from a SCM perspective is becoming critical for sustainability needs [51].

Governance refers to the structure that ensures that decisions are made according to the organization's corporate strategy, to increase or maintain the company value in the long term [52]. In order to explain the concept of governance mechanisms in SSCM, Gimenez and Sierra [37] took as their starting point the definition in [53] (p. 728), in which governance is about "the relationships through which key actors create, maintain and potentially transform network activities". The authors then propose that mechanisms of governance in SSCM are "practices used by companies to manage relationships with its suppliers, in order to improve their sustainability performance" [37] (p. 191).

Formentini and Taticchi [35] advance the discussion, and, from the previous definition, propose a more detailed one. For them, governance mechanisms are "practices, initiatives and processes used by the focal company to manage relationships with internal functions, departments, members of the supply chain and stakeholders, in order to successfully implement its approach to corporate sustainability" [35] (p. 1921). In this sense, internal control mechanisms indicate actions limited to corporate boundaries, and external governance mechanisms, actions extended to the level of the supply chain and the interested parts.

Governance mechanisms can be classified into seven categories: (i) integration and internal governance activities, (ii) screening and selection, (iii) incentive actions for improvement, (iv) assessment, (v) monitoring, (vi) collaboration, and (vii) development [35–37], as presented in Table A2 (Appendix B).

Research on this subject highlight three dimensions of governance mechanisms in supply chains: collaboration, formalization, and direct or indirect mechanisms [54]. In this sense, the authors explain that focal firms can implement sustainability initiatives in a non-collaborative governance mechanism, through their power in the market, or adopt a collaborative governance style, based on a shared consensus with the other supply chain members [35,37,55]. Moreover, they can implement sustainability initiatives by means of informal governance mechanisms, based on personal relationships, or by formal governance mechanisms, that are institutionalized in organizational structures and procedures [56,57]. Furthermore, they can implement sustainability initiatives through direct governance mechanisms, that is, when focal firms dedicate time and relevant resources in supplier relationships, or by indirect governance mechanisms, when focal firms rely on third-party standards and do not allocate time and resources to directly managing sustainability in supply chain members [58,59]. This third classification suggests that mechanisms can be implemented by means of more direct actions with the active involvement of companies, or more indirect ones, with passive involvement. This study not only maps how focal firms explore the six types of governance mechanisms, but whether they explore a direct (i.e., hands-on) or indirect (i.e., hands-off) approach when employing them.

2.3. Theoretical Lenses Applied

This study adopts two theoretical lenses to approach empirical context, stakeholder theory and contingency theory. For stakeholder theory, we consider two main theoretical frameworks. In the first framework, proposed by Mitchell et al. [60], the authors classify the stakeholders based on the influence of each of the parties on the company, considering three attributes: the power of influence, the legitimacy of the relationship, and the urgency of claiming. The accumulation of such attributes determines the relevance or salience of the stakeholders, which could be classified into seven types: dormant (powerful), discretionary (legitimate), claimant (urgent), dominant (powerful and legitimate), dangerous (powerful and legitimate), dependent (legitimate and urgent), and definitive (powerful, legitimate, and urgent). For the authors, this salience influences the degree to which managers should prioritize claims manifested by stakeholders.

Another theoretical framework in stakeholder theory is Clarkson's [54] RDAP scale, based on concepts identified by Carroll [61] and Wartick and Cochran [62] for reactive, defensive, accommodative, and proactive postures toward social responsiveness. Clarkson [54] relates different postures or strategies toward social responsibility with its respective rating and performance. The author states that a firm might act as reactive when it denies responsibility and performs less than is required. In turn, it might act as defensive when admits its responsibility but fights it and performs the least that is required. Such a firm might also act as accommodative when accepting its responsibility and performing doing all that is required. Finally, the firm might act as proactive, when anticipating responsibility and performing more than is required.

The contingency theory establishes that different situations require different practices, and an important contribution is the identification of variables with a strong effect on the general design of organizations and the prediction of the implications caused by differences in these variables. In Walker and Jones [33], for example, a typology of approaches to SSCM was developed based on the enablers and barriers, internal and external, that focus companies face, and these companies can be: internal focus systems, reserved actors, external responders, and agenda makers. Moreover, from the perspective of contingency theory, integrated with the lens of strategic alignment and a resource-based view, Formentini and Taticchi [35] elaborated a characterization of three profiles of sustainable companies (i.e., leaders, professionals, and traditional ones) and identified factors that allow the adoption of governance mechanisms to implement sustainability.

Contingency theory states that different situations require different practices, contributing in a way that identifies a set of variables that influence organizations. It also argues that there is no best way to lead a company, in view of distinct internal characteristics and external environments [63]. Golicic et al. [18] adopted a contingency view to describe how unique stakeholders and business environment shape the trajectories to sustainability within each supply chain. The authors state that the optimal course of action is contingent upon the situation. In this research, we propose that different factors shape the extent to which focal firms implement governance mechanisms to address social issues. This variation in terms of acceptability finds support in the adoption of contingency theory in the SSCM literature [18,33,34,64], including in an emerging economy context [22].

Tachizawa and Wong [32] developed through a systematic literature review a synthesis framework of approaches and contingency variables to manage the sustainability of SC with multiple layers and sub-suppliers. In their findings, the authors pointed out the main variables in the SSCM literature: power, material criticality, dependence, distance, and knowledge resources. Table 1 describes factors of power, material criticality, and dependence that stood out in the field research.

Table 1. Contingency Factors.

Contingency Factors	
Power	Power is the ability to influence other members activities [56]. Parmigiani et al. [65] recognized two types of influence: economic (negotiation power) and non-economic (industry influence). Mena et al. [66] distinguished between two sources of power: ownership of resources (e.g., ability to offer contracts) and SC position (e.g., proximity to the market). Its role in SSCM governance mechanisms research is promising [57], as asymmetrical power relations are intrinsic to global SC [56]. Power distribution influences the depth of collaboration between buyers and suppliers, e.g., coordination through norms requires a powerful SC partner to enforce them [67] and limits on the power to supply sustainability [68]. Whereas trust relates to collaboration, power can be used for compliance [69].
Material Criticality	Material criticality is associated with impact on final product quality [66]. Critical materials can force companies to establish direct links with lower-level suppliers, a direct approach, while materials with low criticality can motivate companies to take a more indirect approach. A leading company will directly connect with lower-level suppliers that control key product features [70,71]. Material criticality increases relational propensity, that is, benefits obtained from interorganizational relationships [72]
Dependence	Awaysheh and Walker [16] state that dependence on suppliers (i.e., the degree to which a company depends on other SC members for critical resources, components or capabilities) directly affects the adoption of socially responsible practices. Joint dependency positively influences socially responsible SCM [68]. This dependence increases depending on the level of concentration in the industry at lower SC levels [73], forcing companies to adopt alternative governance mechanisms such as collaboration with competitors [74].

In this sense, the concept of stakeholder's salience proposed Mitchell et al. [60] and the RDAP scale of social responsiveness postures presented by Clarkson [54] are employed as theoretical frames to understand how the stakeholder influences the extent to which focal firms implement governance mechanisms to address social issues in supply chains. Additionally, we build on the contingency factors highlighted by Tachizawa and Wong [32], i.e., power, material criticality, and dependence, to understand how those contingency factors, in emerging economies, influence the extent to which focal firms implement governance mechanisms to address social issues in supply chains.

3. Materials and Methods

This research aims to analyze how stakeholder salience and contingency factors influence the extent to which focal firms implement governance mechanisms to address social issues in supply chains. To do this, we investigated through a multiple case study regarding how six focal firms addressed social issues in their supply chains in Brazil. Compared to companies operating in developed countries, companies in emerging economies tend to have lower social standards and face higher pressure from stakeholders [75]. In addition, in this context, pressing social issues are intensified by a higher level of complexity and environmental turbulence [22], where power, material criticality, and dependence can have a greater effect than in developed countries.

Case studies are recommended to develop conceptual models for social sustainability in SC for its complexity and multifaceted perspective [17,76,77]. Theory building based on multiple case studies is a research strategy whose central guideline refers to identifying patterns in constructs within and between cases [78].

3.1. Theoretical Sampling of Cases

Eisenhardt and Graebner [78] clarify that, when the research purpose is to develop theory, and not to test it, theoretical sampling is appropriate, i.e., selecting cases because they are particularly suitable for illuminating and extending relationships and logic among constructs.

For the case selection in this study, we target large focal firms from the industry segment. It is common to focus on sustainability in this segment when adopting an operations management perspective, especially in the SSCM field [79]. Historically, environmental regulations have focused on industrial plants, which suggests that such companies tend to

adopt practices to address environmental issues, and eventually also social [79,80], such as accident prevention measures, occupational health, food, isolation, and rest areas. As for size, large companies are more likely to dedicate a budget, professionals, and departments to sustainability and suffer greater pressure from stakeholders [79].

Case selection was design based on Pagell and Wu's [81] understanding of exemplary cases. For the authors, there are no truly sustainable supply chain. However, they indicate to study exemplary cases as cases that seek to be more sustainable than the others and, eventually, can be examples of sustainability practices. In this sense, case selection started from cases from an initiative called Innovation and Sustainability in the Value Chain, a project led by the Center for Studies of Sustainability of the Getulio Vargas Foundation, a Brazilian business school.

The initiative started in 2011 and developed activities for supplier management in a context of innovation and sustainability. From 2017 to 2019, the initiative discussed ISO 20,400, a sustainable procurement standard, bringing together large companies interested in studying and implementing the standard. In total, seven workshops (i.e., 3 during 2017 and 4 during 2018) were held by the study center and attended by this author. At each meeting, 15–20 companies were present, through their representatives, generally sustainability, purchasing, or supply chain managers.

In total, three companies met the theoretical corpus selection criteria for the case samples and accepted to be part of the research. The selection was complemented with the indication of cases through the snowball technique, which involves first identifying cases with characteristics relevant to the study and then requesting indications of cases with similar attributes [82]. Thus, as units of analysis, we investigate six cases, 3 from the mentioned initiative and 3 nominations. SSCM researches have used 3–11 cases when conducting multiple case studies [35,81,83,84].

The cases investigated were labelled as Agro 1, Agro 2, Cosmetic 1, Cosmetic 2, natural Gas, and Paper and Cellulose. Table 2 presents focal firms analyzed.

Table 2. Focal firms analyzed.

Company ¹	Industry	Time in Brazil
Agro 1	Agribusiness	45
Agro 2	Agribusiness	55
Cosmetics 1	Cosmetic	52
Cosmetics 2	Cosmetic	44
Natural Gas	Liquefied petroleum gas	84
Paper & Cellulose	Pulp and Paper	96

¹ The names of the Companies have been changed for privacy reasons.

The companies are large (i.e., have more than 500 employees), among 44 and 96 years' operating in Brazil, five of national origin and one international (i.e., Agro 2).

3.2. Data Collection

The data collection strategy was twofold. The first strategy, based on primary data, involved data collection through company visits and interviews with professionals linked to the areas of sustainability and/or supply chain management. Six key informants were formally interviewed, one from each of the focal companies. Table A3 (Appendix C) presents key informants' profiles. Informal interviews and additional conversations were also carried out with other employees of the focal companies and suppliers, who attended the workshops conducted by the study center. Interviews are one of the most important sources of information in case studies, commonly being the primary source of evidence [85]. The deeper understanding provided by the qualitative interview offers precious contextual information to support specific findings [86]. We developed a semi structured interview protocol, based on concepts that emerged from the literature review (see Table A4, Appendix D). We recorded and transcribed all interviews with prior authorization from respondents.

The second strategy relies on secondary data, as we collected and analyzed document, websites, and sustainability reports. Sustainability reports complement the information covered in the interviews with greater precision in numerical terms and provide support for the interpretation of a company's historical context.

3.3. Data Coding and Analysis

All files were uploaded in the Atlas T.I. software, a text-based computer program, and coded according to Saldaña [87]. The author suggests that the encoding process takes place in two cycles. The methods of the first cycle occur during initial coding and focus on corpus revision and building a foundation. Second cycle methods aim to classify, prioritize, integrate, synthesize, conceptualize, and build theory [87].

Thus, for the first cycle, we used structural coding, appropriate to studies with multiple participants, semi-structured data collection protocols, and exploratory studies [87]. This coding result in the identification of large text segments on broad topics that form the basis for analysis within and across cases [84]. The study starts from predefined codes and categories from the literature and identified a category and codes from the data, as presented in Table A5 (Appendix E).

For the second cycle, we used the coding of patterns, each of which identifies a theme or emergent explanation, through the joining of information in a unit of analysis more significant [87]. According to the author, to conduct pattern encoding, one must collect similarly coded passages in the first cycle, review them to evaluate convergences, and assign a standard code to them as a stimulus to develop a statement that describes a main theme, a pattern of action, or a network of relationships. Pattern encoding is suitable for searching for rules, causes, and explanations [87,88]. In this sense, as a result of pattern encoding, the results present a new classification for social issues and outline three archetypes of focal firms in terms of how they implement governance mechanisms to address social issues in supply chains.

We use different strategies to avoid bias. In data collection, we used an indirect questioning strategy to reduce the social desirability bias from interviewees [89]. In data analysis and interpretation, we seek to guarantee both the understanding of the context and the background of our interviewees (e.g., education, position, experience, role), as the use of data triangulation strategy [90], aiming to triangulate and assist with data interpretation and to verify key findings and trends when clearness was needed.

4. Results

4.1. Within Case Analysis

Cases are qualitatively presented in this section, summarizing relevant information collected through interviews, documents, sustainability reports, and additional sources from workshops and visits, to provide background information for cross-case analysis and discussion. In this topic, we present each of the investigated cases, describing the social issues mapped in each one. Furthermore, we present a first classification for social issues, based on their recurrence and prioritization among the governance mechanisms of the cases under analysis.

Agro 1 operates in the agribusiness chain, in different stages of agricultural production, such as origination, processing, and marketing of grains, inputs, electricity, and port operations. The company was founded 45 years ago and has approximately 5000 employees, as well as 700 outsourced positions, according to updated data in its sustainability report. Agro 1 is a Brazilian company that, in 2008, started its international operations and became a Brazilian-based multinational, with operations in countries such as Argentina, Switzerland, and China, among others. The key informant interviewed at Agro 1 has held the position of social responsibility supervisor for four years, holds an MBA in third sector strategic management and a postgraduate degree in environmental management.

Considering mechanisms to implement social issues in Agro 1, it was identified that, for decent work conditions, all mechanisms were used (i.e., integration and internal

governance, selection, incentives for improvement, evaluation, monitoring, collaboration, and development). In turn, ethics and development of the local community were addressed by selection mechanisms. Minority development issues were observed through selection and evaluation. Health and safety and child labor were covered through integration and internal governance and selection mechanisms. Training and education issues took place through collaboration and development mechanisms. Regarding the development of social issues in the supply chain social issues beyond those required by law was difficult when managing suppliers.

Agro 2 operates in the sectors of agriculture, food, finance, and industry. The company sells agricultural commodities, provides products and services for grain origination, develops ingredients for companies in the food sector, as well as products for final consumption. In addition, it offers financial services and risk management and sells energy and materials for industrial use, such as oils, paints, and lubricants. The company is over 150 years old, is a multinational with North American headquarters, and has been operating in Brazil for around 55 years, as one of the largest food producers in the country. In its Brazilian scope, Agro 2 has approximately 10,000 employees and more than 20 factories, according to data from its sustainability report.

We identified that, for decent work conditions, all mechanisms are used, except collaboration (i.e., integration and internal governance, selection, incentives for improvement, evaluation, monitoring and development). In turn, questions about ethics and product-related responsibility were addressed by integration and internal governance and selection mechanisms. Health and well-being were addressed in the same mechanisms and in development, only in the cocoa chain, encouraging UTZ certification. Community development and gender were addressed via collaboration. Minority development issues were observed through supplier development in the biodiesel chain through a technical assistance program for family farmers. Health and safety were addressed in the mechanisms of integration and internal governance, selection, as well as incentives for improvement and development. Child labor and exploitation was an issue covered by all mechanisms, except incentives for improvement and evaluation. Finally, questions about training and education took place through the development mechanism, with training in the biodiesel chain and in the cocoa chain.

Cosmetics 1 is a Brazilian multinational in the cosmetics, hygiene, and beauty sector, founded about 50 years ago. The company is publicly traded, with shares on Bovespa, and leads the domestic direct sales market in its sector, negotiating with countries such as Argentina, Mexico, the United States, and France. Based on its 2016 report, the company has about 6500 employees and 1.8 million resellers, and its structure involves a head office and two factories, one in the southeast and one in the north, in addition to a logistics hub in the Southeast region, eight distribution centers in the country, and five in Latin America.

It is noticed that, for issues related to decent work conditions, minority development, equity/diversity, health and safety, and child labor and exploitation, except collaboration, all mechanisms are used (i.e., integration and internal governance, selection, incentives for improvement, evaluation, monitoring, and development). Training/education/personal skills were addressed by all mechanisms except via selection. Local community development was driven through integration and internal governance, selection, collaboration, and development. Human rights issues were addressed through selection mechanisms, incentives for improvement and development; ethics issues by integration and internal governance, selection and development, and health and well-being by integration and internal governance, evaluation, and monitoring. Two social issues, in turn, were addressed by two mechanisms: philanthropy, with integration and internal governance and incentives for improvement; and gender, with integration and internal governance and development. Society development and product-related responsibility issues were addressed through integration and internal governance.

Cosmetics 2 is a Brazilian multinational in the perfume, cosmetics, and personal care sector. In addition to Brazil, the company operates in countries such as Colombia, the

United States, Japan, and Portugal. Founded in the 1970s, Cosmetics 2 has 8000 employees according to its 2016 report.

We identified that, for issues related to decent working conditions and ethics, except collaboration, all mechanisms are used (i.e., integration and internal governance, selection, incentives for improvement, evaluation, monitoring and development). Issues related to child labor and exploitation were covered by all governance mechanisms. In turn, local community development was carried out only through collaborations. Gender actions were also conducted through collaborations, in addition to integration and internal governance. These two mechanisms, in turn, were not used for health and safety issues addressed by all other mechanisms. Finally, equity/diversity issues were considered through integration and internal governance, selection, and development, while training, education, and personal skills were addressed through collaboration and development.

Natural Gas operates in the liquefied petroleum gas (LPG) segment. Its main product is LPG, purchased from the only supplier in the country, Petrobras, and bottled and distributed in the retail and corporate market. It is a Brazilian company, founded about 80 years ago, belonging to a group listed on the Bovespa and Dow Jones stock exchanges. The company has around 3600 employees, 18 LPG bottling bases, 19 storage and distribution bases, and 14 independent stores for sale, in addition to more than 5000 dealer units.

It is noticed that, for decent work conditions, except collaboration, all mechanisms are conducted (i.e., integration and internal governance, selection, incentives for improvement, evaluation, monitoring and development). Issues related to child labor and exploitation were addressed through all mechanisms except development. Development of the local community involved integration and internal governance, selection, monitoring and development. As for health and safety, integration and internal governance, monitoring and development mechanisms were used. Gender issues were addressed by only one mechanism, integration and internal governance. Another social issue carried out by only one mechanism, monitoring, was product-related responsibility. Other social issues were conducted with two types of mechanisms: ethics and equity/diversity took place via integration and internal governance and selection; philanthropy, via integration and internal governance and collaboration; and training, education, and personal skills, via collaboration and development.

Paper and Cellulose operates in the eucalyptus and paper pulp segment, as a forest-based company which plants, extracts, and industrializes wood. Founded about 90 years ago, it deals with more than 60 countries. It is a publicly held Brazilian company with around 8000 employees and 11,000 service providers. It has five industrial units, Brazilian headquarters, and commercial offices in countries such as China, the United States, and Switzerland.

We mapped that, for issues related to decent work conditions, health and safety, and child labor and exploitation, except for collaboration, all mechanisms are used (i.e., integration and internal governance, selection, incentives for improvement, evaluation, monitoring and development). In turn, for issues related to the development of society, equity and diversity, philanthropy, and gender, only the integration and internal governance mechanism was used. The issues related to the local development of the community were addressed through integration and internal governance, selection, collaboration, and development mechanisms. Furthermore, the development of minorities was addressed through mechanisms of integration and internal governance, selection, and collaboration, human rights through selection and evaluation, ethics through integration and internal governance and selection, and work, education, and personal skills through collaboration and development.

All social issues mapped in this cycle of analysis are illustrated in Table A6 (Appendix F). Thus, social issues were identified in the six cases and analysed as to their relations with each governance mechanism. The data assessed led to a social issue incidence map and, for each mechanism, social issues were classified: (i) central, when social issues were mapped in six, five, and four cases; (ii) peripheral, when social issues were mapped in three and two

cases; and (iii) remote, when social issues were mapped in only one case. Table 3 presents social issues mapped in each governance mechanism.

Table 3. Occurrence of social issues in governance mechanisms.

Governance Mechanisms	Social Issues		
	Central Social Issues	Peripheral Social Issues	Remote Social Issues
Screening and selection	health and safety, ethic, exploitation and child labor working practices, decent work condition	health and well-being, equity and diversity, human rights	product liability; minorities development
Incentive actions for improvement	health and safety, exploitation and child labor, working practices and decent work condition	ethic, equity and diversity	philanthropy, training
Assessment	health and safety, exploitation and child labor, working practices and decent work condition	health and well-being, equity and diversity, human rights, minorities development, ethic	training and education
Monitoring	health and safety, exploitation and child labor, working practices and decent work condition, training and education	minorities development, community development	health and well-being, equity and diversity, product liability, ethic
Collaboration	product liability, community development, training and education	health and safety, health and well-being, gender, working practices, exploitation and child labor, society development	minorities development, equity and diversity
Development	health and safety, exploitation and child labor, working practices and decent work condition, training and education, community development, product liability	health and well-being ethics, human rights, equity and diversity, minorities development	gender, philanthropy

After identifying social issues and mapping them according to each governance mechanism, relations between the types of social issues (i.e., central, peripheral and remote) and the types of governance mechanisms (i.e., direct and indirect) were also mapped, as presented in the cross-case analysis.

4.2. Cross Case Analysis

To understand how focal firms implement governance mechanisms to address social issues in SC, we first mapped social issues addressed, as presented in the within case analysis. Then, we analyse the different governance mechanisms implemented in the cases under analysis. Based on this, Table A7 (Appendix G) presents all types of mechanisms in each of the six types of governance mechanisms for SSCM (i.e., screening and selection of suppliers, actions for improvement, evaluation, monitoring, collaboration and development) according to their direct (i.e., hands-on) or indirect (i.e., hands-off) approach, that is, if the mechanisms implemented represent more direct actions with active involvement of focal firms or if they were more indirect, with passive involvement, not allocating time and resources in directly managing sustainability in supply chain members.

Based on the structural categorization and pattern matching, we then analysed how the cases investigated address the different types of social issues (i.e., central, peripheral, and remote) mapped, considering the direct and indirect governance mechanisms identified. In this sense, in central issues, we have identified the adoption of indirect mechanisms in all cases for selection, incentives for improvement, evaluation, monitoring, and development. That is, except for collaboration, it would be common to adopt indirect types of mechanisms for core issues. Direct adoption occurred in all cases for assessment,

monitoring, collaboration, and development. That is, except for selection and incentives for improvements, it was common to adopt direct types of governance mechanism in central issues. Only agro-industry cases do not adopt direct mechanisms, Agro 1 for selection and Agro 2 for incentives for improvements. In all, there was joint use for evaluation, monitoring, and development. There was a case of agribusiness with no direct type in each, and, in collaboration, only agribusiness cases operated with indirect types.

Thus, in central issues, agroindustry companies acted more indirectly, when compared to other cases. In addition, collaboration on core issues can be highlighted as a direct mechanism. Considering peripheral issues, except for selection, the other mechanisms occur more through direct mechanism. That is, when addressing peripheral issues, it would focal firms adopt direct mechanisms to select suppliers.

As expected, the incidence of cases decreases in the peripheral issues facing the central ones. However, this reduction is not uniform, as some cases are less active. Thus, we highlight Cosmetics 1, as more active, and Agro 2, less active. Cosmetics 1 considered peripheral issues in all mechanisms, by means of direct mechanism for incentives for improvement and collaboration and by both direct and indirect for selection, evaluation, monitoring and development. On the other hand, Agro 2 had only collaboration and development mechanisms, both direct and indirect. In remote issues, no more direct mechanisms are identified, as in peripheral issues. Except for development, the other mechanisms occur both direct and indirect. In peripheral issues, the cases that acted through direct mechanism were Agro 1, Paper and Pulp and Cosmetics 1, which stood out by considering remote issues in more mechanisms than the others. The company acts on such issues in all mechanisms except collaboration and was the only one to address via incentive improvement, evaluation, and development. In the context of remote issues, Agro 2 is still less active: it has not been identified with any mechanism. Gas and Paper and Cellulose considered remote issues only in one mechanism, the first through monitoring and the second through collaboration.

From a sector perspective, Agro 1 is more comprehensive than Agro 2, with peripheral issues in all mechanisms except incentives for improvement, and a remote issue, compared to Agro 1, which addresses peripheral issues through collaboration and development and does not address any remote issue. In central issues, the two cases act similarly: contemplating them in all mechanisms through both direct and indirect mechanisms, except one in each, incentives for improvements in Agro 1 and selection in Agro 2. In the cosmetics sector, Cosmetics 1 addresses central and peripheral issues in all mechanisms, as well as remote issues, in all mechanisms except collaboration. Cosmetics 2 addresses central issues in all mechanisms, peripheral issues in all, except monitoring and development, and remote issues through monitoring and collaboration.

It was possible to verify that belonging to the same industry does not necessarily lead to addressing social issues and governance mechanisms in the same way but does suggest some similarities. Further findings and analysis are presented in the next section.

5. Discussion

Empirical evidence suggests different approaches to address social sustainability, with different types of social issues and different types of governance mechanisms. Based on case analysis, we outline three archetypes of social sustainability management in SCM: elementary, selective, and extensive, as illustrated in Figure 1.

The first archetype is represented by firms similar to Agro 2, that address central social issues in each governance mechanisms, peripheral social issues in a few mechanisms (e.g., in Agro 2 via collaboration and development), and do not address remote social issues in any mechanism. Thus, there would be an elementary management of social sustainability in the SSCM when the company considers social issues central to all governance mechanisms and only begins its activities with peripheral social issues.

Social issues SSCM archetypes	Central	Peripheral	Remote
	Elementary	Seletive	Extensive
	→	→	→
	→	→	→
	→	→	→

Figure 1. Social SCM Archetypes and types of social issues addressed.

The second archetype can be represented by companies similar to Natural Gas and Paper and Cellulose, Agro 1 and Cosmetic 2, which address central social issues in all governance mechanisms, peripheral social issues in most governance mechanisms (e.g., in the case of study, contemplated four or five mechanisms), and remote issues in one or two mechanisms. Thus, there would be a selective management of social issues when the firm considers central social issues in all governance mechanisms, peripheral social issues in almost all mechanisms and selects some mechanisms to start considering remote issues.

The third archetype is represented by companies like Cosmetics 1, which address central and peripheral social issues in all governance mechanisms and remote social issues through almost all mechanisms (e.g., in the case of the study, contemplated five mechanisms). Thus, there would be extensive management of social issues when the firm adopts central and peripheral social issues in all governance mechanisms, and it also considers remote social issues in almost all mechanisms. Table A8 (Appendix H) presents quotes from key informant from the field, considering each archetype.

To understand the context of each archetype and analyze its dynamics, each one is analyzed under elements of stakeholder theory and contingency factors. Table 4 presents empirical elements identified as they occur in each archetype.

Elementary archetype considers demands of latent and expectant stakeholders when mapping sustainability issues. Selective considers more quantity and diversity of stakeholders than elementary, as extensive considers in a similar way to selective, with similar types, but in smaller quantity. One prominent issue under such a lens is related to the salience of the supplier: in the selective archetype, a group of suppliers acts as dangerous stakeholders, while in selective and extensive profiles, they generally act as claimants. Suppliers' roles indicate that the greater incidence of power influences the extent to which focal firm addresses more social issues in the chain, whether it is limited to central issues or peripheral and remote issues.

Considering Clarkson's [54] RDAP scale, the elementary archetype was not compatible with the reactive posture proposed by the author, given that denying responsibility and doing less than required are not elements found in the case. In this circumstance, the elementary archetype meets all central social issues and even starts on peripheral social issues. These facts might suggest that, when it comes to managing social sustainability outside a firm's boundaries, even the basic posture is further ahead than the ones regarding social sustainability inside an organization's boundaries. Thus, there was no archetype related to the reactive posture. The elementary archetype proposed presents similarities with the defensive posture, since it admits its responsibility with certain reluctance and performs the minimum required, understood as the central social issues addressed. The selective archetype presents similarities with the accommodative posture, but also stands out since it is not resigned to peripheral social issues and already seeks to address remote issues. Finally, the extensive archetype proposed presents similarities with the proactive posture, since it goes beyond its central and peripheral issues and performs more than is required.

Table 4. Social SCM Archetypes under theoretical lens.

Archetype	Elementary A2	Selective NG, PC, A1, C2	Extensive C1
Stakeholder Theory			
Stakeholder Saliency (attributes of power, urgency and legitimacy)	Consults latent stakeholders (dormant and discretionary) and expectant (dominant and dangerous). A group of suppliers act as a dangerous stakeholder	Consults latent stakeholders (discretionary, dormant and claimant), expectant (dominant and dependent) and definitive. Consults more quantity/diversity than elementary. Suppliers as claimants	Consults latent stakeholders (dormant and claimants), expectant (dominant and dependent) and definitive. Consults stakeholders like selective and suppliers act as claimants and dependents
Contingency Factors			
Power	Does not establish bonds of trust. Use limited power, via contract, on part of suppliers	Does not establish bonds of trust. Use of established power, via contract and terms of commitment with suppliers	Trust bonds established in long-term relationships. Use of power only when necessary
Material Criticality	Critics consider materials with no substitute suppliers. The greater the criticality, the less acting through a direct approach	Critics consider the materials for various reasons: quality, volume, environmental factor, demand for new products. The greater the criticality, the greater the performance through a direct approach.	Critics consider the materials for various reasons: volume of business, representativeness availability. The greater the criticality, the greater the performance through a direct approach.
Dependency	Dependence on suppliers does not directly affect adoption of social issues. It may increase dependency, but adoption of social issues does not increase	Supplier dependence directly affects the adoption of social issues, with search for alternative suppliers, strengthening of internal practices, creation of supplier banks, supplier development	Suppliers' dependence directly affects the adoption of social issues, with the strengthening of suppliers from whom they are dependent and the development of alternative suppliers

As for contingency factors, we suggest that power and trust in a supplier relationship, prominent only in the extensive archetype, make it feasible to address more types of social issues, including peripheral and remote ones. Considering the perspective of Pilbeam et al. [56], that is, power as the ability to influence the activities of other members, and the understanding that, when there is trust, this influence occurs collaboratively to ensure compliance, and when not, it occurs in a more imposing way [69], we also identified that, for the elementary profile, bonds of trust are not established and the achievement of conformity through power is limited. As evidence from the Agro 2 case, the key informant describes a context in which a group of suppliers does not accept to be influenced in terms of social demands. In this context, the necessary cooperation needed to contribute to the benign development of the supply chain [91] is not feasible. Based on the arguments, we propose that the absence of power over suppliers reduces the role of managing peripheral and remote social issues, making it possible to address central social issues via indirect governance mechanisms. On the other hand, when there is bargaining power, the focal company acts through direct governance mechanisms and advances in the management of peripheral social issues.

As for material criticality, Mena et al. [66] state that the criticality of materials is associated with the impact on quality and the establishment of direct or indirect approaches, so that the more critical the material, the more direct the approach. We found that the design of groups of critical suppliers is linked to the criticality of the materials that each one is responsible for. Some cases confirm the link between the criticality of the material and the

quality of the product, but others adopt elements, such as financial impact or availability of substitutes, to assess the criticality of the material.

In the case of the elementary archetype, the criticality of the material is linked to the availability of substitutes. In this case, the more critical the material, the less substitute this supplier has, which, in the context of Agro 2, implies a lesser power of the company over the critical supplier and less influence it exerts over it, tending towards more types of indirect mechanisms (e.g., consultation on third-party lists) than more direct on social issues. Thus, contrary to what Mena et al. [66] propose, for social issues in a company with an elementary profile, even with more critical materials, the approach with its suppliers will not necessarily be more direct. For the selective archetype, in general, bonds of trust are not established either, but achieving compliance is made possible with the use of power. In cases marked as selective, interviewees describe contexts that denote a lack of trust, for example, with recurrent audits to verify previously agreed conditions, and the influence exerted on the demand for social issues. In general, in cases characterized as selective, the interviewees describe a context in which social issues are charged through requirements in hiring and throughout the relationship with their suppliers. Thus, for the context under analysis, the ability to influence its suppliers makes it more viable to act on the management of social issues in relation to the elementary profile. In the selective profile, unlike the elementary, peripheral and remote social issues are reached, in addition to enabling the use of direct mechanisms, such as independent auditing. The presence of trust in relationships, however, cannot yet be seen. Based on the arguments, we propose that the more critical the material and the less substitutable a supplier, the less power the focal firm has.

As for dependency, considering Awaysheh and Klassen's [16] statement that the degree to which a company depends on other members of the chain directly affects the adoption of socially responsible practices, in the context of selective profile cases, it is possible to verify such a relationship, so that if dependence increases, the adoption of social issues increases. At Paper and Cellulose, to increase suppliers with social and environmental criteria and thus avoid relying on a few suppliers, the company developed a supplier bank with such criteria. In Agro 1, for example, dependence on recycling cooperatives was identified. At Natural Gas, there is a dependence on a single raw material supplier involved in corruption news. In each one, the dependency situation generated a response that intensifies a social issue. Thus, the dependence on suppliers directly affects the adoption of social issues, with responses aimed at finding alternative suppliers, strengthening internal practices, creating a supplier bank, in addition to developing suppliers. We also propose that, in a context of high dependency and low power, the variety of social practices of the focal company does not increase with increasing distance, except when it relates to chain suppliers with specific sectorial demands. However, in the context of Agro 2, reasoning similar to the criticality of materials can be applied and, contrary to what the authors propose, the dependence on suppliers does not directly affect the adoption of social issues. In this scenario, if dependence increases, the adoption of social issues does not increase.

We verify that collaborative action increases the management of social issues, expanding the management of central to peripheral and remote issues, in addition to enabling the use of direct governance mechanisms. From this collaboration, there is a greater exchange of information, which stimulates the understanding of peripheral and remote social issues and promotes an improvement in the performance of social issues, an improvement also verified in studies that analyze improvements in environmental issues [92].

6. Conclusions

To shed light on a still neglected topic, we aimed to analyze how stakeholder salience and contingency factors influence the extent to which focal firms implement governance mechanisms to address social issues in supply chains. We conducted a multiple case study with six focal firms operating in Brazil. This study offers contributions to the field, responding to ongoing calls to address social sustainability in SCM and providing empirical

evidence in the context of emerging economies, suggested as an under-investigated context, characterized by business complexity and turbulence [22] and urgent social problems [24].

A list of mechanisms was drawn up and classified according to type, whether direct or indirect [37]. Furthermore, we classified the social issues addressed in each governance mechanism according to their priority and proposed three types: central social issues, peripheral social issues, and remote social issues. Thus, each mechanism was represented in terms of the composition of their respective types of social issues. Considering the relationship between the types of social issues addressed and the governance mechanisms that address them, we outlined and described three archetypes of SCSS: elementary, selective, and extensive. Each one was analysed in the light of stakeholder theory and contingency theory.

A prominent point under stakeholder theory is related to the supplier's salience in different archetypes: in the selective archetype, a strong group of suppliers acts as dangerous stakeholders, while in the selective and extensive archetype, suppliers generally act as claimants. The different roles of suppliers indicate that the presence of supplier power influences the extent to which the focal company can address supply chain social issues, whether limited to central issues or if it reaches peripheral and remote issues.

As for the contingency theory, the establishment of trust in the relationship with suppliers, present only in the extensive archetype, makes it possible to address more types of social issues, between peripheral and remote, alongside the use of power in specific situations. The analysis of criticality of materials pointed out a variety of considerations beyond quality, with criticality linked to materials without substitute suppliers, to the volume of business it represents, and to materials related to the demand for new products. As for this factor, in an elementary archetype, with low power and low availability of substitute suppliers, the greater the criticality, the less action on social issues through a direct approach, contrary to previous findings in the literature. The selective and extensive archetypes, on the other hand, are in line with the literature: the greater the criticality, the greater the performance through a direct approach. As for dependence, in the elementary archetype, it was found that dependence on suppliers does not directly affect the adoption of social issues, as expected in the literature. Thus, even if dependence increases, the adoption of social issues does not increase in the elementary profile, which may still be a result of the imbalance of power in the relationship with its suppliers. In the other archetypes, the dependence on suppliers directly affects the adoption of social issues, such as different reactions to achieve this in each archetype. In selective, there is, for example, the search for alternative suppliers, strengthening of internal practices, creation of a potential supplier bundle, and supplier development. In the extensive archetype, there is the strengthening of suppliers on whom they are dependent and the development of alternative suppliers.

Other findings from the present study deserve further investigation and represent interesting opportunities for further research. For example, the representative case of the elementary archetype does not go deeper in addressing peripheral and remote social issues and presents characteristics such as less power and greater dependence on its suppliers. These relationships can be deepened in future studies. In addition, the case mentions dealing with commodities, which raises questions. Would it then be common for the commodities market not to address beyond central social issues? To what extent could sectoral articulations, governmental pressures, and commitments with international bodies increase the level of social action in this context? It is also noteworthy that there is a diversity among the cases with a selective archetype, which demands granular analysis.

The study also came across the existence of multiple definitions of SCSS. As a suggestion for future studies, a systematic literature review should be performed that includes the available definitions of SCSS and provides a new one that highlights the priority social issues for developed countries versus developing countries. As a basis, this study points out the central social issues, in six cases of focal companies operating in an emerging market country.

The research has limitations: (i) data collection is exposed to social desirability bias, even though we have applied techniques in order to avoid or reduce this; (ii) the snowball technique for case selection may have led to similar cases, but this limitation is mitigated by the diversity of sectors represented across the six case studies. Future research could analyze focal firms of other sizes, sectors, and regions to advance on the typology.

This study brings as a contribution a response to the constant calls to the approach of SCSS [1,12,25,29,40,41]. Our analysis also offers a typology that can be adopted by managers to plan and implement governance mechanisms to address social issues. New concepts, archetypes, and propositions are offered, as well as insights that we provide to foster debate concerning this still neglected topic.

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Institutional Review Board Statement: Ethical review and approval from an Ethics Committee were waived for this study. This procedure is in accordance with Resolution No. 510, of 7 April 2016 (<http://conselho.saude.gov.br/resolucoes/2016/Reso510.pdf>, accessed on 16 November 2021), of the National Health Council, the body that establishes the national regulatory framework for applied ethics to research in Brazil. The resolution is aimed at the ethical specifics of research in the social and human sciences. According to the aforementioned resolution, research that (paragraph 1, item II) uses publicly accessible information will not be registered or evaluated by the Research Ethics Committees or by the National Research Ethics Commission, following the terms of Law 12,527, of 18 November 2011 (i.e., in the case of the sustainability reports consulted, with public access on the websites of the companies surveyed) or which (paragraph 1, item VII) aims to deepen theoretically situations that arise spontaneously and contingently in professional practice, as long as they do not reveal data that can identify the subject (i.e., in the case of interviews with managers to theoretically deepen situations in professional practice). Even though it was not submitted to an ethics committee, it is noteworthy that study has followed all ethics code recommendations of the Brazilian National Association of Post-graduation and Research in Administration (ANPAD). All respondents gave free and informed consent form agreeing to take part in this study and were protected by hiding their personal information during the research process. They knew that their participation was voluntary, and they could withdraw at any time.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available in Appendix A, Appendix B, Appendix C, Appendix D, Appendix E, Appendix F, Appendix G, Appendix H.

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Appendix A

Table A1. Social Issues on SCM based on Jorgensen [44], Simões [48], Yawar and Seuring [24] e Mani et al. [12].

Social Issues	Description
Child Labour	It is concerned with work by children under the age of 15 which prevents school attendance and work by children under 18 years of age that is dangerous to physical or mental health.
Community	Supports with financial and material resources to benefit local communities. It focuses on the cultural and educational interactions to improve external social environment around the company.
Disabled/ Marginalized Inclusion	Groups that are mostly neglected in societies for physical disabilities or those neglected by the government. Population living below the poverty line is considered as marginalized.
Equity	Ensures diversity in in the workplace at customer and suppliers' locations and compliance with gender and non-discrimination policies at customer and supplier sites.
Ethic	A team, department or division is responsible for ethical compliance in manufacturing facilities; establishes transparent, comprehensive and rigorous codes of ethical conduct; audits clients and suppliers for compliance with the code.
Gender	Equal treatment of women and transgender, with equal rights in the workplace
Health and Safety	It includes physical and mental health that is directly related to safety and hygiene at work. It also describes hazardous working conditions, which could leave long-term effects on a worker's personal health.
Health and Wellbeing	Audits suppliers and guarantees adhesion of occupational health policy; Ensures women safety and availability of minimum health care in supplier facilities
Human Rights	Rights inherent to all human beings, regardless of nationality, place of residence, sex, national or ethnic origin, color, religion, language. The right to equal rights, without discrimination and with freedom of association, is its core.
Minorities Development	Development of populations that are considered minorities in terms of population by virtue of their religion, race or ethnicity.
Philanthropy	Includes practices such as: donations to NGOs, encouragement for employees to volunteer and donate to NGOs; encourage suppliers in philanthropic activities, conduct health related fields for society involving factory facilities
Product Responsibility	Integrates consumer health and safety concerns into the product, information on product, ingredients, origin, use, potential hazards and side effects, with labeling. Marketing communication, with ethical guidelines for ads.
Society	Considers elements such as corruption, support in actions for society (e.g., job creation, investments in R&D, culture, technology, infrastructure, support to local suppliers); education programs; acceptance (e.g., communication channels).
Training Education	It assesses the level of commitment to improve human capital skills and attempts to correlate the intellectual development of human resources and social progress achieved by the company.
Working Conditions	Employee's working conditions includes respect for social dialogue, development of human resources; wages, working hours, the right to form unions, employment contract and worker exploitation

Appendix B

Table A2. SSCM Governance Mechanisms based on Akhavan and Beckmann [36], Formentini and Taticchi [35], Gimenez and Sierra [37].

Governance Mechanisms	Description
Integration Activities and Internal Governance	Include: top management support; codes of conduct/ethics, guides and internal policies; goals, action plans and management systems; supply chain systematic analysis, with suppliers' classification; adhere to international initiatives (e.g., Global Compact); Certifications (e.g., ISO14001)
Screening/selection of future suppliers	Definition of minimum standards required; Process defined for supplier selection
Incentive actions for improvement	Establishment of consequences for non-compliance; Contracts with reward system; Encouraging competition based on sustainable criteria
Assessment	Activities related to supplier assessment, such as application questionnaires or company visit.
Monitoring	Seeks to guarantee expectations, with audits or certification by an independent third party. It reports on success and how agreed practices are implemented.
Collaboration	Coordination with customers, suppliers and stakeholders to jointly improve results. May involve NGOs membership/collaboration; Collective initiatives (sectoral)
Development	Training and education; Joint development; Follow-up activities; Supplier diversity; Knowledge and shared assets; Knowledge transfer; Local Suppliers

Appendix C

Table A3. Key informants' profiles.

Company	Key Informant
Agro 1	The key informant interviewed at Agro 1 has held the position of social responsibility supervisor for four years, reporting to the socio-environmental management and the sustainability department. She holds a degree in psychology, an MBA in third sector strategic management and a postgraduate degree in environmental management and in economics and the environment.
Agro 2	The key informant interviewee at Agro 2 has worked as a sustainability manager for six years, is a technologist in environmental management with a postgraduate degree in project management and sanitation engineering and a master's degree in environmental technologies.
Cosmetics 1	The Cosmetics 1 key informant is a sustainability manager and has worked for the company for over ten years. He is an agronomist with specializations in environmental analysis and cooperativism.
Cosmetics 2	The Cosmetics 2 key informant holds the position of sustainability professional for the development of suppliers and the value chain and has worked for the company for six years. He holds an undergraduate degree in environmental engineering, a specialization in occupational safety engineering and a postgraduate degree in service management and retail management.

Table A3. *Cont.*

Company	Key Informant
Natural Gas	The key informant interviewee from Natural Gas is a sustainability manager and has worked for the company for over fourteen years. She holds a bachelor's degree in communication, a master's degree in business management and sustainability, and an ongoing doctorate in the same area.
Paper & Cellulose	The key informant interviewee from Paper & Cellulose is the sustainability and governance coordinator and has worked at the company for about ten years. She holds a degree in administration, specializing in forest management and an MBA in economics and business management.

Appendix D

Table A4. Semi structured interview protocol.

Interviewee Presentation
<ul style="list-style-type: none"> • Could you introduce yourself? – Comment on basic information, such as: professional history; how long ago did you join this organization; what your current role is and main responsibilities.
Organizational Sustainability
<ul style="list-style-type: none"> • Could you comment on the incentives that led the organization to adopt sustainable initiatives? – Which stakeholders (stakeholders) interact with the organization in relation to sustainability? • Internally, how is sustainability integrated into the organization?
Sustainable Supply Chain Management
<ul style="list-style-type: none"> • How was the process of integrating sustainability initiatives into the supply chain? – Do you remember which were the first initiatives? • What factors would have facilitated the adoption of sustainability initiatives in the supply chain? • And, on the contrary, what factors would have made it difficult to adopt sustainability initiatives in the supply chain?
Governance Mechanisms for SSCM
<ul style="list-style-type: none"> • What practices does the organization use to engage with suppliers when integrating these initiatives? And with other actors? • Has the organization started to use new criteria to select suppliers seeking better results in sustainability? Which? • Has the organization started to develop suppliers seeking better results in sustainability? Like? • Has the organization started to evaluate suppliers seeking better results in sustainability? Like? • Has the organization started to collaborate in search of better sustainability results? Like? • Has the organization started to monitor suppliers seeking better sustainability results? Like?
Social Issues
<ul style="list-style-type: none"> • Considering only the social dimension of sustainability, what does the organization understand as social issues to be managed in the supply chain? • Below, a list of social issues is presented to consult about the initiatives developed by the organization: Welfare; Decent Work Conditions; Rights; Equity; Ethic; Philanthropy; Humans
Product Liability; Health and Safety, Society

Table A4. *Cont.*

Interviewee Presentation	
Result and Future Vision	
•	What does the organization perceive as results achieved with the integration of sustainability into SC?
•	What do you think is ideal for future SCM initiatives focused on improving social issues?
•	Do you envision new practices/processes in the organization, in the sector, in the country?
Closure	
•	Were there any questions during the interview?
•	Would you like to add any comments?
•	Could you please indicate a contact you know who works with sustainability in your supply chain?

Appendix E

Table A5. Categories and Codes of Structural Coding.

Categories	Codes	Literature
Governance Mechanisms	Selection; Incentives for improvement; Assessment; Monitoring; Collaboration; Development	Akhavan and Beckmann [36], Formentini and Taticchi [35], Gimenez and Sierra [37]
Types of Governance Mechanisms	Hands-off (indirect) and hands-on (direct) types	Gimenez and Sierra [37]
Social Issues	Philanthropy, security, equity, health and well-being; ethic; human rights; work practices and decent working conditions; society; and product-related liability	Jorgensen [44], Simões et al. [48], Yawar and Seuring [24] and Mani et al. [42]
Types of Social Issues	Central, peripheral and remote	Emerged from data
Types of Stakeholders	Dormant; Discretionary; Claimant; Dominant; Dangerous; Dependent; Definitive	Mitchell, Agle and Wood [60]
Contingency Factors	Power, criticality of materials, dependence, distance and knowledge resources	Tachizawa and Wong [32]

Appendix F

Table A6. Quotes from the field Governance Mechanisms and Covered Social Issues.

[illegible]

Table A6. Cont.

Incentive Mechanisms for Improvements and Covered Social Issues	Work Condition	Community Development	Society Development	Minority Development	Human Rights	Equity Diversity	Ethic	Philanthropy	Genre	Product Liability	Health Wellness	Health Safe	Child Exploitation Work	Training Education
Temporary Punishments (until regularization)	A1 PC											PC	A1 PC	
Definitive Punishments	A1 A2 C1 C2 G PC				C1							G PC	A1 A2 C1 C2 G PC	
Stimulus to Competition	C2 G PC			C1		C1 G	C2 G	C1				A2 C1 C2 G PC	C2 G PC	C1
Recognition	C2 G			C1		C1 G	C2 G	C1				C1 C2 G PC	G C2	C1
Assessment Mechanisms and Covered Social Issues	Work Condition	Community Development	Society Development	Minority Development	Human Rights	Equity Diversity	Ethic	Philanthropy	Genre	Product Liability	Health Wellness	Health Safe	Child Exploitation Work	Training Education
Collect documents	A1 G PC					G	G				PC	A1 PC G	G PC	
Visit suppliers of other programs (certification/quality)	A2 G											G	A2 G	
Visit suppliers of specific chains	A1 A2 C1 C2 PC			C1A1	C1 PC						PC	C1 PC	A1 A2 C1 C2 PC	
Verification by sampling	C2						C2					C2	C2	
Apply self-assessment questionnaires	C1 C2 PC			C1		C1	C2				PC	C1 C2	C2 PC	C1
Use management systems	A1 A2 C1 C2 PC			C1		C1	C2					C1 PC	A1 A2 C1 C2	C1
Develop performance indicators	C1 C2 G PC			C1		C1	C2				C1	C1 C2 PC	C1 C2 G	C1
Evaluates data with senior management	C1			C1		C1						C1	C1	C1
Monitoring Mechanisms and Covered Social Issues	Work Condition	Community Development	Society Development	Minority Development	Human Rights	Equity Diversity	Ethic	Philanthropy	Genre	Product Liability	Health Wellness	Health Safe	Child Exploitation Work	Training Education
Monitoring system to block supplier based on third-party lists	A1 A2 PC												A1 A2 PC	
Management program monitors critical suppliers based on company data	C1 C2 G PC			C1		C1	C2					C1 C2 G PC	C1 C2 G PC	C1 C2 G
Monitoring system for specific chains based on company data	C1			A1						G		C1 PC	A1	

Table A6. Cont.

Monitoring Mechanisms and Covered Social Issues	Work Condition	Community Development	Society Development	Minority Development	Human Rights	Equity Diversity	Ethic	Philanthropy	Genre	Product Liability	Health Wellness	Health Safe	Child Exploitation Work	Training Education
Company audits for specific chains	A2 C1 G PC											C1 G PC	A2 C1 PC	G
Company audit for suppliers at risk	A1 A2 C2			A1									A2 A1 C2	C2
Monitors suppliers for improvement actions	C1	C1										PC	C1	G
Monitors stakeholders for improvement actions		G PC									C1			C1
Own certification	A1 A2 C1			C1		C1						A1 A2 C1		A1 A2 C1
Third party certification	A1 A2 PC											A1 A2 PC	A1 A2 PC	
Collaboration Mechanisms and Covered Social Issues	Work Condition	Community Development	Society Development	Minority Development	Human Rights	Equity Diversity	Ethic	Philanthropy	Genre	Product Liability	Health Wellness	Health Safe	Child Exploitation Work	Training Education
Partnerships with Foundations/Institutes/NGOs for social and environmental diagnosis of suppliers	A1 C2					C2						C2	C2	A1
Partnerships with Foundation/Institutes/NGOs to improve the social and environmental performance of suppliers	A1	A1												
Partnerships with Foundation/Institutes/NGOs to improve specific chains	A2	PC								A2			A2	PC
Partnerships with Foundation/Institutes/NGOs to promote improved distribution													A2 C2 G	
Partnerships with Universities, Foundation/Institutes/NGOs to promote improvements in community/society		A2 C1 C2 G PC	C1 G	PC					A2 C2 PC	G	A2 C1 G			A2 C1 C2 G PC
Articulates by sector for social and environmental improvements	A2	A1								A2		A2	A2	
Supports projects of members of its chain for social and environmental improvements		C1 A2								A2 C1 C2 G	G			C1

Table A6. Cont.

Development Mechanisms and Social Issues Covered	Work Condition	Community Development	Society Development	Minority Development	Human Rights	Equity Diversity	Ethic	Philanthropy	Genre	Product Liability	Health Wellness	Health Safe	Child Exploitation Work	Training Education
Provides socio-environmental information that guide improvements	A1 A2 C1 C2 PC	A1 A2 C1		C1	C1 PC	C1 C2	C1 C2		C1	A1 A2		A2 C1 C2 G PC	A1 A2 C1 C2 PC	C1 C2 PC
Provides socio-environmental information that guide improvements in critical suppliers	C1 C2 G PC	C1		C1	C1 PC	C1 C2	C1 C2		C1			C1 C2 G PC	C1 C2 G PC	C1 C2 G PC
Empowers suppliers										A1		A1 G		
Empowers critical suppliers	A1									C2		C2	A1	C2
Enables specific chains	A2 C1 PC	A2 C1 PC								A2 C1 PC	A2 PC	A2 C1 PC	A2 PC	A2 C1 PC
Empowers other actors in the supply chain								C1	C1	C2		G		C1 C2
Empowers community		C1 G PC		A2					C1			C1		A1 A2 C1 G PC
Develop specific chains	A2	A2		A2							A1 A2	A2	A2	A1 A2
Certify suppliers in own certification	A1 A2 C1				C1	C1	C1					A1 A2 C1	A1 A2 C1	
Prioritizes local suppliers		A1 C1 G PC												

Source: Empirical research data.

Appendix G

Table A7. Direct and Indirect Governance Mechanisms for SCSS.

	Selection	Incentive	Assessment	Monitoring	Collaboration	Development
Indirect Governance Mechanisms →	Consult Third Party Lists					
	Prerequisites for all suppliers					
Direct Governance Mechanisms ←	Prerequisites for supplier of specific chains			Monitoring system with supplier	Supports projects of members of its chain to promote socioenvironmental improvements	
	Contracts with requirements for all suppliers			blocking on third party lists	Articulates sectorally to promote socioenvironmental improvements	Prioritizes local suppliers
	Contracts with specific chain supplier requirements		Collect documents	Monitoring system for specific chains based on company data	Partnerships with Foundations/Institutes/NGOs to conduct socio-environmental diagnosis of suppliers	Certifies suppliers
	Requires code/policy recognition		Applies self-assessment questionnaires	Management program monitors critical suppliers based on company data	Partnerships with Foundations/Institutes/NGOs to improve socio-environmental performance of suppliers	Provides socio-environmental information that guides improvements
	Requires documentation that proves demands for all suppliers	Temporary Punishments (until regularization)	Uses system	critical	Partnerships with Foundations/Institutes/NGOs to improve socio-environmental performance of suppliers	Provides socio-environmental information that guides improvements in critical suppliers
	Analyzes documentation and risks in critical suppliers	Definitive Punishments	Penalties with fines	Company audit for specific chains	Partnerships with Foundations/Institutes/NGOs to improve specific chains	Empowers critical suppliers/suppliers
	Visit to confirm requirement in specific suppliers	Competition Incentives	Sample visit	Company audit for suppliers at risk	Partnerships with Foundations/Institutes/NGOs to improve the distribution channel	Empowers other actors in the supply chain
	Excludes suppliers without socioenvironmental criteria	Acknowledgement	Prepares socio-environmental performance indicators	Monitors suppliers for improvement actions	Partnerships with Universities, Foundations/Institutes/NGOs to improvement community /society	Empowers community
	Prioritizes suppliers based on socio-environmental criteria		Evaluates data collected with senior management	Monitors stakeholders for improvement actions		
	Develops bank of suppliers qualified in socio-environmental criteria			Conducts Own Certification		
	Prepares material to guide supplier selection					
	Qualifies supplier in selection demands					

Source: Empirical research data.

Appendix H

Table A8. Quotes from the field.

Quotes from Key Informant from the Field	
Elementary	<p>“Agribusiness is very sexist, it’s a place where we have many more men than women, we have some programs now that insert women in field work, which were unthinkable a while ago, because we are still solving externally, right, so, from the point of view of charging this from a SC, it’s very difficult, when you haven’t even resolved internally. So, today, what we can demand from the SC is the minimum labor issue, slave labor, the more contractual issues, you know, the issues of child exploitation, child labor, the issues of moral harassment, yes, but like that, things that go beyond legislation, it’s quite difficult”</p> <p>“For social issues, you have to comply with the legislation and it’s the least you have to do. I think that, like this, for us, there is still an internal structure that we now, with this process of implementing the 16,001, which is this social responsibility standard, which brings these social responsibility issues, which now the ISO of sustainable procurement it brings, right, we bring the management of this right, map the impact of the business, understand these points, it is... we will inevitably start to demand this from the supply chain, and it’s not just charging, charging is easy, the difficult thing is help the supply chain up the ruler, because you have to move up the ruler, too, and go with it. Since 2017, our social and environmental management system has included as a guideline the respect for the valuation of human rights, as a policy guideline and this will certainly come to the SC in the next 2, 3 years... it is a challenge, also when the we talk about the global positioning, when we work with many suppliers, right, and about broad themes in the chain” (Social Responsibility Supervisor, Agro 1).</p>
Selective	<p>The professional interviewed at Agro 2 holds the position of sustainability manager and has worked for the company for more than six years. In general, there are no mechanisms that deal with issues of gender or equity/diversity, for example. About this, the respondent declares that “You talked about gender, racial equality, these are things that Brazil does not monitor, nor does it have data on it, there is little information and, for us as a company, in this matter, we do not have much power to influence. But again, it doesn’t mean that we don’t go to work, we work, especially more objective issues, such as occupational health (Sustainability Manager, Agro 2)</p> <p>“Every beginning of the year we have a meeting with suppliers, this moment marks the beginning of the year. We bring what is a relevant strategy, which will happen in that cycle. This meeting is very important and we do it every year, it’s a priority. At this time, usually in March, we take the opportunity to recognize those suppliers that were also highlighted in the previous year. We put the rules on the table, which will guide the year. Until May we share a booklet, with these rules and how the supplier can qualify and rank as a sustainable supplier. Then, in November, I give him a self-assessment questionnaire, there, he will bring all the practices he has on the subject, the social commitments, the control he has in the supply chain, certificates, engagement policies, everything put it there. So, this self-declaration is like an audit requirement, we go through a verification process, an auditor goes there to check what he declared. Checked it, we issue a report, a check of what was declared, and then we have a ranking of our suppliers. (Sustainability Professional, Cosmetics 2)</p> <p>“A large part of our workforce is female, in branches, offices, there are already women commercial managers, only some activities that don’t work yet, but our customers, our high-end consumers, are women, so that’s why we have that looking at them with affection is even a retribution and affection for the preference of our brand (...) for the future, I see it (...) we work a lot with our children and teenagers in projects, in communities, and, for the future, we intend to work on women’s empowerment projects (...) to bring women into these projects, with a focus on income generation and women’s empowerment” (Sustainability Manager, Gas)</p> <p>“Our control program, we call it controlled wood, is highly praised by the certifier as one of the best (...) our frequent monitoring program, there, during cutting, or during planting, if it is a program of development, which we do there, including release of money, if we arrive and take an area that has a problem, we hold the money until it resolves, the payment releases... so, this is very tied to this process of monitoring the harvest” (Coordinator of Sustainability and Governance, Pulp and Paper)</p> <p>“We have been working with community councils, which is, together with the community, to define the best project, which is important... so, the councils give more autonomy to the communities, because, before, as we did: I thought in a project, I came to the community and put the project in, and sometimes it worked, but sometimes it didn’t, because people sometimes don’t have the skills, don’t want a project, they want an action that reforms a school, so, we have been working a lot on this part of the councils, and suppliers are invited to participate, get involved, but it is still not so fluid, I could make a communication for each... it happens a lot because the third parties who are in the plant have access, but it was something that could be better” Sustainability and Governance Coordinator, Pulp and Paper).</p>

Table A8. Cont.

Quotes from Key Informant from the Field	
Extensive	“I myself work linked to cases of rural families, rural schools in Pará, there are 30 rural families (...) in the alternation pedagogy, the student spends 15 days at school and 15 days at home, applying knowledge, studying children of cooperative members... so, by investing in this, we will improve the production chains, we will be able to contribute to improvements in local technical assistance, not only for the production chains, but for other chains as well, the self-esteem of these young people as well, so thus, you can create, and perhaps due to the strength of our company, you can also attract partnerships for this, more voice, right, for this population, but anyway, in short, we want the environment to be better where we operate” (Sustainability Manager, Cosmetics 1)

Source: Empirical research data.

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