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CREATING A SUSTAINABILITY FRAMEWORK FOR SUPPLIER EVALUATION

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Tämän tutkielman tavoitteena oli tutkia toimittajien arviointia ja toimittajasuhteita suhteessa vastuullisuuteen. Tutkimus perehtyi eri vastuullisuusongelmiin ja niiden tärkeyteen toimitusketjuissa ja niiden pohjalta muodostettiin vastuullisuuden viitekehys. Empiirinen osa tutkimuksesta toteutettiin suomalaiselle toimeksiantoyritykselle, joka toimii pohjoismaiden elintarviketeollisuudessa. Päädata koostui viidestä puolistrukturoidusta haastattelusta, jotka toteutettiin yrityksen hankintatiimille. Lisäksi käytettiin toimeksiantoyrityksen toimittamia aineistoja. Pohjautuen viitekehykseen, lista vastuullisuustekijöistä, joilla toimittajia tulisi arvioida, muodostettiin. Tutkimuksesta määriteltiin kolme kestävän kehityksen pääkohtaa, joita yrityksen tulisi harkita: ympäristö, ihmisoikeudet ja etiikka sekä liiketoiminnan eheys. Tärkeimmät havainnot osoittivat, että yritysten olisi keskityttävä saastuttamisen ja luonnonvarojen kulutuksen hallintaan lisäämällä ekologisia toimintatapoja. Lisäksi lapsityön ehkäisy ja hyvien työolojen mahdollistaminen nostettiin tärkeäksi ihmisoikeusnäkökohdaksi. Yritysten tulisi myös ottaa huomioon niiden vaikutukset paikallisiin yhteisöihin samalla keskittyen myös oikeudenmukaisiin työsuhde käytäntöihin. Keskittymällä näihin teemoihin toimittaja-arvioinnissa yritykset pystyvät vähentämään riskejä, siirtymään kestävämpiin toimitusketjuihin samalla muodostaen parempia yhteistyösuhteita toimittajiensa kanssa.

ABSTRACT

Title of the thesis: Creating a sustainability framework for supplier evaluation

Keywords: Sustainability, supplier evaluation, supplier relationships, supplier development

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The objective of this thesis was to study supplier evaluation and supplier relationships in relation to sustainability. Different sustainability issues and their importance in the supply chains were studied and a framework was created. The empirical study was conducted with a Finnish case company, operating in the Nordic food industry. The primary data consists of five semi-structured interviews with the procurement team. In addition, secondary data provided by the case company was used. Based on determined sustainability factors, the goal was to create a list of sustainability criteria by which suppliers should be evaluated upon. From the research, three main aspects of sustainability the case company should consider were introduced: the environment, human rights and ethics and business integrity. The main findings indicated that companies should focus on controlling pollution and resource consumption by implementing environmental management practices. Additionally, the prevention of child labor and enabling good working conditions were raised as an important human rights aspect. Companies should also consider their impact on local communities while focusing on fair employment practices. By implementing these themes to supplier evaluation, companies are able to mitigate risks, grasp more sustainable supply chains while simultaneously forming more collaborative relationships with their suppliers.

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The two years of Master´s degree studies at LUT have flown by and it feels rewarding to finally be writing these acknowledgements. I will cherish all the great memories from these two years. Completing my last year of studies in a global pandemic has taught me a lot about myself and furthermore have forged me to the person I am today. This is an end of an important chapter in my life, and I am excited to continue to the next one.

I would like to share my thanks and appreciation to all the professors and teachers at LUT, especially to my thesis supervisor Anni-Kaisa Kähkönen. Your encouraging feedback and guidance in my thesis process were irreplaceable. I would also like to thank the case company and its personnel for taking part in this project and giving me the tools to succeed in this project.

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11.3.2021, in Helsinki
Nelli-Maria Sirén

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1 INTRODUCTION

1.1 Background of the study

Compared to several years back, when sustainability initiatives were considered more a novelty or a marketing tactic, in today's business environment sustainability is becoming a standard of operation. Companies have been showing a growing interest in sustainability in recent years. This is partly a result of various global megatrends, such as global warming, carbon emissions, scarcity of resources, human rights and equality. (Dufva 2019) Changing customer demand, consumer awareness, pressure from stakeholders, legislations and regulations are all factors that contribute to sustainability awareness of organizations. Sustainable business can be seen as continuous development providing competitive edge and complying to present needs, while preserving resources for future generations. (Burrit 2014, 327)

Social and environmental responsibility of corporations has become a focus for decision makers, as both consumers, governmental- and non-governmental organizations have become more aware of sustainability issues after public ethics scandals, state Maloni & Brown (2006, 36). Organization operating in the food industry are one of the first targets for public concern, especially regarding environmental and social issues in their supply chains (Maloni & Brown 2006, 44). The media and other stakeholder groups have become increasingly quick to react and criticize possible unethical practices and greenwashing in the global supply chains of multinational organizations. This acts as an incentive to act more sustainable and responsible, as self-declared sustainability initiatives affect positively on a company's brand image. (Lawlani, Nunes, Chicksand & Kumar 2018, 3987) As sustainability has received more attention in top management, it has resulted in companies starting to evaluate their suppliers from the viewpoint of triple bottom line approach (Vahidi, Ali Torabi & Ramezankhani 2018, 1352). While companies can have various sustainability policies and actions in place, it does not cover the entire supply chain. In order for the company to ensure sustainability, companies need to establish alliances with suppliers while simultaneously spreading sustainability initiatives through the supply chain. (Gimenez & Tachizawa 2012, 541)

1.2 Research objectives and questions

In order to recognize the value of suppliers, companies need to focus on strategic supplier selection. (Lasch 2016, 179) After the selection, continuous supplier evaluation must take place to manage the performance of suppliers. Supplier evaluation is one of the most critical and strategic success factors for sustainable supply chain development. (Lasch 2016, 180) There are often tens, hundreds or thousands of suppliers, managed in large quantities, therefore, and with a different relevance for the buying company. The main goal of effective supplier evaluation is to gain insight to the operations and performance of suppliers while maximizing overall value in purchasing (Bradu, Oquin and Thøgersen 2013, 284). Companies often focus merely on the financial performance measures of their suppliers. However, it is also important to map out the social and environmental impact of suppliers. Thus, effective supplier evaluation should measure each aspect of the triple bottom line: financial performance, environmental impacts and social responsibilities. (Büyüközkan 2013, 3939-3940)

Supply chain management has an enormous impact on sustainability practices. Various activities related to supply chain and sourcing such as efficient transportation, reduced packaging, environmental requirements for suppliers, improved working conditions can be a source of cost reductions and a guide to better reputation among stakeholders. Environmental degradation, such as the depletion of natural resources, congested waste and increasing pollution, has steadily increased the importance of environmentally friendly thinking in supply chain management. (Shrivastava 1995b, 937) By engaging in sustainable supply chain management and forming new sustainable practices, organizations are not just reducing their total carbon footprint, but in addition optimizing their operations and thus enabling cost savings and profitability. (Winter & Lasch 2016, 179) Winter & Lasch (2016, 179) also argue each supply chain can be optimized using sustainable practices.

Companies are aiming for more sustainable supply chains, thus the application of sustainability criteria in supplier evaluation has become more common. (Winter 2016, 175) Environmental and social criteria help to mitigate risks and problems with suppliers, as companies are held accountable for their own actions as well as their supplier's. This brings challenges to companies, especially those who operate on a global scale. Global supply chains often receive attention from multiple media outlets worldwide. With the broad spectrum of regulations and

legislation, volatile customer demand, and exacting stakeholders, sustainability has become a hot topic for organizations. (Seuring 2008, 459) Governmental and non-governmental institutions are creating an atmosphere of pressure for organizations to act more sustainable. Hence, many organizations following these sustainability actions have recognized the latent value it brings. In example, this value can mean competitive advantage against others, waste reduction, possible product differentiation altering to improved position on the market and overall better financial performance. (Winter & Lasch 2016, 178-179)

In order to study the importance of sustainability in supplier evaluation as well as forming the framework of all the key sustainability factors in supplier evaluation the main research question and supporting sub-questions were formed.

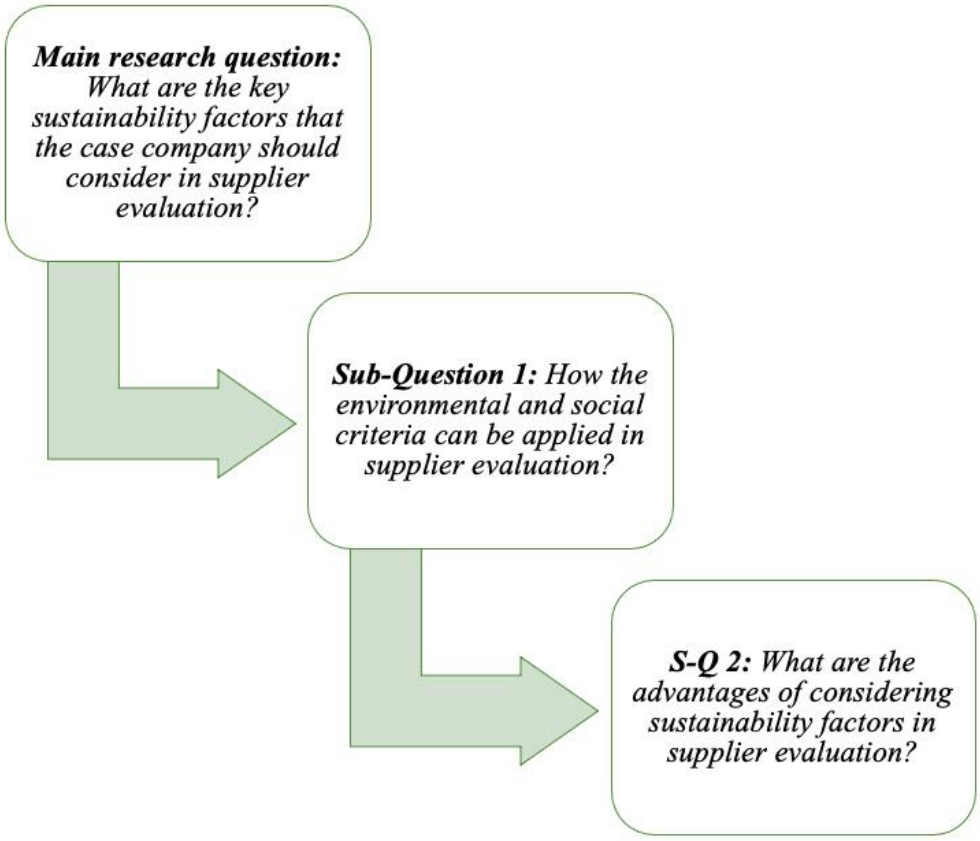

Figure 1. Research questions

Conducting research about supply chain management and sustainability is useful. While supply chain management is a complex, interesting topic, it constantly offers new research results and offers insight to current issues. In addition, sustainability is a topical research topic that is becoming an increasingly well - known around the world, which makes it worthwhile to research. However, research on sustainability in supply chain management is usually more focused on the environmental dimension of the triple bottom line (cf. Lamming & Hampson, 1996; Lu, 2007; Seuring, 2008). Thus, it is important to conduct research including the social dimension as well. However, in more recent studies, there has been an increased interest to include both viewpoints in research. (cf. Winter, 2016) The study focusing on a company operating in the Finnish food industry, managing global supply chains can help reveal interesting information about their supply chain liabilities while providing assistance in forming a clear framework of sustainability attributes to consider, when conducting supplier evaluation.

1.3 Limitations

The thesis approaches the research topic from the perspective of the purchasing organization, in addition to which the research is limited to only one company whose procurement activities are international and whose strategy has defined sustainability as an important area of focus. Thus, the results are limited to only this company and its activities. Due to the vast scope of the topic, supplier evaluation is limited to the evaluation of suppliers' sustainability issues, although supplier evaluation is carried out to evaluate other factors, such as financial performance, as well. The organization of the study is one of the largest players in the food industry in Finland. Responsibility, sustainability and supplier management are solely studied from the perspective of the target organization in relation to its suppliers. In this thesis, the concept of relationship is restricted to business relationships between manufacturers and suppliers in the supply chain. These relationships are often presented as buyer-supplier relationships, but throughout this research will be referred to as supplier relationship.

1.4 Research methodology

A case study method was selected for the research method of this study. The data is collected from a case company operating in the Finnish food industry, with extensive global supply

chains. The data collection is conducted via one-to-one interviews with the case company's representatives. The interview form is presented in appendix 1. Research methodology is discussed further in chapter 3, where the reasoning behind the research methodology, data collection process and data description are explained.

1.5 Conceptual framework

The theoretical framework of the study is created based on previous studies on sustainability criteria of supplier evaluation and supplier relationship management. In addition, the impact and motives of environmental and social sustainability are further explained and analyzed. The study also reflects on specific nuances of sustainability in the food industry. Figure 2. illustrates the framework of the thesis.

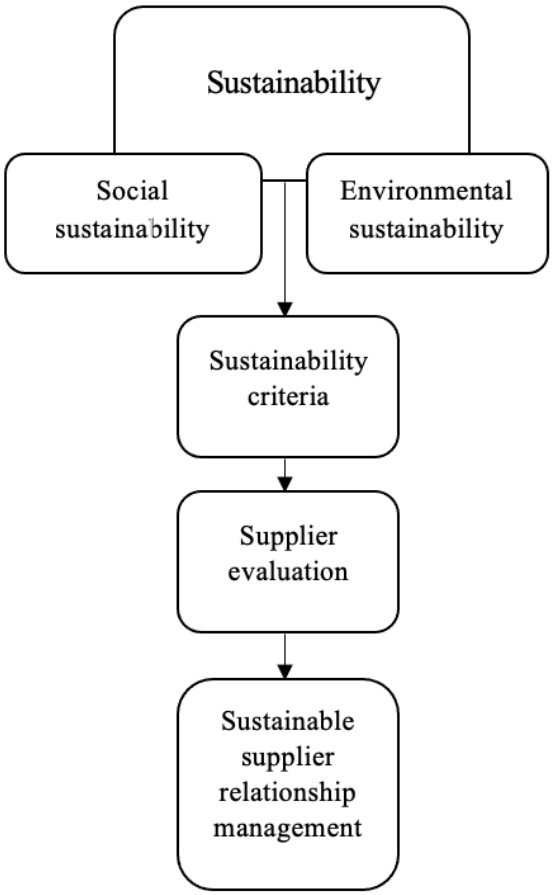

Figure 2. Framework of the thesis

1.6 Key concepts

The key concepts of the study are presented below for a more pleasant reading experience. The concepts are further discussed in chapter 2.

Sustainability

Sustainability is referred as the development that is able to meet the needs of the present without compromising the ability of future generations to meet their needs. (Cassen 1987, 126)

Sustainable supply chain management

Sustainable supply chain management means integrating environmentally, socially and economically viable practices throughout the supply chain. These practices can be implemented from product design, product development to material selection (including extraction of raw materials or agricultural production), manufacturing, packaging, transportation, storage, distribution, consumption, return, and disposal. (Carter 2008, 367)

Supplier evaluation

Supplier evaluation is the process of evaluating and approving new suppliers through quantitative and qualitative evaluation. It is also a process applied to existing suppliers to measure and monitor their performance to reduce costs, reduce risk, and to promote continuous improvement. (Gimenez & Tachizawa 2012, 540)

Triple bottom line

The triple bottom line is a concept created by John Elkington (1998, 39) that suggests that organizations should measure their social and environmental impacts in addition to their economic performance and not focus solely on the economic aspect of business.

1.7 Outline of the thesis

The thesis starts with the introduction chapter, where the background of the study and research objectives are presented. After this, research questions are formed. The first chapter simply seeks to present the framework for the study, while providing key concepts and outline of the thesis. After introduction, a literature review is conducted. It studies sustainability and the triple bottom line, supplier relationship management as well as supplier evaluation. After reviewing the literature and theory, the thesis moves to the methodology of the empirical study. The study is conducted for a case company operating in the Nordic food industry. The next chapter reveals the results of the study. Lastly, the final chapter answers and discusses the research questions and forms a conclusion.

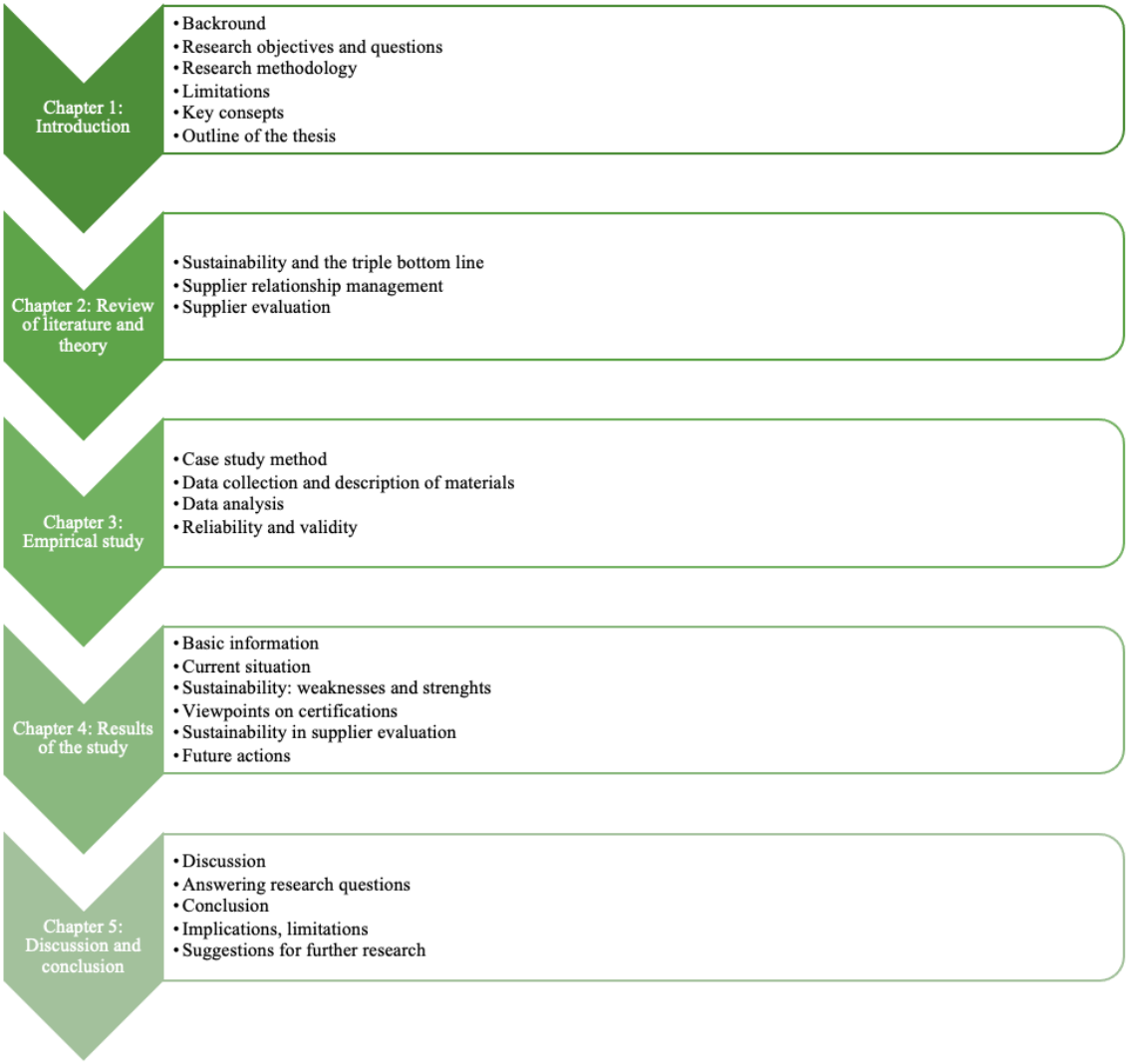

Figure 3. Outline of the thesis.

2 SUSTAINABILITY IN SUPPLIER EVALUATION

This part of the thesis consists of a comprehensive literature review. It introduces different viewpoints and research regarding the triple bottom line, sustainability in supplier evaluation and supplier relationship management. The chapter also maps out the environmental and social criteria used in supplier evaluation.

2.1 Sustainability and the triple bottom line

The World Commission on Environment and Development (Cassen 1987, 126) has defined sustainability as: "development that meets the needs of the present without compromising the ability of future generations to meet their needs". This definition has been supported by various researchers. In example, Shrivastava (1995a, 955) defines sustainability as "the potential for reducing long-term risks associated with resource depletion, fluctuations in energy costs, product liabilities, pollution and waste management." While this macroeconomic definition has been widely adopted by organizations, it has proven to be difficult to operationalize. Sustainability has usually been operationalized through the theory of triple bottom line, which was created by John Elkington (1998, 37). The illustration of the triple bottom line is introduced in figure 2.

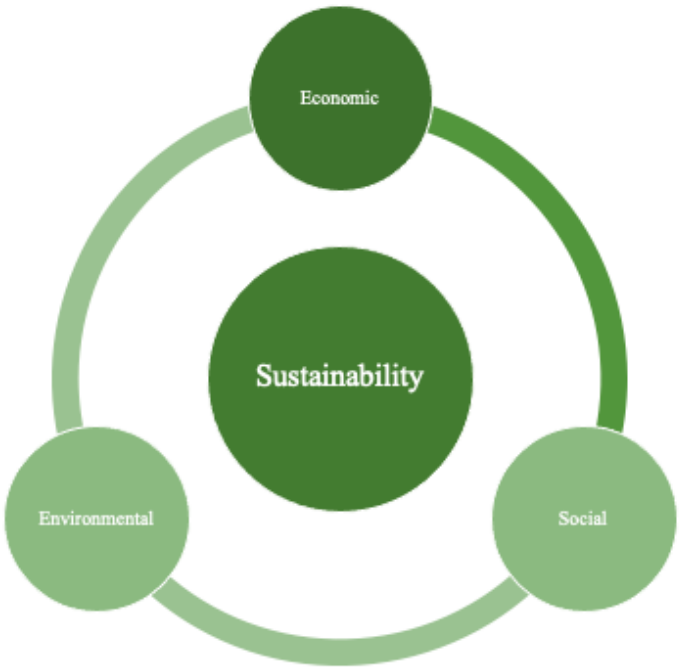

Figure 4. The triple bottom line (Elkington 1998, 37; Carter 2008, 365).

The triple bottom line is a concept that considers all environmental, social and economic factors simultaneously. On the contrary of traditional viewpoints, Elkington (1998, 39) determined that an organizations success is not only dependent on its financial condition but actually on its social and environmental welfare as well. Carter (2008, 370) agrees with Elkington (1998,39) as he defines sustainability actions as social and environmental activities that fall in line at the intersection with the economic bottom line. Taking all these three dimensions in count, businesses are able to grasp sustainability. In order to culminate superior triple bottom line performance, there is a need for innovative partnerships and business models in all economic, environmental and social aspects of businesses. Thus, long-term, mutually beneficial partnerships will be crucial in the transition towards sustainability. (Elkington 1998, 37-38)

Bocken et al. (2014, 42) state business models need to go through a transition towards a more sustainable future, as current practices of corporate social responsibility and ecological

efficiency are not adequate to drive the holistic changes needed to achieve long-term social and environmental sustainability. These sustainable business models incorporate all three dimensions of sustainability, and include all stakeholders' interests, including environment and society as key stakeholders. The needed change towards new sustainable business models is done through business model innovation, which demands rethinking the sole purpose of the company, as well as their logic for creating value. (Bocken et al. 2014, 43). Business model innovation is ultimately about changing the way organizations do business and goes beyond considering only products and processes. (Porter & Kramer 2011, 65) The key to a truly sustainable business model is the ability to deliver solutions to fight unsustainability at its source. It is not sustainable to create solution that compensate or offset the negative impacts that are already created by business practices. (Bocken et al. 2014, 44)

2.2 Sustainability in supply chain management

While sustainability and superior triple bottom line performance are pursued by organizations, there are various challenges introduced in research. From a supply chain point of view, Faruk (2001, 37) stress that one of the main reasons for organizations to face challenges regarding sustainability actions is the limited reach companies have. The line of sustainability usually extends further from an organizations' direct control. Organizations are thus vulnerable to actions of their suppliers, as a supplier's poor environmental management can undermine the organizations high level of environmental performance. (Keating 2008, 175)

In addition to environmental factors, social issues of suppliers are often reflected towards the buying firm. These can be factors such as labor conditions, human rights or product safety. Hereby organizations have recognized the demand for strategies that extend further down the supply chain, moving forward from traditional corporate governance processes. The most notable result of this extension has been the ascent of corporate social responsibility aligned purchasing strategies. (Keating 2008, 176) Lu (2007, 5451) also underlines that there will be an increased number of products made from recyclable materials in the future, thus impelling organizations to rethink their supply chain decision in the context of environmental responsibilities. Organizations are implementing operations such as codes of conducts, supplier evaluation processes as well as collaboration projects. These strategies have pressured suppliers

to perform more responsible in order to keep existing partnerships as well as appearing more desirable to new business partners. (Keating 2008, 177)

Gimenez & Tachizawa (2012, 540-541) identify two governance methods to improve suppliers' sustainable attributes. These are supplier evaluation and supplier collaboration. They conclude both seem to have a positive impact on environmental performance as well as corporate social responsibility. However, research also indicates supplier evaluation is not sufficient on its own – implicating it is beneficial for management to implement both concepts. Evaluating the supplier's performance and identifying necessary actions is one step, however, to have an impact, organizations need to form collaborative relationships with their suppliers in order to increase sustainability in their network. (Shrivastava 1995b, 955) A summary of sustainability actions and benefits drawn from literature are introduced in Table 1.

Table 1. Benefits of engaging in sustainability actions.

Actions	**Benefits**
Use of renewable energy, Waste reduction (Mollenkopf et al. 2005, 171; Rosenau et al. 1996, 163) Minimized packaging (Mollenkopf et al. 2005, 171; Rosenau et al. 1996, 163) Analysis of life-cycle costs (Shrivastava 1995b, 955)	Lower operating costs (Mollenkopf et al. 2005, 171; Rosenau et al. 1996, 163) Efficiency (Shrivastava 1995b, 960) Reducing the amount of greenhouse gases, especially methane produced from landfill sites (Shrivastava 1995b, 960) Reducing energy consumption to handle and process packaging waste (Shrivastava 1995b, 955)
Implementation of ISO 14000 standards (Hanson et al. 2004, 37; Montabon et al. 2000, 8)	Cost reductions, shorter lead times, better product quality (Shrivastava 1995b, 955) Framework for environmental management systems (Hanson et al. 2004, 37; Montabon et al. 2000, 6)
Providing a greener product selection to a growing ecologically aware consumer segment (Shrivastava 1995b, 955)	Competitive advantage (Shrivastava 1995b, 955)

Innovative and inimitable strategies (Shrivastava 1995b, 955)	Possibility to differentiate from competitors Gain environmental leadership in the industry (Shrivastava 1995b, 955)
Social sustainability (Shrivastava 1995b, 955; Gimenez & Tachizawa 2012, 541)	Good public relations (Shrivastava 1995b, 955) Better corporate image (Shrivastava 1995b, 955) Social presence in markets (Gimenez & Tachizawa 2012, 541) Social legitimacy (Gimenez & Tachizawa 2012, 541)
Ecological sustainability as risk management; systematically addressing these long-term issues at an early stage (Shrivastava 1995b, 955)	Reducing long-term risks related to resource depletion, fluctuating costs, product liabilities, pollution and waste management (Shrivastava 1995b, 955)
Improved ecological performance (Shrivastava 1995b, 956)	Benefits the operating ecosystem and the environment Might help to reduce health expenses in the community (for example in case of industrial pollution) (Shrivastava 1995b, 956)
Safe warehousing, sustainable transportation practices (Brown, 1996, 159) Better working conditions Carter et al. 2007, 143).	Reduced health and safety costs (Brown, 1996, 159) Lower recruitment and labor turnover costs (Carter et al. 2007, 143) Increase motivation and productivity and reduce the absenteeism of supply chain personnel (Holmes et al. 1996, 36)
Forming sustainable processes through strategy (Gimenez & Tachizawa 2012, 540-541). Introducing codes of conduct (Carter & Dresner 2001, 26) Proactively shaping future regulation (Shrivastava 1995b, 955)	Companies that proactively address environmental and social concerns can influence government regulation when this regulation is modeled after a company's existing production and supply chain processes, leading to a difficult-to-replicate competitive advantage for companies and their suppliers (Carter & Dresner, 2001, 27; Gimenez & Tachizawa 2012, 540-541).
The ability to design for reuse and disassembly (Christmann 2000,	Cost reductions (Christmann, 2000; Hart, 1995; Shrivastava, 1995a, 184)

665; Hart 1995, 989; Shrivastava 1995a, 188)	
Enhanced reputation through sustainability actions (Ellen et al. 2006, 149)	Can make an organization more attractive to suppliers and customers (Ellen et al. 2006, 150), to potential employees and to shareholders (Klassen and McLaughlin 1996, 1212).

Ecological efficiency can be a source of cost reductions. By applying sustainable actions such as the use of renewable energy, waste reduction, minimized packaging and over all analysis on life-cycle cost companies are able to drive their operation costs down. (Mollenkopf et al. 2005, 186; Rosenau et al. 1996, 163) Nowadays there is a clear demand for ecological products, which gives organizations opportunities to use sustainability as a source of competitive edge against their competitors. A continuously growing segment of consumers respond to green products that use eco-friendly packaging and provided by organizations that promote sustainable actions. (Shrivastava 1995b, 955) As we are at an early stage in corporate environmentalism globally there is business opportunities to be seized as well as the opportunity to create unique environmental strategies. By creating new approaches and innovative solutions organizations can become industry leaders and trendsetters. (Hanson et al. 2004, 31; Montabon et al. 2000, 5-6) These strategies also help the organizations to get ahead of the curve of regulations by giving them the opportunity to have a say in legal issues. (Carter & Dresner 2001, 14; Gimenez & Tachizawa 2012, 540-541). Ecological sustainability is likely to positively influence public relations and furthermore polish the corporate image. Social engagement with societies helps to form a presence in the market and furthermore helps to gain social credibility. (Ellen et al. 2006, 149)

Sustainability actions can also be a form of risk management for companies. As organizations are more aware of their resources, energy usage, product liabilities, waste management and pollution levels, they can mitigate risks by managing these long-term issues. (Shrivastava 1995b, 955-956) By improving ecological performance companies positively impact their operating environment, as their operations are less likely to pollute and negatively impact the surrounding ecosystem. However, the transition to seizing these sustainability opportunities doesn’t come without costs. In order to grasp the potential benefits companies, they need to invest in new resources, such as technology, labor, and machinery. Organizational sustainability demands new processes and systems to be obtained. (Gimenez & Tachizawa 2012, 540-541)

Bocken et al. (2014, 43) emphasize the importance of holistic approach in order to safeguard a more sustainable future, meaning that environmental challenges need to be considered in parallel with economic and social challenges. It is clear, that in the next years, companies need to pay more and more attention to consumer's needs related to information about the ethicality of the products as the consumer base becomes more aware of the social issues. (Bradu et al. 2013, 284) Sadly, these efforts are not yet proven to be as effective in driving the prices up, as Karjalainen and Moxham (2012, 273) describe that consumers are not willing to pay much extra for fair trade or more sustainable product, this can mean products with a lower carbon footprint, that are domestically produced or recycled. However, Bradu et al. (2013, 287) concluded in their study, that nowadays consumers are more willing to buy products which have a label of traceability.

2.3 Supplier relationship management

Due to recent changes in product life cycles, volatile customer demand, rapid technology innovation and the increased complexity of services and products, it has become vital for organizations to manage their supply chains. This has resulted for organizations to seek competitive advantage in supply chain management, using it as a strategic tool. Supply chain management can ultimately mitigate risks and helps to optimize inventory, while having a positive effect on the overall quality of products. (Porter & Kramer 2011, 66) Outsourcing non-core competencies has become an increasing trend in many fields. Buying companies find themselves more dependent on suppliers, as they are no longer in full control over their operations. This means there is room for errors in security, innovativeness as well as sustainability of their entire supply chain. Organizations aim for reduced costs, while simultaneously seeking competitive advantage over their competitors. According to Carter (2008, 386) this can be done by managing suppliers, and developing those relationships.

Supplier relationship management (SRM) has been defined by many researchers over the years. In example, Hughes (2008, 23) has defined SRM by three characteristics.

1. A systematic process conducted throughout the whole enterprise, where suppliers' assets and capabilities are evaluated in respect to the company business strategy
2. Determining in which activities to engage with specific suppliers

3. Precise planning and implementation of selected interactions with all suppliers in order to maximize the value achieved through these interactions.

Lambert & Schwieterman (2012, 337) follow the same definition as Hughes (2008). Lambert & Schwieterman (2012, 337) agree, SRM is a way to attain value for both entities in buyer-seller relationships. Supplier relationships management can be used as a clear structure for the management to control their relationships with their suppliers, ultimately leading to better overall performance. However, the increased performance should not be the primary goal. Diverging from this, Park et al. (2010, 496) suggests that SRM is a strategy to work with suppliers in order to create new innovations and thus, efficiency.

Park et al. (2010, 496) introduced an integrated SRM system to provide knowledge for managers regarding different departments and their work. Using this knowledge managers are able to better understand the mutual influence of each department an additionally use this knowledge to increase performance. In the study conducted by Park et al. (2010, 496) the SRM system includes shaping strategies for purchasing, selection of suppliers, collaboration on innovation of products, supplier evaluations and development of these selected suppliers. The SRM system is continuously improved by a feedback cycle. (Park et al. 2010, 496-497) The process is illustrated in Figure 5.

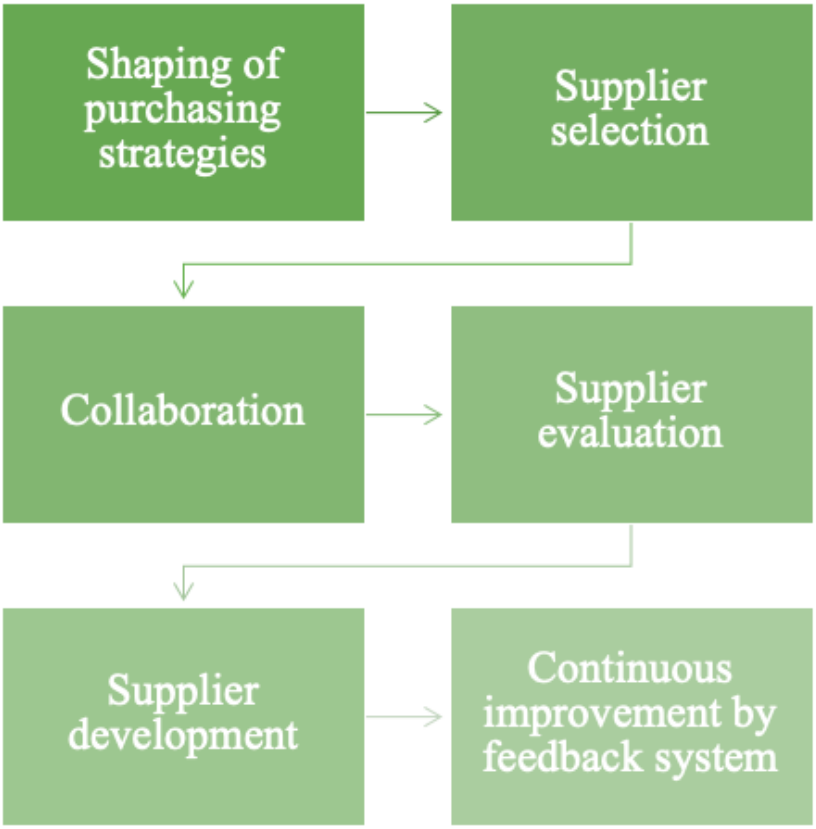

Figure 5. Supplier relationship management system (Park et al. 2010, 496-497)

To support the view of Park et al. (2010) it is important to see what kind of actions these steps can withhold. Trent (2005, 55-56) names a list of SRM related activities:

- Designating managers for relationships, including the managers for key supplier relationships
- Providing up-to-date and complete feedback on supplier's performance
- A formal assessment of the supplier's perception of the buyer as a customer
- Meeting with suppliers to understand their relationship expectations and encouraging suppliers to take part in the executive buyer-supplier council
- Adopting trust-building functions
- Supporting collaborative cost management models

- Providing resources to improve supplier performance
- Incorporating suppliers' suggestions for improvement in sharing savings together
- Involving suppliers in product design and development
- Implementation of SRM information systems
- Inviting suppliers to participate in workshops
- Develop long-term contracts that offer mutual value

Supplier relationship management is generally defined as a strategy or a process for creating value using cross-functional and process-oriented methods in buyer-seller relationships. Seuring & Mueller (2008, 1700-1701) see SRM as a way for organizations to grasp superior financial performance and competitive advantage. According to Hughes (2008, 24) supplier relationship management is a way for organizations to provide a clear structure on how to manage supplier relationships. As it has been shown, good management increases the organizations performance and thus efficient supplier relationship management will contribute to this. To give examples of the main reasons for SRM, Lambert & Schwieterman (2012, 337) bring up increased competition, risks due to increased awareness of sustainability, the aim for cost-efficiency in order to compete and seeking for closer relationships with selected key suppliers.

Buyer-supplier relations are in a key role when it comes to addressing environmental issues, states Lu (2007, 5452). Cooper (1997, 76) stresses, that by engaging in a cyclical process with suppliers, mutual trust can be formed. This cycle means forming commitments, following through with promises, clear communication, presenting results and repeating the process all over again. The more often the cycles are completed and thus repeated, the more it increases the commitment and deepens the level of trust among the two parties. Information sharing and increased trust will ultimately result in greater partnership. (Cooper 1997, 78) From the viewpoint of product quality, Dwyer, Schurr & Oh (1987, 13) presented their view that SRM is a way to achieve quality in the supply chain. It has become necessary to establish stable relationships between buyers and suppliers and thus strive to work beyond the boundaries of the organization. For the relationship to be beneficial for both parties, there needs to be mutual willingness to sacrifice short-term profits while working together towards common, pre-set goals. This view is supported by Lamming and Hampson (1996, 48), as they add that there needs to be investments made for long-term commitment. These investments further help to

align buyers' goals with their suppliers, thus resulting in better overall quality and increased profits. Lamming and Hampson (1996, 48) view has been since supported by other authors, as Porter & Kramer (2011, 65) also endorse a shared value approach. Furthermore, Porter & Kramer (2011, 65) recommend strengthening the local network of suppliers and improving their operations. Using a shared value approach delivers more value by enabling sustainable development and increased product quality. Thus, all entities involved are exposed to growing revenue and profits.

There is an increasing trend of buyers being keen on finding innovativeness among supplier instead of focusing just on operational performance. Innovation potential can result in potential value for buyers' customers. (Inemek & Matthyssens 2013, 580) Azedegan (2011, 49) supports this view by emphasizing that buying companies can leverage suppliers for direct and indirect benefits. Innovativeness helps to develop new processes and technology that have an impact on the products supplied to the buying company. This view is also endorsed by Cox (2004, 351-352). According to Cox (2004, 351-352) forming proactive long-term relationships between a buyer and a supplier that results in new innovations, good functionality and sensible cost, is most likely to be the most profitable for the buyer. Additionally, Herrman & Hogson (2001, 2) add innovative suppliers are more efficient in supplying to the demand of the buying company, as they are able to develop alternative solution more quickly. It can be argued that supplier relationships provide a dynamic resource for the acquisition of new capabilities. Thus, many suppliers can offer expertise, which is one of the reasons to engage in close, cross-functional relationships with selected key suppliers. To cooperatively create value, Lambert & Schwieterman (2012, 337-338) suggest companies should use their expertise and be willing to invest and into the supplier relationship. Companies that are proactively upgrading their capabilities through learning and process adaptation while engaging in interactive supplier relationships are therefore grasping opportunities to enhance their innovativeness in their value chain. (Inemek & Matthyssens 2013, 581)

Mol (2007, 10) also supports the view of a collaborative relationship in which the buyer and supplier make dedicated investments in the relationship. This can be, for example, specific adjustments to processes or the provision of additional information. In a study conducted by, Inemek & Matthyssens (2013, 591), the authors found that cooperative product development between an international buyer and a local supplier relates positively to supplier innovativeness. It is clear, that in addition to the flow of materials, the flow of ideas increases the

innovativeness. Thus, buyers should consider working with a smaller number of suppliers to be able to deepen the relationships. (Ro, Liker & Fixon 2007, 363) With selected key suppliers, the buying company should be able to share information more easily and consequently cooperate in new product design and process coordination. (Mol 2007, 18)

However, it is important to consider that the relationship between buyers and suppliers are not always designed to be long-term or cooperative. In example, when the buying company buys in bulk, the supplier relationship is often different than with suppliers that provide more defined products. Bulk buying usually consists of short-term relationships, as the buying company's buying decision is influenced by the best price-quality ratio. (Cox 2004, 351-352) Cox (2004, 351-352) also mentions that in this case, the pressure of constant development and new innovations falls solely on the suppliers, as the buyer is able to test the market without any restrictions. Usually, the buyer only gives certain specifications to the supplier, such as the basic requirements for product and the quantity.

As mentioned, there are various benefits in engaging SRM activities. However, in order to succeed, there needs to be a clear methodology. While SRM provides the structure for supplier relationships, it also provides guidelines how the relationships are managed and further developed. Supplier relationship management is also involved in the product and service agreements. (Lambert & Schwieterman 2012, 349-350) The advantage of SRM is that it is able approach the supply chain link-to-link and relationship-to-relationship, examining each individual relationship. Additionally, SRM studies the relationships financial performance and impact on the organization. As is suggested by Lambert & Schwieterman (2012, 349-350) it is very necessary for organizations to be able to measure their supplier's performance on aspect such as cumulative revenue, overall costs and investments and link it to the supplier relationship management functions. This knowledge can improve the organizations' ability manage their supply chain as well as provide tools for improving it. Additionally, when done properly, SRM allows the buyer and supplier to negotiate mutually beneficial agreements that keep all parties motivated.

2.3.1 Supplier relationships

It can be argued that the purchasing function is the core of supply chain management. Gimenez & Tachizawa (2012, 542) stress, that in order to supply chain management to be successful, the purchasing functions need to be carefully reviewed. When considering sustainable supply chain strategy, Ahtonen & Virolainen (2009, 268) state supplier relationships play a key role. Supporting the view of Carter (2008, 386) and Porter & Kramer (2011, 66), Gimenez & Tachizawa (2012, 542) state outsourcing of non-core competencies has increased the share of outsourcing in the total costs of many organizations, allowing companies to focus more on their relationships with their suppliers. This has ultimately affected the willingness of many companies to focus more effort and resources on their supplier relationship management systems. Lintukangas, Kähkönen & Hallikas (2019, 8) see the value in this, as they explain the exploitation of supply chain strategies enable companies to grasp sustainability in their operations.

In a relationship, there needs to at least two parties involved. The parties exchange value which can consist of attributes such as services, products and knowledge. (Walter 2001, 365) Stuart (1997, 556) explains the exchange usually requires mutual goals and trust. Long-term alliances with suppliers can maximize the probability of business success and provide benefits for both parties involved through collaborative approach. (Stuart 1997, 557) In supplier relationships both parties find it worth-while to exchange monetary value to other value e.g., a long-term relationship and products. These relationships can take many forms in business context. (Cooper 1997, 78) There is an increased need of making management level decision which define the true nature of supplier relationships. Companies are making decisions whether to adopt collaborative partnerships instead of transactional relationships, says Gallear (2015, 6456). These partnerships are adopted to create mutual value for each party involved (Lemke 2003, 14).

In today's volatile market, the evolution for strategic partners and collaboration efforts has become inevitable for organizations. Companies are transforming their supplier relationships more collaborate and reciprocal, thus, demanding new skills and capabilities from suppliers.

This transition has made it more complex for buyers to select the right type of suppliers as they need to consider their capabilities on a broader scale. (Govindan et al. 2015, 66)

2.3.2 Supplier development

Krause & Ellram (1997, 21) define supplier development as any activity that a purchasing firm performs to improve their suppliers' performance. On the other hand, Khan and Nicholson (2014, 1216) consider supplier development as a planned measure to improve the short- or long-term performance of suppliers. Although Krause & Ellram (1997, 21) agree with Khan and Nicholson (2014, 1216), they emphasize that supplier development can also a help supplier to meet the buyers supply needs. The view of Krause & Ellram (1997, 21) has also been adopted by other authors, in example, Li, Humphreys, Yeung & Cheng (2012, 354). Li et al. (2012, 354) describe supplier development as the following: "effort of the buying firm with a supplier to increase the performance and/or capabilities of the supplier and to meet the buying firm's short and/or long-term supply needs." Another view of supplier development is offered by Cox (2004, 351). Cox (2004, 351) defines supplier development as a buyers' leverage over the supplier. The leverage needs to be acknowledged by both the buyer and the supplier, and thereby it should be seen as a decision factor in sourcing.

In a study conducted by Krause, Handfield & Scannell (1998, 39) they describe the development of suppliers as predictable measures of the purchasing firm that primarily seek to identify, measure, and improve supplier performance. Following a study by Krause & Ellram (1997), Krause et al. (1998, 54) found in a new study that there is one significant difference in the development of suppliers in organizations. Krause et al. (1998, 54) argue that supplier development can be used as either a strategic or a reactive tool. The main difference between the two is a strategic tool for gaining a competitive advantage, while a reactive approach means focusing more on the poor performance of the supplier (Krause et al. 1998, 54). Ultimately, the goal is to ensure that suppliers act accordingly and offer competitive products and services. (Krause et al. 1998, 54) It should be noted, however, that even tough organizations are engaged in supplier development, not all efforts are effective or successful. In many cases, suppliers do not report continuous development, leading to a decrease in suppliers 'share of the business.

In a study by Lai, Cheng & Yeung (2005, 399), they found that the development of suppliers, which focuses on both people and capital, has shown increased motivation among suppliers, which has affected the continuity of supplier relationships. While agreeing with Lai et al. (2005, 399) Wagner (2006, 560) argues that the development of a relational supplier can be seen as an act of the purchasing firm to invest in a particular supplier. This commitment can vary from many characteristics, the most common being the invested time, capital, or other resources. Together with Lai et al. (2005) Wagner (2006, 565) has divided relationship-focused supplier development into two different dimensions: capital and human. The capital dimensions include resources such as financial support, which is more common in smaller companies. The human dimension includes all resources that require real human action, such as counseling, process support or information sharing.

Krause & Ellram (1997, 22) argue, that when it comes to organizations that are aiming for good quality products while cutting down costs in order to stay on top of competition, supplier development should be acknowledged and explored. It plays an especially important role in organizations that move their production to countries where the supplier's performance doesn't hold up to expected standards. As mentioned earlier, while many organizations concentrate on their core competencies, suppliers have a big role in delivering products of expected quality standards while promoting competitive advantage. (Krause & Ellram 1997, 23)

Krause & Ellram (1997, 30) argue, one of the key points to consider when buying firms take the initiative to perform supplier development, is that the main focus should be on the relationship between buyers and suppliers. The buying company should invest into the relationship and aim for a long-term relationship, rather than focusing on the short-term. The key to successful supplier development is good communication, top management involvement and the willingness to collaborate, state Krause & Ellram (1997, 30) Dowlatshahi (2000, 128) reminds supplier development and relationship management both require a significant number of resources in addition to joint efforts. Thereby it can become costly. To effectively manage the supplier relationships, suppliers should be limited to only those who are able to bring competitive advantage for the buying company. This is why organizations should consider carefully, which suppliers to focus on. By limiting the number of suppliers, the suppliers can engage in various activities, such as process and product design. (Dowlatshahi 2000, 128)

2.4 Supplier evaluation

As Bradu et al. (2013, 283-284) state, companies have expanded their operations to new locations due to globalization. This is usually done in with the intention of acquiring raw materials and labor at a lower cost. Global food and agricultural supply chains can be described as complex; thus, they require a lot of effort to monitor and measure. This creates various challenges and expenses to companies. (Lalwani, Nunes, Chicksand & Boojihawon 2018, 3986) Even though there are a lot of effort and expenses required to monitor the supply chains, it is becoming a necessity for companies, as stakeholders are becoming more aware of social issues (Freeman 2005, 233). The sourcing from global supply chain forces companies to pay more attention to the ethicality of the products, as consumers are becoming more demanding and aware of latent issues in the supply chains. (Bradu et al. 2013, 284) The main objectives for supplier evaluation are to reduce risks in supply chains and to establish long-term relationships with suppliers (Winter 2016, 179).

Even though supplier evaluation usually consists of a clear framework of assessment and criteria, these often lack the viewpoint of sustainability. In addition to traditional approach, organizations are focusing more on sustainability issues related to supplier evaluation and selection. (Lasch 2016, 178) Sustainability can be divided into three dimensions; economic, environmental and social. Carter & Rogers (2008, 361) argue the term sustainability can be linked to these themes. Social, environmental and economic dimensions all reflect the responsibilities of an organization’s actions. As a term, sustainability has been adopted rapidly by various organizations. It is most commonly linked to discipline such as management and operations. (Sarkis 2015, 178-179; Carter & Rogers 2008, 361) Carter & Rogers (2008, 386) concluded supplier evaluation and collaboration efforts have a positive impact on an organization's environmental performance. Thus, effective supplier evaluation should measure each aspect of the triple bottom line: financial performance, environmental impacts and social responsibilities (Büyüközkan 2013, 3939-3940).

Suppliers have a major role in creating sustainable supply chains. (Winter 2016, 175) According to Pagell, (2009, 38) sustainable supply chains are described to be chains that govern environmental, economic and social impacts of their network while ensuring long-term profitability and value creation. Sustainable supply chains also ensure the survival of the companies in the network. Burrit (2014, 327-328) agrees that sustainable supply chains are mutually beneficial for all entities, providing profitability and continuity. From a risk mitigation point of view, Carter (2008, 366) defines the management of supply chain as the ability to simultaneously understand and manage environmental, social and economic risks of an organization. Lu (2007, 5451) mentions the concept of green supply chain, which consists of a variety of methods used to help su pplier improve their environmental performance. The two primary goals presented by Lu (2007, 5451) are:

"(1) consistently meeting specified environmental performance criteria among the participant s in the supply chain and promoting responsible corporate environmental behavior among all the players in the chain of products and services, and

(2) helping suppliers to recognize the importance of resolving environmental issues and supp ort them in installing their own improvement initiatives."

Shrivastava (1995b, 956) states the gradual change towards more sustainable future will require a comprehensive value reorientation of society and organizations. Instead of the current state of economic rationality, we need to move towards a broader concept of ecological rationality to ensure long-term survival of the earth.

Lalwani, Nunes, Chicksand & Boojihawon (2018, 3989-3990) state that for example the agriculture industry is known for using supplier code of conducts. In order to code of conduct to be met by suppliers, the standards should be formed only based on previous data collected from supplier evaluation. Handfield (2002, 70) reminds it should be noted that when environmental aspects are incorporated into purchasing, the process undergoes major alterations. These alterations may result in more complicated purchasing processes, as in addition to for example lead-time, cost and quality there is now the social and environmental responsibilities to be considered. Handfield (2002, 70) states there is a growing need for green purchasing to meet the environmental needs of organizations. Thus, there should be a clear decision-making sustainability framework in the purchasing process.

Gimenez & Tachizawa (2012, 541) identify two types of enablers for sustainability: internal and external. Internal enablers are things such as top management support, resources and the organizations commitment to environmental actions. External enablers on the other hand are factors like trust in the buyer-supplier relationship, as well as the overall clarity of sustainability objectives. Xu (2013, 908) reminds it is beneficial for organizations to consider social, ethical and economic decisions in contemporary supply chains, as there is rising importance of global interdependence. Handfield (2002, 78) emphasizes that there is an importance in capturing relative information from the viewpoint of the buying company's environmental strategic priorities. Meaning, if a company's strategy emphasizes circular economy actions, their purchasing policy should reflect this. Handfield (2002, 78) also concluded, that some sustainability attributes are more easily assessed than others, however there is a difference whether those attributes are the most important ones to evaluate in supplier evaluation.

Xu (2013, 908) analyzed the importance of seven sustainability criteria in selecting the right suppliers to support corporate social responsibility. The seven criteria include: human rights, pollution, long working hours, work environment safety, child labor, female gender labor and legal responsibility. (Xu 2013, 908) Incorporating sustainability goals and values can act as a persuasive measure for company members to perform better in their daily tasks. Meaning people are more engaged to pursuing substantial, rational goals opposed to more rational and economic goals. (Shrivastava 1995b, 956) Carter (2008, 370) however notes that there are challenges in implementing environmental and social initiatives. Some of these will of course fail, as other initiatives related to, in example product development, do as well. The key is to be resilient in these situations and to move forward from failures into developing new workarounds.

2.4.1 Sustainability criteria in supplier evaluation

According to Bai (2010, 254) environmental criteria defines the company's ability to perform environmentally friendly. Kannan, Govindan & Rajendran (2015, 198) argue the environmental evaluation criteria focus on promoting a green supply chain and work towards eliminating negative effects of the supply chain while improving the overall sustainability of the company

and its suppliers. Environmental criteria are divided to environmental practices and environmental performance. Social sustainability can be defined as serving both internal and external stakeholder needs reflected by the categories internal social criteria and external social criteria. (Bai 2010, 254-255; Dou 2010, 573-577)

The most common social and environmental criteria applied from selected literature is presented in tables 2 and 3. (Bai 2010, 254-255; Dou 2010, 573-577; Winter 2016, 175; Xu 2013, 908)

Table 2. Environmental criteria.

Categories	**Factors**	**Sub-factors**
Environmental practices	Pollution control	Remediation
		End-of-pipe control
	Pollution prevention	Product adaptation
		Process adaptation
	Environmental management system	Establishment of environmental commitment and policy
		Identification of environmental aspects
		Planning of environmental objectives
		Assignment of environmental responsibility
		Checking and evaluation of environmental activities
Environmental performance	Resource consumption	Energy consumption
		Raw material consumption
		Water consumption
	Pollution production	Production of polluting agents
		Production of toxic products
		Waste production

Environmental practices are divided into three factors, pollution control, pollution prevention and environmental management system. These practices include procedures that control and

prevent pollution by end-of pipe control, new product design and processes, being committed to environmental policies as well as identifying and planning environmental objectives. Environmental performance includes resource consumption and pollution production, which focus on consumption levels and the actual production of un-environmental material.

Table 3. Social criteria

Categories	**Factors**	**Sub-factors**
Internal social criteria	Employment practices	Disciplinary and security practices
		Employee contracts
		Equity labor sources
		Diversity
		Discrimination
		Flexible working arrangements
		Job opportunities
		Employment compensation
		Research and development
		Career development
	Health and safety	Health and safety incidents
		Health and safety practices
External social criteria	Local communities influence	Health
		Education
		Housing
		Service infrastructure
		Mobility infrastructure
		Regulatory and public services
		Supporting educational institutions
		Sensory stimuli
		Security
		Cultural properties
		Economic welfare and growth
		Social cohesion
		Social pathologies

		Grants and donations
		Supporting community projects
	Contractual stakeholders influence	Procurement standard
		Partnership screens and standards
		Consumer education
	Other stakeholders influence	Decision influence potential
		Stakeholder empowerment
		Collective audience
		Selected audience
		Stakeholder engagement

Internal social criteria are divided to employment practices and health and safety. Employment practices focus on themes such as security, employee contracts, diversity in the workplace, discrimination, fair compensation and so on. Health and safety criteria take into account incidents and safety practices. External social criteria affiliate to influence in local communities, contractual and other stakeholder influence. The influence in local communities include criteria related to overall wellbeing, education, housing, security of stakeholders, as well as supporting the local communities and educational institutions. From a contractual point of view, criteria focus on procurement standards, consumer education as well as standards for partnerships. Other influence companies can have over stakeholders are decision influence, stakeholder engagement, selected audience…

3 METHODOLOGY

This chapter introduces the methodology used for the study. It explains case study method and qualitative research. Data collection and material description are presented. The chapter then moves to explain how the data is analyzed and discusses the reliability and validity of the study.

3.1 Case study method

The research method used in the empirical study is a case study method. Case study method has been defined as a powerful research method in the development of new theory, state Voss, Tsikriktsis & Frohlich (2002, 196). A study based on case method can provide new and creative insight to the research question at hand, as well as help to develop new theory. (Voss et al. 2002, 195) It has been recognized that the case study method is particularly good providing answers for “how” and “why” questions (Voss et al. 2002, 199). Thus, case method studies can have a great impact (Voss et al. 2002, 195). There has been various new theories and business models created through case research, such as the lean manufacturing method. (Voss et al. 2002, 195) However, there are also challenges in conducting case research. It is often time consuming and in order to succeed, case method demands skilled interviewers as well as a focus in forming general conclusions about the results. (Voss et al. 2002, 195)

Case research process starts with the creation of research framework and questions. When creating research, the researcher should have a view of the general pieces of the study (study objectives) and the relationship between those objectives. Therefore, a general framework of the concept is needed. The purpose of this framework is to explain the main things which are the subject of research as well as the presumed relationships. (Voss et al. 2002, 199) It is also important to form an understanding of the theory used in the study. (Stuart, McCutcheon, Handfield, McLachlin & Samson 2002, 420) After constructing the framework, the tentative research questions are formed. The research questions help guide the data collection. (Voss et al. 2002, 199)

As the research questions are tentative, there is a possibility for movement and evolvement in the research as it goes further, meaning it is not uncommon for the research questions to be

modified, developed or eliminated as the research goes on. (Voss et al. 2002, 201) After this, comes case selection. As the research question(s) are formed, the case-based researcher moves forward to develop the proper measurement instruments for data collection. (Stuart et al. 2002, 425) In most case studies, the primary source of data are structured interviews, supported with unstructured interviews and/or other interactions. Other data can be sourced from personal observations, conversations, meetings etcetera. (Voss et al. 2002, 204) It is important to form a specific protocol to conduct the interviews, so that it helps to outline the subjects, states the questions and indicates the required data. (Stuart et al. 2002, 425) When designing the appropriate research protocol, the trade-off between efficiency and richness of data should be considered, meaning the researcher should always consider the correct number and value of the interviewees. (Voss et al. 2002, 205)

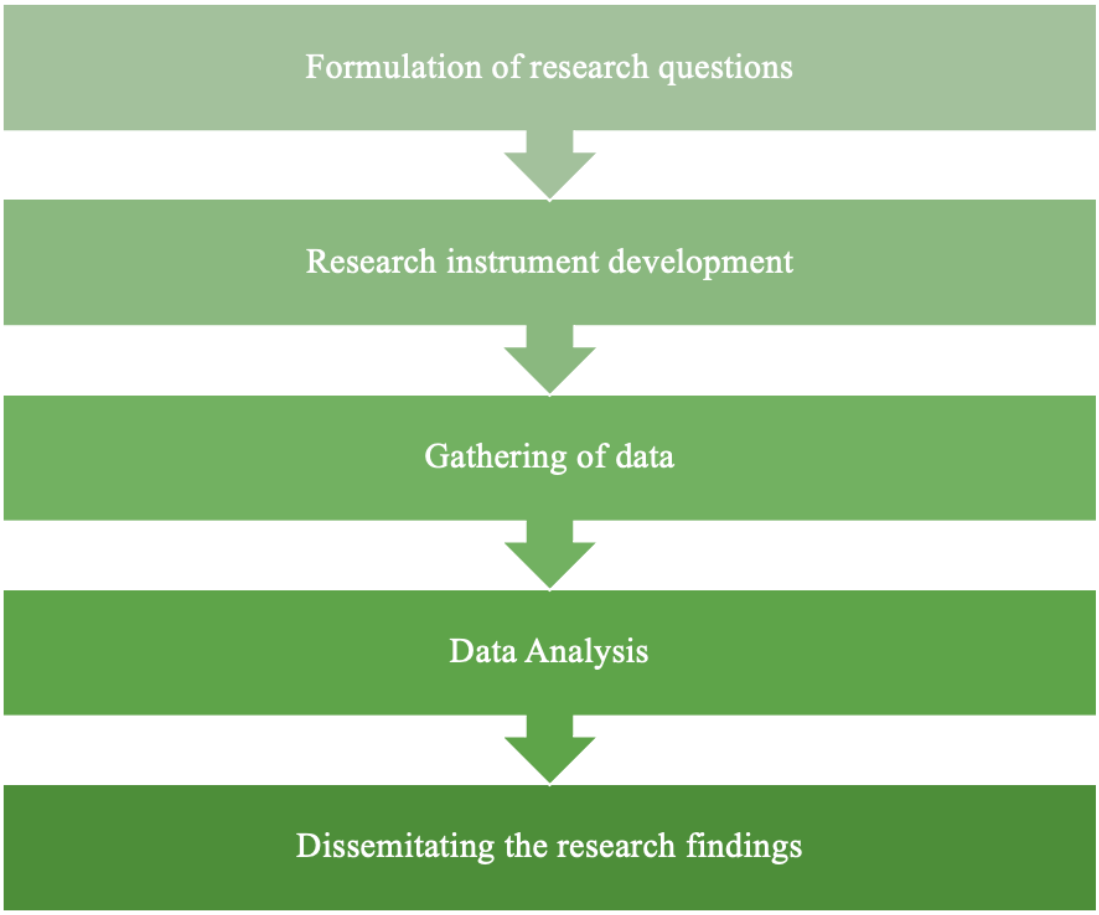

Figure 6. Research process model (Stuart et al. 2002, 420)

Qualitative research is characterized by its versatility and complexity. A qualitative research method often provides in-depth information that is poorly generalizable. (Alasuutari 1999, 82-85) Qualitative research is used to provide detailed information from a specific topic, helping to gain a comprehensive view and a deeper understanding of the object of research. (Thomas 2011, 152) Thus, choosing qualitative research method over a quantitative one can offer specific answers to a specific context whereas in quantitative research attention is spread wider by gathering a vast amount of information in order to build generalizable numeric results. (Holliday 2016, 2-6) This actively demonstrates that quantitative research conducted for sample groups often lead to findings or conclusions that can be extended to apply to other groups as well. On the contrary, qualitative research is not interested in generating results that are generalizable, but in fact seeks to explore a specific subject more deeply to gain further knowledge. (Thomas 2011, 152-153)

As qualitative research is always a version of its own subject and can never be fully trusted, thus, it does not provide completely objective and absolute information, even if one would prefer so. Conclusions can be drawn from the results obtained by researchers, but the results are always contextual. The results are always somewhat related to time and place of the research and strongly linked to the researcher. The reliability of qualitative research is more difficult to assess than the reliability of quantitative research, as it has more room for human errors. (Eskola & Suoranta 2000, 211-112) Additionally, Krefting (1991, 218) argues "A qualitative study is considered credible when it presents an accurate description or interpretation of human experience that people who also share the same experience would immediately recognize."

The author opted for qualitative research instead of quantitative, as qualitative research offered the opportunity to study the subject in a specific framework with limitations, providing detailed information and the opportunity to interpret the results freely without the issue of generalization. It also allowed the interviewees to answer questions freely, by giving the opportunity to share their personal knowledge and experiences without restrictions. However, Alasuutari (1999, 145) states, the analysis and interpretation of qualitative material is not limited to one or two perspectives on what the material tells us. This actively demonstrates that the collected data is open to interpterion of the reader and thus, is not very generalizable to any other cases. Notwithstanding, qualitative research method better served the goal of the case company, as they wanted precise information about the theme (sustainability factors in relation

with suppliers) and aimed to further analyze and develop the results internally, focusing on industry and business specific viewpoints.

3.2 Data collection and material description

Data collection is done with semi-structured thematic interview. Galletta & Cross (2014, 23) state a semi-structured interview is an efficient way of discussing specific pre-planned topics related to the phenomena of interest while allowing the interviewees to add their own views and opinions as well. A semi-structured interview can be formed in various ways and it allows versatility. In example, the questions can vary from open-ended questions to theory driven questions, grouped into different segments. Thus, a semi-structured approach allows researchers to combine practical experience and theory-based variables. (Galletta & Cross 2014, 23)

The data usually consists of written and taped records of the interviews, as well as company documents, when conducting case-based research. (Stuart et al. 2002, 427) Therefore, one-to-one interviews are the main data collection method for this case study. Interviews were selected as the main data, since the author found it the most efficient method to collect in-depth information about the case company. Koskinen, Alasuutari & Peltonen (2005, 157) describe interviews as a common way to collect qualitative data, providing insight to the interviewee's thoughts.

The selected interviewees work either in procurement or sustainability function of the company. Each purchasing manager has their own product category which they are responsible for. A list of interviewees is presented in table 4. The interviews took place in December 2020. Because of the global pandemic (covid-19) and safety regulations set by the Finnish government, the interviews were conducted online via Microsoft Teams. There were five interviews in total.

The interview questions were carefully structured by the author to provide an overview of the current supplier evaluation state of the case company as well as providing information about the incentives and motives for sustainability. The interview questions remained nearly the same for every interviewee, with a few modifications depending on the persons role in the organization. The interviews were thus flexible and allowed the conversation to flow within the

pre-set framework of themes. The researcher tried to remain neutral and avoided steering the conversation. Interviews were held in time windows of approximately one to one and a half hours. Every interview was recorded with the permission of the interviewee, in order for the author to be able to come back to the conversations and to quote the interviewees. The interview questions are presented in appendix 1.

Table 4. List of interviewees

Interviewee	**Position in the case company**
A	Head of Procurement
B	Procurement Manager
C	Procurement Manager
D	Director of Sustainability
E	Procurement Specialist

In addition to the data collected from the interviews, this study aims to gain validity and reliability by using secondary data provided by the case company. Secondary data consists of pre-existing data, such as documents of the sourcing policy and the former supplier evaluation form. All the secondary data were also provided by the case company itself. A list of secondary data used is illustrated in table 5.

Table 5. List of secondary data

Data	**Format**
Company sourcing policy	Pdf document
Results of the supplier evaluation conducted in 2019	PowerPoint document
Supplier evaluation form	Excel document

3.3 Data analysis

Appropriate research methods are essential to ensure the high quality of qualitative research, it should also describe the process for selecting appropriate analytical methods, taking into account the extent to which they help answer the research question or questions and are compatible for ontology, epistemology, and philosophical assumption methods that support the overall design of the study. (Fade & Swift 2011, 108) An important part of the data for case-based studies come from analyzing and interpreting what the interviewees are trying to say. However, it is usually challenging to point out what has been learned and how to present the findings. (Stuart et al. 2002, 427) In result, case-based approaches are thus often criticized. (Stuart et al. 2002, 428) According to Fade & Swift (2011, 107) although much of the analysis performed in qualitative research falls within the broad scope of thematic analysis, the broad scope of qualitative research provides the researcher with many viable alternatives to data analysis techniques. While some qualitative researchers advocate analyzing interview data directly from recordings, they are usually transcribed to produce written text to use in analysis. However, this transformation of speech into written text inevitably involves issues of accuracy, fidelity, and interpretation. (Fade & Swift 2011, 108)

Data can be transcribed at different levels, meaning the accuracy of transcripts. The decision about approach should be guided by the research questions and theoretical frame that supports the research. To give an example, when simple factual information related to a research question is required, information that is not directly related may be omitted. (Stuart et al. 2002, 429)

There are two ways to address the important role of the researcher during data analysis: a literal or an interpretive approach. A literal reading of the material requires the researcher to distinguish personal prejudices during the analysis. Qualitative researchers can also use reflexivity to facilitate a more interpretive reading of qualitative data…" Reflexivity refers to the process by which a researcher recognizes and reflects on his or her role in the research process." state Fade & Swift (2011, 108) In this context, it can be used as a tool to allow the researcher to formally acknowledge its impact on data analysis so that it can be presented clearly when the research is written.

The steps of data analyzing in this study were the following:

1. Data collection through interviews
2. Collection of secondary data through email
3. Transcribing interviews in word
4. Organizing the interview answers by themes from each interviewee with excel
5. Familiarizing with secondary data
6. Forming summaries from each theme of questions
7. Combining final summaries and secondary data to discussion

3.4 Reliability and validity of the study

Eskola & Suoranta (2000, 209) state that qualitative research is dependable on the researcher, as the reliability of the study must be measured through the process. Ultimately, reliability can be simplified into one question:

If the study was conducted twice under same conditions, would the results be similar?

This contributes to the fact that when studying the same case twice, the same results are given both times. (Thomas 2011, 153) However, Stuart et al. (2002, 430) argue one common criticism case studies face is the small sample size in research, affecting the generalization of the results. However, using multiple sources of data can strengthen the validity as well as the reliability of the study, states Yin (2003, 15). The generalization of results is often difficult, from which the reliability suffers. As mentioned, the reliability of a study can be considered good if the results are not random. Low reliability can be due to, for example, an incorrect measuring instrument or a misinterpretation. For example, in an interview survey, the respondent may understand the question differently than it is intended, answer dishonestly, or remember something incorrectly. (Thomas 2011, 154; Holliday 2016, 7) The interviewer may also record the answer incorrectly. While research should always be as reliable as possible, lack of reliability does not necessarily hamper research. These are factors that need to be taken into consideration when assessing the reliability of the thesis. In order for the study to be as reliable as possible, the author needs to form the questions in a manner that is only explained and understood in one way to avoid misunderstandings. It is also important that during the interviews the authors remains non-bias and does not steer the conversation in any way. (Holliday 2016, 8)

When it comes to this particular study, the reliability of the results is moderate. While the sample size is small, the accuracy of the answers can be considered good. The Interviews were conducted for each product category manager, and in addition managerial point of view was recorded from two different interviewees working in both procurement and the sustainability department. The purpose of the study was to create a supplier evaluation framework for the case company, which is why a larger sample size would have not provided higher quality data. The interviews were recorded, which allowed the author to re-visit the interviews. The reliability of the study suffers from the lack of generalization. (Thomas 2011, 153) In this study, the results are only applied to the case company and its operations, rather than being generalizable for other supply chains with different liabilities. However, the results can be generalized for other operators in the food industry, that suffer from similar liabilities in their supply chains.

The validity of the study can be divided to two parts, internal and external validity. Validity of the research refers to the level of truth the results hold among the participants of the study, compared to similar individuals outside the study. It is important to evaluate if the study has adequately measured the key concepts in the study or not. Stuart et al. (2002, 428) concluded presenting the data collection sources and study method can improve the validity of the study, as the reader is able to form a chain of evidence of the study.

When it comes to the validity of this study, information was gathered from multiple interviews, company materials as well as various pre-study conversations, which makes the validity of the study good. The interviews were held close together, and the answers reviewed and transcribed right after, which increases the validity. The research process was planned and documented. In summary, the validity of this study can be considered good.

4 EMPIRICAL RESULTS OF THE STUDY

The aim of this chapter is to present analysis and results of the study based on the interviews and secondary data. The interview framework of the interviews consisted of four themes, which were divided to the following:

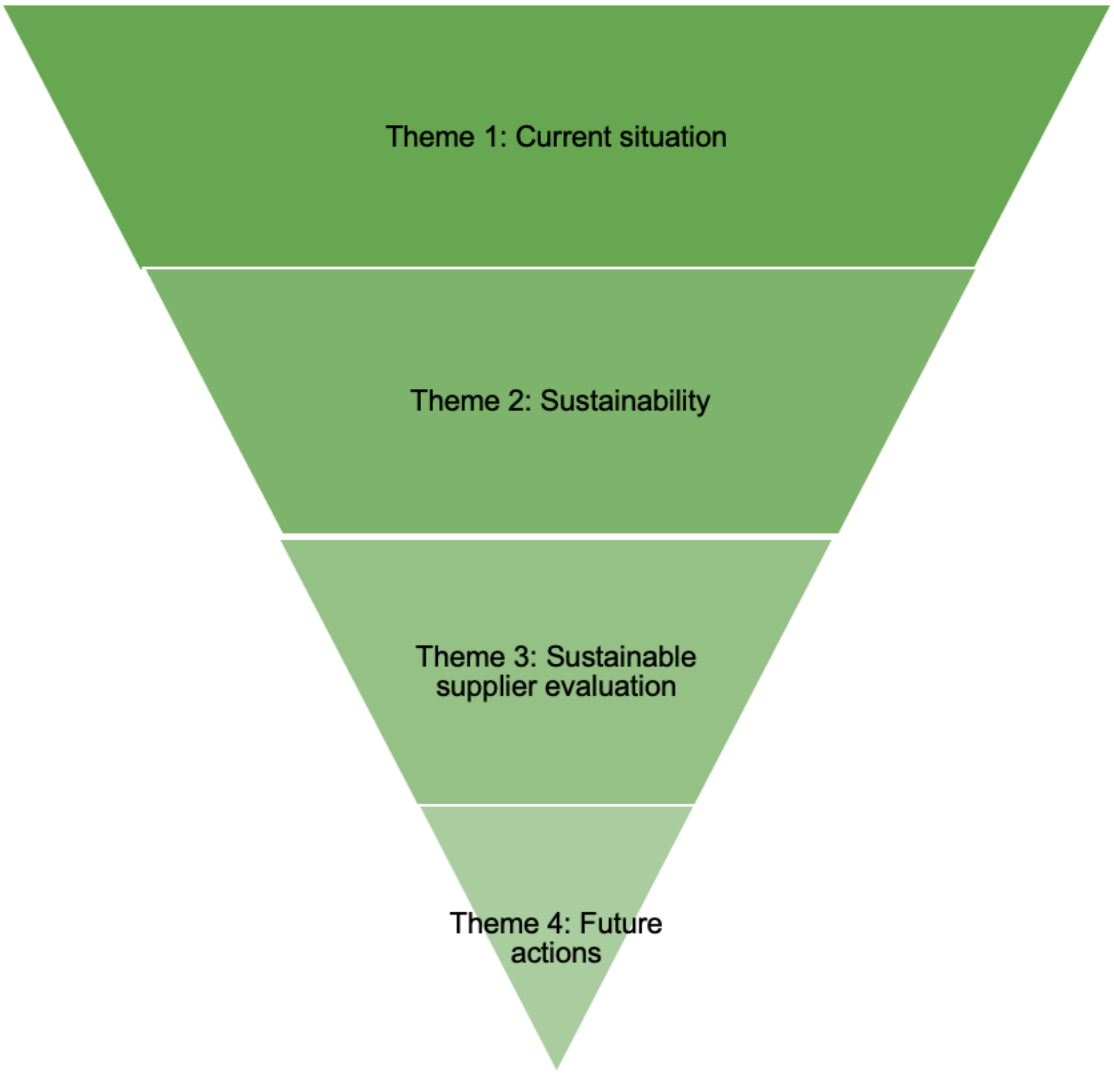

Figure 7. Interview themes

Theme 1. Current situation

Theme 1 aims to map out current practices the case company has set in place regarding supplier evaluation. It also discusses the primary motives for supplier evaluation as well as the reactions received from suppliers.

Theme 2. Sustainability

The objective of the questions in theme 2 is to study how the interviewees define the term sustainability and how they link it to the field of procurement. In addition, it seeks to map out the importance of sustainability in the food industry, what are the sustainability liabilities of the case company regarding their supply chain, weaknesses and finally the main reasons and incentives to invest in sustainability. Theme 2 also touches base on previous sustainability actions and achievements, such as applying certifications.

Theme 3. Sustainable Supplier Evaluation

Theme 3 dives more into the actual evaluation process of the suppliers, mapping out the pre-requirements and sustainability criteria posed to suppliers. It also questions the reasons for applying/not applying sustainability criteria.

Theme 4. Future actions

The last theme questions the future actions related to sustainability criteria in supplier evaluation.

4.1 Company introduction

The case company has started its operations in the early 1900's. It is nowadays a part of a bigger group of companies, that are all owned by a mother company, which is one of the largest companies in the category industry in Europe and has become strongly international in recent years. In addition to Finland, the group has operations in many other counties, e.g., Italy, France, the Netherlands, the United Kingdom, Brazil, the United States and Australia. Worldwide, the group operates in more than 100 countries. In 2019, the company's turnover was 914.5 MEUR and the number of employees was over 3000. The case company operates in Finland, having distributors in both the Baltic and Nordic countries with sales of 83.8. MEUR (in 2019). The company operates in the food industry. The food industry can be defined as the industry that produces food or food raw materials. As a system, food production is a complex, global array of different business sectors that produce most of the food consumed by the world's population.

The case company has divided its procurement to three bigger categories, in which each procurement manager/specialist is accountable for. The estimated number of suppliers overall is 84, but this number does not include suppliers with whom the company's contract has not been renewed for 2020 and forward. The number and percentage of suppliers is presented in figure 8. As can be seen from the figure, there is a big difference in the number of suppliers between the interviewees, however, it is important to note that this does not reflect the spend of these categories. For example, product category Y is sourced from one supplier who acts as a broker between the case company and suppliers in the countries of origin. This category covers the biggest spend of the company, estimated over 41 million euros per year. On the other hand, the category F holding 30 suppliers covers around 6 million euros per year.

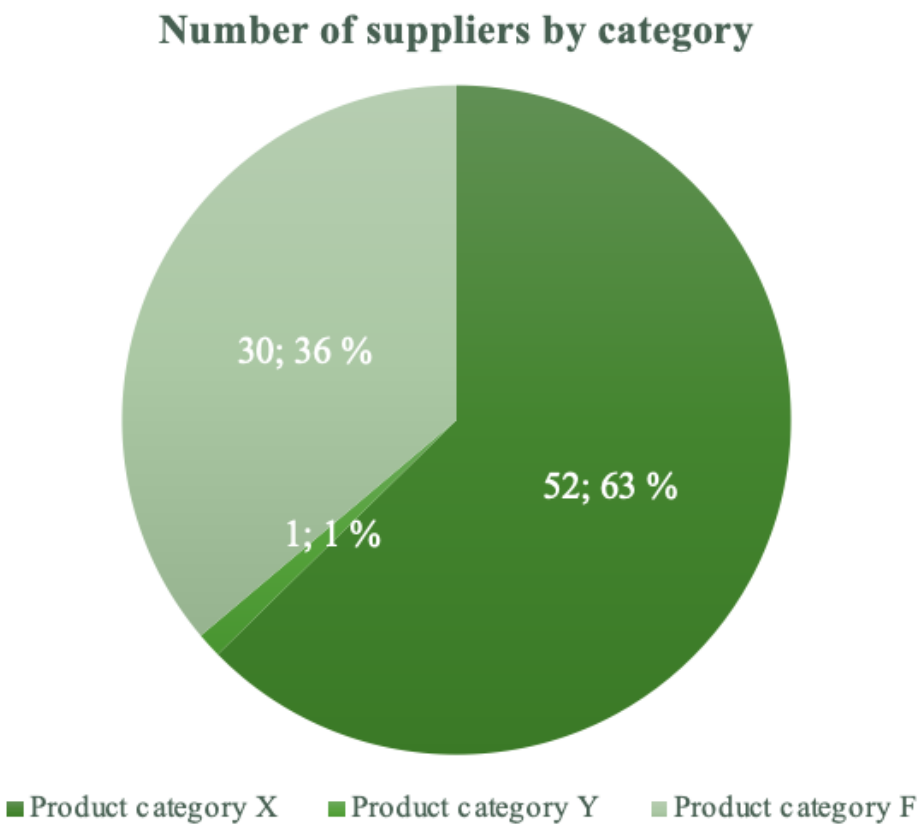

Figure 8. Number of suppliers

As the case company has limited resources, it has optimized its sustainability resources so, that all sustainability goals are embedded in every level of the organization. Each employee of

the organization is responsible for sustainability in their own day-to-day actions. Additionally, there are a few job descriptions, where the title "sustainability" is mentioned, and their job descriptions are strongly linked around sustainability. However, it is important that all employees work towards a common goal. The company has started a sustainability group which fills the role of sustainability department every 2 months. The group considers cross functional issues, takes part in decision making and discusses what is taken to the top management along other tasks.

"Responsibility should not be a detached supporting function but should rather be part of every function." is a viewpoint that was presented by interviewee D; however, this opinion was strongly supported by each interviewee.

4.2 Current situation of the company

Supplier evaluation is something that the company has recently started doing. It is important to note, that in some product categories, the suppliers are evaluated by the parent company, and is not done by the subsidiary. The procurement department has done one big project one and a half years ago, where they mapped out all their suppliers, aiming to gain more knowledge in terms of total costs, quality and risks of suppliers. The evaluation was conducted for selected suppliers, which meant 81 in total. They included the last 12 months' worth of purchasing data as well as other data from their report software. The suppliers were reviewed and rated by various variables, such as

1. Price and contract
2. Product development
3. Quality
4. Deliveries and customer service

At this time, sustainability was yet to be taken into consideration. This project helped the procurement managers to get a comprehensive view of the current situation with their suppliers. However, there was no actions taken regarding the results. The suppliers did not receive feedback from this evaluation, as it was conducted using only existing, internal data. Procurement manager C stated the following:

"Personally, I got some help from the data regarding my day-to-day work and was able to look for alternative suppliers, if there were some unfavorable scores due to big quality issues."

Now, supplier evaluation is scheduled to be conducted once a year. In addition, if there is a bigger meeting held not close to the evaluation date, delivery data and quality complaints will be discussed with the supplier. The motives for including sustainability as a factor in supplier evaluation varied between the interviewees. All the interviewees agreed that as sustainability is part of the supplier code of conduct and the company strategy, it should be reflected on the supplier evaluation as well. On a managerial level, the company believes strongly that it wants to go in this direction in every aspect of their business. They also view sustainability as a form of competitive advantage - meeting customer and consumer requirements regarding sustainability. Sustainability is seen a big part of supplier relationship management and a part of risk management as well. From an operative point of view, including sustainability as criterion helps to facilitate day to day work when weaker suppliers are left out, thus, you can invest in good suppliers. This enables more efficiency, fewer quality complaints and successful deliveries. Other results that can be expected are the development in supplier monitoring, systematic measures taken based of the results, evaluating new suppliers in a changing environment, advanced reporting – converging data with suppliers, compliance with the regulations of FFSC and ISO certifications…

The previous reactions from supplier evaluation have been mainly positive, however it depends on the supplier. For suppliers, sustainability evaluation can mean a rather large workload (audits, reporting, etc.), but it can also be a source a competitive advantage. For example, the supplier's carbon footprint calculations for products have been really important to the case company, when choosing a supplier to work with this can be adapted to other sustainability attributes as well. As the case company operates on a global scale, there are major differences between suppliers, as some of are used to regulations and some operate in a "freer" environment. For example, European suppliers are used to evaluations and knowledge the fact that they are operating in an environment such information must be provided. This might not be the case for a supplier operating in Africa.

Interviewee B: "It is a part of modern business world. It of course takes time from suppliers, but they are already used to it."

Interviewee C: "It really depends on the supplier, one of my suppliers is excited about the supplier audit because they know there are no liabilities in their manufacturing process. On the other hand, some of my suppliers are traders, and would not want to reveal their supply chain."

Interviewee E: "It really depends on the tone of the survey. Many of our suppliers have large customers, and there are a lot of surveys to fill out. Therefore, the response can be a little negative, as "another survey" to fill out. Because of this, a clear survey is a key factor. It needs to be comprehensive and clear."

All interviewees agree, there should be a justification for the survey presented clearly at the start to ensure transparency. It is also important to give feedback after the survey in order to keep the dialogue open with the supplier. Supplier evaluation should be seen a dialogue between buyer and supplier, where the motives go beyond just seeking issues related to quality and efficiency, but rather aim bettering the whole supply chain. Taking into account sustainability and social issues, these evaluations enable development of suppliers through an open dialogue, that includes evaluations, findings and feedback that aims to engage the suppliers. This can help to endorse mutual trust and to strengthen the relationship.

4.3 Sustainability

Firstly, the interviewees were asked to define the concept of sustainability. This was made in order to identify the overall standing of the interviewees regarding sustainability. This was also important to establish a common ground about the definition of the term, so that misunderstandings would be avoided. The term sustainability was asked to be defined from the procurement point of view, if possible. The interviewees described the term sustainability as the following:

Interviewee A: A state of mind to act with the current conditions, keeping future generations in mind.

Interviewee B: "To leave the globe in a good condition for the next generations to come."

Interviewee C: "The conscious awareness of the journey of raw materials from seed to the consumer's dining table."

Interviewee D: "In addition to profit, companies should take into account people and the planet as well."

Interviewee E: "An opportunity to develop activities and livelihoods."

In academic literature, sustainability has been defined in various ways. However, they all come close to the same conclusion. For example, Cassen (1987, 126) defines *sustainability as* development that is able to meet the needs of the present without compromising the ability of future generations to meet their needs. All the interviewees' answers adapted to this same definition.

In the field of food industry, environmental and social sustainability have been a known factor for many years. However, in global food networks and supply chains it can be hard to grasp the real state of the supply chains and keep up with the monitoring and governance of the environmental and social factors, as it requires a lot of resources and can become costly. However, as organizations face a lot of pressure from customers, consumers, governmental and non-governmental organizations, the media…

Nowadays, customers and the consumer base are insisting more sustainable products. One of the company's biggest customers, a Finnish retailer Kesko, is ranked as the world's most responsible retailer, which puts a lot of pressure to ensure sustainability in the supply chain. (Kesko 2020) Retailers usually have significant sustainability goals of their own, in which the supplier (in this case the case company) needs to comply with the objectives. As Finnish consumers pay an increasing amount of attention to issues related to sustainability of the products, it works as an incentive to find new ways to tap into this market. The question arises: Does money weigh more in the scale, than sustainability? The two are no longer contrasted, but in fact sustainability is starting to form as a source of competitive advantage for many operators. Additionally, the environment of operation has a strong impact in Finland, as legislation and standards also drive sustainability forward.

In the food industry, there are commonly developing countries included in the countries of origin, which makes the supply chain vulnerable for social issues. People in the farms are interested in making a strong living and supporting their families, which is why companies should help to develop relationships with the farmers to make them strong. Farmers should be educated and taught the best practices to ensure there are no environmental issues in the farming process. There is also a possibility for issues such as child labor, compromised child health and community safety, which are important things to be aware and to be proactive in fixing.

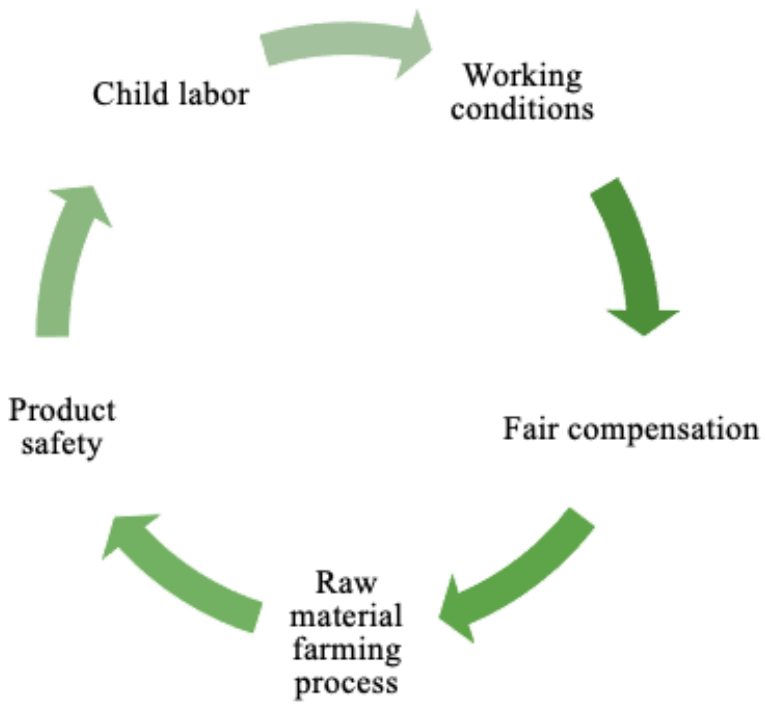

Figure 9. Social factors

One of the serious issues that came up in the interviews, that can have far-reaching effects in the food industry, is product safety. As the organizations provide products that are edible, there needs to be a focus on the actual farming process and its impact on the final product. The company needs to be sure that the product is safe for the consumer to consume, thus, they must for example be aware of the pesticides that are used in the country of origin, as well as the

overall working conditions and methods. Because of this risk, the safety and quality of the raw materials are always measured closely through a standardized process by trained professionals.

Buying companies have to acknowledge their part in the environmental effects. During the interviews, it became clear all the interviewees acknowledged the impact their sourcing actions have on the environment. Themes, that came up the most in the interviews were, for example, climate change, GHG emissions, loss of biodiversity, draining resources such as energy, water and soil, as well as the destruction of rainforests. These were all seen as a major issue in the supplying countries of origin and seen as a motivator to find more sustainable ways of operating.

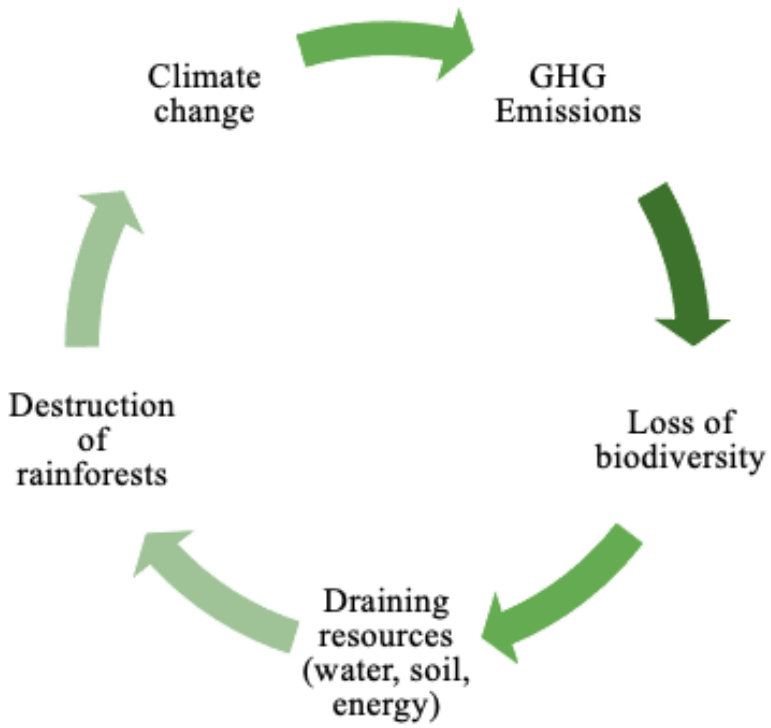

Figure 10. Environmental factors

The company's supply chain is exposed to various sustainability liabilities. In the interviews it became clear, that it is sometimes difficult to stay on top of all the different latent problems

there might occur in the large pool of suppliers. However, globally, there is a lot of conversation about child labor, forced labor, lack of employment contracts, unclear terms of employment and questionable working conditions. When the company has conducted visits in countries of origin, during the visits all have seemed okay. It is important to note, that these visits where not auditing trips. Considering the sustainability aspect of certified products, a third party ensures that the products are produced responsibly. Due to this, the company has not taken part in auditing the suppliers. Nonetheless, through these visits the company has been able to see the current operating conditions. Unfortunately, these might not reflect the whole truth. The procurement is aware of this fact and aims to gain deeper knowledge in the future. There are also cultural differences in many countries – for example in Uganda, at some plantation's workers refuse to wear shoes, which would be considered bad working conditions in other countries. The overall well-being of employees is an important matter, that should be one of the main focuses. With other product categories, where audits have been possible, the farming process is at a good level, but there are still problems with the processing of raw materials. The factories in the tomato processing section have a considerable number of safety-related regulations, while some facilities do not have any procedures (e.g., hearing protection, safety shoes, hair nets).

From an environmental point of view, global sourcing brings the challenges of transport and logistics. Although produced responsibly, the transportation of the products is not environmentally friendly. All materials have to be transported through freight and trucks, which causes emissions. However, this is a known issue, and these transportation methods are not possible to be replaced with other methods at the moment. In farming processes, a lot of water, fertilizers and pesticides are used, which can result in soil eutrophication. A problem with fertilizers is that they can be washed of by rainwater, moving with it into rivers and other bodies of water. This can increase the level of minerals and cause eutrophication. Eutrophication then encourages the growth of algae. Farming methods are also an important matter, and as some of used raw materials are retrieved by felling, plantations and small farms have been reported to cause deforestation, erosion and even deforestation.

4.3.1 Weaknesses and strengths related to sustainability

One of the weaknesses this far has been the fact that there the company has not had its own audit trips with suppliers. The visits have been to the so called “model farms”, which the supplier has selected – leaving room for deceit. Interviewee E stated that the view of some suppliers might be too positive at the moment, while the truth might be different. The suppliers might not take the visitor to the “worst” sites, and there might be some bad code of conduct in the model farms, but everything seems to be good at the day of the visit/inspection. As the visits has been organized by export companies (in some product categories) some of the information might get left in the dark to obtain a better image. When sourcing products through exporters (which source from risk countries), it is difficult to stay on top of the issues in the supply chain – the exporters are responsible for the audits, and the audits are spread regionally, not all facilities have been audited. Still, interviewee E finds that there is a certain amount of group pressure on farms to perform sustainably in order to ensure better business. The issues are highly dependable of the country of origin and the supplier itself. There can be clear differences between suppliers supplying the same product in the same country.

Problems arise as well in other product categories, which are mainly sourced from Europe. One of the issues is the tier-2 clearance, and transparency in the supply chain. It is a terribly big palette – something new can always be found somewhere in the chain. A prominent issue mentioned by interviewee B is the fact that sometimes, even if asked and clarified, not all things may come to light with some suppliers. This again boils down to the resources, which in the end are limited. The question remains, how much should be done by external auditors and how much is done by the company itself?

Additionally, Interviewee C points out that in the food industry, certificates are often perceived as the only widely reckoned sustainability measurement by the public. As much as the company wants to be responsible, aware and take steps towards reducing sustainability risks, the downside is that a lot is done in the countries of origin without being under the certificate. Consumers are therefore in the dark because it is difficult to communicate effectively. It is common that the average consumer does not know if the right things are actually happening in the source but assumes that everything is fine. Some of the product categories the company holds are challenging, as there are no possible certificates for every raw material – this leaves room for error and interpretations of the media. Interviewee D stated, that another challenge the

company faces is the lack of resources. As the company is fairly small, its resources are not as extensive as its bigger competitors. At this time, the management has to make tough choices where it can pour its resources when it comes to sustainability. Still, the primary role of the company is to do business and profit, yet with sustainability in mind. Everything is viewed through cost-effectiveness.

On management level, sustainability is reflected in the company values, and the company is ready to invest in it. Some of the investments have been the use of renewable wind energy in production, as well as the development of circular economy methods in production. Sustainability has slowly but surely become integrated into operations. The goal has been to make it a way of doing things, not just an additional expense. Of course, the management has had to consider the ability of the busines to absorb additional costs related to these sustainability actions. Procurement has taken steps to provide facts and viewpoints of sustainability in the supply chain. As procurement is included in the responsibility working group, it has the opportunity to influence decision making. Partnerships are harnessed through supplier cooperation, states interviewee A, which is why the procurement team should be seen as an enabler, offering expertise and the needed insight on suppliers. Partnership thinking should be raised continually to grasp hidden value.

Another viewpoint from interviewee A is that there could be a stronger will to take the (sustainable) company strategy forward, rather than just being reactive. At that, the price competitiveness and resources come to the picture. Being sustainable does not directly affect the bottom line in a positive way, which makes it difficult to balance between costs, responsibility and profitable business. The company has set its sustainability targets realistically, yet ambitiously. Still, a certain realism must be involved in this industry, because of the complexity of supply chains. No one in the world can assure that all things are okay and done “by the book” every single hour of every single day. Nevertheless, the ambition to work toward optimizing the supply chain and operations is important.

The company’s strength is the overall commitment to sustainability. Employees are truly committed to promoting sustainability and it shows in the professionalism through the whole organization. The company has an agile and quickly responding organizational structure, which makes it easier to evolve in an ever-changing operating environment. Despite all the challenges,

in its own concern the company is a pioneer in sustainability and has been providing the other entities with fresh ideas and instructions on being more sustainable.

4.3.2 The main incentives for the company to invest in sustainability

When asked about the incentives and motives behind the company's investments in sustainability, interviewees all listed both internal and external factors.

Internal

Interviewee C sees motives are strongly related to product safety and quality, as they are vital in the food industry. As there has been investments made in more sustainable processes, it has affected the overall quality and safety of the end product. The company has a strong will to provide better products to the end user, this is why there is internal pressure to invest in sustainability. Additionally, the company has formed an internal incentive to become more responsible in every aspect of its operations. This vision is also supported by interviewee D, who stated these factors have internally driven the operations towards sustainability. The company also sees sustainability as an opportunity to differentiate from competitors, as well as a competitive advantage against some operators. Interviewee B explained that there has also been a lot of internal pressure and passion to better the relationships with suppliers, while creating more transparent supply chains. Investing in investigation of supply chains provides more information about the suppliers, thus increases the ability to mitigate risks.

External

All interviewees agreed that external pressure has been a strong incentive to take sustainability seriously. The public pressure from the media, as well as the intensified competition has affected the company's viewpoint on sustainability. When operating in the 90's, sustainability was not as prominent of a subject it is nowadays. From approximately 2010 the topic has been on the rise, which has caused a great deal of external pressure for the company, stated interviewee D. For the last ten years, the company has experienced a change in customers, who have themselves become demanding and trailblazers in sustainability. Also, competitors have made large investments in sustainability, becoming one of the most sustainable companies in

the whole country. It is often stated that consumer base is becoming more aware of sustainability issues and demanding more sustainable products, but in the case of the company, this has not created “enough” pressure or worked as a main motive to invest in sustainability. Sustainability is now seen as an enabler of conducting business (license to play). In addition, Interviewee E stated, that in some product categories, there might be a direct benefit in bids for the company, whose products are certified.

4.3.3 Viewpoints on certification in the food industry

As mentioned earlier, food industry, which includes fast-moving consumer goods (FMCG) is known for several certifications. The certifications provide information about in example, the origin, health or method of production of the product. One of the most recognized labels is the Fair-trade label. Fair-trade label informs consumer that the producer of the product has received a proper compensation for their work. (Yamoah, Duffy, Petrovici & Fearne 2016, 181) As the company has many products that are certified (some with multiple labels of certification) it was interesting to study are these certifications a source of sustainability. This question showed scatter in the results. From a procurement point of view, the advantages of this depend on the certificate. It is mainly considered a good thing that such certificates exist as they provide guidance and help to create commonly used standards. Certificates can also be an advantage in negotiations. However, there are issues related to certificates in some raw material categories. Interviewee C provided an interesting point of view:

In some countries, farmers are very poor, and it takes a lot of money for them to be able to become certified farmers. The certificates provide a better income for these farmers, but it needs to be considered that there are a lot of farmers left out from the certified circle. If you source only from those with better incomes, others will be left out and will not receive any income. Some certificates can be exposed to corruption and can in fact be bought without any sustainable efforts. This supports the conclusion that even if there is a certificate, it does not ensure everything is okay in the first tier. Thus, companies need to be aware of the risks.

The company has been able to source from family farms, which has been a great way to contribute to many livelihoods. Even though the company would like to do more, the sourcing of tens of thousands of kilos yearly results in the lack of resources. The company is inevitable

unable to control all countries of origin. Therefore, it is vital to rely on external systems that organize the operations. “The certificates are one of the most important principles of sustainability certification”, stresses interviewee D. There are also challenges related to sales and communications of the products; some certificates are clearer to communicate than others, but on the other hand can lead to confusion as they are not comparable with each other. Even though consumers knowledge and understanding of different certificates differ, it is important to the company to be able to perform more sustainable.

All in all, the results indicate that even though certificates increase the level of sustainability efforts, it does not equal to sustainable, responsible or ethical.

4.4 Sustainable Supplier Evaluation

To sum up everything that has been stated so far about the company’s supplier evaluation; there has been efforts made to evaluate suppliers independently through attributes such as quality, price, deliveries, product development and so on. The company has not included sustainability as a factor in evaluation yet. Still, this actively demonstrates the fact that there is a strong state of mind to develop suppliers and supplier relationships further. To develop sustainability in supply chains, the procurement team has started to include pre-requirements to new suppliers regarding sustainability, yet this is a fairly new part of supplier selection. Suppliers are asked to fill an information form and a proof of certificates are requested. The company has also formed a code of conduct for sustainability, and new suppliers are informed about these practices. It important for the suppliers to comply with these practices and to sign the commitment. Yet, it is worth to note that after signing the sourcing policy it has not been monitored whether or not there is actual compliance with the code of conduct.

To form a better view of the current practices of supplier evaluation, the interviewees were asked why sustainability criteria have not been applied in supplier evaluation before. The main reason is not only the lack of time and resources, but also the difficulty of measuring sustainability numerically and getting reportable results. After all, there is no point in measuring something you cannot use to manage. However, sustainability needs to be measured in order to manage effectively. There has been interest in including sustainability as a measurement, but there has been no consensus on which indicators to measure. Another point of view from

interviewee A is that the inclusion of sustainability has been the next step of evolution in supplier evaluation for the case company. Changing business environment and customer demand has embarked on the construction of more sustainable supply chains, thus the steps have been taken to expand supplier evaluation further. Before this, the company has heavily leaned on certificates and standards in products which has been an effective form to ensure a creditable level of sustainability. Ambitious sustainability goals reached so far would not have been achieved without external operators. In interviewee E's product category, a distributor has acted as a strategic partner to achieve goals and has done most of the work towards sustainability through ensuring certifications. The company started from the product base and is now keen on moving forward to supply chains.

While the company has set clear goals for sustainability in the future, it was mentioned there has not been consensus of which attributes to measure in sustainability. For the validity of the study, it is important to define what the company aims to gain from the information gained from the suppliers. The interviewees listed the following desired outcomes:

- *Map out the current situation*
- *Clarify the large pool of suppliers*
- *Provide interesting data*
- *The criteria for supplier evaluation are made more comprehensive, which leads to further development of the supplier*
- *In addition to just "hard" criteria, such as payment term and delivery times, suppliers could be measured for "softer" attributes such as environmental efforts (lower emission levels, reduced packaging…)*
- *The results can help to form criteria for supplier selection*
- *Which seem to be performing well in terms of sustainability actions, and which ones do not*
- *At what level is supplier sustainability work at the moment and where there may be challenges and areas for development in those specific suppliers*
- *Help to find which areas to focus on (environmental versus social for example)*

4.5 Future actions

The company's objectives with regard to the results of the supplier evaluation survey are clear, but it was also important to find out what measures will be taken on the basis of the results of the evaluation form. The fact of which every interviewee agreed upon, is that the results from the evaluation will be used for supplier relationship management and development.

The company has set its next sustainability goals, which includes guidelines for raw material sustainability targets, certifications and so on. The supplier evaluation form will help the procurement to work towards these goals by providing valuable information on the current state of the suppliers. After the results are gathered and reviewed, the procurement managers can plan possible audits for suppliers that raise red flags. It is important to note that during the interviews it was highly stressed, that whatever the results may be, none of the suppliers will be dropped immediately even if there where liabilities found. The company wants to form solid partnerships with their suppliers and sees this as an opportunity to grow together. On the other hand, if some suppliers perform well, the company can leverage this as a benchmark and learn new procedures.

After giving feedback from the gathered information, the reaction of supplier reveals the level of desire and willingness of the supplier to make amendments towards more sustainable procedures. Through the results, the company aims to find strategic partners to develop activities together in a more responsible direction. A preliminary set of steps based on interviews is illustrated in figure 11.

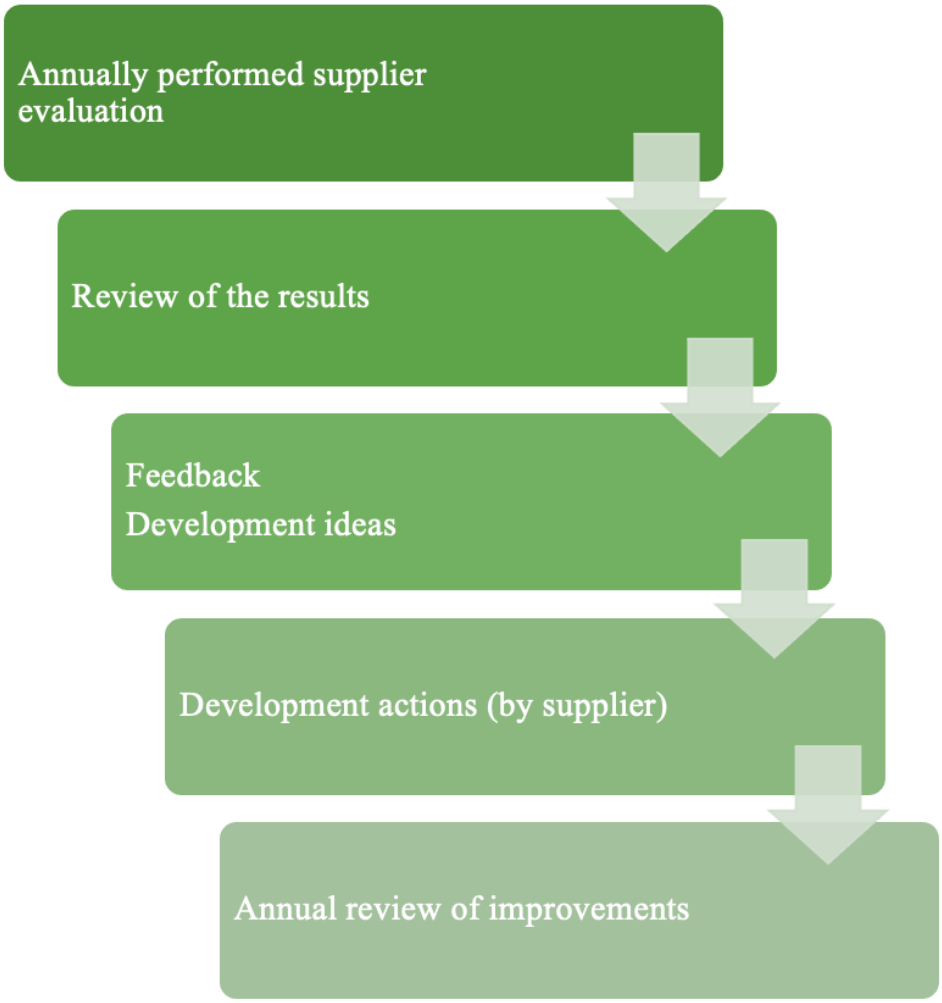

Figure 11. Action plan after supplier evaluation

The aim is to perform supplier evaluations annually. After reviewing the results, feedback and possible development ideas are communicated to the supplier, which has then had the opportunity to develop their actions towards more sustainable procedures. The developments will be reviewed annually for better management and to form cooperation efforts. Through this supplier development, the company hopes they can form common goals with suppliers, as well as discover new, strategic partnerships. The benefits essentially come from more transparent cooperation with the supplier and the direction of supplier cooperation can be influenced. The suppliers will meet the requirements of the standards more easily and risk management in the supply chain becomes easier.

5 DISCUSSION AND CONCLUSION

This chapter introduces the answer to the research questions. It aims to further discuss the results of the empirical study in combination to the literature reviewed. A conclusion is formed. Last, some limitations and further research ideas are introduced.

5.1 Answering the research questions

Chapter 5.1 essentially summarizes the answers to the originally set main research question and sub-questions. The answers are a combination of theoretical information from literature as well as insights from the empirical part of the study.

What are the key sustainability factors that the case company should consider in supplier evaluation?'

The key factors to consider in supplier evaluation were formed based on literature as well as the sourcing policy of the case company. The issues listed by the interviewees were taken into consideration as well. Ultimately, the key sustainability factors that should be taken into consideration are presented in three figures 12, 13 and 14.

The first figure (Figure 12) includes aspects related to environmental sustainability. It is divided to four bigger themes, being pollution control and prevention, environmental management, resource consumption and waste management, as well as the use of chemicals. These are all considered vital to consider from the viewpoint of the case company.

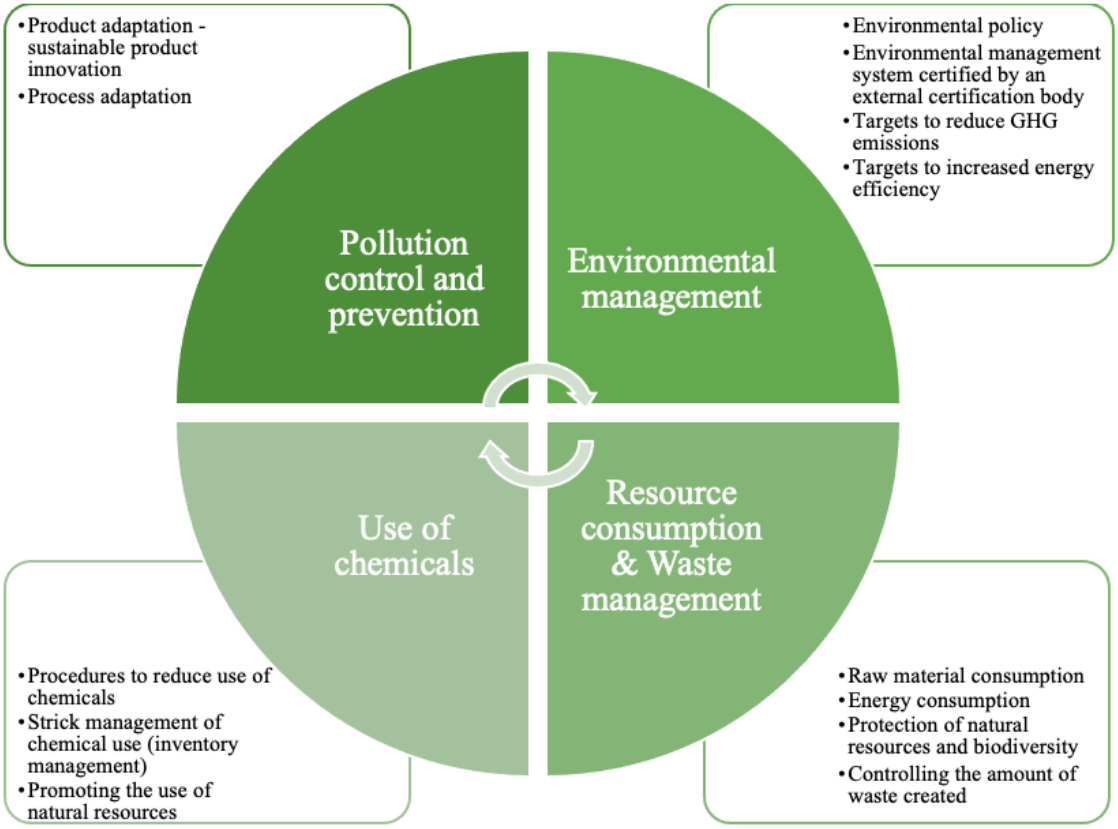

Figure 12. Environmental aspects to consider

The second figure (Figure 13) includes human rights related aspects the supplier evaluation form should consider. It is divided to four main themes that are health and safety, child labor, mobility and cultural properties. These themes are especially important to consider as the company operates in the food industry and has suppliers in various different countries with different cultures, different perceptions of procedures and standards.

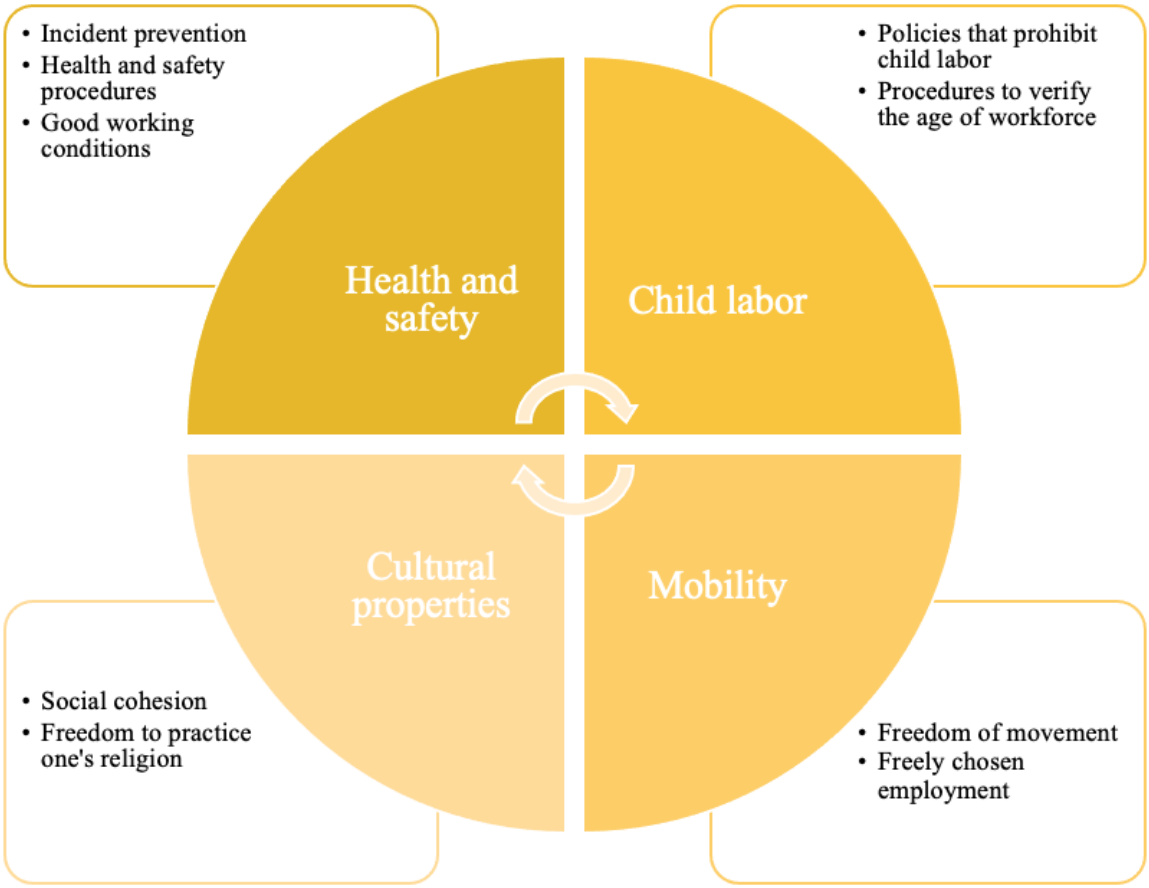

Figure 13. Human rights aspects to consider

The last figure (Figure 14) is a combination of aspects related to ethics and business integrity. Like the previous figures, the most important themes are divided to four bigger pieces. These include contractual influence, employment practices, local communities as well as business conduct. These are important to consider, as common practice have transparency, accurate records and fair employment practices. The company also needs to be aware of the influence it has on local communicates when supplying from different countries.

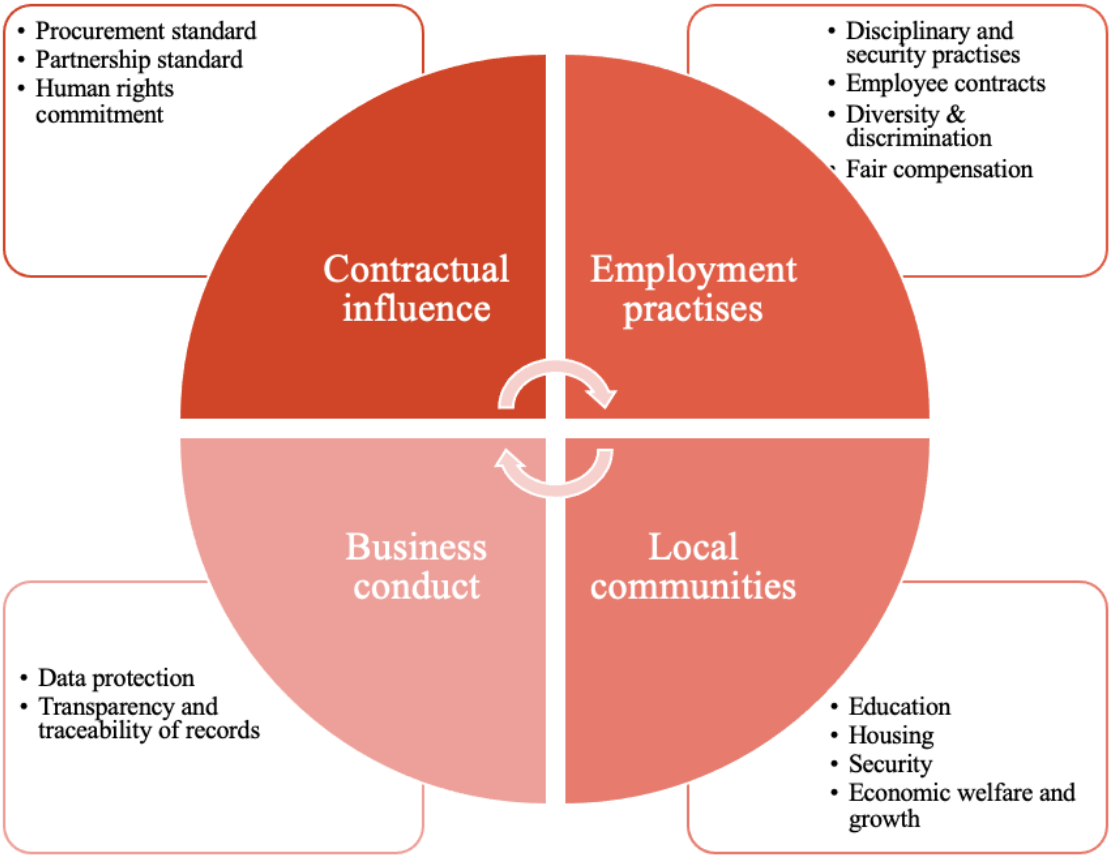

Figure 14. Ethics and business integrity aspects to consider

Sub-question 1: How the environmental and social criteria can be applied in supplier evaluation?

As it has been stated, buyer-supplier relations are in a key role when it comes to addressing sustainability issues in the supply chain. Successful buyer-supplier relationships require mutual trust that can only be formed through actions such as forming mutual commitments, clear communication and transparency. The aim is to work beyond organizational boundaries to capture mutual value.

The defined sustainability criteria can be all embedded in the supplier questionnaire by forming a framework of each theme presented in the three figures 12, 13 and 14. Forming questions around the themes and making the questions clear and straight forward.

To ensure full transparency, it is important to state why the supplier evaluation form is sent to the supplier and what actions will the results be leading to. Feedback of the results will complete the cycle and provide suppliers with valuable information and the tools to perform better.

S-Q 2: What are the advantages of considering sustainability factors in supplier evaluation?

To give an illustration of the main advantages considering sustainability factors from both environmental and social point of view, Figure 15 present the main advantages of environmental sustainability. Additionally, Figure 16 includes the advantages of considering social sustainability.

Figure 15 summarizes the benefits of environmental sustainability. Controlling costs can be seen as an advantage of environmental sustainability, but it is not most often the driver for engaging in environmental sustainability. It can be considered as an advantage, but the author did not list it as an advantage. By achieving internal and external environmental standards and complying with legislation companies are able to manage various risks in supply chains while ensuring maximum community and financial benefits. Environmental sustainability often leads to higher efficiency, reduced packaging and waste. New procedures ensure the reduction and prevention of pollution and emissions. Essentially, environmental efficiency can be a source of competitive advantage and can be used to differentiate from competition.

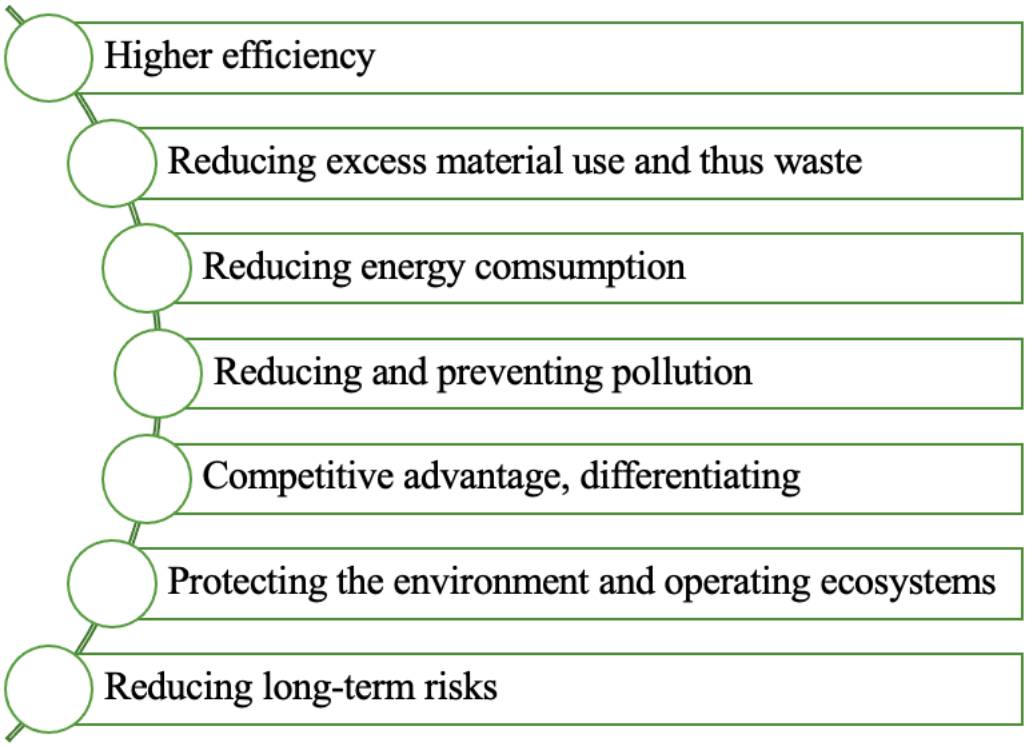

Figure 15. Advantages of environmental sustainability

An equally significant aspect of sustainability are the social efforts. Forming standards, policies and procedures can help to mitigate risks in supply chains. While there is still no way in making sure there are zero children working in the facilities, by creating strict standards for suppliers the company is able to work towards no child labor. Providing better working condition for workers increases the motivation and safety of workers. Engaging in projects with local communities, companies are able to gain social presence in communities. Social awareness and efforts help create a more positive corporate image, thus making the company more attractive to potential business partners, investors as well as other stakeholder groups. All in all, in addition to ethical business conduct, being socially sustainable can have multiple advantages that affect the bottom line.

Figure 16. Advantages of social sustainability

5.2 Discussion

The company sourcing policy forms around three areas that are presented in Figure 17.

Figure 17. The three aspects of the company sourcing policy

These all contribute to ensuring sustainable and responsible practices throughout the company's supply chain. These three strongly affected the formulation of the three figures, 12, 13 and 14, as these three aspects were prominent in the literature, as well as the data collected from the case company. Thus, the overall sourcing policy of the company complies with the general assumptions of scientific literature. The company states, that business ethics can be described as the ability to execute business proceedings while respecting the interests of all partners and individuals and preserving environmental resources. This strongly supports the viewpoint introduced by Porter & Kramer (2011, 65) as business model innovation is ultimately about changing the way organizations do business and goes beyond considering only products and processes.

As the case company's business relations and interactions are vastly covered by their suppliers, they are committed to both developing and promoting a culture that is based on mutual honesty, integrity and fairness. The operations should promote the well-being of all people involved, from farmers to consumers. Many of the countries of origin have delicate eco-systems that are susceptible to environmental challenges. The company feels they have a collective responsibility to preserve these eco-systems and to act responsibly towards the planet while inspiring others to act and behave similarly. This as well adapts to the view of Bocken et al. (2014, 43) as they stressed there is a need for change towards new sustainable business models which demand rethinking the sole purpose of the company, as well as their logic for creating value. Meaning the case company is proactively creating methods to co-create value sustainably in their supply chains.

The food industry is ultimately one of the biggest players that can help to tackle the climate change. The food industry and its processes are enabling pollution and emissions, excessive use of water, producing waste, destroying forests, endangering wildlife... These environmental factors were mentioned as important in the literature by many sources, such as Mollenkopf et al. (2005, 186) and Rosenau et al. (1996, 163). A continuously growing segment of consumers respond to green products that use eco-friendly packaging and provided by organizations that promote sustainable actions, mentioned Shrivastava (1995b, 955) Still, sustainability efforts are not yet proven to be as effective in driving the prices up, as Karjalainen and Moxham (2012, 273) describe that consumers are not willing to pay much extra for fair trade or more sustainable product. There have been contradicting opinions, as Bradu et al. (2013, 287) stated that nowadays consumers are more willing to buy products which have a label of traceability. Thus, it remains unknown if consumer base will be actively responding to more sustainable products.

Moreover, from environmental sustainability, Bocken et al. (2014, 44) stated it is not sustainable to create solution that compensate or offset the negative impacts that are already created by business practices. This is why to mitigate the risk of continuing with procedures that result in the negative effects, the focus needs to be on improving in every possible environmental aspect of the supply chain. Using clean energy solutions, such as renewable energy sources, improving the efficiency of energy use and seeking new forms of transportation with low carbon footprint. This has been a focus point for the case company in their own procedures and now it needs to be taken further to the supply chains.

Shrivastava (1995b, 955-956) sees sustainability as a form of risk management for companies. By being more aware of their resources, energy usage, product liabilities, waste management and pollution levels, organizations can mitigate risks. This has been acknowledged in the case company and thereby energy usage is in the heart of cutting down emissions, as it is used in many forms. Industrial processes, transport, heating, electricity and multiple other factors are causing the emissions. Energy usage is of course just one environmental risk in the supply chain. The issue of erosion, desertification, laterization and general depletion of the fertility of soils is particularly prominent in the developing countries. Post-farm processes are also a contributor in emissions. As it was mentioned, the company is keen on teaching its suppliers the best practices in the farming process, so that the farms are educated about crop management practices. Improved fertilizer usage, lesser use of water in the process, managing land use, restoring degraded lands need to all be considered when conducting evaluation and development on suppliers.

As Carter (2008, 367) mentioned in his study, while companies need to be mindful of the environmental impacts of the farming and manufacturing processes, product design and innovation should also be taken into consideration. Opting for more eco-friendly packaging will contribute to minimizing waste created and possible pollution in the manufacturing process. It can be said that consumers are becoming more aware of the issues related to packaging, as especially plastic waste in oceans and landfills is driving change. Following things are valuable when considering sustainable packaging:

- Renewable energy used in the manufacturing and transportation processes
- Product design made to mitigate excess material use
- Materials are recyclable

Reducing the material used in packaging and thus minimizing waste created are the main components of more sustainable packaging.

Environmental management in the supply chains plays an important role in ethics as well. As many of the first-tier suppliers are dependent of their crop for food or income, environmental measures are vital to ensure regular supplies of food and other necessities for their families. It can be argued that mismanagement of the soils is a serious threat to food production and thus, to the general economic progress of these farms.

The line of sustainability is usually far from an organizations' direct control. Organizations are vulnerable to actions of their suppliers, as a supplier's poor environmental management can undermine the organizations high level of environmental performance. This was supported by Faruk (2001, 37). By not addressing human rights issues, companies operating in the food industry are likely to face costly litigations, negative publicity, loss of credibility and unfavorable market impacts. Thus, in the current business environment, operating in the volatile food industry, the case company cannot afford failing to identify or fix human rights issues across their supply chain, from their direct operations all the way through to the local farms and communities where their products are essentially grown. This supports the view of Ellen et al. (2006, 149) as they concluded social engagement with societies helps to form a presence in the market and furthermore helps to gain social credibility.

With the complex, extensive supply chains in various countries, the company should really focus into discovering, disclosing as well as correcting possible human rights related issues. As there are millions of people working in bad working conditions across countries, it is important for the company to contribute to amending this issue in their supply chain. Even though there is a human rights policy issued, the mitigation of human right violations goes beyond. A good example of social sustainability issues in the supply chains of food companies are the farms. Due to globalization and intensified competition, market prices have sunk so low that farmers in the developing countries are unable to make ends meet. In some regions, the competition has led to a situation where standards for health and safety may be uncared for. This viewpoint was also brought up by Davies & Crane (2003, 79). Therefore, a lot of small farmers have begun to use cheap labor to maintain an acceptable compensation from their work, state Camargo (2019, 10-11).

Luckstead (2019, 3) reminds it is common for many households to be living in poverty, thus, child labor is a form of survival for these families. When poverty is widespread, it becomes a necessity for parents to send their children to work in the farms – whilst enabling the issue of

poor education. Child labor can be therefore seen as a symptom of poverty, as well as a contributing factor of it. Child labor makes it difficult to achieve economic independence as many households are forced to rely on it to survive. This is why the case company should focus its efforts toward gaining knowledge of labor performed by children and mitigating it. Developing methods to enable economic growth in the farms to be better able to provide for their families was also stressed by Keating (2008, 178).

The company essentially needs to establish effective mechanisms to monitor their supply chains. As mentioned by Keating (2008, 177) implementing operations such as codes of conducts, supplier evaluation processes and collaboration projects will pressure suppliers to perform more responsible in order to keep existing partnerships as well as appearing more desirable to new business partners. The company needs to hear not only directly from the workers in first tier to help end the vicious cycle of forced labor but also to mitigate human rights risks and ensure fair working conditions for everyone.

Another key factor to consider is an effective grievance mechanism that ensures all individuals in the supply chain are able to report abuses or other issues without any fear of retaliation. Grievance mechanisms help the company to identify latent risks related to human right violations and to communicate with individuals in the root of the problem. This communication will help to proactively and efficiently correct these issues. Govindan et al. (2015, 66) stated companies are transforming their supplier relationships more collaborate and reciprocal, thus, demanding new skills and capabilities from suppliers. In the food industry, this can reflect itself as a demand for educational efforts. For example, it is important to ensure the proper education of rights and know-how on reporting for workers, so that they are able to actively participate in bringing out possible abuses or violations. Ensuring that employees are well aware and educated on their rights and know how to report abuse through objective, easy-to-use channels, helps the company to get to the source of the problem more efficiently, while making sure the employees voices are heard.

As mentioned previously, the seasonal nature of the farming and production in the food industry exposes it to slavery and human trafficking. There can be situations where employees are forced to work, having to work in inhumane working conditions, having to experience physical and/or sexual abuse, given false promises of wages and so on. In some countries, the brokers might also impose some types of payments from workers, seize passports and visas to restrain the

movement of employees. The case company should thus gain knowledge about the risk of human trafficking in their supply chain. Agricultural work is often labor intensive and seasonal, which is why farmers often require help from temporary and migrant workers. This makes the supply chain vulnerable for malpractice in contractual procedures. It is common that short term and migrant workers are working under a verbal contract, or with a contract that does not include the same protections and benefits that are provided to full-time workers. This can mean differences in wages, over-time compensation, working hours, to mention a few. Thus, it is important to gain awareness of these factors in the supplier evaluation process. Shrivastava (1995b, 956) also mentioned the importance of incorporating sustainability goals and values to operations, as they can act as a persuasive measure for suppliers to perform better in their daily tasks. Fighting against clear goals, like ending human trafficking in their supply chain, can act as a more substantial, rational goal to people than some economic measure that is hard to grasp. By creating internal awareness of the issue, forming procedures to mitigate it and eventually eliminate the issue entirely.

According to the International labor organization ILO (2017) between 2012-2016, 152 million were in child labor of which 73 million were operating in hazardous working conditions. Of these metrics, a significant amount, 70,9% of children worked in the agriculture. This speaks volumes of the impact companies operating in the food industry have over this issue. ILO essentially sets the minimum age at 15 when it comes to working. Thus, it is important to disclose whether or not the suppliers are part taking in this problem, and if yes, further explanation is needed. However, it is important to note, that the distinction between acceptable child labor and illegal child labor can prove challenging. This can be due to multiple factors. As many farms are so called “family farms” and are providing livelihoods for the whole family and then passed down by inheritance, parents are used to teaching children agricultural skills from a young age. This is done so that the children are eventually ready to take over the family business. The obverse of this are the working children that come from poor families, lacking the possibility of education. Enabling these situations can have extensive, unexpectedly long-lasting affects.

5.2.1 Creating the evaluation form

The case company wanted an easy to use, clear and comprehensive, yet focused framework, that covers the main points of the company sourcing policy. In addition, the aim was to find science-based validation for the themes. This turned out to be quite challenging, as research shows there are many topics to cover when evaluating sustainability attributes of a supplier. For example, see Table 2 and 3 and for more: Bai 2010; Dou 2010; Winter 2016 & Xu 2013. However, it is important to note, that due to the resources of the case company, an evaluation form with hundreds of questions will not serve the purpose.

The main goal of the company was to inspire suppliers to review their own operations from a sustainability point of view and to provide information that has not yet been revealed. With this information, the case company can act upon any malpractice in their supply networks, as well as benchmark new procedures introduced by their suppliers. The evaluation questions were formed on the basis of the chapters 5.1 and 5.2.

The finished evaluation form is presented in appendix 2. The framework is the first version and thus has not been tested with any suppliers. However, the aim is to further develop the framework and optimize it after testing with selected key suppliers.

5.3 Conclusion

In earlier years, where sustainability was not as a ‘hot topic’ as it has become nowadays, all individuals, including companies looked at global resources and markets from an economic perspective, which means that resource scarcity or social disruption was rejected due to proliferation availability of substitutable alternatives. This means anything concerns about market inefficiencies due to depletion of resources or social injustice was generally seen as a publicity stunt, rather than real threats to business continuity. This rooted from the fact that alternative resources and new product designs could be integrated without too much

malfunction in operations. The top priority for businesses was to optimize economic performance without actually considering its impact on social sustainability or the environment.

After serious issues sustainability issues in supply chains that have affected many companies' reputations, it has become much more apparent that supply chain design must include and consider tradeoffs among social, environmental, and economic goals in order for businesses to be truly sustainable. However, although sustainability has certainly penetrated the business environment, the payback comes in much longer time horizons than many executives are measured in. For many organizations, especially those operating outside the EU, where stiffer regulations are common practice, sustainability in supply chains remains an issue for discussion and analysis but not yet for action. Despite, many companies are beginning to make progress on sustainable development.

Sustainability due to the longevity of sustainability results and 'rewards' will slowly but surely become part of the organization's DNA (versus a project to work towards) before its alleged benefits for business, the environment and society materialize. This shows itself as a new form of operations, where companies plan their supply chain sustainability outcomes by identifying partners who could facilitate their desired achievement. However, companies that achieve the greatest return from sustainability is for those who are ready to invest resources and see this as an important step by becoming more proactive in sustainability. In fact, companies need to design supply chains that proactively seek to improve relevant results, not only to maintain the viability of their operations. The author predicts it will become increasingly apparent in many organizations that balancing social and environmental goals with economic objectives will provide market benefits and additionally, positive financial returns.

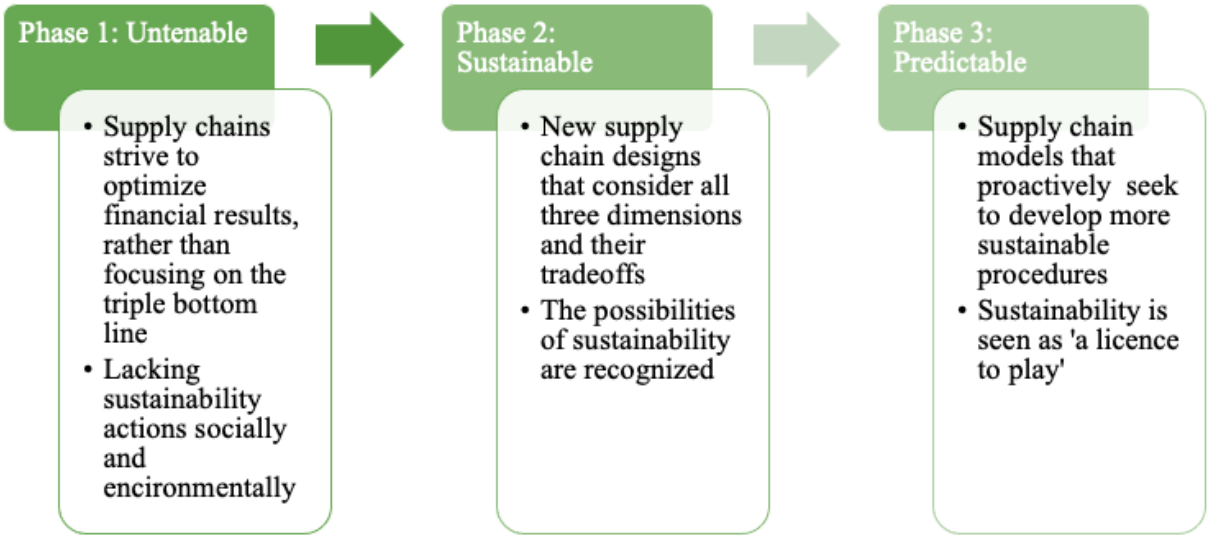

Figure 18. The three phases of sustainability in supply chains

Various global trends will have a holistic effect on the future of business and supply chains, which means that these factors will also have an impact on the future of procurement. Megatrends refer to major themes of development. They are extensive, relatively predictable phenomena, often combined with smaller phenomena. A typical feature of a megatrend is that its trend can be identified, but there is really no chance of influencing it. The impact of megatrends on global society is enormous. They are constantly changing people's lifestyles, needs, aspirations and opportunities. As a result, customer demand changes, which ultimately has an impact on the required resources, production sites and the supply chain. With intensified competition, companies must increasingly focus on the operations of the entire value chain, also in terms of external resources, so that they can improve their own internal operations. Balancing procurement will therefore be leading to a large increase in the role of the supplier for the purchasing organization. Suppliers will increasingly integrate into the purchasing company’s business and product development. In essence, companies are shifting from a state of untenable to sustainable, and from sustainable to predictable.

In most cases, companies do not have a good idea of what is going on down the supply chain, where downstream and downstream customers can play a small but yet a critical role. But as was stated by the case company in empirical research, they are unable to strengthen business continuity arrangements with non-first-tier suppliers. With carefully conducted supplier evaluation, measurement, and the development of better communication, companies can learn more, inspect, and communicate throughout their supply chains. Essentially, companies need to address sustainability concerns in their supply chains through supplier development. Companies therefore need to take action to limit their climate risks by diversifying their supply chains, as the growth opportunities offered by the sustainable supply chains can be significant.

In addition to mitigating climate change, attention must also be paid to adapting to its effects. In the journey towards a sustainable future, societies should aim for a big change when it comes to energy production and consumption, consumer behavior, food production, eating habits, new construction, housing and mobility. This could be marked as an ecological reconstruction which translates to a transition of societies that proactively improve the state of the environment as well as human well-being. In the business world, this means transitioning procedures with renewable energy, reducing consumption of materials, increasing sufficiency and an aim towards a circular economy.

5.3.1 Limitations and suggestions for further research

There are several limitations when considering this study. The study focuses solely on the environmental and social issues in the supply chains, while excluding the economic point of view entirely. However, it is important to note, that in most cases, these inevitably overlap, and true sustainability requires management and balance of all three aspects simultaneously. Thus, it strongly demonstrates the fact that social and environmental sustainability does not guarantee completely sustainable supply chains and operations.

The study concentrated to exploring the issues and solution from the case company's and ultimately from the buying point of view, rather than bringing suppliers point of views into consideration. Having both sides of the evaluation process would give a more comprehensive view on the topic. The empirical part of the study is limited to only one case company. As the case company is not revealed in the study, it limits the level of deepness the study is able to go

into when it comes to the empirical results. It is also important to note, the company has many different product categories, where the level and form of environmental and social issues differs. It also has several p categories where the SSCM practices vary.

Considering the rareness and complexity of sustainable supplier evaluation studies, the results are not universal to all companies and cannot be generalized. For future research, it would be beneficial to assess the impact the evaluation form created has had on the sustainable performance of the company. Additionally, conducting research about the accuracy of measurements of sustainability would be beneficial. Lastly, the combination of social and environmental sustainability was a rather wide topic, which made analyzing difficult compared to focusing on solely one aspect.

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APPENDICES

Appendix 1. Interview questions

1 Current situation:

1.1

How often is supplier evaluation conducted?

1.2

What are your primary motives in supplier evaluation?

1.3

What has been previously done with the information collected from suppliers?

1.4

How do your suppliers react to these evaluations?

2 Sustainability:

2.1.

What do you understand by the term sustainability? How do you link that to procurement?

2.2

Why is sustainability important in your field?

2.3

Are there clear sustainability liabilities in your supply chains?

2.4

What are the company's weaknesses related to sustainability?

2.5

What have been the main reasons / incentives for the company to invest in sustainability?

2.6

How do you feel about different sustainability certifications in the food industry? Have they resulted in more sustainable procedures in your company?

3 Sustainable Supplier Evaluation:

3.1

What pre-requirements do you have for suppliers regarding sustainability?

3.2

Do you apply any sustainability criteria in supplier evaluation?

3.2.1

If yes, what criteria and for what purpose?

3.2.2

If no, why do you not apply sustainability criteria?

3.3

If sustainability criteria are applied in supplier evaluation, what do you think you can gain from the information?

4 Future actions

4.1

What are the actions you aim to take regarding the sustainability information gathered from suppliers?

Appendix 2. Supplier evaluation framework

Basic Information

1. Name of the company:
2. Business ID:
3. Primary contact person:
4. Email address:
5. Which category of products does your company provide for the case company?
6. Please list the facility / facilities the answers for this survey covers
7. Has the company signed the sourcing policy of the case company?

ETHICS AND BUSINESS INTEGRITY

8. Does the facility have a written corporate responsibility policy that defines its commitment to labor, health, and safety standards?
9. Is there a human rights company policy in place?

10. Are formal and written policies and procedures for disciplining and terminating employees standardized throughout the facility?

11. Does the facility prohibit physical punishment of employees as a disciplinary measure?

Businesses conduct & fair operating practices

12. Are there procedures to ensure confidential information is handled accordingly in order to avoid disclosing details to unauthorized persons?

13. Are sensitive data protected from cyber and / or physical attacks?

14. Are there records maintained to ensure transparency and traceability?

15. Are there management systems with the capability to maintain organized, clear, and accurate records?

16. Are there procedures to ensure that land ownership and land rights are observed and protected?

17. Do you engage with local communities to share feedback relating to their livelihood and well-being?

18. Do you to map and evaluate your impacts on the rights, natural resources and territories of local communities?

HUMAN RIGHTS

19. Do you have policies to prohibit forced labor and child labor?

20. Do you employ workers under the age of 15?

21. Do any young workers perform night work, hazardous jobs, or are they exposed to risks?

22. Do you have procedures for verifying workers' ages? Explain procedure

23. Are there procedures to ensure that younger workers work in good conditions?

Freely chosen employment

24. Does the facility have procedures to ensure freedom of movement of contract workers?

25. Are all employees provided a written employment agreement with the facility in a language that they understand?

26. Are workers free to resign from their employment at any time without penalty?

The right to associate freely

27. Are workers able to join or form trade unions or workers' organizations?

28. Does the facility recognize trade unions or other independent workers' organizations representing employees in the workplace?

Reasonable working hours and rest days

29. Does the facility have procedures in place to ensure all workers are given at least one day off in seven?

30. Does the facility have procedures in place to ensure all overtime performed at the facility is always voluntary?

Fair treatment

31. Does the facility have written personnel policies in place for its hiring, salary, benefits, termination, and/or retirement practices to prevent discrimination?

32. Does the facility have procedures in place to ensure employees receive equal pay for equal work, regardless of these factors?

33. Are employees permitted to perform religious actions without restriction?

Fair compensation

34. Does the facility have procedures in place to ensure all workers are paid at least the legal minimum wage?

35. Does the facility have procedures in place to ensure all workers are paid the legal overtime rate?

36. Does the facility have procedures in place to ensure payroll documents indicate all hours worked?

Health and safety

37. Does the facility have procedures in place to ensure appropriate machinery is well-maintained and equipped with necessary safety devices?

38. Does the facility have procedures in place to ensure appropriate safety equipment is provided to employees?

39. Are noise levels and air quality in the facility monitored?

40. Does the facility have fire evacuation procedure?

41. Are all employees trained on relevant health and safety matters?

42. Does the facility have well-stocked, unlocked first aid stations at every production site?

ENVIRONMENT

43. Do you have a formal environmental policy in place? If yes, please insert a copy of the policy

44. Do you have an Environmental Management System in place certified by an external authorized certification body (e.g., ISO14001)? If yes, insert documentation

Natural resources and biodiversity

45. Does the facility have procedures to ensure protection of natural resources and biodiversity? If yes, explain further

Energy use and waste

46. Does the facility monitor and track energy consumption?

47. Does the facility have a system in place to reduce the environmental impact of energy use and greenhouse gases?

48. What kind of energy is used in the manufacturing / farming process?

49. Does the facility have goals and targets to reduce GHG emissions?

50. Does the facility have procedures to reduce / eliminate pollution and waste?

The use of chemical substances

51. Does the facility keep inventory of all chemical substances used, stored, processed, and manufactured?

52. Does the facility have procedures to reduce the use of resources (other than water), and promote sustainable natural resource practices?

Packaging

53. Are there proactive methods to ensure the packaging is sustainable?

54. Is sustainability considered in innovation of new products?

ADDITIONAL INFORMATION

Additional comments:

Open feedback for the questionnaire: