Influence strategies of a large retail company to stimulate the sustainability of their suppliers.

An empirical case study of HEMA and their food suppliers.

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Abstract

This research aims to get insight into how a large retail company can stimulate sustainability at their suppliers. In order to obtain this insight, a preliminary research is conducted, which consisted of a literature review on the following topics: 'sustainability', 'supply chain management' and 'influence strategies'. Based on the insights of this preliminary research, a survey was developed. After that, an empirical case study of the current and potential food suppliers of HEMA was conducted. This empirical study consisted of in-depth interviews with 20 respondents.

From this research it can be concluded that the main motivation to implement CSR is Safeguarding Market Position. During the implementation of CSR the external factor of Customer Demand plays the most important role, and the main internal factor is Personal Beliefs. The most important Bottleneck during the implementation of CSR is Support.

The research also showed that retailers have a large influence on the sustainability of the supply chain. The best way to exercise this influence is to use a combination of influence strategies Reason and Appeal to Business Relationship/Loyalty.

Also, cooperation and strong buyer-supplier relationships/partnerships appeared to increase the effectiveness of the supply chain towards sustainable development. Therefore, it can be concluded that the best way for the retailer to stimulate sustainability at their suppliers is to cooperate and build a strong buyer-supplier relationship/partnership and then apply a combination of influence strategies Reason and Appeal to Business Relationship/Loyalty.

Management Summary

This research aims to get insight into how a large retail company can stimulate sustainability at their suppliers to advise HEMA on how to influence their food suppliers to produce in a sustainable way. In order to obtain this insight, a preliminary research is conducted, which consisted of a literature review on the following topics: 'sustainability', 'supply chain management' and 'influence strategies'. Based on the insights of this preliminary research, a survey was developed. After that, an empirical case study of the current and potential food suppliers of HEMA was conducted. This empirical study consisted of in-depth interviews with 20 respondents. From the results of this research several conclusions can be drawn, which are described here.

Contrary to the literature review, in which regarding CSR as a Business Opportunity appeared to be the most important motivation for implementing CSR, in this research the most important motivation for implementing CSR is Safeguarding Market Position (25%), followed by Customer demand (21.4%). Respondents indicated that Safe Guarding Market Position is the motivation to implement CSR, because they need to ensure that they can continue to exist in the market. VION said: *"You can avoid the discussion now, but then, in 10 years, there is a completely different discussion, the discussion of existence."* For HEMA Taking Responsibility is the main motivation for implementing CSR, but also the societal pressure from consumers plays an important role for Safeguarding the Market Position. The empirical study shows that it is expected that internally focused motivations such as Safeguarding Market Position and Taking Responsibility result in a higher degree of sustainability at the company than externally focused motivations such as Customer demand and Comply with Regulation. It is therefore expected that the type of motivation influences the degree of sustainability in the company.

Thereafter, external and internal factors that affect the implementation of CSR were investigated. From this study it can be concluded that Customer Demand (75%) is the main external factor, which can be explained by the fact that the manufacturers in this study produce private label products, and therefore depend on their customers (the retailers) for indicating product specifications. For HEMA Consumer Demand (in their case the same as Customer Demand) and the Pressure of NGOs are important external factors.

Personal Beliefs (55%) is presented as the main internal factor to influence the implementation of sustainability, which can be explained by the response of the interviewees that without support of the management board or other employees in the organization, sustainability cannot be achieved. Unilever said about this: *"If there is no vision and willingness of the management board, forget it! You will always get the conflict of cost and then you will not make it. There needs to be an attitude change. It*

is not about a campaign of 12 weeks, but it's about the long-term vision, it is about changing your business model".

This outcome shows directly in the bottlenecks that arise with the implementation of CSR. In the empirical study, Support appeared to be the main bottleneck, with 38.9%. The bottleneck of Support means the approval and cooperation of the management board and other employees, or the lack thereof. This bottleneck can be overcome by *"convincing people with numbers" (Astra Sweets),* *"motivating people" (Grootendorst Banket),* and *"setting up engagement programs in which information is shared, engagement is stimulated and practical tools are given" (Unilever).*

For HEMA the main internal factor is Cost-Benefits. This can partially be explained that HEMA is owned by a private equity firm, which is not willing to make long-term investments. This makes HEMA a profit-driven organization, where there is a tension between CSR and money. HEMA said: *"When margins are under pressure, CSR disappears to the background."* This also shows directly in the main bottlenecks, which are Budget and Support.

The literature review has shown that many companies are including sustainability as CSR in their business strategies. The CSR tends to focus on company level only, while a chain approach is proven to be more effective. It is therefore important to set up a chain approach to stimulate sustainability. 68.4% of the respondents appointed the retailer to take the role of initiator of a sustainable supply chain. Especially companies with a low or medium degree of sustainability indicated the retailer as the most suitable supply chain member for this role. The most important reason why the retailer should be the initiator is that the retailer is the link between the consumer and the manufacturer. *"The retailer is in de middle of the supply chain. The retailer passes on the demand of their customers on to the manufacturers."* Several respondents say *"we can produce a good product in a sustainable way, but we need the retailer to put it in the market".*

HEMA disagrees with the respondents. HEMA thinks the food manufacturers themselves have their own responsibility for CSR. HEMA thinks role lies in stimulating sustainable development by buying commendable sustainably produced products.

To measure to what extent the retailers and HEMA exercise the role of initiator in the supply chain at this time, respondents were asked to rate this role on a 7-point Likert-scale, with 1 being low and 7 high. The average score of retailers in general is 4.1 and HEMA scores 3.4. That means, respondents think HEMA shows less initiative in sustainability of the supply chain than other retailers do. HEMA can improve this by, again, *"try to set up partnerships in the supply chain" (VION), "focus on long-term relationship" (Foppen)* and *"guarantee long-term cooperation" (Anonymous).* Many retailers indicated that HEMA should be more proactive, have an active policy and show more initiative. HEMA

agrees (they score themselves at 3.5) that HEMA should be more proactive and said they can do that by *"setting ambitious goals"* and *"stimulate sustainable development initiatives."*

HEMA can be more proactive by actively stimulate sustainability at their suppliers. From both the literature review as well as the empirical study, it can be concluded that a combination of Reason and Appeal to Business Relationship/Loyalty is the best approach to encourage compliance. To be able to apply the Business Relationship/Loyalty strategy, first a strong buyer-supplier relationship/ partnership should be developed.

A strong buyer-supplier relationship is beneficial, because it also enhances the performance throughout the supply chain. Also, even though, cooperation or partnerships were not asked about, in the answers to the question about who should be the initiator of the supply chain, 9 of the 20 respondents indicated that cooperation and/or partnerships are the best way to develop a sustainable supply chain. Some of the quotes include: *"Above all, there should be cooperation between supply-chain members."* (Astra Sweets); *"If we would do things together in a partnership, you can accomplish these kind of things."* (Anonymous); *"I see examples of when doing things together, the effectiveness of goals increases"* (VION); *"I think that if retailers and manufacturers would set up a project to stimulate sustainability, there would be the fastest results."* (W. Heemskerk) Even though cooperation and/or partnerships are important, there is still an initiator needed to lead the project. As one of the respondents said: *"I think you do it with all supply-chain members, but if I have to appoint someone, I think the retailer should do it."* (New My Kits) HEMA agrees that cooperation is needed to stimulate sustainable development, but also thinks every supply chain member has their own responsibility.

Therefore, it can be concluded that the best way for the retailer to stimulate sustainability at their suppliers is to cooperate and build a strong buyer-supplier relationship/partnership and then apply a combination of influence strategies Reason and Appeal to Business Relationship/Loyalty.

Preface & Acknowledgements

This thesis is the result of research conducted between November 2010 and April 2011 at HEMA B.V. Amsterdam, under the supervision of the Management Studies Group of Wageningen University, part of Wageningen UR. It is submitted in partial fulfillment of the requirements for a Master's degree in Food Technology, specialization Food Innovation & Management.

Carrying out a Master thesis project is an intensive process. I am very grateful for the support many people gave me, either because of the importance of this research being carried out, or just because these people care about me.

First of all, I would like to express my sincere gratitude to my research supervisor, dr. Vincent Blok, for his involvement, expertise and guidance during this thesis project. He was very proactive in providing literature and was critical towards the final product, which helped to improve this thesis tremendously.

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Furthermore, many thanks to my HEMA colleagues, for accommodating a nice working environment, providing needed information and data, or just for asking how the project was going.

Thereafter, I would like to thank all the participants in the empirical study. Without them this research wouldn't have succeeded.

Not only do I want to thank my parents for the support they gave me during this thesis project, but also for the variety of support I received during my life. My mother provided a loving home and taught me the importance of family and friends. My father encouraged me to reach beyond my horizon and stimulated me to go abroad, and to pursue a master's degree.

Finally, I would like to thank my closest friends, Roxanne, Sandra and Marjolein, for their friendship, support and the sometimes needed distraction.

Jinske Verpalen, April 2011.

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1 Introduction

Sustainability is not just a hype. Already in 1987 the 'Brundtland Report', also known as 'Our Common Future', gave a definition of sustainable development: *"development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (G. Brundtland et al., 1987)*. Nowadays, the world becomes more and more aware of the importance of developing, producing, and living in a sustainable way. Companies are including sustainability as Corporate Social Responsibility (CSR) in their business strategies (*G. Málovics et al., 2006; J. Sarkis, 2003).* However, the CSR of companies tends to focus on the performance on company level only, rather than on the performance of the supply chain as a whole *(P.W. Gerbens-Leenes et al., 2003)*, while a chain approach proves to be more effective (*G.B.C. Backus & A.E. Simons, 2010; D.F. Simpson & D.J. Power, 2005; R.D. Klassen & S. Vachon, 2003*). In a chain approach in CSR, supply chain members work together. This could be initiated by the dominant firm in the supply chain, which is mostly the firm with the largest financial power or the most expertise.

In order to gain insight into how dominant firms in the supply chain (often the retailer) should best approach this challenge, the focus of this research is on influence strategies, which a large retail company could use to stimulate the sustainability of their suppliers. This research was conducted for HEMA, therefore the goal of this thesis project is to advise HEMA on how to stimulate their food suppliers in sustainable development.

This thesis presents the research that is conducted over the last six months. Key words for bibliographical searches include 'sustainability', 'supply chain management' and 'influence strategies'.

First, the background is described. After that, in chapter 3, the problem is defined, the goal, purpose and relevance of the research are stated and the research questions are formulated. In chapter 4, the methodology of the research is described. Then, chapter 5 presents the results of the literature review and relevant concepts are defined. After that, results of the empirical study are presented and analyzed in chapter 6. Thereafter, in chapter 7, conclusions are drawn and research questions are answered. In chapter 8, managerial implications for retailers are described. Then, chapter 9 describes HEMA&CSR. Finally, the discussion is provided and recommendations are made in chapter 10.

2 Background

In this part of the report, the sector is described and the reference company is presented.

2.1 Sector Description

The Dutch retail industry includes about 77.700 companies (*CBS Statline, 2009*), with an overall turnover of 32.309 million euros and employs over 2.960.000 workers (*CBS Statline, 2008*). The retail sector includes supermarkets and department stores, which sell a variety of products, such as food, clothing, office supplies, toiletries etc. The food industry in The Netherlands includes about 4400 companies (*CBS Statline, 2009*), with an overall turnover of 50 billion euros (*Federatie Nederlandse Levensmiddelen Industrie (FNLI), 2009*). The sector employs over 140.000 workers (*FNLI, 2009*). The food sector produces a variety of (semi) finished products, such as bread, cheese, cookies, micro-wave meals, condiments etc. Several organizations have developed a variety of sustainability labels for consumer packaging, such as Fairtrade, Rain Forest Alliance, UTC Certified and MSC. An overview and explanation of each of these labels can be found in Appendix I: Sustainability Labels in the Food Industry.

2.2 Reference Company

HEMA is a Netherlands based company which exclusively sells private label products in different product categories, such as clothing, toiletries, food, and office supplies; with an annual net turnover of about 1,1 billion euros (*HEMA, 2011*). HEMA was founded in 1926 and consists of four business units: head office, distribution centre, bakeries and stores; which together employ about 9500 workers (*HEMA BV, 2009*). HEMA has 555 stores in The Netherlands, Belgium, Germany, Luxembourg and France, part of which are franchise stores (*HEMA BV, 2011*).

HEMA is deeply rooted in the Dutch society, in which HEMA has a positive sustainable image (*Management Team, 2010*). HEMA claims to take responsibility for the society it is in, by constantly striving for a balance between people, environment and business (*HEMA BV, 2010*). This is in line with the sustainability definition given in part 5.5 Definition of Concepts, which incorporates the three dimensions of sustainability, namely environment, society and economy. Making profit is essential, but the way this is achieved is also important to HEMA. That is why HEMA strives to incorporate CSR into all of their business operations; from the choice of raw materials, and social engagement projects to transport efficiency and waste management. (*HEMA BV, 2010*). In their food product range, HEMA, currently carries the following sustainability labels: Fairtrade (tea and wine), organic (milk, buttermilk and rice crackers), UTZ (chocolate), 'Milieukeur' (pork), Rainforest Alliance (coffee) and MSC (fish). For an explanation of these sustainability labels see Appendix I: Sustainability Labels in the Food Industry.

3 Problem Analysis

In this section, the problem is defined, the goal and purpose are presented, the relevance is described and research questions are stated.

3.1 Problem Definition

The CSR of companies tends to focus on the performance on company level only, rather than on the performance of the supply chain as a whole *(P.W. Gerbens-Leenes et al., 2003)*. The efforts of a single company might then only contribute a little to the improvement of the entire supply chain.

A chain approach, where companies not only focus on their own sustainable business practices, but also state expectations for their business partners' performances, could be more effective. In this way, the sustainability responsibility is not shifted from one company to the other, but becomes a shared responsibility instead. A chain approach could lead to cost-effective environmental solutions, collaborative waste reduction, environmental innovation at the interface, and better understanding the environmental impact of the supply chain (*D.F. Simpson & D.J. Power, 2005*). Also, collaboration can increase market responsiveness, customer satisfaction, and competitiveness among all members of the partnership (*R.D. Klassen & S. Vachon, 2003*).

To initiate a chain approach in CSR, the dominant firm in the supply chain should take the lead, because their power greatly affects supply chain activities (e.g. pricing and sourcing raw materials). The dominant firm in the supply chain is often the retailer. They should therefore set an example and try to influence their suppliers' production process. Research shows that pressure from chain actors to pay attention to the environment is positively related to the adoption of environmental management capabilities (*D.J. Haverkamp, 2007*). This means that large retail companies can potentially influence the sustainability of their suppliers' production process. To influence the production process, a thought-out strategy should be followed to effectively stimulate suppliers to comply with the request. Therefore, the focus of this research is on the influence strategies a large company could use to achieve compliance.

3.2 Goal and Purpose

As this research was conducted for HEMA, the goal of this thesis project is to advise HEMA on how to influence their food suppliers to produce in a sustainable way. The purpose of this research therefore is to gain insight into the influence strategies a large retail company could use to stimulate the sustainability of their suppliers.

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3.3 Relevance

This research aims to gain more insight in the influence of large retail companies on the sustainability of their suppliers. This contributes to the body of scientific knowledge significantly, since there is currently no research available on the influence of large retail companies on their suppliers in combination with sustainability.

The societal relevance of this research is focused on (large) retail companies, which can benefit from the insights of this research by applying the insights in practice to effectively stimulate their suppliers to start or improve sustainable development.

3.4 Research Questions

The main research question for this research is:

How can a large retail company stimulate sustainable development at their suppliers?

Sub research questions involve the following:

1. What is sustainability and how can it be measured?

2. What is the motivation to implement CSR?

3. Which internal and external factors affect sustainability within suppliers?

4. Which bottlenecks can arise during the implementation of CSR?

5. What does the general food supply chain look like?

6. Which role would be most suitable to be the initiator of a sustainable supply chain?

7. To what degree do large (retail) companies have an influence on their suppliers?

8. What influence strategies are there to stimulate compliance at suppliers?

9. What is the best way for large (retail) companies to stimulate compliance their suppliers?

4 Methodology

The goal of this thesis project is to advise HEMA on how to stimulate their food suppliers to produce in a sustainable way. The purpose of this research therefore is to gain insight into the influence a large retail company might have on the sustainability of their suppliers. A research is conducted on sustainability, supply chain management and influence strategies. The main research question for this research is:

How can a large retail company stimulate sustainable development at their suppliers?

Sub research questions involve the following:

1. What is sustainability and how can it be measured?
2. What is the motivation to implement CSR?
3. Which internal and external factors affect sustainability within suppliers?
4. Which bottlenecks can arise during the implementation of CSR?
5. What does the general food supply chain look like?
6. Which role would be most suitable to be the initiator of a sustainable supply chain?
7. To what degree do large (retail) companies have an influence on their suppliers?
8. What influence strategies are there to stimulate compliance at suppliers?
9. What is the best way for large (retail) companies to stimulate compliance their suppliers?

4.1 Research Framework

To answer the questions stated above, the research is divided into several parts; as presented schematically in the research framework (figure 1). First, a preliminary research is conducted. This consists of a literature review on the following topics: 'sustainability', 'supply chain management', and 'influence strategies'. Based on the insights of this preliminary research, a survey has been developed. After that, an empirical study of the current and potential food suppliers of HEMA is conducted. This consists of data collection from interviews with suppliers; these data are used for the analysis of the practical situation. Thereafter, the research results are analyzed, including linking the case study back to the literature. Finally, conclusions are drawn and recommendations are made.
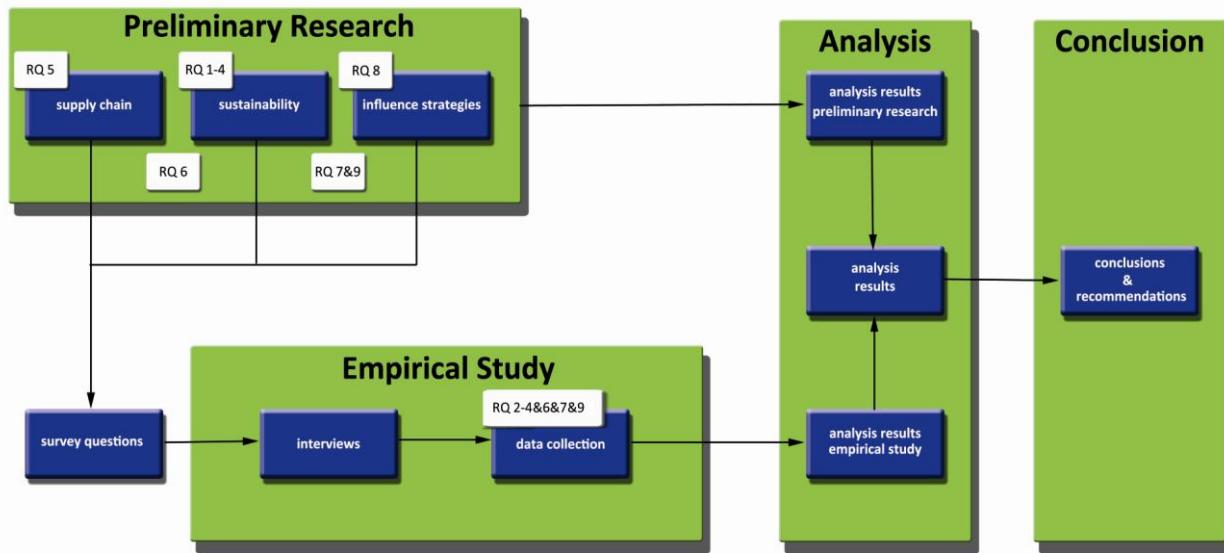
Figure 1: Research Framework

As is shown in the research framework in figure 1, all sub research questions can be answered in theory from the insights of the preliminary research. Questions 2, 3, 4, 6, 7 and 9 are answered again with the results of the empirical study.

4.2 Preliminary Research

The preliminary research is a literature review, which is performed by analyzing available relevant literature. Sources for relevant literature are books, research articles and websites. The literature has been found with 'Web of Science' and/or 'Scopus', through branching from references in the literature and by recommendations. The most important requirement for the literature is that it needs to be current (published in or after 2001), to guard the recency and relevance of this research.

After the literature review, all sub research questions are answered from a theoretical point of view. From the insights of the literature review, the interview questions for the second part (the empirical study of the food suppliers of HEMA) are formulated.

4.3 Empirical Study

After the interview questions are formulated from the insights of the preliminary research, a qualitative practical analysis of the food suppliers of HEMA is conducted with an empirical study.

4.3.1 Population and Sampling

Currently, HEMA has about 85 different food suppliers. Then, there are also suppliers that have recently been in contact with HEMA for a product tender, but were not selected as a supplier or suppliers which are able to produce similar products (the potential suppliers). Therefore, the population for this study is

defined as 'all current and potential food suppliers of HEMA'. The focus of this research will be mainly on the current suppliers of HEMA, therefore the ratio of current and potential suppliers in this research will be roughly 4:1.

Current suppliers are selected by the Pareto principle, which states that roughly 80% of the effects come from 20% of the causes. In this case it means that 80% of the volume is produced by 20% of the suppliers. So, it is sufficient to interview that 20% of the population for this research. For the current suppliers that means (20% of 85) 17 suppliers should be interviewed. To ensure a sufficient number of participants, initially, an extra 55% of current suppliers (26 current suppliers) were contacted, because it was expected that not all contacted suppliers would be willing to participate.

To select the current suppliers to contact for participation in this study, the suppliers were first divided into six food product categories: Meat&Poultry&Fish, Sweets&Chocolate, Bread&Baked Goods, Cheese&Dairy, Ready Meals&Delicacies and Fruits&Vegetables. From these six categories the suppliers responsible for the highest sales volumes in their category were selected. In this way, a representation for all product categories is ensured. It was strived to select a broad variety of suppliers: small, medium and large companies (based on number of employees); producing private label products only or both private label and brands; processing local or imported ingredients; etc.

The potential suppliers were selected by matching the current suppliers with their main competitors. As stated above, the ratio of current and potential suppliers in this research is 4:1, so if 17 current suppliers are interviewed, there should be 3 or 4 potential suppliers.

In total 26 current suppliers and 6 potential suppliers were contacted by phone. 5 suppliers declined to participate and 7 suppliers were not reached, did not respond or responded too late. In total 17 current suppliers and 3 potential suppliers agreed to participate in this empirical study.

The respondent for every supplier was selected by asking for the person responsible for sustainability in the company, which resulted in the following respondents: 9 CEOs, 5 quality assurance managers, 4 sustainability managers, 1 product manager and 1 supply chain manager. A list of respondents is included in Appendix III.

In addition, the manager Product Quality&Sustainability and manager Food&Catering of HEMA were interviewed to obtain the view of HEMA on the research topics.

4.3.2 Instrumentation

For this empirical study a structured survey was developed from the insights of the literature review. This instrument is chosen because it is a commonly used instrument in similar research projects.

The survey was developed after the literature review (see also Figure 1: Research Framework). The survey consists of open and multiple choice questions, which are structured around three themes:

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'sustainability', 'supply chain management' and 'influence strategies'. The multiple choice questions were prompted. Interview questions involved questions on sustainability indicators; motivation for implementation of CSR; internal and external factors which influence the implementation of CSR; bottlenecks which arise during the implementation of CSR; most suitable initiator for a sustainable supply chain; the role of HEMA; influence strategies and their effectiveness; HEMA's approach in influence strategies; preferred influence strategies. A copy of the interview protocol is included in Appendix IV. By covering these topics the research topics of the literature review were covered and therefore the interview protocol was complete. However, during the interviews many respondents indicated the importance of cooperation and/or partnerships. This led to additional literature research to get more insight into supply chain relationships.

All interviews are conducted in person. In order to prevent biases, the interviews are all conducted by the same interviewer.

4.3.3 Procedure

Before the interviews were conducted, the sampled suppliers were contacted to investigate their willingness to participate in the study. After that, appointments were made for the interviews with the respondents. As stated above, the survey has been conducted in a personal interview. Afterwards, the results were analyzed as described below.

4.3.4 Analysis

During the analysis of the empirical study, sub research questions 2, 3, 4, 6, 7 and 9 are answered from a practical point of view.

The statistical analysis of the results was performed with Excel software. First, all collected results were included in a data matrix according to a coding plan. For example for the degree of influence: 1 = very low, 2 = low, 3 = somewhat low, 4 = neutral, 5 = somewhat high, 6 = high, 7 = very high. After the data matrix was formed, the frequencies were calculated for the different variables to check the entries in the data matrix. Then, the means (μ) of the different variables were calculated from this data matrix. Statistical analysis for the significance of correlations with a Chi-square test or a Spearman's rank correlation was not possible, due to the limited number of respondents and the extensiveness of the answers, and not relevant for qualitative weighting. Therefore results were analyzed descriptively.

Finally, results from the empirical study, were linked back to the literature review from the first part of this research.

4.3.5 Validity and reliability

The validity of the empirical study has been assessed in two ways: by content validity and by face validity. The content validity was obtained by the fact that the interview questions are based on the literature review. To obtain face validity the survey was pre-tested on understanding and interpretation of the questions.

The reliability of the study was guarded by using the same interviewer for all the surveys and by selecting a representative sample of the population as described in paragraph 4.3.1 Population and Sampling.

4.3.6 Assumptions

For this empirical study, some assumptions were made:
-   the sample represents the population;
-   the survey is valid and measures adequate coverage of the topic;
-   the respondents answer the survey questions truthfully.

4.3.7 Scope and limitations

For this research current and potential food suppliers of HEMA are analyzed. However, other members of the food supply chain were excluded from this research. The main reason for this decision is time limitations. Also, it is assumed that retail companies have most likely most influence on their first tier suppliers, because there is direct contact with this part of the supply chain.

5 Literature Review

In this section the theoretical framework of the research topics is described. The research topics that are covered are: 'sustainability', 'supply chain management' and 'influence strategies'. Finally, the concept definitions and hypotheses for the empirical study are stated.

5.1 Sustainability

There is a great variety of perceptions and definitions of sustainability, but there is not one comprehensive definition for sustainability available in literature. To define sustainability, the 'Brundtland report' is often quoted on sustainable development: *"development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (G. Brundtland et al., 1987).* In today's literature, sustainability is often described using the integration of three dimensions: environment, society and economy (*H.E.J. Bos-Brouwers, 2010; A.L. Carew & C.A. Mitchell, 2008; R. Lozano, 2008; G. Málovics et al., 2008; P. Glavič & R. Lukman, 2007*), also referred to as People-Planet-Profit (3P) concept. The three dimensions are presented in figure 2.
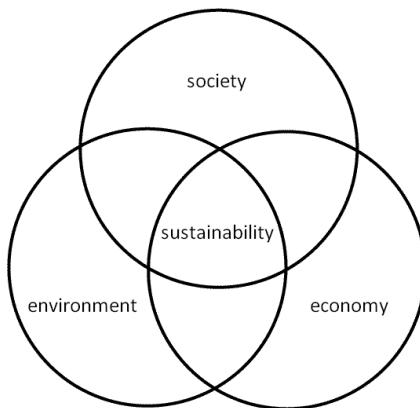
Figure 2: Diagram of the integration of three dimensions (environment, society and economy) to obtain sustainability.

The environmental dimension is about environmental protection (e.g. waste management, transport efficiency, and reduction of pollution) the societal dimension involves social equity (e.g. fair trade, human rights, and animal welfare), while the economical dimension affects economic growth (e.g. food safety, product quality, and costs). As this model shows, in order to obtain sustainability, these dimensions need to be integrated by linking the societal and environmental dimensions to the economic dimension. Full integration of dimensions is difficult to achieve, because all dimensions should be balanced. For example, when an airport wants to expand, this contributes to the dimension of economy by increasing profit and the dimension of society by creating job opportunities, but the environmental

dimension is impaired, because by expansion the burden on the environment will increase. So, to balance all three dimensions, a solution to reduce this extra burden on the environment should be found, for example by only allowing airplanes that meet strict environmental requirements.

As there is not one comprehensive definition of sustainability available in literature, and the Brundtland report definition is found to be too theoretical to work with in this research, a more operational definition is formulated by uniting the definition from the 'Brundtland report' and literature on the three dimensions. This results in the following definition: *"a concept which involves the integration of three dimensions, namely environment, society and economy, to meet the needs of the present, while protecting, preserving and enhancing human and natural resources that will be needed in the future."*

As illustrated above, the complexity of the sustainability concept is caused by the difficulty to balance all three sustainability dimensions. These three dimensions of sustainability include a variety of sustainability indicators presented in a range of assessment methods (i.e. frameworks, models and measuring methods), which adds even more to the complexity of the concept. For this research it is necessary to decrease the complexity and make the concept of sustainability more workable, therefore a selection of sustainability indicators has been made.

In order to make a selection of sustainability indicators for this research, an assessment method is selected as an example. However, to select one assessment method is easier said than done, because there is a wide variety of available assessment methods, which are based on different aspects of sustainability. Therefore, their results greatly differ and are thus difficult to compare. Currently, there is not one comprehensive framework, model or measuring method available for the evaluation of sustainable performance. Before one comprehensive integrated assessment method can be developed, there should be an investigation of the following: the concept of sustainability should be completely clear and well defined, general guidelines for the sustainable company should be developed, conditions to be met should be stated, and the problems and bottlenecks to overcome should be determined. As the focus of this research is on 'influence strategies' and not on developing an assessment method for sustainability, there is one assessment method chosen that is best suited for this research, the Dow Jones Sustainable Index.

The Dow Jones Sustainable Index, DJSI, is an assessment method for sustainable performance, which integrates the three dimensions of sustainability. The DJSI World tracks the largest sustainability leaders worldwide and comprises about 300 companies that represent the top 10% of the leading sustainability companies out of the largest 2500 companies (based on market capitalization). The companies are ranked within their industry group and are assessed on an extensive set of corporate sustainability criteria divided over the three dimensions of sustainability, for example risk governance,

codes of conduct, customer relationship management, environmental management systems, biodiversity, human capital development, philanthropic activities and occupational health & safety (*DJSI Index Design Committee, 2010*). For a full list of the DJSI 'Corporate Sustainability Assessment Criteria' see Appendix II. This method includes four sources of information: company questionnaires, company documentation, media and stakeholders, and contact with companies (*DJSI Index Design Committee, 2010*), and can therefore be considered as a reliable method. In this research the assessment method is not used to measure sustainability, but to define sustainability indicators.

The DJSI classifies the industry in 19 categories. In the Food&Beverage category in the DSJI World of 2010/2011, Unilever has been appointed as the sustainability leader for the 12th executive year and Lotte Shopping has been named as the sustainability leader in the Retail category (*SAM Indexes GmbH, 2010*). Therefore, these companies' sustainability plans, respectively the 'Unilever Sustainable Living Plan' and 'Think Tomorrow', can serve as a reference to test the applicability of the sustainability indicators for this research.

To be certain, the selection of sustainability indicators is complete and exhaustive, another assessment method is reviewed. The International Organization for Standardization (ISO) provides a guidance tool for social responsibility, ISO26000, in which the core subjects and issues of CSR are described.

The selection of sustainability indicators for this research are based on the DJSI Corporate Sustainability Assessment Criteria and supplemented with the indicators presented in the sustainability plans of Unilever and Lotte shopping, and the ISO 26000 standard, are presented in table 1.

Sustainability indicators	Associated Activities
Environmental	
Energy Usage	Energy reduction, energy usage from renewable sources
Water Usage	Water usage reduction
Waste Management	Waste reduction, packaging reduction/reuse/recycling
Pollution	Elimination/reduction of pollution in air, water and/or soil
Sourcing	Sustainable purchasing, fair trade practices, biodiverse purchasing
Societal	
Human Rights	Protection of civil, political, economic, social and cultural rights
Labor Practices	Reduction of workplace injuries and accidents, improvement of employee health, work-life balance, anti-corruption&bribery policy
Animal Welfare	Right treatment of animals (caging, transport, feed etc.)
Philanthropic Activities	Health promotion activities, energy saving promotions, sponsorships, participating in research projects, giving back to local communities
Economical	
Organizational Governance	Participatory management processes, idea generating programs, stakeholder communication, respect for property rights, codes of conduct
Product Quality	Product safety, accurate product information, customer service
Employee management	Educational programs, performance evaluation, employee benefits

Table 1: Sustainability indicators in this research per sustainability dimension (*DJSI Index Design Committee, 2010;, Unilever N.V., 2010; Lotte Shopping CO, 2010; International Organization for Standardization, 2010*).

The in table 1 presented sustainability indicators will be used in the survey during the empirical study, to get insight into the status of sustainability implementation at suppliers and which indicators could be stimulated at suppliers.

For the implementation of these sustainability indicators there is a certain motivation of the company required. Research shows that the most important motivation for implementing CSR, is seeing CSR as a Business Opportunity (*G. Málovics et. Al, 2008*). Other motivations include Comply with Regulation, Improving Corporate Image, Eco-Efficiency/Cost-Effectiveness, Safeguarding Market Position, Response to Competition, and Pressure from NGOs (*H. Bos-Brouwers, 2010; D.J. Haverkamp, 2010; G. Málovics et. al, 2008, BearingPoint Inc., 2008*). A description of the various motivations can be found in table 2. The motivations for implementing CSR will be tested in the empirical study. From this literature the following hypothesis is formulated:

Hypothesis 1: *"The most important motivation for implementing CSR is Business Opportunity."*

Motivation	Description
Business Opportunity	CSR can be a business opportunity, when for example the company is the first to the market with a sustainable product.
Comply with Regulation	Complying with regulation is a prerequisite of doing business.
Improve Corporate Image	CSR can improve the corporate image among consumers in a positive manner.
Eco-Efficiency / Cost-Effectiveness	By implementing CSR processes can be increasingly eco-efficient and/or cost-effective by, for example reducing energy usage.
Safeguarding Market Position	CSR is becoming more and more important in the buying decisions of consumers. Not implementing CSR can therefore mean a decrease in market position.
Response to Competition	Implementing CSR because competitors are.
Pressure from NGOs	NGOs can pressure companies by creating consumer awareness with campaigns (increase consumer demand), 'naming-and-shaming', directly pressure companies.

Table 2: Description of motivations for implementing CSR.

When the motivation for implementing CSR is present, there are several internal and external factors that affect this implementation. Examples of external factors are: Regulation, Consumer Demand, Pressure from NGOs, Customer Demand and Supplier Push. Internal factors include: Cost-Benefits, Time, Knowledge, Business Priorities and Personal Beliefs. The predominance of internal and external factors that influence sustainability will be investigated during the empirical study. The following hypotheses are studied in the empirical study:

Hypothesis 2: *"The main external factor that influences implementation of CSR is Consumer Demand."*

Hypothesis 3: *"The main internal factor that influences implementation of CSR is Cost-Benefits."*

Coherent to these internal and external factors are the bottlenecks that can arise during the implementation of CSR, namely lack of clear planning, too little time, lack of knowledge of CSR-implementation, lack of knowledge of CSR, lack of support of the managing board, lack of support of employees or middle management and insufficient budget, (*L. Moratis & T. Cochius, 2010, BearingPoint Inc., 2008*). These bottlenecks need to be overcome in order to successfully implement CSR. A description of the bottlenecks can be found in table 3. The predominance of these bottlenecks will be measured during the empirical study, with the following hypothesis:

Hypothesis 4: *"The main bottleneck for implementation of CSR is Budget."*

Bottleneck	Problem	Solution
Planning	CSR is implemented without planning and is therefore not structured.	Structure the implementation process and make a clear planning,
Time	There is too little time for the implementation of CSR.	Make more time available by prioritizing or hiring employees.
Knowledge	There is insufficient knowledge on implementation or CSR.	Learn more about the subject or hire external assistance.
Support	Management and/or employees do not support the implementation of CSR.	Inform, motivate and stimulate management and/or employees.
Budget	There is insufficient budget available for CSR.	CSR can also save money. So good calculations need to be made for the investment and payback time and cost reduction by increasing process efficiency.

Table 3: Description of bottlenecks with the implementation of CSR.

5.2 Supply Chain Management

A supply chain is the network of linked organizations that provides goods and services to end consumers (*N. Slack et al., 2007*). It starts with raw, unprocessed materials and ends with the final customers who use the final product. In this research the focus is on the food supply chain (figure 3). The main difference between regular supply chains and food supply chains, is that food supply chains are more dependent on natural performances (e.g. seasonality, growth, weather conditions, spoilage and diseases) than other supply chains. These natural performances result in price fluctuations, differing quality of raw materials, and varying availability of raw materials, which make food supply chains more complex than other supply chains.

As presented in figure 3, there are two sides of the supply chain: the supply side (the chain of suppliers) and the demand side (the chain of customers). In this research the focus is on the interface of the supply side and the demand side; between the food manufacturers and the retailer.
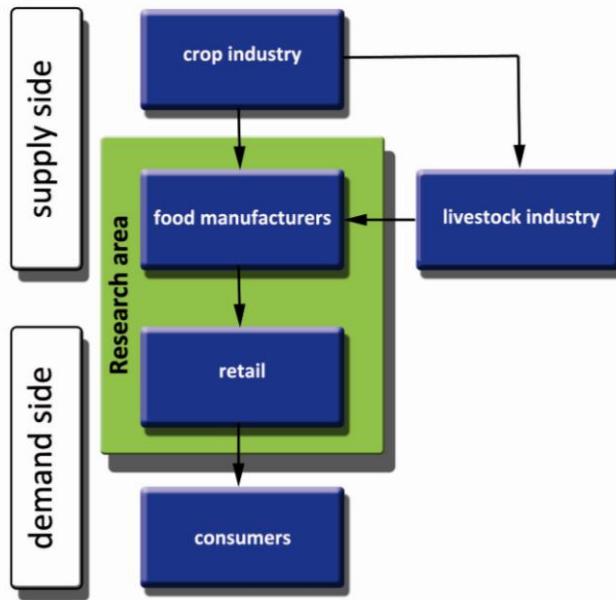
Figure 3: Schematic view of a general food supply chain.

Supply chain management is the management area that is focused on controlling and optimizing the service- and product streams, the information streams and the financial streams within and in between the consecutive links in the supply chain – from suppliers to final customers (*M. van Assen et al., 2010*). It is about the integration with other partners in the supply chain and the coordination of the various production- and logistic processes herein.

Supply chain management starts with the formation of the supply chain by selecting appropriate suppliers. Through supplier management, retailers have the ability to build and shape the supply chain by selecting suppliers and managing supply-chain relationships. The selection of suppliers should involve the evaluation of the relative importance of factors such as product range, product quality, cost, volume flexibility, dependability, ease of doing business, long-term commitment, willingness to share risk, technical capability and financial capability (*N. Slack et al., 2007*). The importance of these factors varies per company. For example, a supplier might be selected who, even though more expensive than the competitor, has an efficient volume flexibility, because the buying company needs this flexibility for the seasonality differences in their customer demand.

As a part of a supply chain, retail companies rely on their suppliers for the sustainability of their product range. This product range sustainability can be obtained through supplier management; either by replacing suppliers or by stimulating improvement of sustainability at suppliers. Replacement depends on the existence of better (or potentially better) suppliers, while stimulating improvement in sustainability depends on the retailer's ability to motivate or pressure the suppliers.

5.3 Influence Strategies

In supplier management there are different strategies that can be used to improve sustainability. Influence strategies are meant to motivate a target's compliance to a request from the source. In this case, the target is the supplier and the source is the retailer.

Influence strategies are mostly categorized as coercive and non-coercive strategies (*A. Hausman & W.J., Johnston, 2010; J.R. Brown et al., 2009; C.-S. Lai, 2009; J.M. Payan & R.G. McFarland, 2005*). Coercive strategies are based on the influence mechanism of rewards and punishments from the source, which effectiveness depends on the source's ability to act on these threats or promises, while non-coercive strategies are based on attitude change of the target, which effectiveness on compliance is determined by the completeness of the arguments provided in the strategies.

Research on the effect of coercive versus non-coercive influence strategies shows conflicting findings. *B. Clemens & T.J. Douglas* (2006) find a positive relationship between coercive strategies and compliance, while *J.M. Payan et al.* (2006&2005) and *T.-L. Hu & J.-B. Sheu* (2005) find a positive relationship between non-coercive strategies and compliance. Another study finds no relationship between either coercive or non-coercive strategies and compliance at all (*A. Hausman & J.R. Stock, 2003*). It can be concluded, that different situations ask for different influence strategies.

As stated above non-coercive strategies rely on attitude change, while coercive strategies rely on punishment and rewards. Even though both strategy types could result in compliance, the non-coercive strategies will have a long-term effect, while the coercive strategies will have a short-term effect (*J.M. Payan et al., 2005*). This is because with the coercive strategies the target will only comply in order to gain a reward or to avoid punishment, not because it believes in the content of the request as is the case with non-coercive strategies, which need attitude change before compliance. In improving sustainable performance, the long-term effect is important. Therefore, for improving the sustainability of the supply chain, non-coercive influence strategies can be considered most suitable.

In order to find out which influence strategy encourages compliance the most; literature on the individual influence strategies is compared. The most studied strategies are Promise, Threat, Legalistic Plea, Information Exchange, Recommendation, Request and Reason (*P.W.Th Ghijsen et al., 2010; J.R. Brown et al., 2009; C.-S. Lai, 2009; J. M Payan & R.G. McFarland, 2005*), which are defined in table 4.

Influence strategy	Definition
Coercive	
Promise	The source promises the target a reward for compliance with a request.
Threat	The source threatens the target with punishments for non-compliance with a request.
Legalistic Plea	The source explains that the request is required by law and negative sanctions will follow with non-compliance.
Non-Coercive	
Information Exchange	The source supplies the target information without a request.
Recommendation	The source claims that the target will benefit if it complies with the request, without giving arguments.
Request	The source simply states the actions it would like the target to take.
Reason	The source presents explanations (beyond promise or threat) for compliance.

Table 4: Definitions of most researched influence strategies.

Legalistic Plea can be considered as a form of threat. Therefore, in this research, Legalistic Plea is included in the Threat strategy.

Non-coercive strategies can be classified according to the argument structure theory. The Argument structure theory presents the ideal argument as a complete argument. A complete argument consists of three structural elements: claim, data and warrant. The claim is a request for acceptance, the data are the information that offers evidentiary support for the claim, and the warrant is the concluding statement. Research shows that, the more complete the argument is, the higher level of influence (*C.S. Areni, 2002*). When applying the argument structure theory to influence strategies, it shows that Information Exchange only contains the 'data' and Request only contains the 'claim', while Recommendation contains the 'claim' and the 'warrant'. All of these strategies are thus based on incomplete arguments and would therefore not be as effective as an influence strategy based on a complete argument. Therefore, an influence strategy based on a complete argument should be added to the research and is referred to as Reason: a combination of Information Exchange and Recommendation.

Then, there should be a strategy which addresses the buyer-supplier relationship as described in 5.4 Supply-chain Relationships. In this part of the literature study it is found that a strong buyer-supplier relationship or partnership enhances the performance of the supply chain. In order to link this literature to literature on influence strategies, a fifth strategy is added: Appeal to Business Relationship/Loyalty. With this strategy the supplier appeals to the professional relationship with the target or to the loyalty to this target in order to stimulate compliance.

Summarizing, the influence strategies studied in this research are: Promise, Threat, Request, Reason and Appeal to Business Relationship/Loyalty. These influence strategies are defined in table 5.

Influence strategy	Definition
Coercive	
Promise	The source promises the target a reward for compliance with a request.
Threat	The source threatens the target with punishments for non-compliance with a request.
Non-Coercive	
Request	The source simply states the actions it would like the target to take.
Reason	The source presents explanations (beyond promise or threat) for compliance.
Appeal to Business Relationship/Loyalty	The source appeals to the business relationship with the target or the loyalty from/to this target to stimulate compliance.

Table 5: Definitions of influence strategies studied in this research.

Research shows that strategies that include reasons, arguments and/or supportive data linked to a request (i.e. Reason) will result in higher levels of compliance than strategies without this information (i.e. Request) (*J.M. Payan et al., 2005; C.S. Areni, 2002*). This can be explained by the above described theory of argument completeness. The effect of Appeal to Business Relationship/Loyalty can be estimated by the results of research conducted by *J.M. Payan & J.R. Nevin* (*2006*). This research suggests that even though Reason is more effective than Request, it is not statistically more effective than a strategy of appealing to the professional friendship/loyalty of the supplier. This also indicates that although influence strategies are important, a strong buyer-supplier relationship is even more important. This is supported by the literature found on willingness to cooperate in relationships built on trust in 5.4 Supply-chain Relationships. The effectiveness of and the preference for the described influence strategies will be tested during the empirical study. The following hypotheses are stated:

Hypothesis 5: *"The most applied influence strategy to stimulate sustainability is Reason."*

Hypothesis 6: *"The best influence strategy to encourage compliance for sustainability is Appeal to Business Relationship/Loyalty."*

Compliance is not only affected by the influence strategy, but also by the nature of the request (request legitimacy, request importance and request imposition). Request legitimacy refers to the rightfulness of the request: if the request is perceived as legitimate, it is more likely to be complied with. Request importance deals with the ability to reach business goals when complying with the request: if the request supports the business goals, compliance to the request is more likely. Request imposition relates to the degree of impact the request has on the business: if the business needs to make many changes to comply with the request, compliance is less likely. These factors will not be addressed in this research as of time limitations.

5.4 Supply-chain Relationships

In the previous paragraph Appeal to Business Relationship appeared to be the best influence strategy to encourage compliance in sustainability. For this influence strategy to work, a strong buyer-supplier relationship is essential. This paragraph shows why a strong buyer-supplier relationship is important and how it can be established.

Literature shows that supply chain integration, by building and maintaining a strong supply-chain relationship and encouraging cooperation, enhances the performance throughout the supply chain (*W.C. Benton & M. Maloni, 2005; R. Handfield et al., 2005; I.J. Chen et al., 2004; V. Narayanan & A. Raman, 2004*). Furthermore, a greater level of supply chain integration is associated with a higher level of performance (*T. van der Vaart & D.P. van Donk, 2008*). This enhanced performance can be explained by the development of close interpersonal ties between supply-chain partners in a strong relationship, which lead to an increased level of commitment and compliance. Furthermore cooperation between supply-chain partners can lead to a win-win situation for both partners, because cost reductions can be achieved (for example by scale benefits or shared transport costs), planning processes can be more efficient, risks can be shared, competences can be built together etc.

Relationships are managed at the interface between the demand side and the supply side, where respectively the purchasing managers and the sales managers are an important link. They must understand each others needs and capabilities and guard the integrity of the relationship. To establish a strong buyer-supplier relationship there need to be conversations and agreements on mutual business goals and roadmaps for reaching these goals, dividing tasks for the different partners and developing conflict management policies. After the agreements, involved companies stay committed by continuous dialogues. With these conversations and agreements the focus of the supply-chain relationship shifts from merely contractual agreements to a longer-term cooperative relationship. This shift encourages the partners to take a long-term view of the relationship, to rely on each other and to build trust.

5.4.1 Trust in supply-chain relationships

Trust is positively related to the performance of cooperative relationships (*J.M. Whipple et al., 2010*). It is needed to make companies feel comfortable to share traditionally proprietary information, strategy, goals and planning with their partners. Trust, in this context, is defined as the confidence in the integrity and reliability of another party. There are several forms of trust: trusting the contact persons and their organizations, trusting the relationship to be long enough to reach mutual goals, trusting the intentions and trusting the competences (*M. van Assen, 2010*). Trust and greater commitment can be obtained by promoting long-term relationships between supply-chain members (*I.J. Chen et al., 2004*), as is done by

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establishing a partnership. So, trust is an important prerequisite for developing strong supply chain relationships, as well as a condition required for cooperation among organizations.

Trust enhances a partner's willingness to cooperate (*C. Wiertz et al., 2004*). In strong, long-term supply chain relationships or partnerships as described above, supply-chain members might even be willing to act beyond their contractual obligations, due to mutual understanding (*A.A. Lado et al., 2008*), for example improving sustainable performance.

5.4.2 Dominant firm in supply-chain relationships and power

Stimulating sustainable development in the supply chain is influenced greatly by dominant firms that can effectively influence suppliers to engage in sustainability projects and to improve their sustainable performance (*J. Hall, 2001*). The dominant firm is mostly the company with the largest financial power, the company with the most knowledge/expertise or the company that generates most customer value with the right products and/or processes (*M. van Assen et al., 2010*). Research shows that supply-chain relationships between supplier and retailer are very strongly retailer led (*A. Hughes, 2005*). Retailers are therefore often the dominant firm in the supply chain. This indicates that retailers as the dominant firm have a certain power over their suppliers.

Power refers to the asymmetric dependence in an inter-firm relationship. So for example, if the supplier's dependence on the retailer is higher than the retailer's dependence on the supplier, then the retailer has power over the supplier. So, to what degree this power can affect the target firm, is partly determined by the dependence of the target firm on the dominant firm. For example, if the retailer only buys a small percentage of the supplier's turnover, the retailer does not have a lot of influence, because the supplier is not dependent on the retailer for their business to keep existing. The following hypothesis arises:

Hypothesis 7: *"The relative importance of the buyer is positively correlated with the willingness to cooperate of the supplier."*

The various power sources available to the dominant firm can be classified into two types: mediated and non-mediated power. Mediated power sources include reward, coercion and legal legitimate, while non-mediated power sources include referent, expertise and information provided by the dominant firm (*W. Ke et al., 2009; W.C. Benton et al., 2005*). Reward power refers to the dominant firm's ability to give a reward for cooperation, coercion power refers to the dominant firm's ability to mediate punishments for non-cooperation, and legal legitimate power is based on the dominant firm's legitimate rights to exert influence. Referent power is associated with the target firm's identification with the dominant firm, expert power is based on the expertise of knowledge hold by the dominant firm, and information

power is the dominant firm's ability to provide information which is meaningful but unknown by the target company. The different types of power sources have significant influence on the supply-chain relationship (*W.C. Benton et al., 2005*), with varying results on supply chain integration. Mediated power sources are associated with a negative attitude towards supply chain integration, because this type of power reduces the supplier's trust and may incur conflicts (*W. Ke et al., 2009*). Non-mediated power sources, on the other hand, have a positive effect on the supply-chain relationship (*W.C. Benton et al., 2005*), while it can enhance trust and thereby motivate the supplier to cooperate (*W. Ke et al., 2009*). Power should therefore be used considerately in appropriate influence strategies, as described in paragraph 5.3 Influence Strategies. Again, the non-coercive way appears to be the best way to stimulate compliance.

The dominant firm can use their power to stimulate suppliers to improve their sustainable performance. Research shows that the pressure from supply-chain members to pay attention to the environment is positively related to the adoption of environmental management capabilities (*D.J. Haverkamp, 2010*). This leads to the following hypothesis for the empirical study:

Hypothesis 8: *"Retailers, as the dominant firm in the supply chain, should be the initiator in supply chain integration towards increasing sustainable performance."*

5.4.3 Types of supply-chain relationships

As the dominant firm in the supply chain, retailers often lead the buyer-supplier relationship (*A. Hughes, 2005*). Literature distinguishes two types of buyer-supplier relationships: 'traditional relationship' and 'cooperative relationship'/'partnership' (*N. Slack et al., 2007; W.C. Benton et al., 2005; D. Power, 2005*). The main difference is that in traditional relationships the products and services are purchased by selecting the best supplier every time it is necessary to purchase, while in a partnership the business selects the best supplier for an alliance to achieve mutual business goals. The characteristics of these types of relationships are listed in table 6.

Characteristic	Traditional relationship	Partnership
Supplier selection	Price emphasis	Multiple criteria
Duration	One time	Long-term
Goals and planning	Individual, short-term	Mutual, long-term
Risks and benefits	Individual	Shared
Transferability	Completely transferable	Difficult to transfer
Number of suppliers	Large supplier base	Few suppliers
Information sharing	Proprietary	Shared
Attitude	Independent, suspicious	Open, trusting, cooperative
Problem solving	Power driven	Mutual problem solving

Table 6: Characteristics of buyer-supplier relationships (*W.C. Benton et al, 2005*).

Traditional relationships are characterized by regular price reviews, multiple suppliers and avoidance of long-term commitments. Partnerships are characterized by sharing information, mutually achieving goals, sharing resources, responsibilities, risks and benefits as well as jointly solve problems and decision making. Based on these characteristics there are advantages and disadvantages of both strategies. The advantages of the traditional relationship, over the partnership are:

- competition between alternative suppliers is maintained, which promotes a constant competitive drive between suppliers to deliver best value;
- flexibility in suppliers, which enables the buyer to change the type and/or number of suppliers when the demand changes.

Disadvantages of the traditional relationship are:

- continuously selecting and contracting suppliers takes time and effort;
- standardized products, not adding to the differential advantage of the company

Then, the advantages of the partnership over the traditional relationship are:

- higher efficiency, due to joint planning processes which can be co-aligned;
- spreading risk, because large investments are shared;
- higher level of innovation, because resources and competences of partners can be used to create differential advantage at the companies in the partnership;
- better communication, due to open information sharing between partners;
- willingness to cooperate, because of built trust (*C. Wiertz et al., 2004*)
- higher performance, because long-term commitment leads to an overriding focus on price (*J.M. Whipple et al., 2010*)

Disadvantages of the partnership can be:

- difficult to change suppliers, because long-term commitments of contracts are present;
- relying on other companies, which needs high levels of trust.

From these advantages and disadvantages, the partnership can be considered as the favorable relationship in a supply chain for stimulating sustainable development in the supply chain, because mutual goals in sustainability can be accomplished. Also, this type of supply-chain relationship is consistent with the literature on influence strategies, in which the influence strategy of Appeal to Business Relationship/Loyalty arises as the best influence strategy to stimulate sustainable development. The following hypothesis arises:

Hypothesis 9: *"Establishing partnerships is the best way to stimulate sustainable development in the supply chain."*

5.5 Definition of Concepts

CSR (Corporate Social Responsibility): commitment and actions beyond compliance, where companies integrate environmental, social and economical concerns in their business strategy and in their interaction with stakeholders on voluntary basis (*H.E.J. Bos-Brouwers, 2010; J.M. Cruz, 2008; Commission of the European Communities, 2006; C. Labuschagne & A.C. Brent, 2005*).

Sustainability: a concept which involves the integration of three dimensions, namely environment, society and economy, to meet the needs of the present, while protecting, preserving and enhancing human and natural resources that will be needed in the future (*H.E.J. Bos-Brouwers, 2010; A.L. Carew et al., 2008; R. Lozano, 2008; G. Málovics et al., 2008; P. Glavič et al., 2007; G. Brundtland et al., 1987*).

Sustainable production: the creation of goods and services using processes and systems that are non-polluting, conserving of energy and natural resources, economically viable, safe and healthful for workers, communities and consumers and which are socially and creatively rewarding for all stakeholders for the short- and long-term future (*Lowell Center for Sustainable Production (LCSP), 2010*).

Dominant firm: the firm in the supply chain with the largest power, based on financial power, knowledge/expertise of generating most customer value with the right products and/or processes (*M. van Assen et al., 2010*).

Large retail company: Companies with more than 250 employees (*European Commission, 2010a*), that sell goods in relatively small quantities directly to consumers (*Oxford Dictionaries, 2010*). Stereotype characteristics are the delegated management control, economy of scale, resource abundance, bureaucratic rigidity, focus on mid to long term, strong (inter)national focus and looser ties with customers and high degree of formalization (*H.E.J. Bos-Brouwers, 2010*).

Supply Chain Management: the management area that is focused on controlling and optimizing the service- and product streams, the information streams and the financial streams within and in between the consecutive links in the supply chain – from suppliers to final customers (*M. van Assen et al., 2010*).

Partnership: the relationship between individuals or groups, characterized by mutual, cooperation and responsibility to achieve specified business goals.

Influence strategy: approach to motivate a target's compliance to a request from the source.

Compliance: the action or fact of complying with a wish or command (*Oxford Dictionaries, 2010*).

5.6 Summary of Hypotheses

From this literature review the following hypotheses arose:

Hypothesis 1: *"The most important motivation for implementing CSR is Business Opportunity."*

Hypothesis 2: *"The main external factor that influences implementation of CSR is Consumer Demand."*

Hypothesis 3: *"The main internal factor that influences implementation of CSR is Cost-benefits."*

Hypothesis 4: *"The main bottleneck for implementation of CSR is Budget."*

Hypothesis 5: *"The most applied influence strategy to stimulate sustainability is Reason."*

Hypothesis 6: *"The best influence strategy to encourage compliance for sustainability is Appeal to Business Relationship/Loyalty."*

Hypothesis 7: *"The relative importance of the buyer is positively correlated with the willingness to cooperate of the supplier."*

Hypothesis 8: *"Retailers, as the dominant firm in the supply chain, should be the initiator in supply chain integration towards increasing sustainable performance."*

Hypothesis 9: *"Establishing partnerships is the best way to stimulate sustainable performance in the supply chain."*

These hypotheses will be tested during the empirical study.

6 Empirical Study

Based on the outcomes of the literature review, 20 in-depth interviews were held with current and potential suppliers of HEMA. The respondents included CEOs, QA managers, sustainability managers and supply chain managers of mainly private label manufacturers, as well as some manufacturers of brand products. In this part of the thesis report, the results of the empirical study are presented, interpreted and compared to the literature review. The results per interview question are included in Appendix V.

6.1 Sustainability

During the interview, the respondents were asked about the different sustainability indicators found in the literature review, as presented in Table 1. The respondents described how they are involved in the different sustainability indicators and which sustainability indicator has priority in their organization. As presented in graph 1, Sourcing and Energy Usage are indicated as the sustainability indicators with highest priority, with 28.6% and 20% respectively, followed by Waste Management and Pollution both with 11.4%.
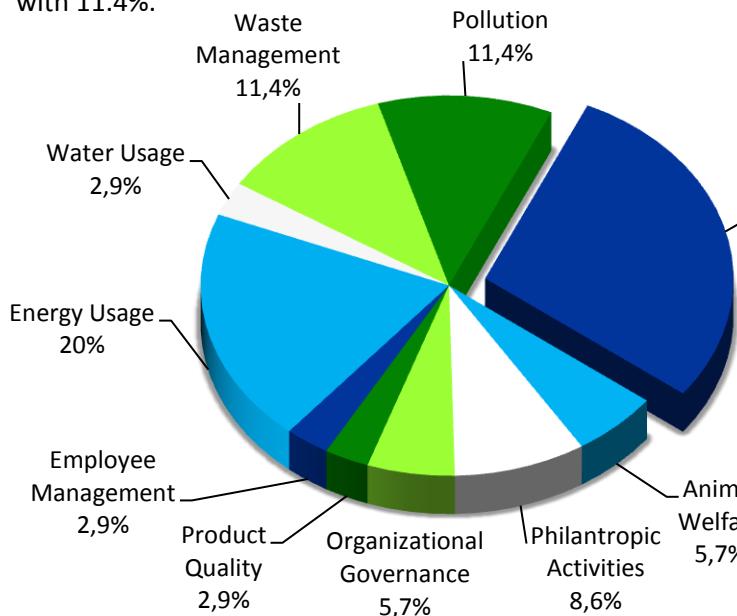
Graph 1: Sustainability indicators with priority.
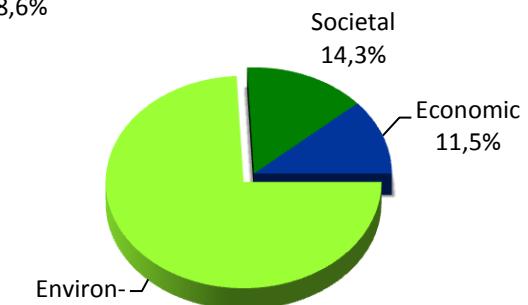
Graph 2: Sustainability dimensions with priority.

Strikingly, the indicators with the highest priority are all from the Environmental dimension. It is therefore interesting to investigate the priority of the three sustainability dimensions. This is presented in graph 2. This graph shows that there is a large priority in the Environmental dimension of 74.2%. Respondents explained that this priority is due to the fact that these indicators are easiest to improve and most gain can be achieved. For example, reducing energy by replacing machines, adding insulation or improving the efficiency of the production process. The priority for Sourcing is largely influenced by

customer demand, as respondents indicated. Furthermore, other indicators, such as Labor Practices (0%), Human Rights (0%) and Product Quality (2.9%) are bound by strict regulation in the Netherlands, which makes paying attention to these indicators self-evident and thus not a priority.

Based the answers to the interview question on sustainability indicators the respondents were classified to their estimated degree of sustainability and divided over three groups: High, Medium and Low (see also Appendix III: Respondents). As sustainability was not measured in this empirical study, the classification is based on a qualitative weighting of the impression the interviewer had of the respondent's company. The respondents in the High category represent the forerunners in sustainability; sustainability is embedded in their business strategy and is considered with every decision. The companies in the Middle category are consciously engaged in sustainability and have implemented sustainability in parts of the business. The companies in the Low category have some interest in sustainability, but have not taken much action towards sustainable production. This classification has been made to investigate possible relations between the degree of sustainability and other factors, such as motivation to implement sustainability. First the overall results of the research topics are described and then, if applicable, the possible/expected relation. The view of HEMA is indicated with the following symbol: HEMA .

6.1.1 Motivations

For implementing the sustainability indicators there is a certain motivation of the company required. The literature review presented the main motivation for implementing CSR: Business Opportunity. From the empirical study, however, Safeguarding Market Position (25%) appears to be the main motivation, as illustrated in graph 3.
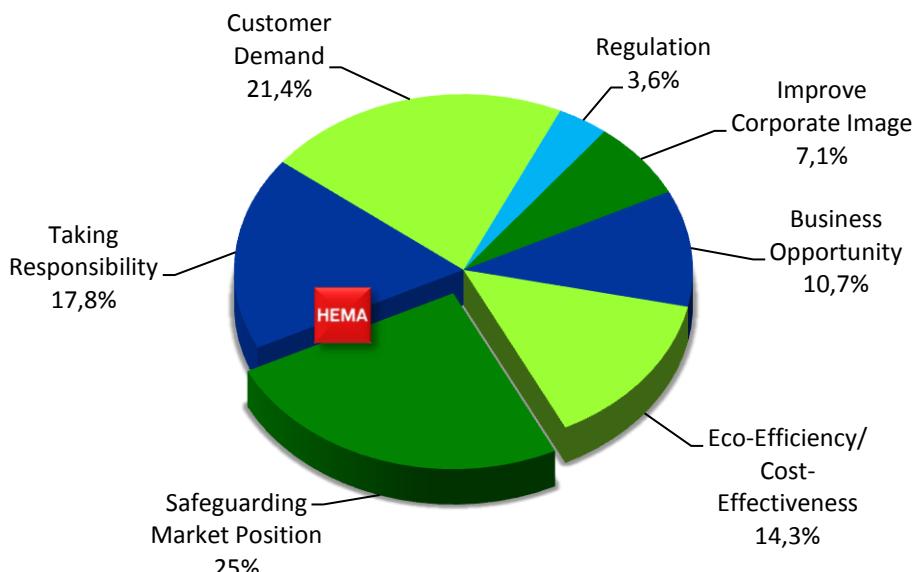
Graph 3: Motivations for implementation of CSR.

Respondents indicate that Safeguarding Market Position is the motivation for implementing CSR, because they need to ensure that they will keep existing in the market. Foppen said about this *"If you are a large player in the market, you need to ensure the availability of raw materials."*, VION said *"You can avoid the discussion now, but then, in 10 years, there is a completely different discussion, the discussion of existence."* Unilever goes even further, by saying *"Growth and sustainability are inseparably linked. We can only grow if we are sustainable, but we can only be sustainable if we are growing, because you need to make these environmental investments."* As these results show, companies can no longer ignore sustainability or CSR if they want to keep existing as a business. Therefore, Hypothesis 1 *"The most important motivation for implementing CSR is Business Opportunity."* is not supported. However, the motivations Business Opportunity and Safeguarding Market Position can be linked, because responding to business opportunities can be a way to safeguard the position in the market.

Two additional motivations arose from the interviews, which were not found in literature: Taking Responsibility and Customer Demand. Customer Demand (21.4%) is the second most important motivation for suppliers to implement CSR. This can be explained by the fact that the suppliers greatly depend on the product specifications of their customers, the retailers. W. Heemskerk said the following on product specifications of pesticide residues on fruits and vegetables *"There are legal regulations, but one of our customers goes even further, they demand only 1/3 of the maximum allowed amount."* Customer demand (21.4%) is thus a more important motivation than to Comply with Regulation. Complying with Regulation (3.6%) is not an important motivation for suppliers to implement CSR. This can be explained by the fact that many customers (retailers) of the suppliers are ahead of regulation with their stricter demands on the products. For example, Arla said *"We are ahead of regulations, it is rarely that we have to adjust to regulations."*.

The main motivation of HEMA is Taking Responsibility (as indicated in graph 3), but also the societal pressure from consumers. *"Sustainability cannot be avoided anymore."* Thus there is also a commercial interest in CSR to Safeguard the Market Position. The drive of individuals in the organization and the fact that sustainability is more and more part of product quality play a role in the motivation of HEMA to pay attention to sustainability.

When the respondents are classified to their degree of sustainability, it is interesting to notice that the motivations for implementing sustainability differ among these groups. The most important motivations for Low are Customer Demand and Eco-Efficiency/Cost-Effectiveness, for the Middle group Customer Demand and Safeguarding Market Position are the most important and for the High group the motivation of Safeguarding Market Position is most important, while Customer Demand scores 0% in this High group. It is interesting to see that in the Middle and Low groups the externally focused

motivations (Regulation, Customer Demand, Eco-Efficiency/Cost-Effectiveness) are most important, while the High group only has internally focused motivations (Business Opportunity, Safeguarding Market Position and Taking Responsibility). HEMA has an internally focused motivation, Taking Responsibility and Safeguarding Market Position. The difference between internally and externally focused motivations is the attitude towards sustainability. Companies with an externally focused motivation shift the responsibility for sustainable development to other parties, such as customers or government, while companies with an internally focused motivation take matters into their own hands. These results show that internally focused motivations based on a positive attitude towards sustainability result in a higher degree of sustainability. It can therefore be expected that the type of motivation influences the degree of sustainability in the company. Further research is needed to confirm this expectation.

6.1.2 External factors

All external and internal factors were prompted to the respondents to investigate which external factors influence the implementation of CSR. The results are presented in graph 4. After that, respondents were asked to indicate the most important external factor, which is presented in graph 5.
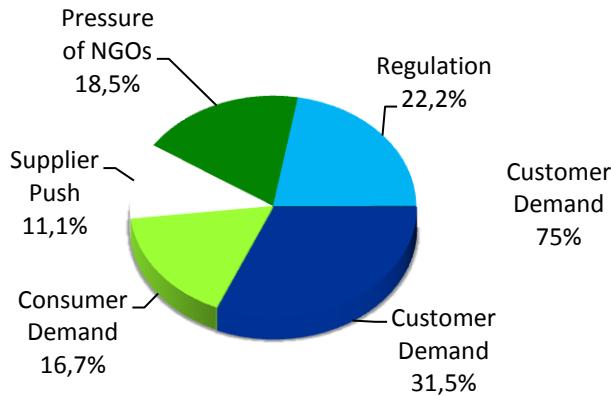
Graph 5: External factors which influence the implementation of CSR.
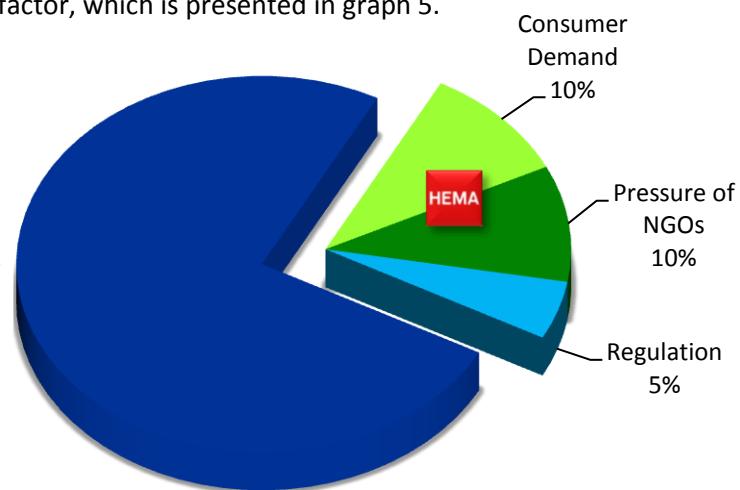
Graph 4: Main external factors which influence the implementation of CSR.

As is shown in graph 4, all external factors play a role with the implementation of CSR, which proves that the literature review was correct on this subject. Then, in the follow-up question, 75% of the respondents indicated Customer Demand as the main external factor, as presented in graph 5.

Hypothesis 2: *"The main external factor that influences implementation of CSR is Consumer Demand."* is supported with these results. This can be explained by the fact that these manufacturers produce private label products, and therefore depend on their customers (the retailers) for indicating product specifications, volumes etc., as described in the part on the motivations. As one of the

respondents, who wishes to remain anonymous, said: "*retailers have the power, they determine what is being sold".*

HEMA indicated that Consumer Demand is the main external factor that influences the implementation of CSR (see graph 5). Customer Demand and Consumer Demand in their case is the same. So, the result is similar to that of the suppliers. Another external factor that is of influence is Pressure of NGOs. HEMA said NGOs pressure the organizations with the most visibility and herewith most vulnerability to this pressure. NGOs pressure these types of organizations to use their influence to stimulate their suppliers.

Also, when respondents are classified to their degree of sustainability, the external factor of Customer Demand remains the most important factor in all groups, Low, Middle and High. A relation between most important external factor and degree of sustainability can therefore not be confirmed.

6.1.3 Internal factors

The same question was then prompted for internal factors. The results are presented in graph 6 and 7. Also, all the internal factors were present in the answers of the respondents.
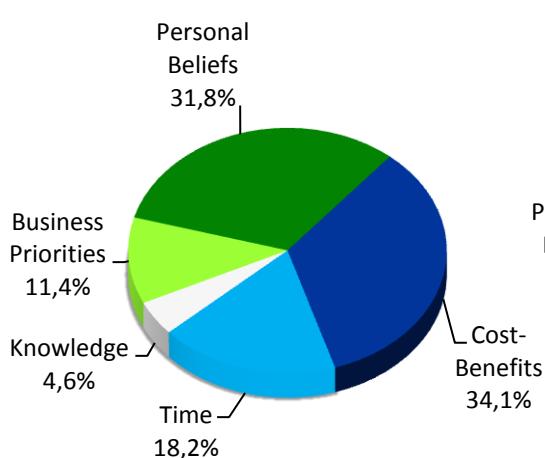
Graph 7: Internal factors which influence the implementation of CSR.
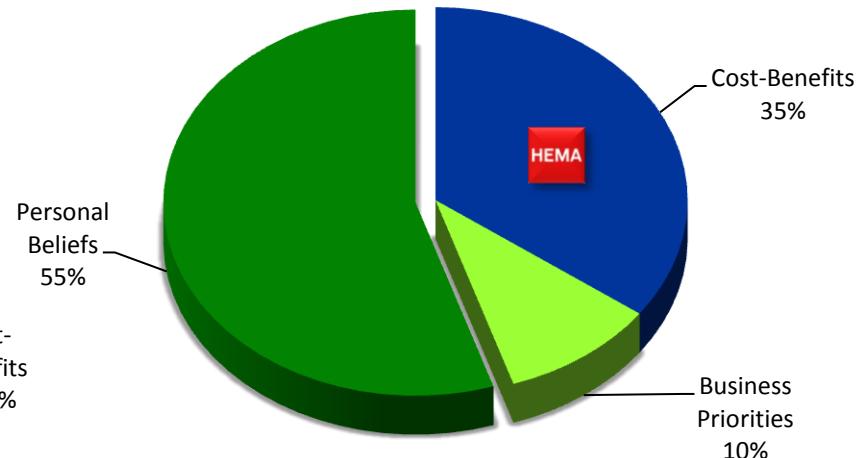
Graph 6: Main internal factors which influence the implementation of CSR.

In the follow-up question, Personal Beliefs (55%) is presented as the most important internal factor to influence the implementation of CSR. Unilever said: *"If there is no vision and willingness of the management board, forget it! You will always get the conflict of cost and then you will not make it. There needs to be an attitude change. It is not about a campaign of 12 weeks, but it's about the long-term vision, it is about changing your business model".*

Knowledge and Time were both not indicated as the most important internal factor. HEMA said: *"Time and Knowledge can be created."* With 35%, Cost-Benefits is an important internal factor, *"When you look at sustainability, it needs to contribute to the business objectives, directly or indirectly." (VION),*

but the most important internal factor appears to be Personal Beliefs. Therefore, Hypothesis 3: *"The main internal factor that influences implementation of CSR is Cost-Benefits."* is not supported.

For HEMA the main internal factor that influences the implementation of CSR is Cost-Benefits (as indicated in graph 6). *"It is not about saving money or not wanting to invest, but more about safeguarding our market position."* HEMA has to compete with many discounters in the market who are not paying (as much) attention to sustainability, Cost-Benefits is therefore an important factor in the organization. Furthermore, Personal Beliefs become more and more important due to enthusiastic individuals within the organization.

Again, the respondents were compared based on their degree of sustainability. Strikingly, for the High group the only internal factor indicated as most important is Personal Beliefs. Personal Beliefs (44.4%) is also the most important internal factor in the Medium group after Cost-Benefits (33.3%), while the internal factor of Cost-Benefits is as important as Personal Beliefs (both 50%) in the Low group. The quote above *"If there is no vision (…) changing your business model."* from Unilever, which is in the High group, illustrates the importance of Personal Beliefs perfectly. The other two respondents from the High group made similar comments. FrieslandCampina: "*It only works if management calls for it. (…) Sustainability needs to be integrated in the entire organization.*" Arla: "*It is important that the entire organization carries it out. (…) That it is not a small project here and there. It needs to be spread throughout the organization.*" It can therefore be expected that there is a relation between internal factors and the degree of sustainability.

6.1.4 Bottlenecks

Coherent to these internal and external factors are the bottlenecks that can arise with the implementation of CSR. From the literature review the main important bottleneck for implementation of CSR is Budget. The results from the empirical study are presented in graph 8, which shows that the main bottleneck is Support (38.9%). Time is not mentioned as a bottleneck by the respondents in this study.
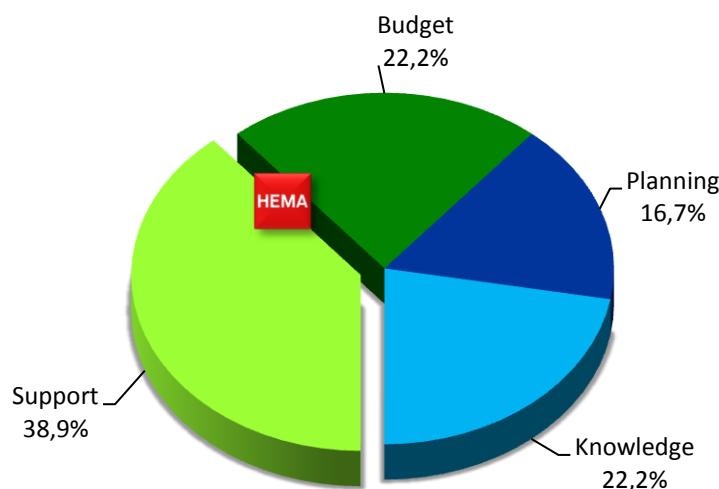
Graph 8: Bottlenecks with the implementation of CSR.

The main problem in the bottleneck Support is that *"people don't recognize the importance of sustainability" (Astra Sweets)*. Grootendorst Banket said: *"you can have a fantastic plan from the management top, but the personal commitment of individuals determines the success. If people have been doing something in a particular way for years, it is difficult to let those people do it another way that management thinks is better"*. This bottleneck can be overcome by *"convincing people with numbers" (Astra Sweets), "motivating people" (Grootendorst Banket),* and *"setting up engagement programs in which information is shared, engagement is stimulated and practical tools are given" (Unilever)*.

Also HEMA indicated Support as the main bottleneck with the implementation of CSR. HEMA said: *"600 people, 600 opinions".* In such a large organization it is difficult to get everyone to agree on the same goals. Another bottleneck for HEMA is the complexity of CSR. HEMA has so many products, from so many different supply chains in different countries. It is not only about sourcing, but also about other business processes in the office, but also in the 555 stores HEMA has. It is inevitable to make choices in CSR, because it is impossible to do everything at the same time. Also, Budget is an important bottleneck within HEMA. This is partially influenced by the fact that HEMA is owned by a private equity firm, which is not willing to make long-term investments.

The bottleneck of Knowledge is another important bottleneck among suppliers. The main problem is in the complexity of the concept of sustainability. Respondents said about this *"it is very broad and it is very difficult to get focus on" (Katshaar Zuivel)* and *"the definition of sustainability, in particular with our customers, that is a challenge" (VION)*. Arla illustrated the complexity with the following example *"organic cane sugar is perceived by consumers as the most natural sugar. The sugar we use is from European beets, which is also natural. The organic cane sugar is imported from India, so concerning CO_2 -emission, that is not sustainable at all. These kind of dilemmas need to be dealt with"*. Solutions for this bottleneck are *"discussions with customers" (Baronie), "searching for different product concepts" (VION)* and *"making well weighed choices, so we can explain why we made that choice in case customers have questions" (Arla)*.

Although Budget (22.2%) is an important bottleneck, it is not the main bottleneck in this study, thus therefore Hypothesis 4: *"The main bottleneck for implementation of CSR Budget."* is not supported in this empirical study. In this study the main bottleneck is Support, as described above.

6.2 Influence Strategies

During the interview the respondents were asked which strategy was most similar to their own strategy, to find out which influence strategy was most used among food suppliers. Results are presented in graph 9.
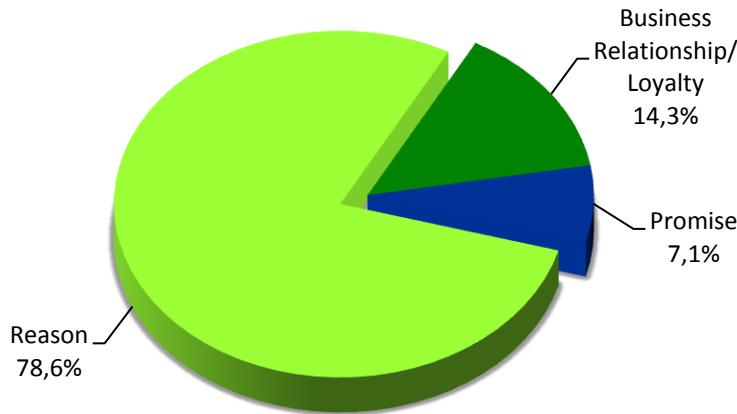
Graph 9: Most used influence strategies of food suppliers.

From this graph it can be concluded that Reason (78.6%) is the most used influence strategy among food suppliers, while Threat (0%) and Request (0%) are both not used at all. Therefore Hypothesis 5: *"The most applied influence strategy is Reason."* is supported for the food suppliers.

Then, the respondents were asked about their perception of influence strategies used by HEMA. The results are presented in graph 10.
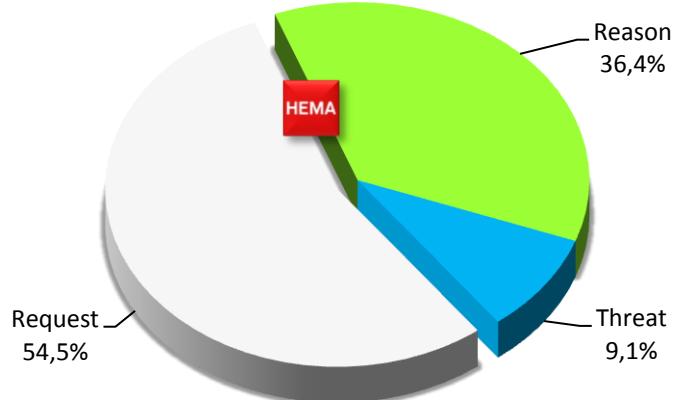
Graph 10: Perceived most used influence strategies by HEMA.

As is shown, the used influence strategies by HEMA differ from the most used influence strategies used by the food suppliers in this study. As perceived by the respondents, HEMA's most used influence strategy is Request (54.6%), followed by Reason (36.4%). The influence strategies Appeal to Business Relationship/Loyalty (0%) and Promise (0%) are perceived to be not used at all.

HEMA, however, indicates Reason to be the main influence strategy used, followed by Request. HEMA emphasizes that the influence strategies they use depend on varying factors such as, negotiation phase,

supplier and type of relationship. It can be concluded that Hypothesis 5: *"The most applied influence strategy is Reason."* is not supported for HEMA's perceived approach.

The respondents were also asked which strategy they preferred to be approached with. The results are presented in graph 11.
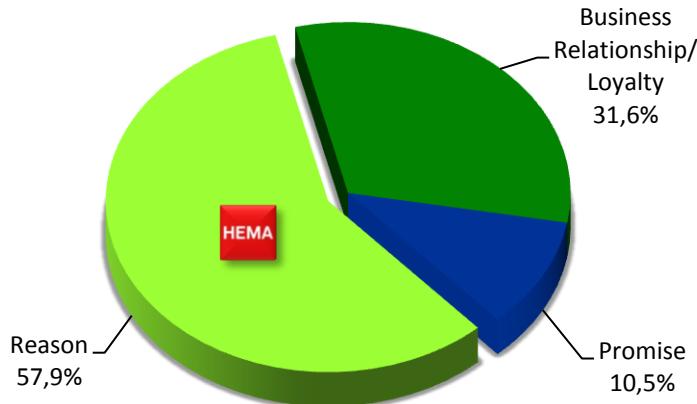
Graph 11: Preferred influence strategies.

Reason (57.9%) is the most preferred strategy, followed by Appeal to Business Relationship/Loyalty (31.4%). The preference for the Reason strategy is because in this way *"there is an interactive process in which there is a debate with arguments" (The Greenery)* and then suppliers *"know with what stake and with what goal customers are choosing a certain path" (Baronie)*, which *"gives safe feeling, because then you know why" (Astra Sweets).* The preference for Appeal to Business Relationship/Loyalty is based on *"working towards the same goal (…) with shared values, because then you have the same stake" (FrieslandCampina)*. Respondents said *"by cooperation you can accomplish more" (Arla)*, because *"you can realize goals together and share the reward" (Menken Combinatie)*. HEMA agrees with the respondents and has also indicated Reason as their preferred influence strategy to be approached with, because it is a nice way of doing business, while being effective. *"I would like to understand why."*

The preference for Promise (10.8%) is low, because respondents indicate that "*it reeks of bribery*". None of the interviewed food suppliers have a preference for Threat (0%) or Request (0%). There is no preference for Threat, because businesses have a loss of control in this way. The non-preference of Request can be explained by the fact that respondents think that the effectiveness of Reason is better, as illustrated in graph 12, because of the added arguments. Therefore, it is assumed that none of the respondents chose Request as their preferred strategy.

Now that the preferred strategies are identified, it is relevant to investigate the effectiveness of the individual influence strategies. The effectiveness of the strategies was measured by using a 7-point Likert-scale. The respondents rated all strategies of which the results are presented in graph 12.
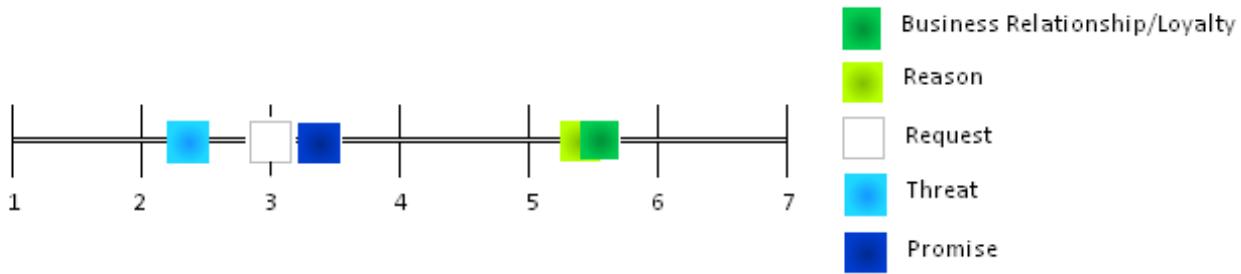
Graph 12: Average perceived effectiveness of influence strategies.

As found in literature, the strategy Appeal to Business Relationship/Loyalty is perceived as most effective (5.5), closely followed by Reason (5.4). The perceived effectiveness of other strategies is relatively low, with Threat as the most ineffective (2.4). HEMA has also indicated the perceived effectiveness of the individual influence strategies: Reason: 6; Request: 4; Threat: 2; Promise: 6; and Appeal to Business Relationship/Loyalty: 4. Again, HEMA emphasizes the difference in effectiveness in different situations. A striking difference is the perceived effectiveness of Promise (6), while the suppliers perceive that influence strategy as rather ineffective (3.4).

The perceived effectiveness of Appeal to Business Relationship/Loyalty is based on working together towards mutual goals, as described above. One of the respondents adds that *"it only works in long-term relationships" (New My Kits).* Respondents think Reason is effective, because *"Reason convinces" (Foppen)* and *"arguments are decisive" (Katshaar Zuivel)*. Request is rated rather low, because "*it is too non-committal*" *(New My Kits)* and "*you will get questions anyway*" *(Anonymous)*. The effectiveness of Promise is only there "*in the initial phase, to convince suppliers to participate, after that sustainability should be self-evident*" *(Mayonna)*. Threat is seen as *"a last resort"*, that *"it might be necessary in case of emergency, but then there is a chance that you lose your supplier" (Arla)*. Bakkersland said *"It works, but it is not the best way, because relationships are under pressure"*.

With Reason as the preferred strategy and Appeal to Business Relationship/Loyalty and Reason as the most effective strategies, it can be concluded that both these strategies are very suited to encourage compliance. As respondents indicated, with Appeal to Business Relationship/Loyalty alone there will be no compliance, because an explanation (i.e. Reason) is needed as well. The other way around, The Greenery said: *"Reason works even better in a long-term relationship".* Unilever said that there is not one best influence strategy: *"It is fine tuning, a combination of strategies. Depending on the existing relationship, the context and the issues in this context."*. Hypothesis 6 *"The best influence strategy to encourage compliance for sustainability is Appeal to Business Relationship/Loyalty."* is thus partially supported. It can be concluded that a combination of Reason and Appeal to Business Relationship/Loyalty is the best approach to encourage compliance and stimulate sustainable development throughout the supply chain.

6.3 Supply-chain Relationships

6.3.1 Dominant firm in supply-chain relationships and power

As described in the literature review, it is important for the supply chain to work together to enhance the performance throughout the supply chain. From the literature review the retailer also appeared to be the most suitable supply chain member for the role of initiator. The respondents were asked during the interview who should be the initiator of a sustainable supply chain. The results are presented in graph 13.
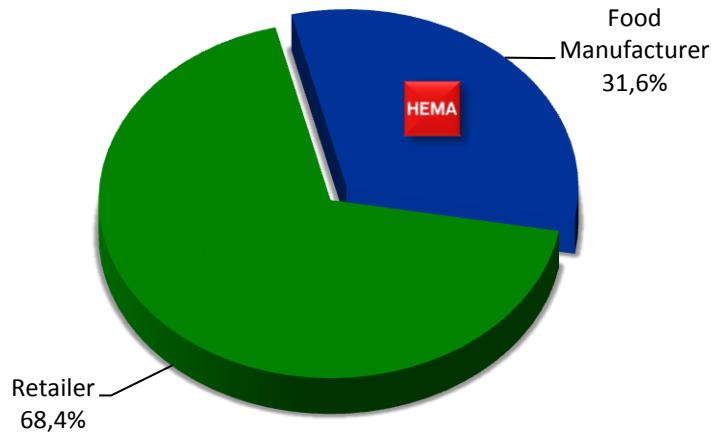
Graph 13: Most suitable supply chain member to be the initiator for a sustainable supply chain.

68.4% of the respondents indicated the retailer as the most suited supply chain member to be the initiator for a sustainable supply chain, 31.4% suggest the food manufacturer for this role, while the other supply chain roles (consumer, government, NGO and supplier of raw materials) were not mentioned at all. This supports Hypothesis 8: *"Retailers, as the dominant firm in the supply chain, should be the initiator in supply chain integration towards increasing sustainable performance."*

On the contrary, HEMA indicated the food manufacturer as the most suited supply chain member to be the initiator for a sustainable supply chain (as indicated in graph 13). HEMA explains that *"everyone has their own responsibility, HEMA too*." HEMA takes their responsibility by for example reducing energy usage, optimizing transportation, and by social engagement programs. "*It is unfair to expect of HEMA that they will also take responsibility for other supply-chain members."*

When the respondents are classified to their degree of sustainability it appears that the Low and Middle groups indicate the retailer as the role to be the initiator for a sustainable supply chain, while the High group indicates the food manufacturer as the initiator. The High group thus takes their own responsibility for sustainability in the supply chain, while the Low and Middle groups abdicate the responsibility on the retailers. This indicates a passive attitude in the Low and Medium group towards sustainability and a pro-active attitude in the High group. It can therefore be concluded that a pro-active attitude towards sustainability is expected to lead to a higher degree of sustainability.

Even though it appears that better results can be obtained by taking their own responsibility, still most respondents have indicated that the retailer should be the initiator of a sustainable supply chain. The most important reason why the retailer should be the initiator is because the retailer is the link between the consumer and the manufacturer. Bakkersland explained: *"The retailer is in de middle of the supply chain. The retailer passes on the demand of their customers on to the manufacturers."* Several respondents say *"we can produce a good product in a sustainable way, but we need the retailer to put it in the market".* Because, *"retailers have the power, they determine what is being sold" (Anonymous)* and *"the retailer can use their power to sell the sustainable product with the right marketing" (W. Heemskerk).* With this power, the retailer can guarantee consumer demand, and *"by guaranteeing the demand, sustainability can be stimulated" (Unilever)*, because *"in the end, the consumer behavior, will determine how far we get" (VION)* with sustainability.

Respondents were also asked about how the initiator should approach this supply chain integration towards increasing sustainable performance. According to the respondents, the retailer should first *"include sustainability in their buying policy" (Anonymous)* and set specific product specifications. Then, the retailer should *"bring supply-chain members together" (Unilever)*, *"get around the table to talk" (FrieslandCampina)* and *"optimize partnerships in the supply chain" (Foppen).* Also, the retailer should *"assist with implementation" (Mayonna)* of sustainability. Finally, respondents indicated that retailers should monitor demand by following trends in the market, guarantee demand or create demand by marketing in the stores.

To measure to what extent the retailers and HEMA exercise the role of initiator in the supply chain at this time, respondents were asked to rate this role on a 7-point Likert-scale, with 1 being low and 7 high. The average score of retailers in general is 4.1 and HEMA scores 3.4, illustrated in graph 14.
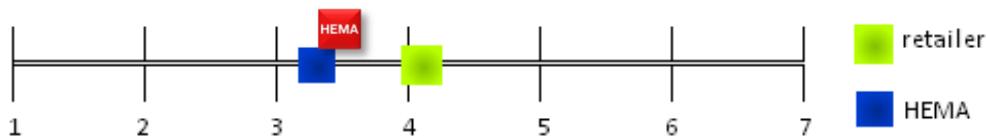
Graph 14: Average perceived initiative of retailers in general compared to HEMA.

That means, respondents think HEMA shows less initiative in sustainability of the supply chain than other retailers do. HEMA can improve this by, again, *"try to set up partnerships in the supply chain" (VION)*, *"focus on long-term relationship" (Foppen)* and *"guarantee long-term cooperation" (Anonymous).* Many retailers indicated that HEMA should be more proactive, have an active policy and show more initiative. They can do that by "*discussing more, instead of just demanding" (New My Kits)*, *"be being more distinctive in the market with more active communication towards consumers" (Unilever)*

and by *"reserving more space in the store" (Menken Combinatie)* for sustainable products. There is a lot of potential for HEMA to improve their role in the supply chain.

HEMA was also asked about their initiative in the supply chain. On the 7-point Likert-scale HEMA scores itself a 3.5 (as indicated in graph 4). This is the same degree of effectiveness as the respondents score HEMA (3.4). HEMA said they can improve their role by "*setting ambitious goals*" and "*stimulating sustainable development initiatives*", more than they do now.

From the literature review the retailer also appeared to be the most suitable supply chain member for the role of initiator, because retailers are often the dominant firm in the supply chain. The dominant firm in the supply chain can use their power to stimulate other supply-chain members to improve their sustainable performance. Part of this power is the percentage of turnover bought by the retailer, which might stimulate cooperation. Hypothesis 7 in the literature review is therefore as follows: *"The relative importance of the buyer is positively correlated with the willingness to cooperate of the supplier."* Unfortunately, there are no results to support this hypothesis, because all percentages of turnover bought at the interviewed suppliers are lower than 20%. This is because HEMA has a policy that the amount of products bought from the supplier should be strived to not exceed 25-30% of the turnover of this supplier to prevent dependability of the supplier on HEMA (*HEMA, 2005*). This could indicate a correlation between the percentage of turnover bought and dependability, and herewith buying power. This, and the correlation with cooperation, should be investigated in future research.

6.3.2 Types of supply-chain relationships

Even though cooperation or partnerships were not asked about, in the answers to the question about who should be the initiator of the supply chain, 9 of the 20 respondents indicated that cooperation and/or partnerships are the best way to develop a sustainable supply chain. Some of the quotes include: *"Above all, there should be cooperation between supply-chain members." (Astra Sweets); "If we would do things together in a partnership, you can accomplish these kinds of things." (Anonymous); "I see examples of when doing things together, the effectiveness of goals increases" (VION); "I think that if retailers and manufacturers would set up a project to stimulate sustainability, there would be the fastest results." (W. Heemskerk)* Also, every respondent in the group with the High degree of sustainability indicated cooperation/partnerships as the best way to develop a sustainable supply chain. This means that these successful companies in sustainability say that cooperation/partnerships are needed to accomplish a sustainable supply chain.

Even though cooperation and/or partnerships are important, there is still an initiator needed to lead the project. As New My Kits said: *"I think you do it with all supply-chain members, but if I have to appoint someone, I think the retailer should do it."* Therefore, the best way to stimulate sustainability

throughout the supply chain is for the retailer to be the initiator and to cooperate with supply-chain members or develop partnerships, which supports hypothesis 9: *"Establishing partnerships is the best way to stimulate sustainable development in the supply chain."*

'Influence strategies of a large retail company to stimulate the sustainability of their suppliers.'
- An empirical case study of HEMA and their food suppliers.'

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7 Conclusions

Chapter 5 and 6 presented the results of respectively the literature review and the empirical study. In this chapter conclusions are drawn and research questions are answered.

7.1 Answers to Research Questions

The overall objective of this research is to analyze **how a large retail company can stimulate sustainable development at their suppliers**. In order to meet this objective, nine research questions are addressed. Insights into the research topics to answer these research questions were obtained during the literature review and the empirical study, of which the results are presented in chapter 5 and 6.

1. *What is sustainability and how can it be measured?*

Sustainability in this research is defined as *"a concept which involves the integration of three dimensions, namely environment, society and economy, to meet the needs of the present, while protecting, preserving and enhancing human and natural resources that will be needed in the future."* The environmental dimension is about environmental protection (e.g. waste management, transport efficiency, and reduction of pollution) the societal dimension involves social equity (e.g. fair trade, human rights, and animal welfare), while the economical dimension affects economic growth (e.g. food safety, product quality, and costs). In order to obtain sustainability, these dimensions need to be integrated by linking the societal and environmental dimensions to the economic dimension.

Currently, there is not one comprehensive framework, model or measuring method available for the evaluation of sustainable performance. To assess the sustainable performance of the participants in the empirical study, sustainability indicators were defined. The selection of sustainability indicators is based on the DJSI Corporate Sustainability Assessment Criteria (Appendix II) and supplemented with the indicators presented in the sustainability plans of Unilever and Lotte shopping, and the ISO 26000 standard. The sustainability indicators used during the empirical study are presented in table 7.

Sustainability indicators	Associated Activities
Environmental	
Energy Usage	Energy reduction, energy usage from renewable sources
Water Usage	Water usage reduction
Waste Management	Waste reduction, packaging reduction/reuse/recycling
Pollution	Elimination/reduction of pollution in air, water and/or soil
Sourcing	Sustainable purchasing, fair trade practices, biodiverse purchasing
Societal	
Human Rights	Protection of civil, political, economic, social and cultural rights
Labor Practices	Reduction of workplace injuries and accidents, improvement of employee health, work-life balance, anti-corruption&bribery policy
Animal Welfare	Right treatment of animals (caging, transport, feed etc.)
Philanthropic Activities	Health promotion activities, energy saving promotions, sponsorships, participating in research projects, giving back to local communities
Economical	
Organizational Governance	Participatory management processes, idea generating programs, stakeholder communication, respect for property rights, codes of conduct
Product Quality	Product safety, accurate product information, customer service
Employee management	Educational programs, performance evaluation, employee benefits

Table 7: Sustainability indicators in this research per sustainability dimension (*DJSI Index Design Committee, 2010; Unilever N.V., 2010; Lotte Shopping CO, 2010; International Organization for Standardization, 2010*).

From the empirical study appeared that there is a priority for the following sustainability indicators among the interviewed suppliers: Sourcing (28.6%), Energy Usage (20%), Waste Management (11.4%) and Pollution (11.4%).

2. *What is the motivation to implement CSR?*

The literature review presented several motivations for the implementation of CSR, of which a description can be found in table 8.

Motivation	Description
Comply with Regulation	Complying with regulation is a prerequisite of doing business.
Improve Corporate Image	CSR can improve the corporate image among consumers in a positive manner.
Business Opportunity	CSR can be a business opportunity, when for example the company is the first to the market with a sustainable product.
Eco-Efficiency / Cost-Effectiveness	By implementing CSR processes can be increasingly eco-efficient and/or cost-effective by, for example reducing energy usage.
Safeguarding Market Position	CSR is becoming more and more important in the buying decisions of consumers. Not implementing CSR can therefore mean a decrease in market position.
Response to Competition	Implementing CSR because competitors are.
Pressure of NGOs	NGOs can pressure companies by creating consumer awareness with campaigns (increase consumer demand), 'naming-and-shaming', directly pressure companies.

Table 8: Description of motivations for implementing CSR.

The literature review presented Business Opportunity as the main motivation for implementing CSR. From the empirical study, however, Safeguarding Market Position (25%) appears to be the main motivation followed by Customer Demand (21.4%), while Business Opportunity scores 10.7%, as illustrated in graph 15.

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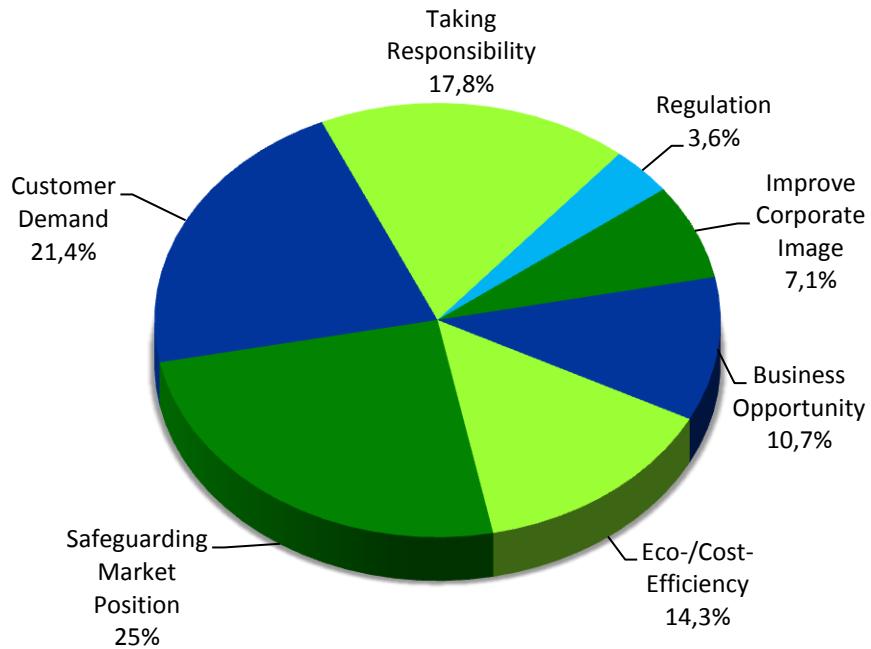
Graph 15: Motivation for implementation of CSR.

However, the motivations Business Opportunity and Safeguarding Market Position can be linked, because responding to business opportunities can be a way to safeguard the position in the market. The high predominance of Customer Demand can be explained by the fact that these interviewed suppliers greatly depend on the product specifications of their customers, the retailers, because they produce private label products.

3. *Which internal and external factors affect sustainability within suppliers?*

There are several internal and external factors that affect the implementation of CSR. External factors include: Regulation, Consumer Demand, Pressure from NGOs, Customer Demand and Supplier Push. Internal factors involve: Cost-Benefits, Time, Knowledge, Business Priorities and Personal Beliefs. The predominance of internal and external factors that influence sustainability was investigated during the empirical study. From this study it can be concluded that Customer Demand (75%) is the main external factor, which can be explained by the fact that these manufacturers produce private label products, and therefore depend on their customers (the retailers) for indicating product specifications, volumes etc. Personal Beliefs (55%) is presented as the main internal factor to influence the implementation of sustainability.

4. Which bottlenecks can arise during the implementation of CSR?

Bottlenecks studied in this research are presented in table 9.

Bottleneck	Problem	Solution
Planning	CSR is implemented without planning and is therefore not structured.	Structure the implementation process and make a clear planning,
Time	There is too little time for the implementation of CSR.	Make more time available by prioritizing or hiring employees.
Knowledge	There is insufficient knowledge on implementation or CSR.	Learn more about the subject or hire external assistance.
Support	Management and/or employees do not support the implementation of CSR.	Inform, motivate and stimulate management and/or employees.
Budget	There is insufficient budget available for CSR.	CSR can also save money. So good calculations need to be made for the investment and payback time and cost reduction by increasing process efficiency.

Table 9: Bottlenecks with the implementation of CSR.

These bottlenecks were assembled from different studies and are therefore not compared in one study. In this empirical study, Support appeared to be the main bottleneck, with 38.9%. Knowledge is the second most important bottleneck with 22.2%, together with Budget (22.2%).

5. What does the general food supply chain look like?

A supply chain is the network of linked organizations that provides goods and services to end consumers (*N. Slack et al., 2007*). It starts with raw, unprocessed materials and ends with the final customers who use the final product. In this research the focus is on the food supply chain (figure 4).
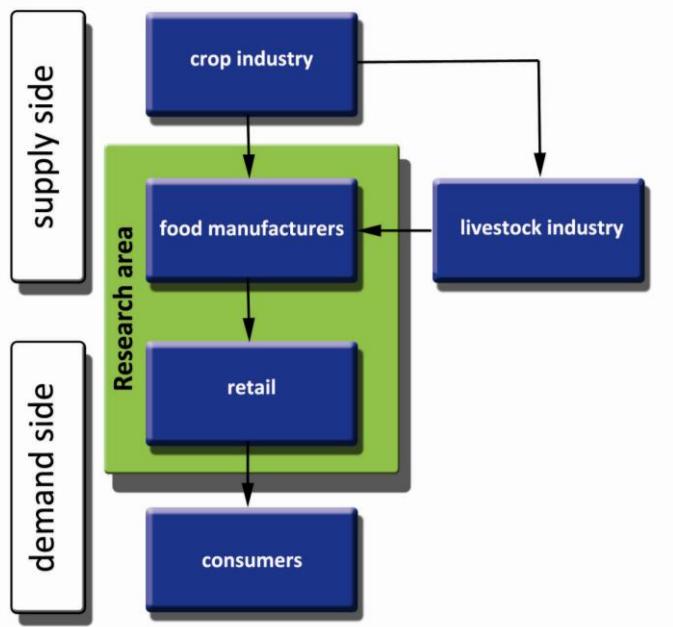
Figure 4: Schematic view of a general food supply chain.

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The main difference between regular supply chains and food supply chains is that food supply chains are more dependent on natural performances (e.g. seasonality, growth, weather conditions, spoilage and diseases) than other supply chains. These natural performances result in price fluctuations, differing quality of raw materials, and varying availability of raw materials, which make food supply chains more complex than other supply chains.

6. *Which role would be most suitable to be the initiator of a sustainable supply chain?*

Retailers are often the dominant firm in the supply chain, therefore supply-chain relationships between supplier and retailer are very strongly retailer led (*A. Hughes, 2005*). This indicates that retailers as the dominant firm in the supply chain have a certain power over their suppliers. The dominant firm can use their power to stimulate suppliers to improve their sustainable performance.

These findings from the literature review are supported by the outcomes of the empirical study, in which 68.4% of the respondents indicated the retailer as the most suited supply chain member to be the initiator for a sustainable supply chain and 31.4% suggest the food manufacturer for this role, while the other supply chain roles (consumer, government, NGO and supplier of raw materials) were not mentioned at all. The most important reason given for why the retailer should be the initiator is because the retailer is the link between the consumer and the manufacturer. It can be concluded that the retailer is most suitable for the role as initiator of a sustainable supply chain.

7. *To what degree do large (retail) companies have an influence on their suppliers?*

First of all, retailers select their suppliers and determine the type of relationship with these suppliers. The literature review shows that supply-chain relationships are often very strongly retailer-led. Retailers are therefore often the dominant firm in the supply chain. As the dominant firm, suppliers can influence suppliers by setting requirements for the products. As one of the respondents said during the empirical study: "*retailers have the power, they determine what is being sold".* By setting sustainable requirements for their products, retailers can influence sustainability at their suppliers.

8. *What influence strategies are there to stimulate suppliers?*

Influence strategies are meant to motivate a target's compliance to a request from the source. Influence strategies are mostly categorized as coercive and non-coercive strategies. Coercive strategies are based on the influence mechanism of rewards and punishments from the source, which effectiveness depends on the source's ability to act on these threats or promises, while non-coercive strategies are based on attitude change of the target, which effectiveness on compliance is determined by the completeness of the arguments provided in the strategies. The most studied strategies are Promise, Threat, Legalistic Plea, Information Exchange, Recommendation and Request. In this research, Legalistic Plea is included in

the Threat strategy. Also, an influence strategy based on a complete argument is added to the research and is referred to as Reason: a combination of Information Exchange and Recommendation. Then, there is a strategy which addresses the buyer-supplier relationship, which is referred to as Appeal to Business Relationship/Loyalty. The influence strategies studied in this research are defined in table 10.

Influence strategy	Definition
Coercive	
Promise	The source promises the target a reward for compliance with a request.
Threat	The source threatens the target with punishments for non-compliance with a request.
Non-Coercive	
Request	The source simply states the actions it would like the target to take.
Reason	The source presents explanations (beyond promise or threat) for compliance.
Appeal to Business Relationship/Loyalty	The source appeals to the business relationship with the target or the loyalty from/to this target to stimulate compliance.

Table 10: Definitions of influence strategies studied in this research.

9. *What is the best way for large (retail) companies to stimulate compliance at their suppliers?*

From both the literature review as well as the empirical study, it can be concluded that a combination of Reason and Appeal to Business Relationship/Loyalty is the best approach to encourage compliance in sustainability. To be able to apply the Business Relationship/Loyalty strategy, first a strong buyer-supplier relationship/partnership should be developed. This strong buyer-supplier relationship is additionally beneficial, because it also enhances the performance throughout the supply chain.

Therefore, it can be concluded that the best way for the retailer to stimulate compliance at their suppliers is to cooperate and build a strong buyer-supplier relationship/partnership and then apply a combination of influence strategies Reason and Appeal to Business Relationship/Loyalty.

7.2 Main Conclusion

It is striking that customer demand plays an important role in every part of this research. Customer demand is an important motivation for suppliers to implement sustainability, it is the most important external factor, and it influences the priority in sustainability indicators. Thus, customers (in this case the retailers) have a great influence in the implementation of sustainability in the supply chain.

This influence can be exercised by using influence strategies. From both the literature review and the empirical study it appeared that a combination of Reason and Appeal to Business Relationship/Loyalty is the best way to stimulate compliance in sustainability. Therefore, the answer to the main research question *"How can a large retail company stimulate sustainable development at their suppliers?"* is: the retailer should cooperate and build a strong buyer-supplier relationship/partnership and then apply a combination of influence strategies Reason and Appeal to Business Relationship/Loyalty.

8 Managerial Implications for Retailers

As the goal of this research project is to advise HEMA on how to stimulate sustainability at their suppliers, managerial implications for retailers are included and described in this part of the report.

The business environment becomes more and more aware of the importance of developing, producing and doing business in a sustainable way. Many companies are including sustainability as CSR in their business strategies. The CSR tends to focus on company level only, while a chain approach is proven to be more effective. From a managerial perspective it is then important to stimulate this chain approach. Based on the results from the literature review and the empirical study several implications for managers are extracted.

Change your attitude

The motivation for implementing sustainability is very important. Only paying attention to sustainability, because "we have to" (because of Regulation, Customer Demand or Eco-Efficiency/Cost-Effectiveness) results in lower results in sustainable performance than with motivations of "we want to" (for example Taking Responsibility or seeing sustainability as a Business Opportunity to improve the market position). There needs to be a positive attitude towards a pro-active policy on sustainability.

Without a positive attitude towards sustainability in the organization the retailer cannot bring the message of the importance of a sustainable supply chain across to other supply-chain members. The retailer should first set the example by including CSR into their own business model. Unilever said: *"There needs to be an attitude change. It is not about a campaign of 12 weeks, but it's about the long-term vision, it is about changing your business model"*.

Sustainability should also be included in the buying policy, by setting standard product requirements. Herewith suppliers can be approached in the negotiations in the buying process.

Be the initiator

68.4% of the respondents appointed the retailer to take the role of initiator of a sustainable supply chain. Especially companies with a low or medium degree of sustainability indicated the retailer as the most suitable supply chain member for this role. At these companies the largest gain can be achieved in terms of sustainability. It is therefore important for the retailers to focus on stimulating these suppliers.

The most important reason why the retailer should be the initiator is that the retailer is the link between the consumer and the manufacturer. Bakkersland: *"The retailer is in de middle of the supply chain. The retailer passes on the demand of their customers on to the manufacturers."* Respondents said *"we can produce a good product in a sustainable way, but we need the retailer to put it in the market"*.

Use your influence

This research has shown that the customer demand of the retailer at their suppliers is of great influence on the implementation of CSR. Customer Demand appears to be one of the most important motivations to implement CSR and is the most important factor to influence this implementation. Therefore, it is important for the retailer to realize, that the retailer holds a strong position in this. Respondents indicated that retailers have the power to determine what is bought and sold. If retailers want to stimulate sustainability in the supply chain, they should use this power. However, this power should be used considerately, because *"Forced sustainability does not exist." (Mayonna)*

To achieve compliance, this power should be applied in influence strategies. This research presented Reason and Appeal to Business Relationship/Loyalty as both the preferred as well as the strategies with the most perceived effectiveness. Reason is the strategy in which the source presents explanations with a request to stimulate compliance. The Appeal to Business Relationship/Loyalty strategy appeals to the business relationship with the target or the loyalty from/to this target to stimulate compliance. From the literature review and the empirical study it can be concluded that a combination of influence strategies Reason and Appeal to Business Relationship/Loyalty is most suited.

Work together

This research has shown that strong buyer-supplier relationships/partnerships have a positive impact on the performance throughout the supply chain. This cooperation results in a win-win situation for both partners, because cost reductions can be achieved, planning processes can be more efficient, risks can be shared, competences can be built together etc. It is therefore important for the retailer to build these strong relationships/partnerships with their suppliers. This can be done by getting supply-chain partners together to talk about mutual expectations, business goals and long-term agreements.

Unfortunately, this is easier said than done. The food industry is an industry with tight margins and fluctuating raw material prices. Many of the negotiations are thus based on price. The respondents and HEMA agree that sustainability is important, but neither of them wants to pay for it. Rijkenberg illustrates this by saying: *"We can decide that everything we make is sustainable and Fairtrade, but if my competitors do not do that too, my products will be more expensive. And if the buyer is not responsive to sustainability, there is a chance he switches to another supplier."* Bakkersland indicated that *"The retailer often asks to do the same as we already did, but better or with sustainable ingredients. And it cannot be more expensive or compromise the product quality."* To achieve sustainability the suppliers and retailer should come together in their interests and demands and then set mutual goals in CSR.

9 HEMA & CSR

In this chapter, the view of HEMA on CSR is described. It is based on the CSR report of HEMA (*HEMA BV, 2010*), the interviews with Caspar Woolthuis, Manager Product Quality & Sustainability and Boudewijn van Nieuwenhuijzen, Manager Food&Catering at HEMA and complemented with insights from this research.

HEMA has a broad view on CSR. There are initiatives from sourcing raw materials, employee management and recycling to animal welfare, social engagement projects and energy saving (*HEMA BV, 2010*). These initiatives are driven by enthusiastic individuals in the organization. The motivation for these initiatives comes from wanting to take responsibility for the environment and society HEMA is in. Taking Responsibility is the main motivation for paying attention to CSR, according to Caspar Woolthuis. As described above, there are many initiatives in CSR at HEMA, such as 'Return to Sender', organic cotton t-shirts, food product labeling, using FSC-paper for brochures etc. However, there is not one overarching vision on CSR of HEMA. This lack of an overarching vision makes is unclear what the goals of HEMA are in CSR and who is responsible for reaching these goals.

To provide more clarity on CSR, an overall vision should be formed which is supported by the management board of HEMA. From this vision there should be a CSR policy in which targets are included that match the HEMA business goals. There should be overall targets for HEMA, but also specific targets for different departments within HEMA. For example, CSR targets could be included as a prerequisite for bonuses for buyers.

Setting CSR targets is complex for an organization like HEMA. As Caspar Woolthuis, indicated during the interview, CSR is a broad topic, which is difficult to apply to every part of the organization. HEMA has many different stores, which sell many different products, from many different suppliers, which are based in many different countries. It is impossible to address all these different parts at the same time. So, for forming a CSR policy it is inevitable to make choices. To set realistic targets, the scope of the CSR policy should first be defined. For example, whether it should include only HEMA business processes or should it also address the rest of the supply chain. Also, whether HEMA wants to be a forerunner with a proactive attitude or a follower with a reactive attitude.

At this moment HEMA is more reactive than proactive towards sustainable development. For example, the 'Groene Sint' campaign by Oxfam Novib against 'bad' (unsustainable) chocolate letters was one of the reasons for acquiring UTZ certification. Pressure of NGOs thus influences the CSR at HEMA, as is also confirmed by Caspar Woolthuis. Also the respondents in the empirical study indicated that HEMA could show more initiative and be more proactive. One way for HEMA to be more proactive is by including CSR in product specifications and forming the aforementioned CSR policy.

The formation of this CSR policy is also partially influenced by the fact that HEMA is owned by a private equity firm (at this time Lion Capital). This creates tension between CSR and money issues. Private equity firms are focused on making short-term profit by investing in companies and then reselling the companies after a few years. There is therefore little interest in long-term investments and the herewith associated long payback periods, which are sometimes required for CSR. This focus on the short-term reflects on the business processes of HEMA. HEMA is profit-driven. So, when the margins are under pressure, CSR disappears to the background. Therefore, when a CSR policy is introduced, it should take this tension between CSR and money into account. This CSR-money tension within HEMA is also addressed by Caspar Woolthuis during the interview. He indicated Money as the main internal factor which influences the implementation of CSR at HEMA.

To do so, CSR targets should first focus on improving eco-efficiency/cost-effectiveness, such as reducing energy usage, water usage, transport and waste management. These types of CSR activities can save money. If this saved money is then invested into other CSR projects, which require initial investments or additional costs (for example with sustainable sourcing), CSR does not need to take of much of the yearly budget. Also, costs can be reduced by cooperation among supply-chain members, by for example scale benefits, shared transport costs and shared investments.

This cooperation is also addressed by Caspar Woolthuis during the interview. Even though he indicated that everyone in the supply chain should have their own responsibility for CSR, he said cooperation is needed to stimulate sustainable development. This is supported by the literature review of this research, in which is found that by cooperation and building strong supply-chain relationships, the performance throughout the supply chain is enhanced. In his opinion HEMA can contribute to sustainable development by stimulating sustainable innovation and buying commendable sustainably produced products.

Another factor that influences the implementation of CSR at HEMA is Consumer Demand, as indicated by Caspar Woolthuis. Research shows HEMA has a positive sustainable image among consumers in The Netherlands (*Management Team, 2010*). HEMA is perceived as a trustworthy company and CSR is associated with that. Two of the brand values of HEMA are 'trustworthy' and 'honest', these brand values can be taken to a higher level by making a CSR a prerequisite for product quality. Caspar Woolthuis said that sustainability should be an inherent part of product quality. CSR targets should then be translated into product specifications.

As this chapter shows, HEMA already has many initiatives in CSR, but there can be a more proactive attitude. Caspar Woolthuis said "*Perseverance pays, to achieve something in CSR you need to be patient and be able to deal with disappointments*." With this attitude HEMA can achieve great things in CSR.

10 Discussion & Recommendations

Although the results from the empirical study are mostly confirming the findings from the literature review, one should be careful to apply these results to other business situations. This research presents the view of 20 food manufacturers in the Dutch market and is therefore not always representative for other manufacturers or markets. Nevertheless, it can be expected that these results give a good impression of the opinions and practices in the Dutch food business, because the participants were carefully selected to represent the population. Future research could explore other industries to obtain a broader view.

Also, the view of HEMA is represented by interviewing only two people. However, these people represent both the Product Quality&Sustainability department and the Buying department of Food&Catering. It can therefore be expected that these two interviews can represent the view of HEMA for this research.

In this research the effectiveness of the influence strategies was not measured, but estimated as perceived by the respondents. For future research is might be interesting to measure the actual effect of the influence strategies when they are applied in practice.

Also, as addressed in the results of the empirical study, future research might find a correlation between the relative importance of the buyer (in this case the retailer) and compliance. Other correlations might be found in the type of relationship between the retailer and the buyer, the size of the supplier or other factors. Future research could study these correlations by investigating the difference in compliance between partnership suppliers and tender suppliers or focusing on the difference between SMEs and large companies in compliance.

In this research relations between the degree of sustainability and other factors, such as motivation, are described. These relations are only expected, because sustainability is estimated instead of measured. Future research could focus on relation of the measured degree of sustainability and factors such as motivation, internal and external factors. Additional relations which might be interesting to research are the relation between het degree of sustainability and different product categories of the difference between private label products producers and brand products producers.

Finally, the role of the retailer should be further investigated. This research shows that the retailer should be the initiator of improving the sustainability of the supply chain and explores what is the best way for the retailer to do so. Future research could focus more in-depth on what is the best way for the retailer to initiate a chain approach on CSR.

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Appendices

Appendix I: Sustainability Labels in the Food Industry

Appendix II: DJSI Corporate Sustainability Assessment Criteria

Appendix III: Respondents

 Appendix IV: Interview Protocol

Appendix V: Results of Statistical Interview Questions

'Influence strategies of a large retail company to stimulate the sustainability of their suppliers.'
- An empirical case study of HEMA and their food suppliers.'

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Appendix I: Sustainability Labels in the Food Industry

An overview of sustainability labels in the Dutch consumer market, in alphabetical order.

Beter Leven (Animal Welfare) Kenmerk

The 'Beter Leven'-label is an initiative of the Dutch Animal Protection organization. It stimulates farmers to improve the animal welfare in their business. The label uses a 3-star system: the more stars, the more animal welfare. This system is introduced to make the step to a full organic business easier. (*Dierenbescherming, 2009*)

FAIRTRADE

The Fairtrade Foundation is a non-profit organization that licenses the use of the FAIRTRADE mark on products. *"Fairtrade is a strategy for poverty alleviation and sustainable development" (Fairtrade Foundation, 2010*). The FAIRTRADE mark represents standards to support the development of disadvantaged farmers and plantation workers. The standards cover the three dimensions of sustainability (environmental, society and economy); these include: a guaranteed minimum price, a premium that producers can invest in development, partially pre-financing if necessary and the facilitation of long-term trading relationships and sustainable production practices. One of the key objectives of the standards is to set clear minimum and progressive criteria to ensure that the conditions for the production and trade of a product are socially and economically fair and environmentally responsible. (*Fairtrade Foundation, 2010*)

Milieukeur (Environmental mark)

'Milieukeur' is a Dutch mark for environmental friendliness for food products, consumable goods and services, developed by SMK. The 'Milieukeur'-certification criteria concern the entire product life cycle. (*SMK, 2010*)

Marine Stewardship Council (MSC)

The Marine Stewardship Council (MSC) is an international certification and eco-labeling program for sustainable seafood. The MSC standards for sustainable fishing, includes the following principles: sustainable fish stocks, minimizing environmental impact and effective management.

The MSC's mission is to contribute to the health of the world's oceans by recognizing and rewarding sustainable fishing practices and influencing the choices people make when buying seafood. (*Marine Stewardship Council, 2010*)

Organic

The term 'organic' ('biologisch') is protected by EU law. The EU organic farming logo is allowed to be used when the product complies with the European regulation as approved by the European Commission in July 2007. The most important rule is that 95% of the product consists of organic ingredients. (*European Commission, 2010b; Stichting Skal, 2010*). In The Netherlands the EKO-mark is also an indicator for organic products. This certification is based on the European regulations and is certified by Skal.

Rainforest Alliance

The Rainforest Alliance is an organization that works to conserve biodiversity and ensures sustainability by transforming land-use practices, business practices and consumer behavior. Rainforest Alliance promotes standards for sustainability that need to be met in order to earn the right to use the Rainforest Alliance Certified seal. These comprehensive criteria are set by the Sustainable Agriculture Network, which is a coalition of independent non-profit conservation organizations that promote the social and environmental sustainability of agricultural activities. (*The Rainforest Alliance, 2010*)

UTZ CERTIFIED

UTZ CERTIFIED is a certification organization for agricultural products, such as coffee, tea, cacao and palm oil. UTZ CERTIFIED's vision is to achieve sustainable agricultural supply chains, that meet the needs and expectations of farmers, the food industry and consumers. Producers are UTZ CERTIFIED when they comply with the UTZ CERTIFIED Code of Conduct, which includes environmental, social and economical criteria. (*UTZ CERTIFIED, 2010*)

Mark for compostable packaging

Seedling mark (Compostable Package)

The Seedling mark ('Kiemplantlogo') is a mark introduced by the European Bioplastics association to allow identification of a compostable package made of biodegradable bioplastic for consumers and the recycling industry (*European Bioplastics, 2010*).

Sustainability certification for companies

ISO 14000 and ISO 26000

The International Organization for Standardization is a non-governmental organization that develops standards business, government and society. The ISO 14001 is a standard with requirements for an environmental management system. The ISO 14001 standard provides management tools to manage environmental aspects and to assess environmental performance. These tools can help: reduce raw material/resource use, reduce energy consumption, improve process efficiency, reduce waste and utilize recoverable resources. (*International Organization for Standardization, 2009-2010*). ISO 26000 provides organizations with guidance in CSR. It contains concepts, backgrounds, core issues and practices related to social responsibility (*International Organization for Standardization, 2010*).

Appendix II: DJSI Corporate Sustainability Assessment Criteria

Criteria	Sub-Criteria
Economic	
Corporate Governance	Board structure; Non-Executive Chairman/Lead Director; Responsibilities and Committees; Corporate Governance Policy; Audit Conflict of Interest; Diversity: Gender, Board Effectiveness; Entrenchment provisions; Senior Management Remuneration
Risk & Crisis Management	Risk Governance; Risk Optimization; Risk Map; Risk Review; Risk Strategy
Codes of Conduct / Compliance / Corruption & Bribery	Codes of Conduct: Focus; Codes of Conduct: Systems/Procedures; Corruption & Bribery: Scope of Policy; Codes of Conduct: Report on Breaches; Codes of Conduct / Anti-Corruption & Bribery: Business relationships
Industry Specific Criteria	Brand Management; Customer Relationship Management; Innovation Management; Gas Portfolio; Grid Parity; etc.
Environment	
Environmental Reporting*	Assurance; Coverage; Environmental Reporting: Qualitative Data; Environmental Reporting: Quantitative Data
Industry Specific Criteria	Environmental Management Systems; Climate Strategy; Biodiversity; Product Stewardship; Eco-Efficiency; etc.
Social	
Human Capital Development	Human resource skill mapping and developing process; Human Capital performance indicators; Personal and organizational learning and development
Talent Attraction & Retention	Coverage of employees through predefined performance appraisal process; Percentage of performance related compensation for each employee category; Balance of variable compensation based on corporate and individual performance; Corporate Indicators for performance-related compensation; Type of individual performance appraisal; Communication of individual performance to upper management; Payout type of total performance-related compensation; Trend of employee satisfaction
Labor Practice Indicators	Grievance Resolution; Labor KPIs (Key Performance Indicators)
Corporate Citizenship and Philanthropy	Group wide Strategy – financial focus; Input; Measuring benefits; Type of Philanthropic activities
Social Reporting*	Assurance; Coverage; Social Reporting: Qualitative Data; Social Reporting: Quantitative Data
Industry Specific	Social Integration; Occupational Health & Safety; Healthy Living; Bioethics; Standard for Suppliers; etc.

*Criteria assessed based on publicly available information only. (*DJSI, 2010*).

Appendix III: Respondents

000. Meat&Poultry&Fish				
Code	Supplier	Estimated Sustainability	Respondent	Job Title
001	Foppen Paling en Zalm	Middle	Bertus van Panhuis	Product Manager
002	VION Food Nederland	Middle	Harold Theunissen	QA Manager
003	Unilever Nederland	High	Anniek Mauser	Sustainability Manager
004	Mayonna B.V.	Middle	Peter Hamaker	CEO
100. Sweets&Chocolate				
Code	Supplier	Estimated Sustainability	Respondent	Job Title
101	New My Kits B.V.	Middle	Frans Putters	CEO
102	Astra Sweets B.V.	Low	Karine van Looveren	QA Manager
103	Rijkenberg	Middle	Jos Rijkenberg	CEO
104	Baronie-De Heer B.V.	Middle	Dhr. Vriethoff	CEO
200. Bread&Baked Goods				
Code	Supplier	Estimated Sustainability	Respondent	Job Title
201	Neerlandia Banket B.V.	Low	Peter Leenhouwers	Supply Chain Manager
202	Grootendorst Banket B.V.	Low	Remco Timmermans	QA Manager
203	Bakkersland B.V.	Low	Nicole Brants	QA Manager
300. Cheese&Dairy				
Code	Supplier	Estimated Sustainability	Respondent	Job Title
301	Katshaar Zuivel B.V.	Low	Koen Streutker	CEO
302	FrieslandCampina N.V.	High	Jaap Petraeus	Sustainability Manager
303	Arla Foods B.V.	High	Marco ter Maat	Sustainability Manager
400. Ready Meals & Delicacies				
Code	Supplier	Estimated Sustainability	Respondent	Job Title
401	Menken Combinatie B.V.	Middle	Quint Menken	CEO
402	Maître André B.V.	Low	André Koudstaal	CEO
403	Schapendonk Dutch Bakery B.V.	Low	Gerrion v. Helvoort	QA Manager
500. Fruits&Vegetables				
Code	Supplier	Estimated Sustainability	Respondent	Job Title
501	W. Heemskerk B.V.	Middle	Kees Pingen	CEO
502	Van der Lem B.V.	Low	Jan Wildrom	CEO
503	The Greenery	Middle	Arie v.d. Linden	QA Manager

Appendix IV: Interview Protocol

Interview protocol

Introduction: goal of the research, available time, interview topics, definition sustainability in this research, confidentiality of the answers.

I. Sustainability

1. Is there attention for sustainability in your organization?

2. Review the sustainability indicators: (prompting)

Sustainability indicators	Associated Activities
Environmental	
Energy Usage	Energy reduction, energy usage from renewable sources
Water Usage	Water usage reduction
Waste Management	Waste reduction, packaging reduction/reuse/recycling
Pollution	Elimination/reduction of pollution in air, water and/or soil
Sourcing	Sustainable purchasing, fair trade practices, biodiverse purchasing
Societal	
Human Rights	Protection of civil, political, economic, social and cultural rights
Labor Practices	Reduction of workplace injuries and accidents, improvement of employee health, work-life balance, anti-corruption&bribery policy
Animal Welfare	Right treatment of animals (caging, transport, feed etc.)
Philanthropic Activities	Health promotion activities, energy saving promotions, sponsorships, participating in research projects, giving back to local communities
Economical	
Organizational Governance	Participatory management processes, idea generating programs, stakeholder communication, respect for property rights, codes of conduct
Product Quality	Product safety, accurate product information, customer service
Employee management	Educational programs, performance evaluation, employee benefits

3. Which of these sustainability indicators have priority?

4. Why where these sustainability indicators chosen?

5. What is the motivation to pay attention to sustainability?

6. Which factors influence sustainability in your organization? (prompting)

   External: regulation, customer demand, consumer demand, supplier push, pressure of NGOs.

   Internal: money, time, knowledge, business priorities, personal beliefs.

7. Which bottlenecks arose during the implementation of CSR?

8. How were these bottlenecks overcome?

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II. Supply Chain Management

9. Which role would be most suitable to be the initiator of a sustainable supply chain? (prompting)

Retailer, Food manufacturer, Government, Consumer, NGO, Raw material supplier.

10. What would the part of the initiator of a sustainable supply chain look like?

11. Why is this role most suitable to be the initiator?

12. To what extent does this role exercise this part of initiator?

Low			Neutral			High
1	2	3	4	5	6	7

13. What is the role of HEMA on sustainability in the supply chain?

14. To what extent does HEMA exercise this role?

Low			Neutral			High
1	2	3	4	5	6	7

15. How can HEMA improve their role?

16. Are there agreements in the supply chain (customers/suppliers) on sustainability?

17. What kind of agreements?

18. How did these agreements arise?

19. To what extent are the agreements kept?

Low			Neutral			High
1	2	3	4	5	6	7

20. How are these agreements monitored?

21. What consequences are there if agreements are not met?

III. Influence Strategies

22. What does your organization do to change something at your supplier?

23. To what extent is that effective?

Low			Neutral			High
1	2	3	4	5	6	7

24. In literature, there are the following influence strategies: Threat, Promise, Request, Reason and Appeal to Business Relationship/Loyalty. Which of these strategies matches your approach best?

25. What experiences do you have with this strategy?

26. To what extent is this strategy effective?

Low			Neutral			High
1	2	3	4	5	6	7

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27. Do you apply other strategies?

    a. Which strategy?

    b. What experiences do you have with this strategy?

    c. To what extent is this strategy effective?

Low			Neutral			High
1	2	3	4	5	6	7

28. To what extent are the other strategies effective?

	Low			Neutral			High	N/A
Threat	1	2	3	4	5	6	7	x
Promise	1	2	3	4	5	6	7	x
Request	1	2	3	4	5	6	7	x
Reason	1	2	3	4	5	6	7	x
Business Relationship/Loyalty	1	2	3	4	5	6	7	x

29. What strategy do you recognize in HEMA's approach?

30. To what extent is this strategy effective?

Low			Neutral			High
1	2	3	4	5	6	7

31. Which other strategy is used by HEMA?

32. To what extent is this strategy effective?

Low			Neutral			High
1	2	3	4	5	6	7

33. What do you think of HEMA's chosen approach?

34. How can this approach be improved?

35. Which is your preferred strategy to be approached with?

36. With what reason do you have this preference?

II. Supply Chain Management

37. Job title respondent:

38. Name of the company:

39. Core business and products:

40. Number of employees:

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41. Certification on sustainability:

    Fairtrade, Rainforest Alliance, Organic, UTZ, MSC, Milieukeur, ISO14001, ISO26000, Beter Leven

    Kenmerk, Seedling, other.

42. Number of suppliers; Number of customers:

43. How long does your company supply for HEMA?

44. Which percentage of the turnover is bought by HEMA?

45. Do you need help/advise/support from HEMA on sustainability?

46. Results of this interview will be processed anonymously. However, HEMA would be very

    interested in these results. Do you give permission for releasing these results?

47. Can HEMA contact you regarding this interview?

48. Would you like the results of this research?

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Appendix V: Results of Statistical Interview Questions

3. Which of these sustainability indicators have priority?

Sustainability indicators	Energy Usage	Water Usage	Waste Management	Pollution	Sourcing	Labor Practices
Number of Respondents	7	1	4	4	10	0
Percentage	20%	2.9%	11.4%	11.4%	28.6%	0%
Sustainability indicators	**Animal Welfare**	**Philanthropic Activities**	**Organizational Governance**	**Product Quality**	**Employee Management**	**Total**
Number of Respondents	2	3	2	1	1	35
Percentage	5.7%	8.6%	5.7%	2.9%	2.9%	100%

Table 11: Sustainability indicators with priority.

5. What is the motivation to pay attention to sustainability?

Motivation	Regulation	Improve Corporate Image	Business Opportunity	Eco-/Cost-Efficiency	Safeguard Market Pos.
Number of Respondents	1	2	3	4	7
Percentage	3.6%	7.1%	10.7%	14.3%	25%
Motivation	**Competition**	**Pressure of NGOs**	**Customer Demand**	**Taking Responsibility**	**Total**
Number of Respondents	0	0	6	5	28
Percentage	0%	0%	21.4%	17.8%	99.9%

Table 12: Motivation for implementation of CSR.

Motivation per Category	Regulation			Improve Corporate Image			Business Opportunity		
	Low	Middle	High	Low	Middle	High	Low	Middle	High
Number of Respondents	0	1	0	0	1	1	1	1	1
Percentage of Respondents	0%	11,1%	0%	0%	11,1%	11,1%	12,5%	11,1%	33,3%
Motivation per Category	**Eco-/Cost-Efficiency**			**Safeguarding Market Pos.**			**Competition**		
	Low	Middle	High	Low	Middle	High	Low	Middle	High
Number of Respondents	2	2	0	1	4	2	0	0	0
Percentage of Respondents	25%	22.2%	0%	12.5%	44.4%	66.6%	0%	0%	0%
Motivation per Category	**Pressure of NGOs**			**Customer Demand**			**Taking Responsibility**		
	Low	Middle	High	Low	Middle	High	Low	Middle	High
Number of Respondents	0	0	0	2	4	0	2	2	1
Percentage of Respondents	0%	0%	0%	25%	44.4%	0%	25%	22.2%	33.3%

Table 13: Motivation for implementation of CSR per category.

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6. Which factors influence sustainability in your organization?

External Factors	Regulation	Customer Demand	Consumer Demand	Supplier Push	Pressure of NGOs	Total
Number of Respondents	12	17	9	6	10	54
Percentage	22.2%	31.5%	16.7%	11.1%	18.5%	100%

Table 14: External factors which influence the implementation of CSR.

Main External Factors	Regulation	Customer Demand	Consumer Demand	Supplier Push	Pressure of NGOs	Total
Number of Respondents	1	15	2	0	2	20
Percentage	5%	75%	10%	0%	10%	100%

Table 15: Main external factors which influence the implementation of CSR.

Main External Factors per Cat.	Regulation			Customer Demand			Consumer Demand		
	Low	Middle	High	Low	Middle	High	Low	Middle	High
Number of Respondents	1	0	0	7	7	1	0	1	0
Percentage of Respondents	12.5%	0%	0%	87.5%	77.8%	33.3%	0%	11.1%	33.3%

Main External Factors per Cat.	Supplier Push			Pressure of NGOs		
	Low	Middle	High	Low	Middle	High
Number of Respondents	0	0	0	0	1	1
Percentage of Respondents	0%	0%	0%	0%	11.1%	33.3%

Table 16: Main external factors which influence the implementation of CSR per category.

Internal Factors	Cost-Benefits	Time	Knowledge	Business Priorities	Personal Beliefs	Total
Number of Respondents	15	8	2	5	14	44
Percentage	34.1%	18.2%	4.6%	11.4%	31.8%	100.1%

Table 17: Internal factors which influence the implementation of CSR.

Main Internal Factors	Cost-Benefits	Time	Knowledge	Business Priorities	Personal Beliefs	Total
Number of Respondents	7	0	0	2	11	20
Percentage	35%	0%	0%	10%	55%	100%

Table 18: Main internal factors which influence the implementation of CSR.

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Main Internal Factors per Cat.	Cost-Benefits			Time			Knowledge		
	Low	Middle	High	Low	Middle	High	Low	Middle	High
Number of Respondents	4	3	0	0	0	0	0	0	0
Percentage of Respondents	50%	33.3%	0%	0%	0%	0%	0%	0%	0%

Main Internal Factors per Cat.	Business Priorities			Personal Beliefs		
	Low	Middle	High	Low	Middle	High
Number of Respondents	0	2	0	4	4	3
Percentage of Respondents	0%	22.2%	0%	50%	44.4%	100%

Table 19: Main internal factors which influence the implementation of CSR per category.

7. Which bottlenecks arose during the implementation of CSR?

Bottlenecks	Planning	Time	Knowledge	Support	Budget	Total
Number of Respondents	3	0	4	7	4	18
Percentage	16.7%	0%	22.2%	38.9%	22.2%	100%

Table 20: Bottlenecks with the implementation of CSR.

9. Which role would be most suitable to be the initiator of a sustainable supply chain?

Initiator	Retailer	Food Manufacturer	Government	Consumer	NGO	Raw Material Supplier	Total
Number of Respondents	13	6	0	0	0	0	19
Percentage	68.4%	31.6%	0%	0%	0%	0%	100%

Table 21: Most suitable role to be the initiator of a sustainable supply chain.

Initiator per Category	Retailer			Food Manufacturer			Government		
	Low	Middle	High	Low	Middle	High	Low	Middle	High
Number of Respondents	5	7	1	2	2	2	0	0	0
Percentage of Respondents	71.4%	77.8%	33.3%	28.6%	22.2%	66.6%	0%	0%	0%

Initiator per Category	Consumer			NGO			Raw Material Supplier		
	Low	Middle	High	Low	Middle	High	Low	Middle	High
Number of Respondents	0	0	0	0	0	0	0	0	0
Percentage of Respondents	0%	0%	0%	0%	0%	0%	0%	0%	0%

Table 22: Most suitable role to be the initiator of a sustainable supply chain per category.

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12. Effectiveness of retailer's approach.

Effectiveness	1	2	3	4	5	6	7	Total
Number of Respondents	0	3	3	1	2	1	2	12
Percentage	0%	25%	25%	8.3%	16.7%	8.3%	16.7%	100%

Table 23: Perceived effectiveness of the retailer's approach ((0x1) + (3x2) + (3x3) + (1x4) + (2x5) + (1x6) + (2x7) = 49; average perceived effectiveness = 4.1).

14. To what extent does HEMA exercise this role of initiator of a sustainable supply chain?

Initiative HEMA	1	2	3	4	5	6	7	Total
Number of Respondents	1	3	3	1	2	0	1	11
Percentage	9.1%	27.3%	27.3%	9.1%	18.2%	0%	9.1%	100.1%

Table 24: Perceived initiative of HEMA as an initiator for a sustainable supply chain ((1x1) + (3x2) + (3x3) + (1x4) + (2x5) + (0x6) + (1x7) = 37; average perceived initiative: 37/11 = 3.4).

24. In literature, there are the following influence strategies: Threat, Promise, Request, Reason and

Appeal to Business Relationship/Loyalty. Which of these strategies matches your approach best?

Strategies Suppliers	Threat	Promise	Request	Reason	Business Relationship	Total
Number of Respondents	0	1	0	11	2	14
Percentage	0%	7.1%	0%	78.6%	14.3%	100%

Table 25: Most used influence strategies by suppliers.

26&28. Perceived effectiveness of influence strategies.

Threat	1	2	3	4	5	6	7	Total
Number of Respondents	4	3	2	1	0	1	0	11
Percentage	36.4%	27.3%	18.2%	9.1%	0%	9.1%	0%	100.1%

Table 26: Perceived effectiveness of the influence strategy Threat ((4x1) + (3x2) + (2x3) + (1x4) + (0x5) + (1x6) + (0x7) = 26; average perceived effectiveness: 26/10 = 2.4).

Promise	1	2	3	4	5	6	7	Total
Number of Respondents	1	2	1	0	2	1	0	7
Percentage	14.3%	28.6%	14.3%	0%	28.6%	14.3%	0%	100%

Table 27: Perceived effectiveness of the influence strategy Promise ((1x1) + (2x2) + (1x3) + (0x4) + (2x5) + (1x6) = 24; average perceived effectiveness: 24/7 = 3.4).

Request	1	2	3	4	5	6	7	Total
Number of Respondents	1	3	3	3	1	0	0	11
Percentage	9.1%	27.3%	27.3%	27.3%	9.1%	0%	0%	100.1%

Table 28: Perceived effectiveness of the influence strategy Request ((1x1) + (3x2) + (3x3) + (3x4) + (1x5) + (0x6) + (0x7) = 33; average perceived effectiveness: 33/11 = 3).

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Reason	1	2	3	4	5	6	7	Total
Number of Respondents	0	1	0	1	3	7	1	13
Percentage	0%	7.7%	0%	7.7%	23.1%	53.8%	7.7%	100%

Table 29: Perceived effectiveness of the influence strategy Reason ((0x1) + (1x2) + (0x3) + (1x4) + (3x5) + (7x6) + (1x7) = 70; average perceived effectiveness: 70/13 = 5.4).

Buss. Relation.	1	2	3	4	5	6	7	Total
Number of Respondents	0	0	1	2	2	6	2	13
Percentage	0%	0%	7.7%	15.4%	15.4%	46.2%	15.4%	100.1%

Table 30: Perceived effectiveness of the influence strategy Appeal to Business Relationship/Loyalty ((0x1) + (0x2) + (1x3) + (2x4) + (2x5) + (6x6) + (2x7) = 71; average perceived effectiveness: 71/13 = 5.5).

29. What strategy do you recognize in HEMA's approach?

Strategies HEMA	Threat	Promise	Request	Reason	Business Relationship	Blanc / N.A.	Total
Number of Respondents	1	0	6	4	0	9	20
Percentage	9.1%	0%	54.6%	36.4%	0%	-	100.1%

Table 31: Perceived influence strategies used by HEMA.

30&32. The effectiveness of HEMA's approach.

Effectiveness Approach HEMA	1	2	3	4	5	6	7	Total
Number of Respondents	0	2	1	3	3	4	1	14
Percentage	0%	14.3%	7.1%	21.4%	21.4%	28.6%	7.1%	99.9%

Table 32: Perceived effectiveness of HEMA's approach ((0x1) + (2x2) + (1x3) + (3x4) + (3x5) + (4x6) + (1x7) = 66; average perceived effectiveness: 66/14 = 4.7).

35. Which is your preferred strategy to be approached with?

Preferred Strategy	Threat	Promise	Request	Reason	Business Relationship	Total
Number of Respondents	0	2	0	11	6	19
Percentage	0%	10.5%	0%	57.9%	31.6%	100%

Table 33: Preferred influence strategy to be approached with.

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