Stakeholder involvement in the selection of Corporate Social Responsibility (CSR) - focussed voluntary standards within the food / agri-business industry

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Table of Abbreviations

AWD All-World Developed (FTSE Index)

BAP Biodiversity Action Plan

CHF Swiss Francs (Currency)

CI Composite Index

CR Corporate Responsibility

CSR Corporate Social Responsibility

DEFRA Department of Environment, Food and Rural Affairs (UK)

EFA Exploratory Factor Analysis

EIRIS Ethical Investment Research & Information Services

EMS Environmental Management Systems

ESG Environmental, Social and Governance

ESMR Environmental Management and Stakeholder Engagement

EUR Euro (Currency)

FSC Forest Stewardship Council

FTSE Financial Times Stock Exchange

GBP British Pounds (Currency)

HCV High Conservation Value

HL Hosmer-Lemeshow test

IAS International Accountability Standards

ICB Industry Classification Benchmark

ISO International Standards Organisation

MSC Marine Stewardship Council

NGO Non-governmental Organisation

OECD Organisation for Economic Co-operation and Development

OLS Ordinary Least-Squares

RA Rainforest Alliance

RSPO Roundtable on Sustainable Palm Oil

SAN Sustainable Agriculture Network

SD Sustainable Development

USD United States Dollars

WBCSD World Business Council for Sustainable Development

WWF Worldwide Fund for Nature

Abstract

This study examines issues concerning the sustainable sourcing of raw materials in the food manufacturing sector, with a specific focus on the utilization of third-party, externally-recognised certification standards. The research is set within the context of debates surrounding the use of externally certified certification standards as a means of generating credibility in the supply chains and communities in developing countries. The findings inform the theoretical debate regarding stakeholder theory and the integration of Corporate Social Responsibility (CSR) in business activity, particularly with regards to impacts on biodiversity.

The theoretical positioning of the thesis is in two areas. Regarding stakeholder theory, the findings recognise the conflicting views within stakeholder theory relating to the motivations of businesses that implement sustainable business practices. Secondly, the thesis is positioned within the theoretical debate relating to the sources of notions of legitimacy. The research informs the position taken by Gilbert (2010) that the normative nature of voluntary standards is prone to being 'decoupled' from the realities of organisational practices. The research question considers the extent to which voluntary certification standards are an effective method of generating legitimacy within stakeholder groups beyond owners and managers. The research objectives are to consider whether certification standards are implemented strategically by 'best practice' business managers within food manufacturing, and whether managers consider the implementation of such certification standards as a route to securing and generating credibility and legitimacy amongst their stakeholder groups.

This thesis is the product of a mixed-methods research strategy, combining qualitative and quantitative analysis methods. The quantitative element demonstrates the construction of an 'Environmental Management and Stakeholder Engagement' (EMSR) composite index to identify best-practice companies in the global food manufacturing sector, and incorporating quantitative analysis using correlation, Ordinary Least Squares (OLS) linear regression, and logistic regression methods. Methods combine with the EMSR Index to focus on the management systems and certification standard-related practices of a 'best-practice' sub-set of the Composite Index sample of constituent companies to determine relationships between the composite index

outcome score, and elements including operational presence, company size and certification commitments.

Following the identification of best-practice companies in the food sector, a case study approach analyses considers (i) best-practice company approaches to sustainable sourcing, company strategy and certification-standard participation, and (ii) RSPO and Rainforest Alliance certification standard-providers, to understand the extent that standard design incorporates affected stakeholders in developing countries.

The findings provide an empirical account of the level of integration achieved by the best-practice companies in developing stakeholder engagement channels and relationships with the supply chain. The quantitative analysis supports the null hypothesis that claims that no wealth bias exists. Furthermore, only a weak relationship is identified between the extent that a company has quality internal management systems and engagement channels with stakeholders, and a weak relationship is identified between such commitments and the size or location of the parent company: that size and location do not impact on the quality of stakeholder engagement and environmental management systems.

The case study findings challenge the use of certification standards as an effective means of establishing legitimacy within the supply chain and community stakeholders. Best-practice companies demonstrate clear steps to embed a sustainability-related 'Strategic CSR' approach to business within their business strategy. This approach features a combination of both instrumental and normative approaches to stakeholder theory, with the strategic embedding of stakeholder groups into its business activity representing an input-driven, 'moral legitimacy' approach.

Best-practice food companies recognise standards as a means of achieving market transformation in areas of sustainable sourcing, and are used from a reputational-risk perspective, but not as a source of legitimacy. Certification standards are considered meaningful mechanisms for developing precompetitive relationships and collaboration. The lack of inclusiveness and representation of non-financial stakeholder interests in the design and governance structures of the observed standards make it difficult for participants to see such standards as being sources of moral legitimacy at local level, and particularly in developing countries.

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Chapter One

1 Introduction

The food and agriculture sector has observed a proliferation of voluntary CSR-focussed corporate standards in the last 15 to 20 years, covering all aspects of the food industry including sustainable sourcing, management systems and supply chain labour and environmental standards. Food manufacturing is a particularly sensitive business sector, where conflicting global stakeholder legitimacy claims in product supply chains exist.

Recent NGO reports have highlighted concerns over the negative role of food manufacturing companies relating to 'food justice', in terms of the ecological footprint of the sector and social impacts on communities (Oxfam, 2011). While sustainability certification standards are particularly prevalent within the food sector, evidence generated by Oxfam questions whether food-related accountability standards are achieving positive effects for the most vulnerable stakeholders within supply chains. Additionally, the Oxfam report asserts that the food and agri-business sector has 'low legitimacy in the supply chain' (Bailey, 2011).

The aim of this research considers Corporate Social Responsibility (CSR) – focussed voluntary standards as a source of credibility and legitimacy for companies within the supply chains of the food / agri-business industry. The main objective is to consider whether such standards are being used as a means of satisfying a CSR approach to strategy management and, if so, whether such standards are an effective route to establishing legitimacy with supply chain and community stakeholder groups.

Contextual Statement

The 2010 World Business Council for Sustainable Development (WBCSD) report 'Effective biodiversity and ecosystem policy and regulation' states that businesses should be doing more in terms of biodiversity protection, but also states that "businesses are already helping to deliver improved conservation outcomes through their own actions" (WBCSD, 2010, p.3). Specific examples cited by the business-centric report WBCSD include the creation and

strengthening of sustainable supply chains, specifically through the implementation of programmes which build capacity, transfer technology and enhance monitoring and reporting performance.

Relevant programmes in food manufacturing include sustainable sourcing certification standards such as the RSPO and the Rainforest Alliance. Standards in the food chain are particularly heterogeneous. Analysis of standards used in the agri-food sector by Poetz (2012) and Henson (2010) show how CSR-related standards have proliferated in this sector, and this proliferation creates a complex environment for managers to decide which standards should be adopted. Poetz (2012) identifies 216 different types of voluntary private standards in the food sector alone, covering a whole plethora of environmental, social and governance concerns. A key feature of such initiatives is an attempt to link consumers to the supply-chain of products, through greater awareness over sustainability issues in the sourcing of raw materials, greater transparency and an encouragement of better practice at operational level.

The literature review raises issues over (i) the nature of the design process for such standards, (ii) the subsequent selection and implementation of standards, and (iii) the level of consultation that occurs with specific supply chain and community stakeholders. It identifies a gap in the existing research where there are concerns over these stakeholders being insufficiently-represented within the consultation processes that lead to the determination of appropriate standards.

1.1 Theoretical Perspective

Voluntary CSR standards have their roots in stakeholder theory, with the various categorisations of voluntary standards satisfying approaches to stakeholder theory. A recurring theme in the literature relates to the issue of companies implementing voluntary CSR standards, either directly or within the supply / value chain that they operate, potentially as an off-the-shelf 'proxy' for effective stakeholder engagement channels.

Furthermore, this study considers the structures that voluntary CSR standards take, as a means of generating a sense of 'legitimacy' within affected stakeholders; and in particular, whether such standards sufficiently factor-in the interests of stakeholder groups in their formulation and design stage. This study uses an approach that recognises 'legitimacy' in terms of effective stakeholder

inclusion, with a particular focus on the different approaches to legitimacy that CSR certification standards can generate; input-based and output-based legitimacy.

Stakeholder Theory

The theoretical framework that the study is developing has roots in stakeholder theory. Stakeholder theory perspective of corporate activity considers companies in a broader context than shareholder-centric theories, which are based on the primacy of profit-maximization on behalf of owner / shareholders as the main motivation for all business decision-making. Instead, stakeholder theory considers a broad range of inter-relationships between the company principals (owners), their managers (agents) and all other affected stakeholder groups (e.g. employees, local communities, suppliers, governmental bodies, trade union and associations, local citizens and communities). All non-owner stakeholder groups have equal primacy with the interests of owners, to be factored into company objectives, covering "any group or individual who can affect or is affected by the achievement of the organization's objective" (Freeman, 1984, p.46).

Key to this is a theoretical 'license to operate' granted to companies by society, where all stakeholders are positioned as having a legitimate interest in an organisation, whether they are owners or not. In this, no one single stakeholder group (including groups such as managers or owners / shareholders of these companies) has priority over another, and firms have responsibilities to wider society that must be fulfilled in order to continue its business operations.

Freeman's stakeholder theory approach has been subsequently refined and subcategorised, most notably by Donaldson and Preston (1995) who have devised the following three categories: the 'descriptive', the 'instrumental' and the 'normative'.

(i) Descriptive stakeholder theory

Descriptive stakeholder theory explains how managers take into account interests of stakeholders, reporting and designing management systems for businesses to structure operations in a manner that allows greater clarity of reporting lines, managerial oversight, review, external audit and assurance. The emphasis is on the 'what' aspect of operational activity.

(ii) Instrumental stakeholder theory

Instrumental stakeholder theory concerns the capturing of positive economic consequences from engagement with the different stakeholder groups, and using this as justification for investing capital into the implementation and management of stakeholder-focussed processes and practices. It examines the worthiness of stakeholder management from a performance / output perspective, justifying the consideration of stakeholder claims, based on the economic consequences of the groups.

(iii) Normative stakeholder theory

Normative stakeholder theory maintains a focus on the primacy of rules-based ethics within business activity. Normative theory considers why managers ought to attend to stakeholders, placing this question as the focus. This approach goes beyond the instrumental which ties the answer to 'why' based on performance, with the 'why' motivation instead relating to underlying moral or philosophical principles or guidelines.

Freeman recognises the instrumental need to demonstrate to corporate managers that addressing stakeholders is financially substantive enough to be a worthwhile activity. Post, Preston, and Sachs (2002) base stakeholder importance explicitly on contributions to the financial bottom-line and the creation and/or destruction of wealth. Post and Sachs state that stakeholder relationships are the ultimate sources of the firm's wealth-creating capacity and long-term business success requires a firm to develop and integrate stakeholder relationships within a comprehensive management strategy. They state that "stakeholders in a corporation are the individuals and constituencies that contribute, either voluntarily or involuntarily, to its wealth-creating capacity and activities, and are therefore its potential beneficiaries and/or risk bearers" (Post and Sachs, 2002, p.19). However, corporate conduct is questioned when beneficial consequences are not contingent on a clear level of stakeholder treatment, or when ineffective treatment of wider stakeholders has negative financial consequences.

Freeman (1999) questions a normative approach, stating that "it is hard to see how [a normative] argument can be connected to real firms and real stakeholders without some kind of instrumental claim" (Freeman, 1999, p.235). However, Donaldson and Dunfee (1995) consider a normative stakeholder

theory approach to be a primary concern for companies, capturing the 'do the right thing' moral responsibilities of companies beyond legal minimums. Donaldson states that normative reasons to respect stakeholders are independent of the ensuing financial benefits, and capture general principles of fairness, employee dignity and fundamental human rights, and or respect for the intrinsic worth of human beings (Donaldson and Dunfee, 1995).

Margolis et al. (2003) also challenge the primacy of the instrumental approach, suggesting that business organizational study should go beyond efforts to reconcile corporate responses to social misery with the neoclassical model of the firm that "...revolve[s] around consequences, financial consequences" (Margolis, 2003, p.279).

Margolis challenges the view that instrumental considerations have 'a grip' on developing stakeholder theory and instead emphasises the need to arrive at a workable balance between instrumental and other moral criteria, particularly when normative and instrumental claims do not perfectly align. Jones and Wickes (1999) develop this balance further, merging the normative and instrumental approaches to create a 'convergent stakeholder theory', considering all inputs, processes and outcomes. Jones and Wickes state that the mutually co-operative and trustworthy relationships with stakeholders that company managers should strive to develop, the 'managerial maxim', are characterised by a normative core of mutual trust and morally-desirable cooperation. However, the consequence of this is competitive advantage for the firm supporting instrumental theory, all the while maintaining a moral, normative core of trust and co-operation. Jones et al. disagree with Donaldson's assertion that normative and empirical elements of ethics can be linked in only the most superficial manner, believing that their theory is both normatively sound and practically viable.

Stakeholder Theory, Certification Standards and 'Decoupling'

Voluntary, CSR-focussed certification standards are potential mechanisms for satisfying both normative and instrumental requirements, whether they relate to business processes (i.e. how they do things) or to outcomes (i.e. what they ultimately produce or profit from) and are a means for companies to demonstrate satisfying the needs of many stakeholder groups.

The scope and number of non-State regulatory initiatives in the food industry has increased significantly over the last thirty years, with the Rainforest Alliance and Round-table on Responsible Palm Oil being two high-profile biodiversity-specific initiatives in the sector. The existence of hundreds of different product-specific standards, all aiming to demonstrate some form of best-practice for companies and stakeholders to adopt or adhere to, has created a dispersal of academic research effort. Indeed, this study identifies that academic research into the extent of multi-stakeholder involvement into the formulation stage of such standards is undeveloped, and justifies our analysis in this area.

The academic literature considers the design and implementation stages of voluntary CSR standards, how this affects their ability to be credible mechanisms for demonstrating stakeholder assurance, and whether standards are sufficiently inclusive in their design to require participants to subordinate their own profit-making interests to those of the wider society within which they operate (Gilbert, Rasche and Waddock, 2010).

Gilbert et al. (2010) identify 'International Accountability Standards' (IAS) as part of a 'new institutional infrastructure for corporate responsibility (CR)'. IAS are defined broadly as "voluntary predefined rules, procedures, and methods to systematically assess, measure, audit and/or communicate the social and environmental behaviour and/or performance of firms", with a significant emphasis on the accountability aspect of IAS in that accountability" (Gilbert et al, 2010, p.24). IAS are mechanisms for bridging national legal and governance gaps, allowing companies the ability to explain and justify their actions, judgements and omissions globally to their stakeholder groups. They give organisational stakeholders the right to judge a firm's actions and omissions and hold the firm responsible, however they are also 'soft law' in that they are not enforceable through legally-binding regulations.

However, Gilbert et al. (2010) identify that a major issue facing IAS is that of 'decoupling', where standards are decoupled from organisational practices, depending on the different IAS structural variations. Decoupling enables organizations to maintain standardized, legitimating formal structures whilst in actuality their activities vary freely in response to practical considerations, with IAS being regarded by Weaver, Treviño, and Cochran, (1999, p.539) as 'window dressing', indicating that the adoption of IAS does not lead to significant improvements in corporate accountability.

Furthermore, while voluntary standard-setting can include many stakeholder community and supply-chain groups in policy design and implementation, the involvement of global organizations and NGOs as proxies for developing country interests is criticized for potentially being too remote from local realities (Dahl, 1999). In particular, 'western' NGO influence may be too distant from impacts at the local level, leading to the existence of weak couplings between global commitments and local implementation that can potentially lead to adverse selection by businesses (Williams, 2004).

Bringing these threads together, this thesis investigates the motivations of companies to implement sustainable sourcing standards, and whether these motivations affect the ability of certification standards to be sources of credibility within affected stakeholder groups, due to inadequate representation of their interests. The thesis also considers whether there is evidence of 'decoupling' as a result of company decisions over suitability and appropriateness of standards relative to their processes.

The literature addresses the notion of 'static' and 'dynamic' natures of decoupling, and considers the extent and explanation for commitments being separate from activities, even when those involved in the standard have been instrumental in its design. The review identifies standard setters experiencing decoupling as part of a dynamic process, drawing on initial 'symbolic compliance' (Sandholtz, 2012), and dynamic decoupling / re-coupling being a factor within the rooting of sustainability standards within an evolving corporate environment (Haack and Schoenborn, 2012; Christensen, 2013). Sandholtz (2012) advances that for standard-adopters, external standards become 'hard' directives, with the degree of acceptance and incorporation depending on the extent that the adopters were involved in the design of the standards. Additionally, when directives threaten the occupational norms and practices of those implementing the standard, a malignant, disjointed form of decoupling is observed. Sandholtz claims a failure on the part of existing research to pay attention to professional communities subsequently becoming recipients and implementers (rather than originators) of standards and argues that existing empirical work has made little use of the professional lens despite the recognition that standards are invariably introduced into settings already populated by practices, tools, people, and other standards. (Sandholtz, 2012, p.657). Using the UN Equator Principles standard for project financing, Haack and Schoenborn (2012) view corporate responsibility standardization as being a dynamic perspective rather than being static, and suggest that decoupling is a transitory, temporary phenomenon. Haack et al. argue that 'narrative contestation' at the local implementation level generates in organizations and individual members a sense of entitlement, conviction, and rationality of action (Haack, 2012).

The approach adopted by Christensen et al. (2013, 2017) extends from the 'license to operate' approach and offers a 'license to critique' approach. Dynamic 'license to critique' philosophy argues that sustainability standards are sensitizing devices that allow for critique and contestation in ways that ideally cultivate the following processes: 1) recognizing and confronting alternatives, 2) authorizing employee participation, and 3) talking out loud about sustainability in order to learn about it (Christensen et la., 2017, p.255). This approach acts as a response to criticisms of sustainability standards that maintain that they are either too open-ended or too restrictive, resulting in a disabling of their ability to contribute to sustainability standards (Christensen, 2017, p.239).

Legitimacy

The literature review raises concerns over companies and standards both suffering legitimacy issues through a lack of inclusivity relating to stakeholders. Any lack of inclusiveness within standards represents a major problem, largely due to the voluntary nature of private standards; in the absence of a legally-enforceable means of rules-compliance, thus generating authority emanating from within standards requires a broad level of inclusiveness within the standards (Gilbert et.al., 2010). Gilbert notes that academic research relating to the production stage of voluntary standards would contribute to challenge claims that standards have not been designed based on an inclusive stakeholder collaboration process. Furthermore, Christensen (2017) emphasizes the need for comparative empirical studies of how a license-to-critique philosophy is maintained in the different contexts of, respectively, principle-based, certification and reporting standards. This project allows for a contribution in this area.

Scherer and Palazzo (2013) look at the different legitimacy strategies that are linked with sustainable development (SD) and how they are employed, arguing that isomorphically-adapting to the expectations of external stakeholders, or

manipulating those expectations while maintaining a 'business-as-usual approach to ongoing operations, are increasingly becoming insufficient responses to capturing legitimacy. Haack (2015) argues that decoupling policy from practice enables organizations to maintain their legitimacy in the face of conflicting institutional demands (Haack et al., 2015, p.307). However, in situations where observers and affected outside stakeholders lack sufficient confidence and good faith in the implementing organisation, and monitor whether organizations who formally adopt are actually implementing a policy, policy-practice decoupling will be perceived as illegitimate, and beholders will enforce negative sanctions (Meyer & Rowan, 1977, p.357).

Specifically relating to the RSPO, Schouten (2012) argues further that while opportunities are possible for members such as smallholders and local communities, the ability for smaller local members to use the channels to 'change the system' are low. Glasbergen (2012) argues that creating legitimacy is an ongoing process; it stabilizes power relationships temporarily, but it is always susceptible to change. Glasbergen argues that the procedural prerequisites of input legitimacy are only part of the process of creating legitimacy, and when a member or participant conforms to the procedure, this does not in itself make any such arrangement legitimate. Glasbergen emphasises that representation of interests and transparency are important, and it is a number of functional considerations that determine the use that is made of these requirements (Glasbergen, 2013, p.365). However, using the example of the RSPO, Glasbergen cites NGOs and the company Unilever as examples of how participating stakeholders have to safeguard their own legitimacy with their specific constituents.

1.2 Research Questions

The following research sub-questions form the basis for the study: What are the effects of company size, operational base and subsidiary location on the likelihood of a company having high-quality internal environmental management systems and environmentally-focussed stakeholder engagement channels?

Which measures of company size (if any) best reflect a wealthy or developed country 'bias' towards food manufacturing companies establishing comprehensive internal management systems? The presence of quality

management systems and stakeholder engagement channels will be investigated, through the modelling of quality systems processes that draw on industry best-practice initiatives. The null hypothesis claims that no wealth bias exists; that size of the company and location of operations have no influence on the companies having quality stakeholder engagement and management system mechanisms.

1. What is the relationship between food manufacturing companies committing to biodiversity-related certification standards, and the quality of internal environmental management systems and environmentally-focussed stakeholder engagement channels?

The literature review raises concerns over the frequency of companies choosing to commit to standards in the absence of conducting consultation with its supply chain stakeholders, resulting in a loss of legitimacy with wider stakeholders. The study considers whether the food manufacturing sector, noted as being saturated with standards, reflects concerns over decoupling. Specifically, whether food companies are using voluntary standards whilst simultaneously failing to have comprehensive internal management systems and engagement mechanisms. The null hypothesis claims no relationship between poor quality systems and engagement channels, and evidence of commitment to standards.

2. What are the implications for companies deciding to commit to voluntary certification standards as a means of increasing legitimacy with supply-chain-related stakeholder groups? What influence do the research findings have on companies deciding to commit?

This research question addresses why a best-practice company chooses to commit to an external certification process, what interests and motivations are perceived to be at the company level, where these motivations emanate from, and how a company prioritises these interests and motivations in its decision-making, particularly where interests conflict between stakeholders. A purpose of committing to biodiversity-related certification standards is to reinforce credibility and legitimacy in the communities that it operates. However, where a lack of adequate internal mechanisms exists then it may be questionable whether to commit to such standards, due to that decision not being supported through its pre-existing quality management and engagement systems. This lack of connectivity is potentially problematic when a certification standard is

perceived by stakeholders as having been designed in a manner that lacked inclusivity, and/or reinforcing rich country interests.

It is through this lens that the study considers the composite index assessment process as an appropriate analytical tool for investigating the extent that externally recognised systems deliver legitimacy at the operational level, with the most affected local stakeholders. Thus, from research questions and the learning achieved via the initial quantitative analysis, a case study approach is developed to gain greater insight into company motivations in decision-making around (i) establishing sustainability-specific stakeholder engagement channels and (ii) participation in certification standards at the design and/or implementation stage.

3. How do standards conceptualise and recognise the need for establishing legitimacy in the communities within which they operate (such as recognising the need to establish the theoretical 'license to operate')?

The case study further considers the extent that specific certification standards sufficiently integrate notions of credibility and legitimacy into (i) their design phase and (ii) ongoing governance and oversight structure. What do standard creators / designers consider to be the defining motivations for joining the process, so that it is considered an effective and credible standard in the eyes of its audience? These aspects are further drawn out in the case study approach, by considering how these competing forces mould the standard in the way that suits the commercial environment that they are intended to operate within.

1.3 Methodology

The study adopts a 'mixed methods' approach, combining both a quantitative analysis and a subsequent qualitative, case study analysis. The combination allows for: (i) a cross-regional analysis of food manufacturing companies in order to identify food sector best-practice performers in environmental management and stakeholder engagement, and with commitments to two certification standards of interest, the Roundtable on Sustainable Palm Oil (RSPO), and the Rainforest Alliance standard, and (ii) a subsequent in-depth analysis into a sample of best-practice food manufacturing companies.

The research design combines a Composite Index construction with a multidisciplinary, 'mixed methods' strategic approach, combining a quantitative

analysis using correlation, Ordinary Least Squares (OLS) multi-linear regression, and logistic regression methods, and a qualitative case study research strategy. The design focuses on the management systems and certification standard-related practices of a 'best-practice' sub-set of the Composite Index sample of constituent companies. The selection of methods is justified within the context of the pragmatist, realist philosophical positioning of the research design.

The research strategy takes a pragmatist approach with a realist ontology. The pragmatism approach combines a positivist approach within the quantitative analysis, and interpretivist elements in the subsequent case study (Farquhar, 2012, p.22). A collective case study approach is applied to reflect the complexity of the individual food company and certification-provider cases, and this approach avoids the reductionism that characterises positivist research (Farquhar, 2014, p.20).

The initial quantitative analysis is an 'Environmental Management and Stakeholder Engagement' (EMSR) composite index for the food manufacturing sector, assessing the completeness of environmental policies and systems and stakeholder engagement channels for each index constituent company. Following this, a series of analyses are conducted to determine the extent that companies are implementing externally-verified 'sustainable sourcing' certification standards as a replacement for having its own policies and systems.

In addition to this, a correlation and regression analysis is conducted to test the hypotheses outlined in Section 1.2. relating to sub-question 1, the OLS Linear regression method is applied to test the extent that explanatory variables (including company size, operational base and subsidiary location) are significant predictors of the ESMR Index. Secondly, relating to sub-question 2, the logistical regression method is applied to test if there is a statistically significant relationship between commitments to external voluntary standards, and several explanatory variables including the quality of internal EMS / stakeholder engagement systems (with the EMSR Index acting as a proxy).

Following this, a case study is conducted to examine the key relationships that emerge from the regression analysis. The analysis of the selection processes that companies have taken relating to the sustainability-related standards that they use, and the selection of non-company and non-financial stakeholders (e.g.

employees and shareholders) that have been consulted in the selection processes, has required drawing on a range of different types of data sources. The study is interested in particular in the implementation of Corporate Social Responsibility standards in a food sector environment. Initial analysis shows that companies classified by global stock exchanges as operating in the food manufacturing sector tend to have subsidiary, associate and regional operational headquarters across a wide spread of geographical regions that are outside of their domestic market, and often in OECD-classified developing regions.

1.4 Scope and Limitations

The composite index design informs the qualitative case study-based analysis, with the case study incorporating both primary and secondary data, as a means of creating a better understanding of how best-practice companies interpret sustainability standards as a means of generating credibility with supply-chain related stakeholders in developing countries. The case study is designed to have a narrow field of interest, covering three major food manufacturers (Unilever, Danone and Nestlé) and two certification standards in the area of sustainable sourcing (the RSPO and the Rainforest Alliance).

Due to the nature of the sampling and input restrictions in terms of accessing primary data from food manufacturing companies that are not European-based, this creates a limitation on the scope of the overall study findings. The nature of the sampling for the EMSR Index being based on Financial Times Stock Exchange (FTSE) All-World Developed Index-listed companies, this means that the initial sample covers companies that are largely global in reach, and does not incorporate smaller companies which would be likely to have a more regional and local focus. Thus, the specific corporate scenarios, with particular focus on two specific certification standards, limits the extent of policy recommendations. Nonetheless, the methodological approach is thought the most appropriate given the sampling and data access restrictions.

1.5 Outline of Chapters

The thesis is organised in nine chapters. Chapter One presents the introduction to the thesis, highlighting its background and theoretical rationale, research

questions and hypotheses, as well as its scope and limitations, methods and contribution

Chapter Two reviews the literature that provides the foundation of the thesis' hypotheses. Its aim is to locate this study within a broader theoretical and empirical framework, to clarify the conceptual background and to link it with previous studies and research. The literature review starts by presenting the academic debate surrounding Corporate Social Responsibility, the differing versions of Stakeholder Theory, and how voluntary standards are utilized by companies to encourage legitimacy amongst wider stakeholders. Literature considers the nature of decoupling, and considers the source of decoupling, and issues encountered by best-practice companies implementing standards that they both participate in and helped to design. Additionally, the review recognises the notion of 'static' and 'dynamic' natures of decoupling, and considers the extent and explanation for commitments being separate from activities, even when those involved in the standard have been instrumental in its design. The literature review considers notions of legitimacy, raising concerns over companies and standards both suffering legitimacy issues through a lack of inclusivity relating to stakeholders.

Chapter Three describes the methodological approach and the research typology for the study, covering the research questions and objectives, hypotheses and propositions based on the research questions, as well as the philosophical assumptions implicit in the study and the overall research design. In particular, this section covers the methods used to construct the composite index and the quantitative analysis used in analysing research questions 1 and 2. This chapter also describes the case study method used for analysing research questions 3 and 4. Finally, the chapter also outlines the ethical considerations applied to the study, in particular outlining the approach to the primary data collection within the case study analysis. The chapter identifies the conditions for how data was collected, used and stored. In summary, informed consent on the terms of using the interviewees' information was obtained prior to the interview, with specific conditions met regarding the use of names and position titles within the organisations, and the level of confidentiality to be maintained depending on the status of publishing of the thesis.

Chapter Four presents the statistical methods for data analysis. It builds on the descriptive analysis of the composite data points and presents the findings from the Environmental Management and Stakeholder Responsiveness (EMSR) composite index. Further to this, the chapter considers the relationships between the composite index scoring outcomes, conducting correlation analysis, linear and logistic regression analysis on the internal data-points within the composite index calculation, and considers potential relationships between these data points and outcomes against external data points, including participation in external certification participation, geographical presence and company size.

Chapter Five focuses on qualitative data-based case study analysis, specifically concerned with the third and fourth research questions regarding best-practice food manufacturing companies and certification standard providers. The case study provides a foundation of company information and policies for the three best-practice companies (Unilever, Danone and Nestlé) that responded to the request for interviews, and provides a strategy management analysis of the company structures and approaches. Furthermore, it describes the governance structures of the Roundtable on Sustainable Palm Oil (RSPO) and the Rainforest Alliance standards, as supported by the Sustainable Agriculture Network (SAN). The study then relates to the primary data-collection approach for the interview stage, including the development of the coding and analysis structure relative to research questions 3 and 4, and a subsequent analysis of the interviews grouped, based on the requisite coding structure within the methodology.

Finally, Chapter Six (analysis conclusions, policy recommendations and study limitations) analyses the findings and evidence from Chapters Four and Five relative to the four research sub-questions and draws out the policy implications. This chapter is devoted to summarising the key research findings in relation to previous literature and in response to the initial working hypothesis. It also highlights the novelty of the research and its findings and the innovation and knowledge contribution that the thesis represents. Finally, the chapter provides a synthesis of both the theoretical and empirical contributions of the study, potential implications and policy recommendations for business, as well as the limitations of the research, and opportunities for further research.

1.6 Contributions of the study

This project builds on previous research identified in the literature review, and is intended to fill the gaps identified, testing the legitimacy of Corporate Social Responsibility (CSR)-focussed voluntary standards within the food / agribusiness industry. This research constructs a composite index with a multinested structure, to the level of internal environmental management systems and stakeholder engagement channels independently implemented by companies. The index score provides the context for where companies have decided to adopt biodiversity-related sustainability certification standards. The EMSR Index builds upon the extensive research created and identified in the literature review, including previous research conducted by the author on a cross-sector biodiversity-related assessment and comparison.

The published research by the author (Monks, 2013) is based on a single-nested assessment methodology. However, the initial research is not sufficiently structured to generate an assessment of the overall completeness of management systems at the corporate level. The composite index design builds upon the development of composite indices in the area of environmental sustainability by agents such as the OECD. However, it is innovative in that composite index design discussions in the literature review do not sufficiently accommodate the combination and integration of qualitative datapoint-based dummy variables into the assessment process, and this is something that the EMSR Index achieves in an innovative manner.

In addition, EMSR Composite Index outcomes are included in a number of quantitative analyses, including 'Pearson's R' correlation analysis, ordinary least-squares (OLS) linear regression and logistic binomial regression analysis, all of which contribute to the case study. These methods address the gap in the existing research, providing much needed information on the level of stakeholder inclusivity within the design and implementation of voluntary standards. Gilbert (2010) notes that academic research relating to the production stage of voluntary standards would contribute to challenge claims that standards have not been designed based on an inclusive stakeholder collaboration process.

Further, this study contributes much needed information on the issues of how companies and standard designers approach issues of credibility and legitimacy with developing country stakeholders. The study provides insight into how leading best-practice food manufacturing companies approach sustainable sourcing and certification standards, specifically relating to RSPO and Rainforest Alliance-relevant commodities.

Insight is achieved concerning the motivations of companies adopting the respective standards, how the governance structures of the voluntary standards affect company involvement, and how this involvement relates to existing policies, systems and engagement channels. This is achieved through semi-structured interviews with senior management representatives concerning sustainable sourcing policy development and stakeholder engagement and engagement with the standard developers.

Finally, this study contributes to the analysis of certification standard providers themselves. Currently, there is limited information about the level of inclusivity found in the design process, and the subsequent inclusivity of the discursive mechanisms that keep stakeholder views and requirements within the standard's ongoing usage. Gilbert (2010) recognises that this remains a gap in existing academic research, and this is something that is explored in this research, filling this particular gap in the literature.

Innovation aspects of the study

This study is innovative in that it adopts a mixed methods approach in order to design a sector-wide composite index to identify best practice food manufacturing companies in the area of environmental management and stakeholder engagement. The subsequent adoption of appropriate certification standards is an issue because of the inadequate inclusion of the most affected stakeholders at operational, community-affected, and manufacturing and processing levels. The regression analysis allows for an interpretation and evaluation of the strength of the relationship between the extent of management systems and stakeholder engagement channels (the EMSR Index) and the adoption of certification standards.

Finally, the study produces policy recommendations for food manufacturing companies relating to the appropriate selection of sustainable sourcing standards. Sustainable sourcing standards are used by best practice companies as a way of supplementing the pre-existing sustainable sourcing policies that are tailored to their specific supply chain operations. Furthermore, best-practice companies are reliant on the presence of pre-existing engagement channels with

communities and supply chains, supplemented by locally-embedded NGOs to help inform their overall approach to sustainable supply-chain sourcing. However, communicating the commercial gains from implementing certification standards motivations is problematic, due to there not being a clear link between standard implementation and increased profitability. In terms of attaining and maintaining legitimacy, the source of legitimacy resides within the end-use consumer as much as with stakeholders in the supply chain.

The next chapter reviews the existing literature, positioning the contribution that this study makes within the academic debate surrounding Corporate Social Responsibility (CSR), the differing versions of Stakeholder Theory, and how voluntary standards are utilized by companies to encourage legitimacy amongst wider stakeholders. The review expands on the nature of environmental and biodiversity-related impacts by the food industry, and how food certification standards are utilized to mitigate risks associated with such impacts, and as a means of generating legitimacy within the various stakeholder groups affected by food production.

Chapter Two

2 Literature Review

The literature review provides the context for the multi-disciplinary analysis of arguments relating to issues over 'decoupling' between voluntary standard commitments and company operational realities, and issues over the implementation of voluntary standards as a means of establishing legitimacy within external stakeholder groups.

Voluntary CSR-focussed certification standards are considered by businesses as a credible means of demonstrating effective stakeholder engagement. However, the use of standards as a 'means to an end' for acquiring a strategic CSR leaves companies running the risk of selecting inadequate or inappropriate standards that are 'decoupled' from the realities of their actual operations. The literature identifies research relating to high-level policy commitments being mismatched with practices occurring, why such decoupling occurs, and the nature of decoupling being a static or dynamic state within companies.

The review captures ongoing debates relating to claims of bias towards large companies based in developed countries implementing comprehensive internal management systems, asserting a wealthy or developed country 'bias'. The review captures the issue of 'decoupling' and the ongoing debate over the nature of policies and practices mismatching. This includes the extent to which decoupling is a static or dynamic phenomenon, the extent that 'policy-process' decoupling is the defining representation of the 'decoupling' phenomenon, and how this translates to certification standards in the food sector.

The review also captures the ongoing debate relating to varying interpretations of securing legitimacy within CSR-related discourse, comparing the moral, input-focussed, discursive interpretation of legitimacy to interpretations that are instrumental and output-focussed. The review also captures discussions relating to the use of large global NGOs by companies and standards, and the impact of this on local-level suppliers and community stakeholders. The review also reveals contributions relating to the legitimization challenges that private governance initiatives such as the RSPO face.

The review identifies concerns over companies choosing to commit to standards in the absence of conducting consultation with its supply chain stakeholders, resulting in a potential loss of legitimacy with its stakeholders. The review raises concerns over companies and standards suffering legitimacy issues through a lack of inclusivity relating to stakeholders. From a company perspective, issues emerge with companies choosing to commit to specific supply-chain standards without having conducted consultation with its own supply chain stakeholders, resulting in a loss of legitimacy with its wider stakeholders. Gilbert (2010) notes that academic research relating to the production stage of voluntary standards would contribute to challenge claims, that standards have not been designed based on an inclusive stakeholder collaboration process. The literature also focuses on the example of the RSPO and research analysis focusing on the relative success of the standard for securing legitimacy with stakeholders. The literature demonstrates a gap in the existing research where there are concerns over stakeholders being insufficiently represented within the consultation processes that lead to the implementation of appropriate standards.

2.1 Main Contributors

Table 1 - Table of Main Contributors in Literature Review

Paper	Summary	
Stakeholder Theory and Corporate Social Responsibility		
Jones and Wickes (1999)	Defines stakeholder theory in terms of considering the inter-relationships between principals, agents and other stakeholder groups (e.g. employees, local communities, suppliers, governmental bodies, trade union and associations, local citizens and communities). Establishes the distinction between input and output legitimacy in terms of stakeholder-theory initiatives.	
Donaldson and Preston (1995)	Sub-categorisation of stakeholder theory into (i) descriptive, (ii) normative and (iii) instrumental stakeholder theory. Descriptive theory about how managers take into account interests of stakeholders. Normative (input) considers why managers ought to attend to stakeholders relating to underlying moral or philosophical principles or guidelines. Instrumental (output) concerns the capturing of positive	

	economic consequences from engagement.	
Donaldson et al. (1995)	Extending from the 1995 research, positions normative stakeholder theory as the primary concern for companies in terms of approaches to stakeholders.	
Margolis et al. (2003)	Challenges the need to reconcile corporate responsibility with neoclassical model theory of the firm. Examining empirical relationship between a corporation's social initiatives and its financial performance, Margolis challenges instrumental approach of companies needing to be incentivised financially to participate in non-financial activities with/for stakeholders.	
Freeman (1999)	Recognises the instrumental need to demonstrate to corporate managers that addressing stakeholders is financially-substantive enough to be a worthwhile activity, effectively arguing against Margolis.	
Post, Preston & Sachs (2002)	In support of the instrumental approach, Post et al. define stakeholders explicitly by the contributions to the financial bottom-line and their relative effects on the creation and/or destruction of wealth	
Lasserre (2007)	Provides an outline of 'Strategic CSR' approach to corporate strategy management, and how stakeholder interests (beyond shareholders) are placed centrally in relation to the long-term corporate objectives of global corporations.	
Blowfield (2008)	Identifying stakeholder engagement process as a key route for CSR management, with this process used as a means of defining and legitimizing the scope of CSR management.	
Henson (2010)	Author criticises academic debates for failing to recognise the diversity of private voluntary standards in the food sector, in terms of (i) their institutional form, (ii) who develops and promotes them, (iii) who adopts them, and (iv) why.	
Poetz (2012)	Questions inclusivity of voluntary standards due to them being costly to implement, and as requiring considerable commitment at company management level to justify the time and expense of pursuing and attaining the implementation of such standards.	
Certification Standards, Bias and Decoupling		
Meyer and Rowan (1977)	'Policy-practice' decoupling is considered the traditional notion of decoupling (Meyer and Rowan, 1977), and relates to where organizations have adopted a policy only symbolically, without implementing it substantively.	

Freeman (1984)	Perceived stakeholder theory as an element of liberal economic theory of profit-maximizing firm, with engagement as a facet of wealth creation. Engagement is considered a necessary intangible asset for mitigating potential loss of profits.
Mueller (2009)	Asserts instances in standard-design create a bias towards potential domination by large corporations. Asserts importance of the 'inclusiveness' of standards as a key legitimacy source, covering all of the participants or indeed as many as possible. Identifies five criteria to be considered in terms of appropriate standard selection and implementation, in terms of their ability to generate legitimacy amongst stakeholders.
Werther (2011)	Stakeholders are prioritized depending on their proximity to 'core operations', implying those further away from core operations will have less immediate importance than those stakeholders closer to the core activities of the business.
Gilbert (2010)	A key text relating to identifying 'decoupling', where standards-requirements are not reflective of actual organisational practice. Companies may capture the benefits of adhering to standardized, legitimating formal structures, whilst in actuality the activities vary freely in response to practical considerations. Clusters standards into four categories, recognising different ways standards draw credibility and legitimacy within affected stakeholders: principles-based, certification-based, reporting / transparency-based and process quality standards.
Sandholtz (2012)	Inductive analysis of standard-designers observing decoupling when applying own rules; emphasises dynamic nature of decoupling with an initial 'symbolic compliance' stage. Emphasises lack of research on standard setters applying the standards.
Haack and Schoenborn (2012)	Coupling, decoupling and recoupling is a dynamic process, acknowledging that CR standardization is an institutional process that commences, rather than ends, at the point of adopting.
Christensen (2013)	Dynamic decoupling affirmed; the public disclosure of commitments is a 'license to critique'; a means of rooting sustainability standards deeper into operational practice, with disclosure as the raw material for reconstructing organizations.
Wijen (2014)	Identifies decoupling as being 'means-end' rather than just 'policy-process' decoupling as per Meyer and Rowan's (1977) primary definition.
Haack (2015)	Rejects Wijen (2014), stating policies and processes represent features of an interpretation that are effectively two 'fixed' reference points, objective facts from which the two can become detached, or 'decoupled'.

	Also, argues that decoupling policy from practice enables organizations to maintain their legitimacy in the face of conflicting institutional demands.
Christensen (2017)	Extension of 2013; 'license to critique' acts as response to criticisms of sustainability standards as either too open-ended or too restrictive, resulting in a disabling of their ability to contribute to sustainability standards.
Voluntary standa	rds and legitimacy
Bernstein (2005)	Legitimacy requires that standards are both inclusive and have the capacity to ensure free and equal discourses among participants. Lacking inclusiveness reflects a problem because legitimacy is essential to standard-setters, and a standard's authority depends on the perceived appropriateness and justification of their rules by a community.
Palazzo and Scherer (2006)	Legitimacy, in the context of transnational governance, is built on a foundation of deliberation and communication. Successful CSR discourse needs to be based on input-focused 'moral legitimacy' based on active justifications with society, and not Output-justified cognitive and pragmatic legitimacy.
Gilbert (2007)	Collaboration can increase and reinforce legitimacy (especially in developing countries), local considerations are largely ignored by the overarching standardizing authority/body, with this factor being particularly pronounced during the pre-formulation stage of consultation process when consulting multinational companies.
Dahl (1999)	Asserts in terms of normative standards, the work of international organizations such as the UN, is often criticized as it is assumed that global policy making is too remote from local realities.
Auld (2010)	Considers a legitimacy trade-off between creating globally enforceable rules and implementation issues in developing countries, finds disclosure alone is insufficient in protecting against legitimacy challenges by stakeholders.
Schouten (2012)	Analysing roundtables as a mechanism for deliberative democracy, challenges the ability for the RSPO structure to incorporate 'radical' viewpoints presented by local community stakeholders.
Scherer and Palazzo (2013)	Argues that adapting to the expectations of external stakeholders, or manipulating those expectations while maintaining a 'business-as-usual approach to ongoing operations, are increasingly becoming insufficient responses to capturing legitimacy.

Vellema and v.Wilk (2015)	Offers a two-stage dynamic of embedding at the international level, and at the local level; however, effectiveness relies on settings wherein local partnerships already have a history of alignment of different interest around a public goal.
Richards, Zellweger and Gond (2016)	Asserts that firms primarily rely on two distinct sets of legitimacy principles that reflect their identity orientation, that of (i) the 'civic and green' world, and (ii) the 'domestic' world, arguing that a reliance by companies on the domestic world is negatively related to firms investment in sustainability certifications.
Schouten and Glasbergen (2011)	Argue that the legitimization of private governance initiatives is a dynamic, multi-dimensional process operationalized across three angles: legality, moral justifications, and consent/acceptance, and RSPO fails to secure this.
Glasbergen (2013)	Argues for the need for the standard to be credible to critical external audiences and participators, and the damage of NGO campaigns to a standard's effectiveness and reliability as a source of consensus building and compromise.
Ruysschaart and Salles (2014)	Identifies the conflict of interest between NGOs that identify growers for not implementing the RSPO guidelines properly from a conservation perspective, and large growers using strategies to decrease the conservation areas to maximize profits; claiming that the RSPO is succeeding in allowing western downstream manufacturing companies to secure their long-term supply of palm oil and protect their reputation.
Oosterveer (2015)	Considers how the legitimacy of the network is subject to dynamic processes elsewhere that undermine its authority, as actors and members potentially pursue their goals outside the RSPO framework, or the potential for the RSPO itself to be split into several networks, each with their own organising principles and understandings of sustainability.

2.2 Stakeholder Theory and Corporate Social Responsibility

Voluntary Corporate Social Responsibility (CSR) standards have their roots in stakeholder theory, with the various categorisations of voluntary standards satisfying particular approaches to stakeholder theory. CSR is the starting point as the umbrella theory that uses accountability certification standards as a

means to achieving and demonstrating sound business practices. CR covers a whole taxonomy of business responsibilities that include any and all of business ethics, legal compliance, environmental management, community investment, human rights, worker rights and welfare, anti-corruption and corporate governance. Carroll identified CSR as covering the four areas of environmental responsibility, legal responsibility, ethical responsibility and discretionary / voluntary responsibilities on top of these (Carroll, 1979).

Developed further from Carroll, 'Stakeholder Theory' defines companies as social institutions embedded in a broader social environment, with the interests of wider non-owner 'stakeholders' as having an equal primacy to be factored into company objectives, covering "any group or individual who can affect or is affected by the achievement of the organization's objective" (Freeman, 1984, p.46). All stakeholders have a legitimate interest in business activity, with society extending a theoretical 'license to operate' determining that firms have implied responsibilities to wider society that must be fulfilled in order for businesses to continue in operation.

Donaldson and Preston (1995) subcategorize stakeholder theory further into the 'descriptive', the 'normative' and the 'instrumental'. Descriptive stakeholder theory explains how managers take into account interests of stakeholders. Normative stakeholder theory maintains a focus on the underlying moral or philosophical principles and rules-based ethics within business activity. Instrumental stakeholder theory concerns the demonstration of positive economic consequences from stakeholder engagement, with performance and outcome as the basis for justifying the consideration of wider stakeholders in commercial activity.

Debate in the literature considers the extent to which company management should balance these often-conflictual concerns when implementing CSR into management, and particularly where managers confront difficult dilemmas when normative and instrumental claims do not perfectly align. Donaldson et al. (1995) consider the primary concern for companies to be normative in terms of approaches to stakeholders, capturing the moral responsibilities of companies, capturing general principles of fairness, employee dignity and fundamental human rights, and or respect for the intrinsic worth of human beings.

Margolis et al. (2003) states that business organizational study must go beyond reconciling corporate responses to social misery associated with the neoclassical model of the firm, arrive at some workable balance between instrumental and other moral criteria, whilst recognising the "practical necessity that stakeholder theory revolves around financial consequences" (Margolis, 2003, p.279).

Freeman (1999) argues against the primacy of a normative approach, believing that "it is hard to see how [a normative] argument can be connected to real firms and real stakeholders without some kind of instrumental claim" (Freeman, 1999, p235). Furthermore, Post, Preston, and Sachs (Post et al., 2002) defines stakeholders explicitly by the contributions to the financial bottom-line, with long-term business success requiring the development of strategically-integrated relationships with stakeholders. Jones and Wicks (1999) suggest a 'convergent stakeholder theory', a merging of normative and instrumental approaches to create a consideration of both processes and outcomes.

This highlights the many and varied approaches that exist under the wider umbrella of stakeholder theory. The following section considers how these complementary and divergent approaches are applied at the corporate level in terms of CSR management, and the extent to which such considerations are implemented into the strategic planning of business activity.

Strategic CSR in Business

When businesses are attempting to manage CSR, a perceived contradiction emerges. On the one hand, CSR management voluntarily accepts its responsibilities to wider society. However, for this management process to have credibility, these responsibilities are expected to be well-defined, consistent, and something for which a company can be accountable. A key route to CSR management that has been adopted is the process of engagement with stakeholders, and this process is then used to define and legitimize the scope of CSR management (Blowfield, 2008 p.159).

A Strategic CSR approach model will have tiers of stakeholders within a given geographical environment, and within a given set of technological capacities and capabilities:

- Organizational stakeholders Shareholders, employees, managers, trade unions
- Economic Stakeholders Customers, competitors, creditors, suppliers
- Societal Stakeholders Governments, NGOs, communities, the environment

A key focus of corporate activity is the acknowledgement by management of its dependency on its stakeholders to survive, recognising itself as a single entity in a wider stratum of interest groups. Companies are dependent on these stakeholders for societal legitimacy, without which they would not be able to remain operational.

Strategic CSR approach has evolved, using a multi-stakeholder perspective that varies depending on whether one draws from the normative, instrumental or descriptive versions of defining stakeholder theory (Baron, 2000). A company business strategy is a set of fundamental choices that define the company's long-term objectives, its general value proposition or offering to the market, its general approach towards how it intends to firstly build and then maintain its competitive business system, and how it operationally and managerially organises itself. Lasserre's framework (Lasserre, 2007) covers four key areas:

- Ambition (the long-term objectives)
- Positioning (its choice of customer segments, and its value proposition to customers)
- Investment (its choice of investments in order to create a business system able to deliver value competitively to the market)
- Organisation (its fundamental choice of people, structure, processes and systems)

Where a company competes in its key world markets and when the business is made of integrated and co-ordinated activities across borders, then its business strategy is classed as 'global'. If the corporation in question operates globally, the corporate strategy will be a global corporate strategy which incorporates the selection of regions and countries in the corporate portfolio.

In terms of ambition, a 'global player' is one whose ambition is to aspire to establish a sustainable competitive position in the key markets or the world, and to build an integrated business system of designs spread over said key markets (Lasserre, 2007, p.38). Global positioning considers a combination of two choices:

- The choice of countries within which a company wishes to compete, and the role that those selected countries will have to play in the overall global country portfolio
- The definition of the numerous and variety of value propositions for the portfolio of products and/or services of that company, as which corresponds to the type of segments and countries within which the given company wishes to compete.

Typically, global companies will often have market and operational presence in a selection of countries that will feature all of the above country groups that will have meaningfulness to the company. In terms of targeting customers in different countries (standardization), where differentiator companies attempt to adapt its consumer targeting differently depending on its market, then rather than having a standardized approach, such companies would be classified as 'adaptive'.

Product differentiation in the food manufacturing industry for mass consumer products can be achieved in a number of ways, either through customer loyalty, positive feedback in the production process through accumulated experience, inimitable competencies or costly adaptations in the product, amongst others, all of which will lead to a sustainable competitive advantage.

In terms of the global business system in the context of the food manufacturing supply chain, covering multiple countries and products, and with a multitude of key risks and exposures, the need to create a series of collaborative arrangements with local and regional organisations is vital, and especially when considering the operational and reputational risks that can occur when supply chain performance and transparency is inextricably linked to the product brand differentiation.

Finally, the nature of global strategy is fulfilled through the operational architecture that a company will adopt, in order to support and implement its global ambition, global positioning, and global business system described in the previous sections. Global organisation selection is dependent on (i) the nature of the competitive context in the industry in question, and (ii) the strategic positioning that has been adopted by the firm.

Certification-based standards draw on a mixture of descriptive and instrumental stakeholder theory, allowing for a demonstration of adherence to an auditable set of processes and procedures for monitoring site-by-site activities, with an external verification, against a predefined set of criteria. However, such standards can be costly to implement, and require considerable commitment at company management level to justify the time and expense of pursuing and attaining the implementation of such standards (Poetz, 2012).

Poetz (2012) identifies 216 different types of voluntary private standards in the food sector, covering a whole plethora of environmental, social and governance concerns. Further to this identified proliferation of standards, Henson (2010) asserts that academic debates fail to recognise the diversity of private voluntary standards in the food sector, in terms of (i) their institutional form, (ii) who develops and promotes them, (iii) who adopts them, and (iv) why. Henson states that "the legitimacy of standards in many of these areas is arguably dependent on their being set by broad-based coalitions of stakeholders, including producer organisations and NGOs" (2010, p.6).

2.3 Certification Standards, Bias and Decoupling

Literature considers the nature of decoupling, and considers the source of decoupling, and issues encountered by best-practice companies implementing standards that they both participate in and helped to design. 'Policy-practice' decoupling is considered the traditional notion of decoupling (Meyer and Rowan, 1977), and relates to where organizations have adopted a policy only symbolically, but without implementing it substantively.

A key concern identified in this review relates to the issue of companies implementing voluntary CSR standards, either directly or within the supply / value chain that they operate, potentially as an off-the-shelf 'proxy' for effective stakeholder engagement channels. Meyer and Rowan (1977) state that decoupling allows organisations a stable means of dealing with institutional contradictions, where a decoupled structure maintains symbolic power without suffering internal consequences, even if it is recognised widely within an organisation that an external standard's effects on internal corporate behaviour is 'negligible' (Tolbert & Zucker, 1996, p. 180). In this situation, decoupled activity can endure in the long-run.

External certification standards are one strand of a wider group of non-governmental multi-stakeholder initiatives, intended to help companies to be better accountable for their managerial decisions, by allowing the assessment and communication of their social and/or environmental impact, through the operationalisation of 'norms'-based considerations. They are designed to help companies to be better accountable for their managerial decisions, and to hold organizations accountable to a greater, more externally-credible degree for their actions, omissions and inadequacies (Gilbert, 2010).

Mueller (2009) asserts that deficiencies in the issue of inclusivity at the design and subsequent discussion stages creates legitimacy issues for certification standards in the area of environmental management. Mueller identifies potential issues over the nature of structure and organisation in standards that places universal applicability over inclusivity regarding regional and minority stakeholder interests, with governance structure (and indeed the expensive nature of being included in the discourse processes) creating a bias towards potential domination by large corporations.

Mueller (2009) recognising the importance of the 'inclusiveness' of standards as a key legitimacy source, covering all of the participants or indeed as many as possible, identifies five criteria for appropriate standard selection and implementation, as a means of generating legitimacy amongst stakeholders:

- (i) Inclusivity Based on 'input legitimacy' and the integration of all concerned / affected stakeholders
- (ii) Discourse developing the criteria of the standards through a discourse process; process must be legitimate ('throughput legitimacy')
- (iii) Control as in democratic control, by ensuring that the outcomes satisfy all stakeholder claims. 'Output legitimacy' is ensuring all standard / certification criteria are satisfied
- (iv) Coverage of supply chain issues, and the integration of all participants along the supply chain (although already covered to an extent)
- (v) Transparency and the open reporting of the results

Mueller asserts that groups without the requisite financial and organizational background are unable to see their interests represented "as the costs for the participation in international meetings of the standardization institutions cannot be paid", representing a significant barrier to participation for the standard

(Mueller, pp. 513-14). While the analysis is not focused on food, the focus is on FSC certification as an externally-recognised certification standard, as well as ISO14001 certification.

Gilbert et al. (2010) identify a major issue facing such standards is that of 'decoupling', where standards-requirements are not reflective of actual organisational practice. In these instances, companies may capture the benefits of adhering to standardized, legitimating formal structures, whilst in actuality their activities vary freely in response to practical considerations. In such circumstances, standards can be regarded as 'window dressing', reflecting that the adoption of IAS does not lead to significant improvements in corporate accountability (Weaver, Treviño, and Cochran, 1999, p.539).

Static and dynamic decoupling

The literature addresses the notion of 'static' and 'dynamic' natures of decoupling, and considers the extent and explanation for commitments being separate from activities, even when those involved in the standard have been instrumental in its design.

As previously mentioned, international standards can be understood as "soft law" (Gilbert, 2010), where "soft" emphasizes the voluntary aspect of standards, while "law" implies that non-compliance carries consequences.

Sandholtz (2012) builds on previous research that standards are likely to be resisted by individuals who consider themselves "highly autonomous, innovative, and different" (Brunsson & Jacobsson, 2000b, p. 134), such as best-practice companies. Sandholtz highlights that for knowledge workers, it matters hugely whose expertise has been, and is being, distilled in the standard.

Brunsson et. al state that standards are mechanisms of social order, hybrid forms of control that incorporate properties of formal directives and informal norms. Further, Timmermans and Epstein (2010) argue for standards that are characterised by formal authorship and voluntary adoption, with the key being to "find a balance between flexibility and rigidity and to trust users with the right amount of agency to keep a standard sufficiently uniform for the task at hand." (2010, p. 81). However, Brunsson et al. who argue that users tend to be

entrusted with varying amounts of agency, suggest that implementing standards are in fact not entirely voluntary.

Sandholtz advances that for standard-adopters, external standards become 'hard' directives, with the degree of acceptance and incorporation depending on the extent that the adopters were involved in the design of the standards. Further to this, when directives threaten the occupational norms and practices of those implementing the standard, Sandholtz observes a malignant, disjointed form of decoupled compliance occurring. However, if standards have accommodated the norms and practices of the targeted occupational group (i.e. themselves), a more benign form of decoupled compliance develops. If standards originate within the group and incorporate its norms and practices, then the resulting directive will encounter less resistance (SandholtzSandholtz, 2012, p.676).

Sandholtz (2012) conducts inductive analysis of designers of ISO9000 quality management systems, and the experiencing of decoupling where those actors had participated in the design of the standards. Sandholtz calls this 'symbolic compliance', specifically when decoupled from the exercise of technical judgment, which is one way for the individual to assert his or her professional autonomy (Sandholtz, 2012, p.659).

Sandholtz claims a failure on the part of the existing research to pay attention to professional communities subsequently becoming recipients and implementers (rather than originators) of standards (Sandholtz, 2012, p.657). Sandholtz argues that existing empirical work has made little use of the professional lens, despite the recognition that standards are invariably introduced into settings already populated by practices, tools, people, and other standards.

Haack and Schoenborn (2012) consider that coupling, decoupling and recoupling is a dynamic process, acknowledging that CR standardization is an institutional process that commences, rather than ends, at the point of adopting an external standard or commitment. Dynamic 'Coupling processes' would result from the "transformative impact of communicative interaction and negotiation" (Haack, 2012, p.835).

Haack et al. also view corporate responsibility standardization as dynamic rather than static, suggesting that decoupling is a transitory, temporary phenomenon. Haack et al. examine the scenario of compliance with standards by companies being perceived as purely 'symbolic' as per Sandholtz,

identifying it as one aspect of a dynamic interplay with material aspects of standardization. Using the United Nations 'Equator Principles' guidelines for international corporate project finance (reference EP), Haack et al. argue that it is the engagement 'narratives' created within the standard development that enable successful application of a standard, i.e. the creation of 'meanings' and understandings. Such meanings bind both the corporations applying the standard and the societal stakeholders that are observing business activity (Haack, 2012).

A 'narrative' approach has the dynamic effect of reducing the differences over time between words and deeds, effectively creating a 'moral entrapment' through keeping promises and engendering commitment, combined with public scrutiny and collaboration with NGOs. Haack's study argues that 'narrative contestation' at the local implementation level generates in organizations and individual members a sense of entitlement, conviction, and rationality of action (Haack, 2012).

Christensen et al. (2013) is consistent with Haack's dynamic flow of ideas, discussion and change that allows adopters to reduce the gap of policy-process decoupling over time. Christensen sees the public disclosure of promises and commitments as a means of rooting sustainability standards deeper into operational practice, with the nature of disclosing intentions as being "raw material for (re)constructing the organization" (Christensen et al., 2013, p.376). By committing publicly to the moral values that are embodied in socio-environmental policies, adopters seek to avoid being perceived as illegitimate, resulting in them become 'morally-entrapped and taken to task if they fail to honour their promises. This in turn establishes behavioural consistency (Haack et al., 2012).

Christensen et al.'s approach extends from the 'license to operate' by offering a 'license to critique' approach. Dynamic 'license to critique' philosophy argues that sustainability standards are sensitizing devices that allow for critique and contestation in ways that ideally cultivate the following processes: 1) recognizing and confronting alternatives, 2) authorizing employee participation, and 3) talking out loud about sustainability in order to learn about it. (Christensen et la., 2017, p.255). This dynamic approach requires a systematic integrate inquiry and contestation of sustainability standards in organizational practices (Christensen et al, 2017, p.240).

This approach acts as a response to criticisms of sustainability standards that they are either too open-ended or too restrictive, resulting in a disabling of their ability to contribute to sustainability standards (Christensen, 2017, p.239). Christensen's dynamic approach to resolving policy-process decoupling emphasises the significance of communicative engagement mechanisms that allow a stimulation of organizational openness in implementation (Christensen et al., 2017). The issue raised by Christensen is that sustainability standards tend to favour the closed, certification type of standards that lack a sensitivity to local conditions due to their quest for more detailed and accurate specification of practices and behaviours. This supports criticism by Rasche (2010) that compliance has a propensity to be reduced to annual box-ticking exercises, thereby excluding necessary reflection on the standard's limitations and discussions about potentially better practices (Rasche, 2010).

Policy-Process vs Means-End Decoupling

Discussion proposes alternative definitions to decoupling beyond the Meyer et al. definition of 'policy-practice' decoupling, one Wijen (2014) calls 'means-end decoupling'. Bromley and Powell (2012) argue that organizations complying with standards policies may not, or may barely, achieve the very objectives that developers and implementers of these policies envisage, due to a fundamental inappropriateness of said policies in opaque areas of business, where accurately assessing fair performance outcomes is difficult.

Where there are transparency issues, Wijen argues that this opaqueness drives institutional entrepreneurs to "create and maintain concrete and uniform rules, apply strong incentives, and disseminate 'best practices" to ensure substantive adopter compliance" (Wijen, 2014, p.302) with the consequence of this rigidity being a loss of agency within the adopters tasked with implementing voluntary sustainability standards. The consequential trade-off is one where the adopter may resolve policy-practice decoupling, with an enhanced disparity between the means and ends, and vice versa.

Wijen asserts that opacity creates a need for concrete and uniform rules, strong incentives, and best-practice dissemination to ensure substantive compliance by adopters, however the rigidity of such compliance-oriented institutions inadvertently erodes agency, namely their capacity to address the inherently complex and diverse challenges (Wijen, 2014, p.318).

However, Haack challenges Wijen's distinguishing between mean-ends decoupling and policy-process decoupling, with Wijen arguing that the two definitions not only co-exist, but also argues that the two are effectively in an ongoing trade-off. Fundamentally, Haack argues that Wijen (2014), as well as Bromley and Powell (2012), seems to overlook that the two different types of decoupling rest on distinct theoretical paradigms whose assumptions are incompatible. Haack posits that policies and processes represent features of an interpretation that are effectively two 'fixed' reference points, objective facts from which the two can become detached, or 'decoupled'. However, results are not fixed points, and are in reality moving targets that are never fixed, and are both relative to existing means and resources, and are subject to 'retro-fitting' once a greater understanding of the consequent outcome has been made clear (Haack et al., 2015, p.307).

Haack et al. argues a means-end decoupling is occupied with cause-effect relationships and enhancing organisational efficiency, and relates to the contingency theory, whereas policy-process decoupling is from an institutional theory perspective; the latter is interested in the 'why and how' organisations adopt processes and structures for their meaning, and not their value.

Additionally, the disparities between policy-practice decoupling and meansends decoupling are considerable, in terms of these differing interpretations of decoupling (policy-practice and means-end). Haack argues that a focus on a means-ends decoupling focus becomes a static analysis that ignores key dynamic features, particularly those where the ends are collective within a wider group of stakeholders, rather than an individual actor's outcome. Collective ends need continuous negotiation between several actors, and only become successful if the adopter is able to both (1) make sense of the disruption to a profit-maximizing business model that sustainable and socio-economic policies incur, and (2) convert unfamiliar policies into meaningful and legitimate ones. (Haack, 2015, p.309). Quoting Scherer and Palazzo (2011), Haack states that goals are initially provisional, and the methods of achieving the (initially) unspecified "ends" cannot be determined ex ante but, rather, need to be discovered through dialogue between business firms and their societal critics (Scherer and Palazzo, 2011).

Wijen rejects the alleged functionalist intrusion of institutional theory that Haack et al. claim is present in Wijen's means-end decoupling approach. Wijen

views a policy-process decoupling as also being functionalist, in the sense that standard adopters may not follow the rules that those who have designed them consider instrumental or effective (Wijen, 2015, p.311). Haack et al. suggest that instead of diluting the clarity of the decoupling concept with functionalist elements of contingency theory and biasing it toward stasis, future research can benefit from examining the ideational dynamics underlying decoupling (Haack, 2012, p.309).

Christensen (2017) further emphasises the need for comparative empirical studies of how a license-to-critique philosophy is maintained in the different contexts of, respectively, principle-based, certification and reporting standards. This study allows a contribution in this area, due to the focus on certification standards of the RSPO, and provides an opportunity for further research as these standards develop themselves in the face of an ever-evolving commercial environment. What is being seen within sustainability standards, particularly those that offer certification and act as a driver of market transformation, is an enhancement process that allows greater engagement, discussion and dialogue within their processes. Christensen et al. propose that such studies may contribute to knowledge in understanding better the challenges associated with nurturing openness in different standard setting regimes.

2.4 Voluntary Standards and 'Legitimacy'

The literature review raises concerns over companies and standards both suffering legitimacy issues through a lack of inclusivity relating to stakeholders. From a company perspective, issues emerge with companies choosing to commit to specific supply-chain standards without having conducting consultation with its own supply chain stakeholders, resulting in a loss of legitimacy with its wider stakeholders. In terms of certification standard providers, the literature review identifies issues over standards insufficiently factoring-in the interests of wider stakeholder groups into their formulation and design stage.

Interpretations of 'legitimacy' is considered in terms of effective stakeholder inclusion, with a particular focus in the literature on differences between input-

based (processes and transparency-based) and output-based (economic benefits) interpretations of legitimacy that different CSR certification standards represent.

Any lack of inclusiveness within standards represents a major problem, largely due to the voluntary nature of private standards; in the absence of a legally-enforceable means of rules-compliance, thus generating authority emanating from within standards requires a broad level of inclusiveness within the standards. This source of internalising of authority, and the embedding of authority within its participants, is represented in the academic literature within the concept of 'legitimacy'.

A failure of inclusiveness, and ineffective integration of stakeholder interests into the design and/or the implementation stages of voluntary standards affects their ability to be credible mechanisms for demonstrating stakeholder assurance (Gilbert, Rasche and Waddock, 2010). In particular, inadequate inclusiveness in the standard design phase leads to a failure by participants to subordinate profitmaking interests to those of the wider societal stakeholder groups.

Standards are an attempt to 'codify' the responsibilities that businesses have to its stakeholders, both internal (management, employees) and external (suppliers, NGOs, wider communities) (Werther, 2010). However, while voluntary standard-setting can include many stakeholder community and supply-chain groups in policy design and implementation, the involvement of global organizations and NGOs as proxies for developing country interests is criticized for potentially being too remote from local realities (Dahl, 1999). In particular, 'western' NGO influence may be too distant from impacts at the local level, leading to the existence of weak couplings between global commitments and local implementation that can potentially lead to adverse selection by businesses (Williams, 2004).

Bernstein (2005) states that securing legitimacy requires standards to be both inclusive and also to be designed to ensure free-and-equal discourses among participants. Lacking inclusiveness reflects a problem because the governing authority of any standard depends on the perceived appropriateness and justification of their rules by a community (Bernstein, 2005).

For Palazzo and Scherer (2006), legitimacy in the context of transnational governance is built on a foundation of dynamic deliberation and

communication, and the fostering of understanding amongst all stakeholders, both public and private. Successful CSR discourse needs to be based instead on a 'moral legitimacy' that is input-focussed and is discursive in nature. This discursive focus thus depends and relies for its legitimacy of actions within processes of 'active justifications' with society, and not purely on the responsiveness of a small number of powerful interests (Palazzo et al., 2006). This position emanates from the view of Palazzo et al. that CSR discourse is too often based on notions of 'cognitive and pragmatic legitimacy' that are power and output-based/justified, built on a foundation of legal compliance and a static set of societal expectations that does not change and is not dynamic.

Dahl (1999) emphasises the need to consider regional and contextual conditions as part of standards-design, and the need to understand contextual features such as sector and operational specifics such as site location, size etc. Furthermore, bodies creating standards require an underlying set of stakeholder consultation mechanisms, such as in the form of discourse forums between community, trade group and NGO stakeholders. However, high-level normative-based standards are often criticized as it is assumed that global policy making is too remote from local realities (Dahl, 1999). Gilbert (2007) asserts that poor representation of local considerations by standardizing authorities/bodies persist due to the views of multinational companies being prioritised during the design phases (Gilbert, 2007).

Auld (2010) suggests that a 'legitimacy trade-off' exists between a streamlined, standardized approach to dealing with stakeholders that may lead to higher levels of participation. However, as a consequence of this, an associated slowing-down of decision-making impedes the ability to respond effectively to policy problems. Auld suggests that disclosure alone is insufficient to protecting against legitimacy challenges, and the use of disclosure 'instrumentally' as a means to informing and consulting with stakeholders can produce very different outcomes than when disclosure and stakeholder consultation are separate ends unto themselves (Auld, 2010).

Bush (2012) highlights further how efforts to maintain label credibility and improve accessibility, while also foster continual improvement creates a "devil's triangle" of certification for the Marine Stewardship Council (MSC). Bush observes how the MSC's credibility risks being undermined by simultaneous poor representation of developing world fisheries at the lower

entry-level end of the standard, and little incentive for 'best practice' assurance and continual improvement at the best-practice end for fisheries that are already certified.

Scherer and Palazzo (2013) provides a systematic analysis of sustainability-related issues from the perspective of corporate legitimacy, and specifically a look at the different legitimacy strategies that are linked with sustainable development (SD) and how they are employed. Scherer argues that isomorphically-adapting to the expectations of external stakeholders, or manipulating those expectations while maintaining a 'business-as-usual approach to ongoing operations, are increasingly becoming insufficient responses to capturing legitimacy. The more sophisticated 'paradox' approach suggested by Scherer is through creating multiple structural and contextual arrangements for the numerous, multiple and heterogeneous challenges they face, with internal platforms for reflection. Scherer argues that those corporations that possess this arrangement are "more successful in preserving their legitimacy in the face of multiple, heterogeneous and conflicting SD-related challenges than those that do not" (Scherer et al, 2013, p.278).

Further to this, Scherer et al contribute through an elaboration on the challenges relating to business operations in increasingly fragmented and dynamically-globalized environments. This paradoxical approach allows companies to respond to contradictory legitimacy demands through the employment of conflicting strategies in parallel.

Scherer recognises the conflicting pressures of globalized trade pushing for greater transnational standardization of soft law rules and regulations, and the creation of institutional contradictions though the diversity of local regulatory, cognitive and cultural contexts within which they operate. This represents a simultaneous tendency towards both more homogeneity and more heterogeneity, acknowledging the view of Haack (2012) of companies "accepting standards of behaviour (e.g., with respect to sustainability issues), which provide a level playing field, incur the same costs to all companies within an industry, and at the same time provide them with legitimacy" (Scherer, 2011, p.245). Scherer presents concerns however that such external standards are fragmented and only partially available per each SD-related issue confronted.

Haack (2015) argues that decoupling policy from practice enables organizations to maintain their legitimacy in the face of conflicting institutional demands (Haack et al., 2015, p.307). However, in situations where observers and affected outside stakeholders lack sufficient confidence and good faith in the implementing organisation, and monitor whether organizations who formally adopt are actually implementing a policy, policy-practice decoupling will be perceived as illegitimate, and beholders will enforce negative sanctions (Meyer & Rowan, 1977, p.357).

The central question addressed by Vellema and v.Wilk (2015) is whether and how multi-stakeholder partnering makes internationally constructed standards fit local norms, rules and practices in producers' regions. Vellema et al. suggest that rather than imposing generic standards, lead firms and international NGOs need to identify and employ effective local problem-solving strategies. Vellema et al. view the global-local interactions outside the boundaries of the global value chain, with the aim of substantially supporting local partnerships to tailor global sustainability standards to their own problem-solving strategies, enabling global standards to fit the wide variety of producer contexts.

The result is a two-stage dynamic of embedding; at the international level, multinational enterprises (MNEs) partnerships with NGOs and work within the global value chains and in consumer markets. MNEs being both profit-seeking and also responding to ethical consumer preferences, and NGOs representing the wider public interest in the consumer region (Vellema, 2015, p.112). At the local level, globally-designed standards become operational through a second stage, where suppliers in the value chain collaborate with wider non-value chain stakeholders, plus also with governments to address local concerns and areaspecific laws and regulations, with an attempt to translate adjustments into the standard's requirements.

Richards, Zellweger and Gond (2016) explore how firms in the coffee, tea, and chocolate industries legitimise themselves on moral grounds through external communication to stakeholders, and the extent to which different types of companies will invest in external certification to achieve legitimacy. Richards et al. assert through their research that there is a positive relationship between those companies seeking to achieve legitimacy with stakeholders through the values associated with the civic and green world, and an inclination to adopt sustainability certifications. Furthermore, Richards et al. assert a negative

relationship between those companies adopting a set of values associated with the domestic world, and the decision to seek legitimacy through sustainability certification. Further, the strength of the above relationships varies based on the firm's governance, due to the view (as per Swanson, 2008) that an organisation's moral legitimacy mirrors the values and identity of its controlling owners.

Richards et al. asserts that firms primarily rely on two distinct sets of legitimacy principles that reflect their identity orientation, that of (i) the 'civic and green' world, and (ii) the 'domestic' world, arguing that a reliance by companies on the domestic world is negatively related to firms' investment in sustainability certifications. Each world is said to define legitimacy principles that can be used to justify organisational practices on moral grounds; a 'civic world' values civic duties over particular private interests, and the green world values a harmonious relationship between humans and nature. In opposition to this, the 'domestic world' values the traditions of interpersonal ties. Richards et al. suggest that these groups of values define what firms define as 'appropriate values' (as previously declared by March and Olsen, 2009), and these values are embedded within organisational identity, expressed through their interaction and engagement with stakeholders such as suppliers and consumers.

Richards et al. argue that domestic morality can work against the establishment of official sustainability standards, and the moral legitimacy derived by emphasising the domestic world can provide leeway for firms to avoid investing in civic or green movements. This was found to be the case even in industries that are confronted by profound ethical and/or environmental issues, and a domestic vocabulary can be deployed in an attempt to appear legitimate without using certifications.

Legitimacy and the RSPO

Empirical research by Schouten and Glasbergen (2011) asserts tensions and trade-offs in the different ways in which non-state market driven governance arrangements can generate legitimacy for participants in the standard. Using the RSPO at the basis for analysis, Schouten et al. argue that the legitimization of private governance initiatives is a dynamic, multi-dimensional process operationalized across three angles: legality, moral justifications, and consent/acceptance. Schouten et al assert that legality should be regarded as the

initial foundation of the legitimization process, interwoven with a subsequent establishing of moral justifications (Schouten et al., 2011, p.1,892). Once these angles have been effectively secured, standards create consent and broader acceptance through additional activities such as engagement (Schouten, 2011). Such a step-by-step approach identifies a dynamic legitimizing process.

In terms of the RSPO, while all elements of legality have been established, Schouten et al. assert that the RSPO fail when there are conflicts between powerful actors in the Roundtable. Furthermore, while internal legitimacy is realized by creating legality and moral justifications, the authority of the RSPO "has not been entirely established by these two elements of the legitimization process; creating acceptance of the RSPO is vital for establishing external legitimacy as well as for reinforcing internal legitimacy" (Schouten, 2011, p.1898).

Schouten et al. consider that the RSPO is perceived to be fairly legalized, with a considerable reliance on formal rules regarding rights, duties and expectations. However, its difficulty in enabling the representation of every stakeholder group in the Roundtable, specifically smallholders, and only some oil-producing countries recognising the RSPO as an important player, weakens its claim for legality (Schouten, p.1896). From a moral angle, RSPO relies on a common ground of interconnected interest that allows for a pragmatic acceptance of the participants' many differences. However, despite commitments to the RSPO's sustainability-driven principles and criteria, Schouten et al. argue that the 'moral justification' step is insufficiently satisfied.

Finally in terms of consent and acceptance, Schouten argues that the RSPO is not perceived by any external audience to be the natural or the 'only' way to govern the palm oil industry, and identifies numerous significant tensions of interest to this study; the first tension is between producers in developing countries and food-processors and retailers in industrialized countries; the second is from outside actors, particularly NGOs, who are critical about such a pragmatic and process-oriented approach (Schouten (2011, p.1897). Combined, due to the tensions, the outcomes in terms of a more sustainable commodity chain are not easy to predict, and the RSPO is considered a fragile institution, and there is still a possibility that it only creates a niche market for certified palm oil.

Schouten (2012) further considers the nature of round tables within private multi-stakeholder governance structures, arguing that roundtables tend to fall short as a mechanism for deliberative democracy, and in terms of inclusiveness (of both actors and discourses) and consequentiality. Schouten argues that the RSPO's structure has a limited variety of discourses, due to the roundtable biasing towards technical knowledge and pragmatic approaches in preference to local knowledge. The case study argues that in roundtable structures, the ideological or emotional styles of communication and standards in-use are "a compromise between similar reformist discourses that have a specific view on the relationship between people, planet and profit" (Schouten, 2012, p.49).

Schouten argues further that while opportunities are possible for members such as smallholders and local communities, the ability for smaller local members to use the channels to 'change the system' are low. Schouten et al. argue that in the RSPO's reformist structure, discourse channels are fixed and capable of achieving the required outcomes by nature of the standard's design. In such a scenario, radical responses to emerging environmental and ecological issues at the local level will struggle to occur (Schouten, 2012).

Glasbergen (2013) focuses on the need for addressing private certification standards as a dynamic process of change, and raises concerns over focusing on the categorisation of standards as creating input or output legitimacy. The author suggests that such an analysis of legitimacy is static, and results in a normative assessment that "does not help much with understanding better the practices of legitimating processes" (Glasbergen, 2013, p.354). The analysis looks at varying categories of certifying standards, and suggests that an effective approach is to consider the legitimacy challenges that such standards need to manage, given the functions that the standards aim to fulfil.

In terms of input legitimacy, Glasbergen argues that the procedural prerequisites of input legitimacy are only part of the process of creating legitimacy, and when a member or participant conforms to the procedure, this does not in itself make any such arrangement legitimate. Glasbergen emphasises that representation of interests and transparency are important, and it is a number of functional considerations that determine the uses that are made of these requirements (Glasbergen, 2013, p.365).

Regarding the substantive aspects of a standard, Glasbergen claims that a conception of the common good is construed in the confrontation of conflicting and different stakeholder claims, and the context of what a standard strives for is only a temporary negotiated agreement in the first instance, highlighting the dynamic nature of a standard's journey towards legitimacy. In such cases, context is continuously debated and refined through the participant-partnering process (Glasbergen, 2013, p.365). Glasbergen considers here also the example of the RSPO, showing how participating stakeholders have to safeguard their own legitimacy with their constituents. For example, the NGO WWF justified participation through reference to its environmental protection objective and the protection of high conservation value (HCV) forests; Oxfam points to its objective to consider human rights issues for its constituents; Unilever had economic resilience concerns such as the need to secure long-term palm oil supply (Glasbergen, 2013, p.359).

Consensus-building and compromise within its stakeholders is considered to be reflected within its standard-setting processes, and this consideration is important to the RSPO establishing itself as authoritative. However, Glasbergen argues for the critical need for the standard to be credible to critical external audiences as well as participators, and points to the potential damage of NGO campaigns to a standards effectiveness and reliability as a source of consensus-building and compromise.

Glasbergen argues that creating legitimacy is an ongoing process; it stabilizes power relationships temporarily, but it is always susceptible to change. However, this approach is considered as inconsistent with the notion of legitimacy in the global economic order, where Glasbergen considers that legitimacy is closely connected to effectiveness as an authoritative actor in the marketplace, which primarily relates to economic actors, such as suppliers and consumers. However, the view is that this approach is insufficient for securing a high level of legitimacy.

Ruysschaart and Salles (2014) conduct further research into the RSPO, and how as a global voluntary standard, how effective the RSPO has been in attaining its conservation goals, and identify specific and complementary shortcomings regarding the RSPO's protection of orangutan-habitat forestry in Sumatra, Indonesia. Ruysschaart et al. conclude that the RSPO's structure is not effective for conservation purposes, either from the perspective of protecting lowland

forested areas, the orangutan or its natural habitats. Further, the authors argue that the RSPO functioning questions long-term participation of conservation NGOs, as they do not achieve their initial conservation goals while legitimizing the RSPO's system.

Ruysschaart identifies the conflict of interest between NGOs that identify growers for not implementing the RSPO guidelines properly from a conservation perspective, and large growers using strategies to decrease the conservation areas to maximize profits; claiming that the RSPO is succeeding in allowing western downstream manufacturing companies to secure their long-term supply of palm oil and protect their reputation (Ruysschaart, 2014, p.444). One specific shortcoming relates to the inadequate representation of smaller growers in the region due to a lack of discernible premium associated with growing RSPO certified product, meaning that less than 2% of growers in Indonesia are RSPO, and all of those members are most of the largest producers. The non-integration of RSPO within the socio-political-legal context of Indonesia means that from a legitimacy perspective, there is a distinct lack of soft law strength provided through RSPO membership.

Also, considering palm oil from a dynamic legitimacy perspective, Oosterveer (2015) analyses emerging dynamics in palm oil provision and reviews different ways aimed at promoting sustainability in the palm oil global supply chain. It is argued that in emerging global environmental governance arrangements, private actors such as companies and civil society organisations have acquired more important roles than national governments. This reflects how unfamiliar sources of power have become relevant within global networks and flows. Oosterveer uses the RSPO as an illustration of how as a global commodity network, having economic and political power alone is not decisive, and argues that the RSPO effectively acts as a 'programmer' in the network it has created; that is, designing and changing the operation of a palm oil network towards sustainability in a dynamic manner, and "reprogramming it through negotiations on the definition, indicators and measurement tools for sustainable palm oil" (Oosterveer, 2015, p.151).

The analysis considers how the legitimacy of the network is subject to dynamic processes elsewhere that undermine its authority, as actors and members potentially pursue their goals outside the RSPO framework, or the potential for the RSPO itself to be split into several networks, each with their own organising

principles and understandings of sustainability (Oosterveer, 2015). The author further illustrates the argument by considering the food manufacturing company Unilever, a founder member of the RSPO, arguing that Unilever illustrates how private companies work within the RSPO to develop stakeholder linkages with other private and civil society actors to address non-economic challenges such as environmental sustainability. In addition to Unilever also using the global network to both strengthen its economic position, and also increase profit, Oosterveer argues that Unilever as a participant is also a programmer of how the global palm oil supply network operates, allowing it to further integrate social and environmental concerns into the network's operation (2015, p.151).

2.5 Cross Sectoral Analysis

Specifically relating to the food sector, a previous cross-sectoral analysis by the author relating to company responses to impacts on biodiversity identified concerns over the many voluntary standards being used effectively in the sector, relative to other sectors with recognised impacts on biodiversity. The previous study, partially-published and peer-reviewed, from here referred to as Monks (2013), identified a prevalence of externally-verified certification standards, and yet the food industry scores compared poorly with other sectors. The distribution scores of the cross-sectoral Scores are represented in Table 2 below:

Table 2 - Cross-sectoral Biodiversity assessment

		Overall Biodiversity Assessment			
Environmental Sector	Impact	Poor	Basic	Moderate	Good
Air transport	Medium	8	6	1	1
Building Materials	High	5	9	6	2
Chemicals / Pharma	Medium	108	39	17	4
Construction	High	36	12	12	2
Energy & Fuel	High	3	11	4	1
Food, Beverages	High	48	18	29	4
Forestry & Paper	High	3	1	6	6
Mining & Metals	High	34	27	23	5
Oil and Gas	High	22	31	16	5
Power Generators	High	7	34	26	5

Property Developers	Medium	48	10	2	2
Public Transport	Medium	13	6	2	0
Road & Shipping	High	25	6	2	0
Supermarkets	Medium	12	6	10	3
		372 (47%)	216 (28%)	156 (20%)	40 (5%)

The initial analysis shows companies that operate in sectors with significant biodiversity impacts are largely performing poorly. Only 5% of companies have been assessed as having a 'good' biodiversity assessment, with close to half of all companies (47%) having a 'poor' biodiversity assessment. High-impact sector companies fare better than medium sector companies in their assessments. Subcategorised based on impact, 8% of high-impact companies having a 'good' assessment compared to 3% by medium-impact sectors. Only 34% of high-impact companies have a 'poor' assessment, compared to 60% of medium impact companies.

The food and beverages sector produced interesting results, due to the company having a skewed outcome of a high number of companies demonstrating a number of substantial contributions in a relative sense, and at the same time a large proportion of companies that were failing in the area of biodiversity protection and conservation in operations and supply chain, and also in the area of demonstrating externally-recognised standards. Further details of this research are included in Appendix D.

2.6 Summary

Companies see CSR-related engagement as an important facet of good strategic management planning, and those businesses that adopt a stakeholder approach recognise that societal stakeholders are an essential source of legitimacy to continue to operate (Lasserre, 2009). Within a strategic CSR approach, voluntary CSR-focussed certification standards are considered by businesses as a credible means of demonstrating effective stakeholder engagement.

However, the use of standards as a 'means to an end' for achieving high-quality strategic CSR runs the risk of selecting inadequate or inappropriate standards. It is asserted that engagement should come before the selection of standards, and

not as a replacement for engagement, and raises concerns over using certification-compliance in isolation as a business-proxy for having adequate stakeholder engagement with broader stakeholder groups. Where internal mechanisms do not exist, concerns are raised over the source of support for committing to such standards, without the requisite support from pre-existing ESG management and engagement systems.

The literature review identifies claims of bias towards large companies based in developed countries implementing comprehensive internal management systems, asserting a wealthy or developed country 'bias' towards companies establishing comprehensive internal management systems (Mueller, 2009). The review captures the issue of 'decoupling' and the ongoing debate over the nature of policies and practices mismatching. Companies may capture the benefits of adhering to standardized, legitimating formal structures, whilst in actuality the activities vary freely in response to practical considerations (Gilbert, 2010). The nature of standard setters experiencing decoupling is part of a dynamic process, drawing on initial 'symbolic compliance' (Sandholtz, 2012). Dynamic decoupling / re-coupling is the consequence of the rooting of sustainability standards within an evolving corporate environment (Haack and Schoenborn, 2012; Christensen, 2013). Further debate considers departure from the policy-practice definition of decoupling (Meyer and Rowan, 1977) to consider decoupling also as a means-end phenomenon, with policy-practice coupling producing outcomes decoupled from the intentions of the standard that has been committed to (Wijen, 2014; Haack et al., 2015). Specifically relating to food companies, an issue is identified relating to companies electing to implement voluntary standards without this decision emerging from its own internal management systems and stakeholder engagement mechanisms (Henson, 2010).

Gilbert (2010) notes that academic research relating to the production stage of voluntary standards would contribute to challenge claims that standards have not been designed based on an inclusive stakeholder collaboration process. Furthermore, Christensen (2017) emphasizes the need for comparative empirical studies of how a license-to-critique philosophy is maintained in the different contexts of, respectively, principle-based, certification and reporting standards. This project allows for a contribution in this area, due to the focus on certification standards of the RSPO, and provides an opportunity for further

research as these standards develop in the face of an ever-evolving commercial environment. Christensen asserts that what is being seen within sustainability standards, particularly those that offer certification and act as a driver of market transformation, is an enhancement process that allows greater engagement, discussion and dialogue within their processes; and that further studies may contribute to knowledge in better understanding the challenges associated with nurturing openness in different standard setting regimes (Christensen 2017).

The first two sub-questions address claims of bias towards large companies based in developed countries implementing comprehensive internal management systems, whether the food manufacturing sector, noted as being saturated with standards, reflects concerns over 'decoupling' between policy commitments and internal processes.

Addressing themes of legitimacy, the literature review raises concerns over the companies choosing to commit to standards in the absence of conducting consultation with its supply chain stakeholders, resulting in a loss of legitimacy with wider stakeholders. Further to this, issues are identified over certification standards insufficiently including the interests of wider stakeholder groups into their formulation and design stage.

The review identifies varying interpretations of securing legitimacy within CSR-related discourse, with an assertion of the moral, input-focussed, discursive interpretation of legitimacy (Palazzo and Scherer, 2006), rather than cognitive, pragmatic and output-based legitimacy. Western NGOs are criticised for being too distant from the local level, leading to adverse selection of unsuitable standards by companies, impacting acceptability at the local level (Williams, 2004, Ruysschaart and Salles, 2014). Challenges are raised regarding the effectiveness of roundtables as mechanisms for deliberative democracy, impacting their capacity for creating legitimacy (Schouten, 2012). Observations are made over the manipulating of stakeholder expectations while maintaining a 'business-as-usual approach within ongoing operations, instead of the creation of multiple structural and contextual arrangements and internal platforms for reflection between stakeholder groups (Scherer, 2010; Scherer, 2013). The legitimization of private governance initiatives is asserted as being a dynamic, multi-dimensional process operationalized across three angles: legality, moral justifications, and consent/acceptance, and RSPO fails to secure this (Schouten,

2011). The legitimacy of the RSPO is also considered as being subject to dynamic processes outside of its own framework, as actors and members potentially pursue their goals outside the RSPO framework, or the potential for the RSPO itself to be split into several networks (Oosterveer, 2015).

The second two research sub-questions concern companies and standard providers. Firstly, whether companies are committing to voluntary certification standards is perceived as a method for increasing legitimacy for their operations in operational locations. Secondly, how do standards conceptualise and recognise the need for establishing legitimacy within the communities that they operate, such as recognising the need to establish the theoretical 'license to operate'.

The next chapter defines the methodological approach and the research typology for the quantitative analysis used as the basis for analysing the four research sub-questions.

Chapter Three

3 Methodology and Research Design

In this chapter, the research design is presented, outlining the methodological approach selected to address the research sub-questions. The research design combines a Composite Index construction with a multidisciplinary, 'mixed methods' strategic approach, combining a quantitative analysis using correlation, Ordinary Least Squares (OLS) linear regression, and logistic regression methods, and a qualitative case study research strategy. The design focuses on the environmental management systems and stakeholder related systems and practices of a 'best-practice' sub-set of companies from a Composite Index sample of constituent food manufacturing companies. The selection of methods is justified within the context of the pragmatist and realist philosophical positioning of the research design.

This design approach creates an index-based cross-regional analysis of the food manufacturing sector, a quantitative measure of the quality of internal operational processes developed by individual companies. The method for constructing the EMSR Composite Index adheres to best-practice guidelines by the OECD, and incorporates an exploratory factor analysis of the index structure. The composite index provides an indication of the requisite internal management systems and engagement channels of food manufacturers, as indicated by the composite index 'quantitative 'score'.

The research design incorporates multilinear regression (MLR) quantitative method to identify potential relationships between company internal systems and key explanatory variables relating to size, location of activities, and commitments to external standard providers. The design then incorporates a logistic regression method to address the research sub-question relating to evidence of decoupling between external commitments and internal systems.

Finally, the design uses a qualitative, case-study approach for understanding the motivations and decision-making processes adopted by a 'best practice' sub-set of companies within the index. This chapter also outlines the methodological approach which has been adopted for the case studies, including an incorporation of the Mason (2002) approach to designing semi-structured

interview questions organised around the research questions, that the interviews are designed to inform.

3.1 Hypotheses and Propositions

Qualitative methods of data analysis are adopted to test hypotheses relating to research sub-questions 1 and 2. Firstly relating to sub-question 1, the OLS Linear regression method is applied to test the extent to which explanatory variables (including company size, operational base and subsidiary location) are significant predictors of the ESMR Index. Secondly relating to sub-question 2, the logistical regression method is applied to test if there is a statistically significant relationship between commitments to external voluntary standards, and several explanatory variables including the quality of internal EMS / stakeholder engagement systems (with the EMSR Index acting as a proxy). The EMSR composite index provides an indication of whether food manufacturers have the requisite quality mechanisms, as indicated by their index score. The results of the statistical analysis are combined with the literature review to formulate the propositions explored in the case study. The first proposition developed from the literature review and explored within the case study concerns whether certification standard participation is considered to be a source of legitimacy within stakeholders, and whether companies include developing country interests in their decisions to implement certification. This proposition claims (i) key stakeholder groups are not being sufficiently consulted as part of company decision-making processes regarding their CSR standard commitments, and (ii) commitments to voluntary certification standards are not perceived by companies as a source of legitimacy in the eyes of wider stakeholder groups, specifically in developing countries.

The second proposition addressed within the case study concerns whether CSR standard-providers integrate notions of stakeholder 'legitimacy' into standard-design, allowing the use of certification standards to form the means of demonstrating an adherence to a theoretical social 'license to operate'. Also formulated within the literature review, this proposition claims that standard providers insufficiently represent the views of wider stakeholder groups in their design, which undermines the ability of such standards to be considered as sources of 'legitimacy'. The statistical analysis further informs the topic guide

within the interview stage of the case study, where statistical analysis has considered the presence and strength of relationships between company internal management and engagement processes and external certification commitments.

Where cases are identified regarding the exclusion of developing country-related stakeholders within specific certification standards, such instances challenge the use of these certification standards as adequate business proxies for comprehensive engagement with these stakeholders. In such cases, questions are raised whether certification standards have been designed correctly, or have been correctly selected for appropriateness and suitability by companies adopting such standards. The final proposition also informs the use of certification standards by companies as a stakeholder engagement channel 'proxy', as this also considers the level of stakeholder participation that such companies, as members, have encouraged within the design of these certification standards.

3.2 Philosophical positioning of the analysis

From a philosophical perspective, the research strategy takes a pragmatist approach with a realist ontology. The pragmatism approach combines a positivist approach within the quantitative analysis, and interpretivist elements in the subsequent case study.

Positivism recognises the centrality of the theory, it revolves around discovering patterns in observable events and describing them in the form of laws, with an emphasis on identifying causal relationships and providing explanations (Farquhar, 2014, p.18). Positivist research seeks knowledge phenomena on the basis of measuring and observing (Collis and Hussey, 2009). Consequently, such an approach includes the development and testing of hypotheses, with a theoretical statement formulated from the review of literature, with a set of hypotheses tested. This approach is taken within the quantitative stage of this research strategy.

Interpretivism is concerned with grasping individual and unique truths with an emphasis on understanding, and acknowledges the subjective meanings that are used in social interaction (Farquhar, 2014, p.18). Thus, a distinguishing characteristic is the centrality of the interaction between research and the object

of the investigation, and through this interaction a deeper meaning can be uncovered. In this context, reality is viewed as socially-embedded, is fluid and changing, and multiple realities are presumed (Cresswell, 2007). Consequentially, a collective case study approach is applied to reflect the complexity of the individual food company and certification-provider cases, and this approach avoids the reductionism that characterises positivist research (Farquhar, 2014, p.20).

Combining the two approaches together in a mixed-methods approach reflects a pragmatic approach, with the view that a more rounded and richer picture of social phenomena can be generated through a mix of methods. Deductive reasoning lends itself well to the quantitative analysis in that the theory is preexisting at the beginning of the research process, with the empirical research and analysis being used to collect data which is compared to the theory. Existing theories can be subsequently refined using the empirical data collection and analysis, however the steps in the process are such that clear hypotheses are developed at an early stage, and the analytical task is to measure data and analysis against the existing theory (Farquhar, 2012, p.77). This is the approach considered within the composite index construction stage, and the subsequent statistical analysis.

At the same time, the business environment is a social construct, and the area of interaction between business and society is better understood through the perceptions of the involved actors, representing an inductive approach. Each individual company operates and interacts in a unique series of locations, products and economic circumstances, and understanding these features is important when seeking to understand the challenges faced by business operations in their many social environments. The pragmatic approach to research is to rely on a version of abductive reasoning combining the induction of pragmatism and interpretivism, recognising the limitations of using purely one approach over another, and instead allowing a degree of interaction between the two approaches (Farquhar, 2014, p.26). Abduction is the development of an explanatory or theoretical idea, which results from close examination of particular cases (Hammersley, 2005), making a judgement with offers the best explanation for the observations that are being made (Thomas, 2011). The pragmatist approach is considered to be the most appropriate approach to answer the research questions.

3.3 Development of a Composite Index

Guidelines on constructing composite indices (CI) have been developed by the Organisation for Economic Co-operation and Development (OECD), specifically relating to the construction of indices by academics and policy-makers in areas including industry competitiveness, globalization and sustainable development. The aim is to address issues encountered in composite index construction, improve techniques and enhance robustness in construction. This is achieved through the creation of a step-by-step guideline framework to improve the quality of CIs. This framework has been incorporated by this project (where relevant) in order to ensure rigour and robustness in the CI that underpins the project findings, in the case of this project it is the construction of the Environmental Management and Stakeholder Responsiveness (EMSR) Index.

OECD guidelines state that "developing a sound theoretical framework to provide the basis for the (i) selection and (ii) combination of single indicators into a meaningful CI, under a 'fit-for-purpose' principle" (OECD, 2008, p.22). It states that a credible framework should clearly define the phenomenon to be measured and its sub-components, selected individual indicators and weights (that reflect their relative importance and dimensions of the overall composite). In addition, OECD states that the process should ideally be based on what is desirable to measure and not on which indicators are available (OECD, 2008, p.22).

One particular aspect of the framework approach is to create credibility through an approach that is focussed on enhanced transparency, and the OECD is particularly mindful of achieving this, especially assessments that relate to newly-emerging policy areas (such as sustainable development), with research still being developed in such areas. The route to effective transparency requires the defining of the concept, determining sub-groups and identifying the selection criteria.

The framework is formed around key steps where relevant to the phenomenon, and those steps are used as considerations within the design of the index:

- 1. Development of a theoretical framework to provide the basis for the (i) selection and (ii) combination of single indicators into a meaningful CI, under a 'fit-for-purpose' principle.
- 2. The data variable selection of single indicators on the basis of: analytical soundness; measurability; coverage of countries (or companies, in the case of the EMSR); relevance to the phenomenon being measured; relationship of each data variable to each other.
- 3. Consideration for (i) imputing missing data and (ii) dealing with extreme values
- 4. Multivariate analysis Conducting an exploratory analysis on the overall structure of the indicators; assessing the suitability of the data set; explain the methodological choices (e.g. weighting, aggregation)
- 5. Creating a scheme of normalisation of indicators to allow comparability.
- 6. Choosing a method of weighting and aggregation, done according to the underlying theoretical framework.
- 7. Analysis to assess the robustness and sensitivity of the CI
- 8. Ensuring transparency and reducibility, ensuring the ability to go back to the underlying data. Transparency is vital, allowing CIs to be decomposed back to their essential components.
- 9. Link CI to other published variables through correlation, identifying linkages through regressions.
- 10. Decide on the presentation and visualisation of the CI.

OECD suggests that this stage requires stakeholder and expert consultation, taking into account multiple viewpoints. Such a process increases robustness of the conceptual framework and the selected indicators. The intention is for the nested approach to be consistent with information derived from experts in the responsible investment field, including any research processes that have also incorporated the relevant data points and assessment structures. The results of this nested approach are outlined in section 3.4.2.

3.4 Composite Index

3.4.1 Sample selection for the composite index

This section discusses the sample basis for participating companies in the Composite Index, the regression analysis for the food industry, and subsequently the case study. Within the approximately 3,000 companies in the FTSE All-World Developed (AWD) Index of companies, 37 separate Industry Classification Benchmark (ICB) Subsectors of operation (as defined by FTSE) are represented. This classification is based on the Index provider identifying the main operational activity being conducted by the registered parent company, included in the index.

It is not an entirely accurate indicator of identifying companies that are involved in food manufacture at levels below the company's main activity, due to the possibility for companies to have diversified industrial activity in sectors beyond food manufacture. As a result, a further check is required, and is conducted using business activity descriptive information and segmental information from the Bloomberg data provider. The final sample included only companies with operations in the food manufacturing.

Essentially any company identified as being involved in food manufacturing within (i) segmental information, or (ii) business details description, is included in the initial quantitative analysis.

A total of 56 companies were identified in order to allow an analysis of comparing and contrasting the actions, processes and inclusiveness of stakeholder involvement by Companies in the UK/EU/North America block against those incorporated outside of these areas, and considering the level of involvement with external verification standards related to biodiversity and sustainable sourcing.

As part of the research design, there is an anticipated limited availability of interview inputs at companies defined as best-practice from the quantitative analysis, due to the nature of there being 56 potential companies, and the intention for the best practice companies being selected based on companies achieving high scores in the composite index. The limitations section of the research elaborates further on the limitation that the research design represents for study. The sample population selected is pre-defined in the context of the

study, given the sample selection, the findings can be considered indicative of the sector.

Consultation occurred with sustainable investment research experts Vigeo Eiris (www.vigeo-eiris.com) regarding its methodology design approach and this provided quality input into the construction of the nesting structure below.

3.4.2 Overarching Design of the Composite Index

The composite index construction is designed to capture the extent to which food companies (prior to participating in such external standards) have evolved their understanding of the suitability and inclusivity of external standards from their own CSR management mechanisms. The index is designed to score companies based on their creation of (i) bespoke, internal environmental policies and systems (excluding biodiversity), (ii) environmentally-focussed stakeholder engagement channels and product stewardship, as attested to through the involvement of external stakeholders, and (iii) an additional assessment of the completeness of environmental policies and systems, specifically related to biodiversity.

The composite index forms the basis for analysing what dependent / explanatory indicators determine total score, (ii) RA commitment, (iii) RSPO, and (iv) general participation in biodiversity commitment. Composite Index data analysis provides an indication of where companies are in terms of having pre-existing engagement channels that are separate to the external standards, and allows the identification and scoring of which Companies have evidence of internally-formulated management systems and engagement channels beyond the adoption of certification standards.

In terms of defining the concept, the EMSR Index measure, a multi-dimensional concept, is founded on the idea that company completeness of approach to environmental management and responsiveness to stakeholders in the area of sustainable sourcing is captured through the areas of: environmental policies; environmental management systems; the existence of stakeholder engagement channels; the existence of product stewardship. The collective aspects can be represented within three broad sub-groups as follows:

Table 3- Sub-Group Categories

Sub-Group	Sub-Group Category
1	Addressing the completeness of environmental policies and systems (ex-biodiversity)
2	Addressing external stakeholders through stakeholder engagement channels and product stewardship (ex-biodiversity)
3	Addressing the completeness of environmental policies and systems, specifically related to biodiversity

The three categories are the sub-groups, and represent the theoretical framework of the composite index design. This establishes the link between the theoretical framework and the structure of the Index. The first two sub-groups are represented in the composite score as 'total internal', effectively establishing a baseline of completeness that does not include a refinement for biodiversity. This is because biodiversity is considered an addition to a rounded approach to the established environmental risks that are recognised within traditional environmental management systems such as energy efficiency, water management, air and water emissions and waste management. This set of impact concerns is recognised within ISO14001 environmental management standards. The third group acts as an enhancement to this base foundation, incorporating all of the areas captured in 'total internal' and form an annexe score that considers the capturing of biodiversity aspects.

Sub-group 1 has a particular construction trait, due to it being based on the approach taken by ISO14001 internationally-recognised certification standard for environmental management systems (EMS). Companies globally have responded to environmental regulation and stakeholder concerns in a variety of ways, and companies can implement an environmental management system (EMS) in order to drive continual improvement in performance and compliance with the corporate environmental policy. The EMS may be externally certified as meeting the requirements of an accepted standard such as ISO 14001 (the international environmental management standard established by the International Organisation for Standardisation that is open to any organisation) (ISO, 2016).

Key EMS components are used to assess corporate environmental management systems which have not been externally certified to a recognised standard.

These elements are part of the ISO 14001 certification requirements, including: the presence of an environmental policy; an initial review to identify key impacts, or establishing data for a baseline year against which progress is measured; documented structure and procedures; internal audits against the requirements of the system (not limited to legal compliance auditing); and board-level oversight of the EMS in terms of its overall effectiveness.

Sub-group 2 is designed to be based on externally recognised engagement processes, however it is primarily intended to identify the presence of established stakeholder engagement channels. This aspect is separated as a subgroup due to these features not being present in the other two groups, specifically environmentally-focussed, two-way mechanisms established to cover: environmentally-focussed stakeholder engagement channels related to direct operational activity (and as a consequence of the EMS scope and completeness); and product/service (stewardship) activities that recognise and mitigate the impacts of the food product (either in the supply chain or downstream product impacts (post-consumer).

Sub-group 3 covers specific policies, measures and management mechanisms, plans and commitments to international norms that relate to biodiversity and sustainable sourcing. This section uses methodological structure that is utilised by a specialist ESG research house, Vigeo Eiris based in London, UK (www.vigeo.com, www.eiris.org). In developing the biodiversity criteria structure, Vigeo Eiris consulted with third-party NGOs including Natural England (a UK body linked to the UK Department of Environment, Food and Rural Affairs (DEFRA), who advise on nature conservation and regulate activities affecting designated sites in England, and the Earthwatch Institute, an international non-profit organization which aims to promote sustainable conservation of natural resources and cultural heritage.

3.4.3 Selection of Composite Index Variables

The 'Environmental Management and Stakeholder Responsiveness (EMSR) Index has been developed with a series of indicators selected to represent a measure of the 'internal' or 'own' approach to having a complete set of policies and systems to environmental management, stakeholder engagement and product stewardship. The purpose is to provide a dependent variable that can be

used as a basis for predicting the characteristics of companies that have developed such a rounded environmental approach.

Table 4 - EMSR Index Indicator Description

Variable number	Index Sub Group	Indicator Description
I1	1	Presence of an Environmental Policy 1 if there is evidence of an Environmental Policy, 0 if otherwise)
12	1	 Completeness of Environmental Policy (ex-biodiversity) Identification of core key environmental impacts being covered within the environmental policy (ALL OF: climate change/energy efficiency, air emissions, water emissions, waste, water management) 1 if evidence of the above, 0 if otherwise.
13	1	 Evidence of documented EMS structure and procedures covering day-to-day operations (either through process guidelines or completeness of monitoring hierarchy). 1 if evidence of the above, 0 if otherwise
I4	1	 Audit Processes Evidence of regular audit process for testing the credibility and completeness of the EMS. 1 if evidence of the above, 0 if otherwise
15	1	Internal reporting and management review of the EMS

		 Evidence of a regular review at senior management / director level of efficacy and effectiveness of EMS 1 if evidence of the above, 0 if otherwise
I6	1	 Operational Coverage of EMS (%) Estimate of total operations covered by total sites (or
		Revenue if sites data is not available) • Estimate between 0% and 100% based on total coverage of EMS across operations based on number of sites.
PROXY	1	ISO14001 Certification (Proxy Score for Sub-group 1)
		 Evidence that operational sites have (to some extent) achieved ISO 14001 certification for Environmental Management If evidence of ISO14001 covers greater than 50% to total operational subsidiaries, all of I1 to I5 are awarded 1.
I7	2	Product Stewardship (Environmental focus)
		 Evidence of the company having either: an environmental policy that covers its product or service provision, or demonstrates the performing of environmental life-cycle analysis within its product design. 1 if evidence of the above, 0 if otherwise
18	2	Stakeholder Engagement / Involvement
		 Evidence of the company having established engagement channels with stakeholders affected by operational activity. 1 if evidence of the above, 0 if otherwise
19	2	Supplier Audits
		 Evidence company either (i) conducts audits of suppliers, or (ii) requires suppliers are audited externally by environmental auditors 1 if evidence of the above, 0 if otherwise
B1	3	Evidence of Biodiversity Policy
		 Evidence that the company has a biodiversity policy covering its operations 1 if evidence of the above, 0 if otherwise
B2	3	Biodiversity Action Plan
		Evidence that the company has incorporated a BAP into its regular operational EMS processes.

		• 1 if evidence of the above, 0 if otherwise			
B3	3	Biodiversity as a major operational impact			
		 Identification of Biodiversity as a key environmental issue that is subject to the same level of oversight as its core environmental impacts. 1 if evidence of the above, 0 if otherwise 			
B4	3	Standalone (Site or Group Level) BAPs			
		 Evidence of standalone Biodiversity Action Plan covering all operations (at either site-level or at group level). 1 if evidence of the above, 0 if otherwise 			
B5	3	Voluntary Commitment to the Convention of Biological Diversity (CBD)			
		• 1 if evidence of the above, 0 if otherwise			

For more detailed explanation of the method of scoring, see Appendix A.

Datapoint variables (with their relevant sub-group) are selected on the basis of: analytical soundness; measurability; relevance to the phenomenon being measured; relationship to each other. The OECD sees "Identifying the selection criteria" (OECD, 2008, p.22) as a key aspect of design that acts as a guide to whether an indicator should be included or excluded, with emphasis on the fact that criteria should be as precise as possible and identify what is being measured in terms of whether the aspect being measured is an input, an output or a process. In particular, the key aspect is to avoid including multitudes of these.

The EMSR Index datapoints focus on process rather than input/output. The process focus considers the structures, commitments, engagement mechanisms and monitoring forms that are in place in order to capture stakeholder engagement and inclusion. Outcomes, and in particular the quality or quantity of outcomes, are not being evaluated in this composite index.

3.4.4 Weighting and Aggregation of the Composite Index

The EMSR Index Calculation Method is as follows:

- (i) Overall Score Calculation Method
 - o 'Total Score' = (Sub-group 1 + Sub-group 2) + Sub-group 3
 - Nb. Sub-group 1 + Subgroup 2 = 'Total Internal'
- (ii) Sub-group 1 calculation

Calculated as the highest total from the following two groupings:

I1	Presence of an Environmental Policy
I2	Completeness of Environmental Policy (ex-biodiversity)
I3	Operational Guidelines
I4	Audit Processes
I5	Internal reporting and management review of the EMS
I6	Operational Coverage of EMS (%) - WEIGHTING FACTOR
	• If coverage is 50% or less, any positive scores in I1:I5 are multiplied by 0.5 (meaning a maximum total 2.5)

OR

PROXY	ISO14001 Certification (includes WEIGHTING
for I1:I5	FACTOR)
	• If ISO14001 Proxy is greater than 50%, this award counts as positive score for all of I1:I5 (maximum total 5)
	• If ISO14001 Proxy is 50% or less, this award counts as positive score for all of I1:I5 (maximum total 2.5)

(iii) Sub-group 2 calculation

Calculated as the total number of indicators awarded from:

I7	Product Stewardship (Environmental focus)
I8	Stakeholder Engagement / Involvement
I9	Supplier Audits

(iv) Sub-group 3 calculation ('Total Biodiversity')

Calculated as the total number of indicators awarded from:

B1	Evidence of Biodiversity Policy
B2	Biodiversity Action Plan.
В3	Biodiversity as a major operational impact
B4	Standalone (Site or Group Level) BAPs
B5	Voluntary Commitments to the Convention of Biological Diversity (CBD)

3.4.5 Data collection for the Composite Index

The secondary data sources utilised in the quantitative analysis are the following:

- (i) Publicly-available secondary data sources have been used, including, company websites, Company annual reports, and Sustainability and Corporate Responsibility reports.
- (ii) Publicly-available documentation on the voluntary Biodiversityrelated CSR standards that have been implemented by the food industry companies in question.
- (iii) Secondary data sources (directly from publicly-available sources) relate to publicly-available documentation relating to the biodiversity-related, externally-recognised certification standards that the Company

- complies with, in terms of the processes that Companies are required to complete in order to secure certification.
- (iv) Quantitative data points from ESG Research sources, including the CSR research provider Ethical Investment Research & Information Services (EIRIS) (www.eiris.org). Access is available to a database of company research and survey data, covering numerous Environmental, Social and Governance (ESG) assessment areas, covering global publicly-listed businesses.

All data used to calculate the data-points is publicly available using the above sources. As a means of aggregating the data, a specialist research company called Vigeo Eiris (www.eiris.org) was contacted, and permission was gained from the company to acquire equivalent data-points as part of the composite index calculation process. The survey process implemented by Vigeo Eiris represents a credible data collection process.

- (i) An initial survey is conducted by researchers on an annual basis, approximately 3-6 months after annual reports are published. Researchers conduct a review of publicly available information into a company profile, which displays all data collated, items awarded and recorded, and overall scored assessments across the ESG areas relevant to each company.
- (ii) The profile is dispatched to each company for review, with companies given a 2-week period for the opportunity to amend/correct.
- (iii) Additional questionnaires are sent to company requesting that companies give and supply any missing information, also with the same 2-week period to respond.
- (iv) Final versions of all questionnaire datapoints are sent to companies, and made available to Vigeo Eiris clients.

Vigeo Eiris primarily undertakes stakeholder involvement at the methodological development / review stage. However, stakeholder engagement also occurs in other spheres. Data from sources such as regulatory bodies or other authoritative third parties is used in specific areas. From time to time, clients provide feedback and additional information on specific companies from their own engagements with third-party NGOs, industry collaborations and academic sources.

3.5 Methods for Quantitative Data Analysis

3.5.1 Composite Index: Exploratory Factor Analysis

The OECD guidance requires a consideration of "an exploratory analysis on the overall structure of the indicators using multivariate analysis" (OECD, 2008, p.69). This relates to (i) assessing the suitability of the data set, and (ii) explaining the methodological choices (e.g. weighting, aggregation). The key here is to avoid selecting individual indicators in an arbitrary way, with little attention paid to the interrelationships between them. Exploratory factor analysis (EFA) is the statistical technique adopted to identify the underlying relationships between the measured variables (Bryman and Cramer, 2016) It is a method for investigating whether a number of variables of interest are linearly related to a smaller number of unobservable factors, grouping variables based on the internal consistency of their scores. The grouping reveals latent factors that are difficult to measure in the traditional way.

For the EMSR Index, factor analysis tests for the strength of the correlation between the variables within each sub-group of the composite index design (Field, 2014). EFA examines whether the 'nesting' structure is well-defined, and if the set of available indicators is sufficient (or appropriate) to describe the phenomenon.

The analysis is helpful in assessing the suitability of the data set, and provides an understanding of the implications of the methodological choices during the construction phase of the composite index (e.g. weighting and aggregation). Information can be grouped and analysed along at least two dimensions of the data set: individual indicators and countries (or sectors), and testing for grouping information on individual indicators.

The variables included in the factor analysis are all of the indicators presented in Table 4 'EMSR Index Indicator Description'. In order to check the internal consistencies and correlations between the data points used to calculate the composite index, and to check the internal consistency of the individual nests of data, factor analysis of the data is conducted.

In the EMSR index the data-point variables are categorical, and in the assessment they are largely binary, in that they are based on 'Y/N' responses. They do not have linear and numerical responses or results, and are either present or not. A special problem is dealing with a data matrix which consists of binary (1,0 or Y/N) items. The objective remains the same, namely exploring the interrelationships between the observed responses, and determining whether interrelationships can be explained by a small number of latent variables.

Because of the categorical, binary (0,1) measurement of all the variables excluding I6, in the correlation assessment the phi correlation coefficient is used as the appropriate test statistic in the exploratory analysis. The phi-coefficient, denoted by Phi (φ) is interpreted very similar to the Pearson's product moment correlation coefficient, r.

The equation is:

$$\varphi = \frac{ad - bc}{\sqrt{n}}$$

Where:

a is the number of instances where there is a negative observation of one composite index variable in Table 4 (I1-I5, I6-I8 and B1-B5) and another composite index variable.

b is the number of instances where a negative observation of one variable and a negative observation of its counterpart in a pair

c is the number of instances where a positive observation of one variable and a negative observation of its counterpart in a pair

d is the number of instances where there is both a positive observation of the pairs of variables

n is the total number of observations

Null hypothesis (Ho): there is no relationship between pairs of variables

Alternative hypothesis: there is a statistically significant relationship between the pairs of variables. The level of significance adopted is 5%.

For each combination of two data-point variables included in the composite index, a phi coefficient between 1 and -1 is measured, calculating the strength and direction of the relationship between the two binary variables. A coefficient of 1 would represent a perfect, positive correlation between the two variables, and -1 means a perfect, negative correlation between the two variables. An outcome of 0 determines a zero correlation between the variables (Field, 2014). If it is found that any variables do not correlate with any other variables or very few, these should be excluded before running the factor analysis. Although multicollinearity is not a problem for factor analysis, it is important to avoid extreme multicollinearity (i.e., variables that are very highly correlated, phi > 0.9) and singularity (variables that are perfectly correlated) (ibid). Where there is a high level of correlation, as per the OECD guidance, interpreted as the correlation coefficient being greater than +/- 0.9, then this would be interpreted as being highly-correlated and of potential concern, should the two variables be considered as having a unique methodological contribution to the overall EMSR Index Score.

The correlation between each pair of variables are arranged in a correlation matrix. The diagonal elements are all 1 because each variable will correlate perfectly with itself. The off-diagonal elements are the correlation coefficients between the variables. The existence of clusters of large correlation coefficients between sub-sets of variables suggests that they are measuring the same underlying dimension known as a factor (or a latent variable) (Fielding, 2005: 620).

Factors are statistical entities that can be visualised as axes along which measurement variables can be plotted, according to the extent to which they relate to a given factor. The co-ordinates of a variable, therefore, represent its relationship to the factors. The co-ordinate of a variable along a classification axis is known as a factor loading. The factor loading can be thought of as the phi correlation coefficient between a factor and a variable. If the factor loading is squared, a measure of the substantive importance of a particular variable to a factor is obtained (Field, 2005).

The axes are straight lines and can be described mathematically by the equation of a straight line. Similarly, factors can also be described in terms of the same equation.

$$Y_i = b_1 X_1 + b_2 X_2 + \dots + b_n X_n + \varepsilon_i$$

$$Factor_i = b_1 Variable_1 + b_2 Variable_2 + \dots + b_n Variable_n + \varepsilon_i$$

As previously stated, the variables included in the factor analysis are the pairs of binary indicators presented in Table 4 'EMSR Index Indicator Description', I1 – I5, I-7 I9 and B1 – B5. The indicator I6 is a weighting factor (rather than a datapoint with its own methodological criteria), and as a result is not relevant to issues of communality and correlation.

There is no intercept in the equation as the lines intersect at 0. The b-coefficients represent factor loadings, describing the relative importance of the measured variables to that factor (Field, 2005).

There are two main forms of factor analysis, the principle components and factor analysis, called in SPSS the principle-axis factoring (Bryman and Carmer, 2006). Factor analysis is primarily concerned with reducing the data set from a group of interrelated variables into a small set of factors. It achieves parsimony by explaining the maximum amount of common variance in a correlation matrix using the smallest number of explanatory concepts (Field, 2005: 620). The common variance is the variance shared by the scores of observations (companies) on three or more variables (indicators). Data is reduced when variables that correlate highly with a group of other variables but do not correlate with variables outside of that group are identified (Bryman and Cramer, 2006). The total variance for a particular variable can be decomposed into: common variance — variance shared with other variables and unique variance, specific to that variable. There is also error variance, which is due to measurement fluctuations. The proportion of common variance present in a variable is known as communality.

Therefore, a variable with no specific variance or random variance would have a communality of 1 and a variable that shares none of its variance with any other variable would have a communality of 0. The conducted analysis is interested only in common variance. The amount of common variance is estimated by estimating the communality values for each variable. The communalities are estimated through the use of the squared multiple correlation of each variable with the others. Once the underlying factors are extracted, new communalities are calculated representing the multiple correlation between each variable and the factors extracted (Field, 2005: 630). Higher communality values are selected as small values and indicate that a variable does not fit well with the factor solution to the variance, and should possibly be dropped from the analysis. If

communalities for a particular variable are low (between 0.0-0.4), then that variable may struggle to load significantly on any factor.

Table 5 shows the phi correlation coefficients between all binary Composite Index variables excluding I6 (see Table 4 for details of variables).

Table 5 - Phi Correlation Co-efficient Matrix for Binary Variables

		I1	I2	I3	I4	I5	I7	I8	I9	B1	B2	В3	B4	B5
I1	Phi	1.000	0.302	0.375	0.349	0.281	0.275	0.145	0.404	0.098	0.098	0.042	-0.051	0.074
11	Sig (2-tailed)		0.204	0.005	0.009	0.035	0.040	0.279	0.002	0.463	0.463	0.752	0.702	0.577
12	Phi	0.302	1.000	0.733	0.723	0.643	0.305	0.248	0.378	0.199	0.199	-0.130	0.219	0.247
12	Sig. (2-tailed)	0.204		0.000	0.000	0.000	0.023	0.064	0.005	0.136	0.136	0.330	0.101	0.065
13	Phi	0.375	0.733	1.000	0.711	0.677	0.328	0.356	0.478	0.261	0.261	0.113	0.237	0.199
13	Sig. (2-tailed)	0.005	0.000		0.000	0.000	0.014	0.008	0.000	0.050	0.050	0.400	0.076	0.137
I4	Phi	0.349	0.723	0.711	1.000	0.734	0.343	0.342	0.417	0.281	0.281	0.121	0.161	0.214
17	Sig. (2-tailed)	0.009	0.000	0.000		0.000	0.010	0.010	0.002	0.035	0.035	0.365	0.227	0.110
15	Phi	0.281	0.643	0.677	0.734	1.000	0.325	0.311	0.250	0.349	0.349	0.150	0.147	0.265
13	Sig. (2-tailed)	0.035	0.000	0.000	0.000		0.015	0.020	0.061	0.009	0.009	0.261	0.272	0.047
17	Phi	0.275	0.305	0.328	0.343	0.325	1.000	0.522	0.390	0.243	0.243	0.104	0.105	0.184
17	Sig. (2-tailed)	0.040	0.023	0.014	0.010	0.015		0.000	0.003	0.070	0.070	0.434	0.430	0.168
18	Phi	0.145	0.248	0.356	0.342	0.311	0.522	1.000	0.447	0.362	0.362	0.156	0.368	0.275
10	Sig. (2-tailed)	0.279	0.064	0.008	0.010	0.020	0.000		0.001	0.007	0.007	0.244	0.006	0.040
19	Phi	0.404	0.378	0.478	0.417	0.250	0.390	0.447	1.000	0.243	0.243	0.104	0.211	0.184
1)	Sig. (2-tailed)	0.002	0.005	0.000	0.002	0.061	0.003	0.001		0.070	0.070	0.434	0.115	0.168
B1	Phi	0.098	0.199	0.261	0.281	0.349	0.243	0.362	0.243	1.000	1.000	0.431	0.588	0.760
Di	Sig. (2-tailed)	0.463	0.136	0.050	0.035	0.009	0.070	0.007	0.070		0.000	0.001	0.000	0.000
B2	Phi	0.098	0.199	0.261	0.281	0.349	0.243	0.362	0.243	1.000	1.000	0.431	0.588	0.760
D2	Sig. (2-tailed)	0.463	0.136	0.050	0.035	0.009	0.070	0.007	0.070	0.000		0.001	0.000	0.000
В3	Phi	0.042	-0.130	0.113	0.121	0.150	0.104	0.156	0.104	0.431	0.431	1.000	-0.055	-0.032
D 3	Sig. (2-tailed)	0.752	0.330	0.400	0.365	0.261	0.434	0.244	0.434	0.001	0.001		0.680	0.810
B4	Phi	-0.051	0.219	0.237	0.161	0.147	0.105	0.368	0.211	0.588	0.588	-0.055	1.000	0.583
DŦ	Sig. (2-tailed)	0.702	0.101	0.076	0.227	0.272	0.430	0.006	0.115	0.000	0.000	0.680		0.000
B5	Phi	0.074	0.247	0.199	0.214	0.265	0.184	0.275	0.184	0.760	0.760	-0.032	0.583	1.000
DJ	Sig. (2-tailed)	0.577	0.065	0.137	0.110	0.047	0.168	0.040	0.168	0.000	0.000	0.810	0.000	

Addressing multicollinearity, Table 5 shows a high correlation (>09) with two data points in the Biodiversity-related nesting (indicators Bland B2) having a high correlation for the food manufacturing sector of companies. This presents a potential issue with regards to using this data nesting within the EMSR Index. However, this is not considered an invalidation of the nesting or either indicator B1 and B2, because nesting structure for the Biodiversity assessment has been designed by the Vigeo Eiris sustainability ratings organisation (Vigeo Eiris, 2018), within a specific cross-sectoral assessment approach relating to Biodiversity, and B2 is only identified in the assessments of four companies in the analysis, with the assessment basis for B1 and B2 being sufficiently different and important that both remain in the EMSR Index. The criteria have an established level of granularity and accumulative assessment, demonstrated in the dispersal of results in the cross-sectoral 'business and biodiversity' assessment by the author, identified in the Literature Review (see section 2.6 and Appendix D for further granular methodological detail of the Vigeo Eiris assessment structure).

Table 5 shows a dispersal of the five methodology data points replicated in B1-B5, representing approximately two-thirds of the entire range of data points (see Appendix D), produces a significant assessment dispersal across all sectors in the assessment by the Author (Monks, 2013) in Appendix D, and also in summary in Table 2 in the Literature Review. The sectoral dispersal in Table 2 includes the food manufacturing sector. With this in mind, it is considered reasonable to maintain the current biodiversity-related methodology data points within the scoring structure, due to the data points individually representing credible best practice features that a company is required to place considerable resources into achieving each separate element. Testing for correlation between variables within the subgroups, the matrix does not identify any correlations that are significantly larger in terms of data points in different nested structures.

There are no further areas of concern relating to internal consistency beyond the consideration of nested datapoints B1-B5.

Table 6 - EMSR Index Communalities

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	Initial	Extraction
I1	1.000	.356
I2	1.000	.829
I3	1.000	.774
I4	1.000	.799
I5	1.000	.768
I6	1.000	.358
I7	1.000	.468
I8	1.000	.662
19	1.000	.659
B1	1.000	.965
B2	1.000	.965
В3	1.000	.877
B4	1.000	.755
B5	1.000	.789

Extraction Method: Principal

Component Analysis.

Table 6 represents communalities related to the correlation data in Table 5. As explained in Chapter 3, Higher communalities are better, and if communalities for a particular variable are low (between 0.0-0.4), then that variable may struggle to load significantly on any factor. Excluding I1 and I6, there are no indicators that breach this limit. The indicator I1 ('Presence of an Environmental Policy') features in 51 of 56 companies in the EMSR Index (See Appendix C), and as a result is not considered to be of significant detriment to the overall structure of the Index.

3.5.2 Identification of explanatory and dependent variables

Table 7, below, provides a list of all dependent and explanatory variables included in the quantitative analysis.

Table 7 - Table of Variables

Variable Name	Description	Mean
Total Overall	'EMSR Index' composite Index score, between 0 and 12.	5.187 (3.1299)
Rainforest	Participation in Rainforest Alliance; 1= If the company participates in RA, 0 if otherwise	0.21
RSPO	Participation in Roundtable for Sustainable Palm Oil; = if the company participates in RSPO; = 0 if otherwise	0.50
Any Other Cert	Participation in any other Biodiversity-related certification = 1 if company participates in any other biodiversity-related sustainable sourcing standard; = 0 otherwise.	0.38
Any Certification	Participation in any Biodiversity-related certification = 1 if company participates in any of the above three certification categories (RSPO, Rainforest, Any Other Cert; = 0 otherwise.	0.57
Market Cap	Size of company in GBP millions, in terms of market capitalisation	13,384 (23,712)
Total subsidiaries	Location of operations; total number of countries where a subsidiary is located.	21.3929
Total Developed	Total number of countries with subsidiaries that are classified as developed countries,	7.82 (8.97)
Total Developing	Total number of countries with subsidiaries that are classified as developing countries,	12.48 (15.78)
Percent Developing	Percentage of countries with subsidiaries that are classified as developing countries,	56.97 (28.76%)

Numbers in parentheses are Standard Deviations, and these are reported for continuous variables only

Sub-question 1 asks what the effects of company size, operational base and subsidiary location are on the likelihood of a company having quality internal environmental management systems and environmentally-focussed stakeholder engagement channels. For this sub-question, the EMSR Composite Index score ('Total Overall') is the dependent variable.

Sub-question 2 asks what is the relationship between food manufacturing companies committing to biodiversity-related certification standards, and the quality of internal environmental management systems and environmentally-focussed stakeholder engagement channels. For this sub-question, evidence of commitments to sustainable sourcing-related external certification standards ('Any Certification') is the dependent variable.

3.5.3 Data collection methods for explanatory variables

Table 8 - Data sources

Datapoint	Data collection and source
Size of company ('Market Cap')	Data extracted using widely available third-party data from internet-sources, primarily Google Finance and Bloomberg
'Location of operations' and 'Participation in externally- recognised Environmental Management Systems ('Any CERTCOV')'	Vigeo Eiris database, using publicly-available sources. This is a combination of investor reports issued by companies (Annual Reports over previous 3yrs), where companies self-report on the geographical location of subsidiaries, plus company analysis provided by third-party data providers including Bloomberg
All Subsidiaries-related variables (Total Subsidiaries, Total Developed, Total Developing, Percent Developing)	Combining 'location of operations' data with OECD classification report, which determines economic development of countries
Participation on any certification	Combination of investor reports issued by companies (Annual Report, CSR/Sustainability Reports), where companies self-report on certification commitments and third-party sources (RSPO website, Rainforest Alliance website, internet search).

3.5.4 Factors impacting on EMSR Composite Index Score: Multiple Linear Regression Analysis (MLR)

The purpose of this section is to examine whether there is a linear relation between the EMSR Composite Index score and: size of company; location of operations; percentage of operations in developing countries; number of operating subsidiaries in developing countries. The explanatory variables in this analysis are quantitative and ordinal or continuous (the measurement of all variables are in Table 5).

The multivariate linear regression equation is:

$$Y_i = a_0 + b_1 X_{1i} + b_2 X_{2i} + \dots + e_i$$

for
$$i = 1, 2,, n$$

Where:

 Y_i represents the dependent variable

 X_{1i} , X_{2i} , are the values of a set of independent variables

n is the number of gathered observations;

 e_i is the error term;

 b_i are the *regression coefficients* whose numerical values are to be estimated by the regression analysis (Gujarati, 2011).

The following assumptions are necessary for the implementation of the MLR:

- 1. The dependent variable must be continuous and normally distributed.
- 2. The independent variables can be either continuous or binary.
- 3. The existence of a linear correlation between dependent and the independent variables
- 4. The non-existence of multicollinearity among the independent variables
- 5. Residuals need to be normally distributed, to be independent, and to exhibit constant fluctuations (Gujarati, 2011).

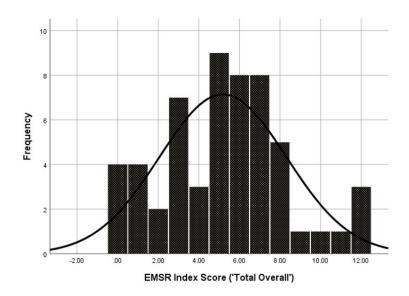
In our analysis, the EMSR Index is a continuous variable, which take a value in the scale between 0 and 12, and therefore is suitable to be used as a dependent variable in the regression model. Table 9 summarises its descriptive statistics.

Table 9 - Descriptive Statistics Table

	Statistic	Std. Error
Mean	5.1875	0.41825
Median	5	
Variance	9.796	
Std. Deviation	3.12986	
Minimum	0	
Maximum	12	
Range	12	
Interquartile Range	4	
Skewness	0.237	0.319
Kurtosis	-0.275	0.628

The average EMSR Index is 5.19 with a median of 5.00, the minimum value of the Index is 0, and the maximum is 12. The fact that the EMSR Index presents similar values for its mean and median is the first indication that the dependent variable follows a normal distribution, a factor that constitutes the first prerequisite for the implementation of the model. This is confirmed by the histogram in Figure 1.

Figure 1 - Histogram of EMSR Index Residuals



The assumption for the normal distribution of the dependent variable is tested applying the Kolmogorov-Smirnov test.

H_o: the dependent variable is normally distributed

H1: the dependent variable is not normally distributed

Results: Kolmogorov-Smirnov test statistic = 0.085, p-value = 0.20 > 0.05

Therefore, we accept the null hypothesis (H_o) that the EMSR Index variable is normally distributed.

The explanatory variables (See Table 11) are four continuous variables of: size of company; location of operations, percentage of operations in developing countries; number of operating subsidiaries in developing countries.

Table 10 - Multiple Linear Regression Data

		Total Overall	Total Subsidiaries	Market Cap	Total Developing	Percent Developing
Total Overall	Pearson Correlation	1	.469**	0.257	.524**	.346**
	Sig. (2-tailed)		0	0.055	0	0.009
Total Subsidiaries	Pearson Correlation	.469**	1	.656**	.973**	0.04
	Sig. (2-tailed)	0		0	0	0.768
Market Cap	Pearson Correlation	0.257	.656**	1	.688**	0.039
	Sig. (2-tailed)	0.055	0		0	0.778
Total Developing	Pearson Correlation	.524**	.973**	.688**	1	0.171
	Sig. (2-tailed)	0	0	0		0.207
Percent Developing	Pearson Correlation	.346**	0.04	0.039	0.171	1
	Sig. (2-tailed)	0.009	0.768	0.778	0.207	

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Table 10 shows that there is a significant Market Cap relationship between each of the explanatory variables and the dependent variable (Total Overall Score and: Total number of countries with subsidiaries, r = 0.469, p=0.000 < 0.01; Market Cap, r = 0.257, p=0.055 < 0.10; No. of Developing countries with subsidiaries, r = 0.524, p=0.00 < 0.01; Proportion in Developing countries, r=0.346, p=0.009 < 0.01).

A very high significant correlation was detected between two explanatory variables ('Total number of countries with subsidiaries' and 'Number of Developing Countries with subsidiaries'), and as a result the variable 'Total number of countries with subsidiaries' was removed for the model.

The new model that will be estimated is:

```
Total \ Overall \\ = \alpha + b_1 * MarketCap + b_2 * PercentDeveloping + b_3
```

* Total Developing + e

The null hypothesis is that the b-coefficients are zero, meaning no significant relationship between the dependent variable and any of the explanatory variables.

The alternative hypothesis is that the b-coefficients are not zero (either positive or negative), meaning there is a significant relationship between the dependent variable and the explanatory variables. A significance level of 5% is adopted to accept or reject the null hypothesis.

The case for multicollinearity is tested after the implementation of MLR. Within this test, SPSS calculates two different indexes: the index of tolerance and the Variance Inflation Factor (VIF). In order to avoid the phenomenon of multicollinearity in our model the tolerance index should be greater than 0.1 while VIF must be less than 10 for each of the independent variables. The assumptions of the residuals to be homoskedastic and lack of autocorrelation are tested after the estimation of the model.

The test for homoskedasticity and lack of autocorrelation of the residuals are conducted after the estimation of the model. This assumption is tested graphically in SPSS. It requires that at each level of the predictor variables, the variance of the residual terms should be constant. Where heteroskedasticity is present, this may suggest that the variances of the variables included in the analysis vary with the effects being modelled. In this scenario, while the variables may still be considered unbiased, they may be inefficient due to an underestimation of the actual variance and co-variance (Gujarati, 2009).

Residuals are also tested for lack of autocorrelation, a characteristic of the data in which for any two observations the residual terms should be uncorrelated (Greene, 2011). This assumption is tested with the Durbin-Watson test, which tests for serial correlation between errors. The size of the Durbin-Watson

statistic depends upon the number of predictors in the model and the number of observations. The test statistic can vary between 0 and 4 with a value of 2 meaning that the residuals are uncorrelated (Field, 2005: 170).

3.5.5 Logistic Regression analysis

The second regression analysis is a logistic regression. It aims to answer the second research question: what is the relationship between food manufacturing companies committing to biodiversity-related certification standards, and the quality of internal environmental management systems and environmentally-focussed stakeholder engagement channels.

This analysis considers company participation in certification standards as a form of engaging with their stakeholders, and the extent that the company has pre-existing engagement channels that would have fed into this process. This is in the form of evidence of the specific company's already-established stakeholder engagement channels, including evidence of the completeness of the company's internal environmental management systems.

The dependent variable 'Any Certification' representing participation in any externally-recognised certification standards are of particular interest to this analysis. These are RSPO certification ('RSPO'), Rainforest Alliance certification ('Rainforest') and any other certification standard commitment ('Any Other Cert').

Where any of these are in evidence, the dummy variable will return a positive (coded as 1) outcome, otherwise the outcome is negative (coded as 0). This selection satisfies the requirement for the dependent dummy variable to have mutually exclusive and exhaustive categories. Logistic regression methods are useful for predicting the probability if a particular occurrence or observation will occur into one of two categories of a dichotomous dependent variable based on one or more continuous and/or categorical binary independent variables (Freedman, 2009, p.128). In this instance, the dependent variable is binary, which justifies the selection of logistic regression for answering this question.

The model tests whether the dependent variables have statistically significant relationships with the following independent variables:

- the size of a company ('Market Cap')
- number of developing countries with subsidiary presence ('Total Developing')
- the EMSR Composite Index, representing the completeness of a company's internal environmental management systems and stakeholder engagement channels ('Total Overall').

The formula for the logistic regression function used in the analysis is:

$$\ln\left(\frac{P}{1-P}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

The left-hand side of the equation is the logarithm of the probability that company participation in any sustainable sourcing-related certification standard against the probability that it does not. It is sometimes called the logarithm of odds ratio (Greene, 2003).

The null hypothesis (Ho) is that the b coefficients are equal to 0 (i.e., the independent variables are not significant predictors of the dependent variable).

The alternative hypothesis is that the b coefficients are different from 0 (i.e., the explanatory variables are statistically significant predictors of the dependent binary variable).

Readdressing the model, the formula is

$$\ln\left(\frac{P}{1-P}\right) = b_0 + b_1 * Market Cap + \beta_2 * Total Developing + \beta_3 Total Overall$$

A significance level of 5% is adopted to accept or reject the null hypothesis.

The Hosmer-Lemeshow (HL) test is used as the test for goodness-of-fit of the model to the data, representing a measure of the adequacy of the logit regression model (Hosmer and Lemeshow, 2005).

The HL test null hypothesis (H_o) is that the model adequately predicts participation/ membership in a sustainable sourcing-related certification standard. The alternative hypothesis is that the explanatory variables in the

model do not predict participation if the associated level of significance is less than 5%.

3.5.6 Reducibility of Data

The OECD guidance requires a consideration of "ensuring that it is possible to go back to the real data" (OECD, 2008, p.35). Transparency is vital, allowing CIs to be decomposed back to their essential components. Within the EMSR Composite Index, all data points are reducible to the original data, through a combination of (i) the data being publicly available in public documents provided by either the business unit themselves, or data publicly-available through the RSPO and Rainforest Alliance websites.

The EMSR Data is included in Appendix C.

3.6 Case Study Analysis

From the quantitative analysis research findings, a case study approach is conducted. There are two case studies conducted. The first case study addresses two areas of interest; an analysis of how best-practice companies develop mechanisms for the interests of its stakeholders when (i) developing its own sourcing policies and processes, and (ii) integrating externally-recognised certification standards into its sustainable sourcing approaches. The second case study also addresses two areas of interest; an analysis of how food-related sustainable sourcing standard providers design and develop themselves in a way that captures the interests and needs of stakeholders involved in their sourcing processes and engagement mechanisms.

3.6.1 Selection of case study approach for research sub-questions

For the purposes of this study, the collective case study approach is considered appropriate. There are a number of different forms of case study that can be used, depending on the type of data, the phenomenon that is being analysed,

including intrinsic, instrumental and collective case studies (Stake, 1995). Collective case studies seek to approach a particular phenomenon from a number of different angles to describe an intervention or phenomenon. This study considers food-manufacturing processes from the perspective of several different companies in distinct operational contexts, and also from the perspective of two certification providers. Furthermore, each case is considered from a specific, single perspective (i.e. strategy management decision-making at the executive/central management level) rather than from multiple management levels, or geographical perspectives. The study uses specific company testimonies from this specific perspective to consider strategic-level managerial decision-making processes, relating to the adoption and/or development of ESG certification standards. This approach is repeated across all of the selected best-practice food manufacturing companies, and is also repeated across the multiple certification standard providers. Consequently, the collective case study approach is considered to be the most appropriate.

An intrinsic case study approach considers each case (e.g., person, specific group, occupation, department, organization) where the case itself is of primary interest in the exploration, and where the case is interested in understanding each individual case across multiple sites or areas. (Mills, 2010). Intrinsic case studies are appropriate when looking to explore situations in which the phenomenon is being evaluated, and where there is no clear or single set of outcomes (Yin, 2003). This is not considered to be an appropriate case study approach for the purposes of this study.

Instrumental case studies are useful if the intention of the study is to look to use the case study to answer something else, to create a theory to explain causal relationships, seeking to explain presumed causal links in real-life interventions that are too complex for a survey or experimental strategies. In instrumental case studies, fieldwork-based data collection is undertaken prior to the definition of the research questions and / or hypotheses (Yin, 2003). This study is not attempting to advance a theory relating to the phenomenon, primarily due to the limited sample of best-practice companies selected to contribute to the study, and the specific senior-management level subjects selected for interview. Consequently, an instrumental case study approach is considered not to be the most appropriate approach to attempt to extend a theory from the evidence collated, due to this specific context.

3.6.2 Selection method for case study subjects

The composite index score is used to identify a group of 'best-practice' companies, those emerging in the top-5 of companies, as the focus of interest for the company case study. The case study stage of this research builds upon the summary findings from the quantitative analysis, with the composite index and subsequent correlation / regression analysis findings providing an informed lead-in approach to both the topic guide for the case study interviews, and also the identification of 'best practice' food manufacturing companies to be the focus of further in-depth scrutiny.

The top-five companies in the EMSR Index are identified as being 'best-practice' companies, and this is the sampling technique for requesting participation in a semi-structured interview. The interview stage is considered essential to including the company in the collective case study, due to the need for a more in-depth scrutiny of the strategic planning processes conducted by the company. It is these strategic planning processes that inform all of the sustainable sourcing policy development, the identification and integration of stakeholder interests, and the decision-making behind participation in the specific certification standards. The exclusion of non-responding companies is included as a limitation of the research, and is noted as an opportunity for further research.

A further key criterion in the sampling technique is that interview-participants are considered to be sufficiently 'senior' within the management structure, in order to ensure that participants have been sufficiently exposed to strategy development to allow contribution on global, parent-company level corporate strategy development. Consequently, this excludes employees with exposure to the manufacturing process, and also excludes management representatives with a regional bias to their responsibilities.

The case study approach focuses on the activities of the following best-practice companies that were able to participate in primary data collection (semi-structured interviews), as identified in the quantitative analysis in Section 4, and are presented in Table 11.

Table 11 - Best Practice Companies identified

Company Name	Country	Total Internal	Total Biodiversity	TOTAL OVERALL
Ajinomoto Company	Japan	8	4	12
Nestlé	Switzerland	8	4	12
Unilever	UK	8	4	12
Danone	France	8	3	11
Olam International	Singapore	7	3	10

All five companies were requested to contribute to a semi-structured interview. Of the five companies, three companies responded to the requests for interview (Unilever, Nestlé and Danone), and consequently these companies are included in the case study developments that occur in this chapter. Exclusion of Ajinomoto and Olam is included in the limitations of the research, and also noted as an opportunity for further research. Consequently, the three companies meeting the conditions for inclusion in the case study analysis are Unilever (UK / Netherlands), Danone (France) and Nestlé (Switzerland). Participating interviewees are presented in Table 12 below.

Table 12 - Company Interviewee / Participants

Organisation	Name	Position	Interview Date	Duration (Mins)	Name in Interview Analysis
Unilever	Unilever Manager A	Global Director, Sustainable Sourcing	24/02/2017	60	MU
Danone	Danone Manager A	Sustainability Manager	31/07/2017	60	MD
Nestlé	Nestlé Manager A	Responsible Sourcing Manager	15/08/2017	30	MNA
Nestlé	Nestlé Manager B	Senior Public Affairs Manager	15/08/2017	30	MNB

In addition, the details of the certification standard provider participants in the case study are presented in Table 13.

Table 13 - Certification Standards Interviewees / Participants

Standard	Name	Position	Interview	Duration	Name in
			Date	(Minutes)	Interview
					Analysis
RSPO	RSPO	Global Engagement	16/04/2017	60	MRS
	Manager A	Director			
Rainforest	RA / SAN	Executive Director	23/04/2017	60	MRA
Alliance /	Manager A				
SAN					

All interviews were conducted by telephone, with calls recorded and transcribed for detailed inclusion in relevant analysis sections.

3.6.3 Case Study design informed by Quantitative Analysis

The findings of the quantitative analysis inform the topic guide by identifying the areas where a significant relationship had been identified and produced the following questions that were to be pursued within a semi-structured interview format:

- What are the mechanisms for engaging with your local operations and suppliers in developing countries?
- What are the relationships with the certification standard providers themselves?
- What stakeholder engagement channels do the standards have that companies use?
- How does the collaborative process work? What are the motivations of companies that approach these certification standards?
- Who are the NGOs that are being involved, how are the local communities and operations being integrated?

Codes are developed deductively from the literature review and also informed by the findings of the quantitative analysis. The propositions and hypotheses that are analysed using quantitative methods are based on the literature review, and findings of interest from the quantitative analysis are pursued further within the interview stage. In particular, the findings from the quantitative analysis in terms of identified relationships between the composite index scoring and the dependent variables are factored into the coding. This provides the link between the quantitative and qualitative states of the research design.

Coding allows for the interview data to capture what is important relative to the research objectives (Farquhar, 2012, p.93). The codes are largely pre-defined, or 'a priori', as per the deductive approach, as the coding of the interviews are pre-determined in line with the semi-structured interview design. The propositions in section 3.1 addressed in the collective case study are embossed in the coding structure. This structure design is embedded in the analysis of the secondary data analysis, and also in the subsequent semi-structured interview planning.

3.6.4 Semi-structured Interview Design

The semi-structured interview design and coding approach developed by Mason (2002) has been adopted in this assessment. This process of developing predefined codes from the research question ensures that the interviews produce usable data, by firmly entrenching the research questions and the intellectual puzzle into the interview approach. The structure identifies the specific questions to be asked in Step 3, ensuring that all questions in Step 3 are cross-referenced and relatable to (i) the main research question, and (ii) the identified research sub-questions. The steps are as follows:

The first step lists / assembles the 'big' research question(s). The main research question that interview questions will explore, is:

• The extent to which food manufacturing companies are effectively integrating stakeholder group engagement into the selection processes of biodiversity-related certification standards and commitments.

The next step breaks-down or subdivides the 'big' research questions into miniresearch questions. The links between the big research questions and the subcategories of them (the 'mini'-research questions) is clearly expressed, with the sub-category linkage to the main research question being easily established, is done by using corresponding 'codes'.

For the company interviews, the subdivisions are as follows:

- (a) How companies conceptualise and recognise the need for establishing legitimacy within the communities that they operate (such as recognising the need to establish the theoretical 'license to operate')
- (b) Whether voluntary CSR standards are being used strategically by businesses as a demonstration of effective stakeholder engagement channels (and thus being used as a route to satisfying the 'strategic CSR' stakeholder-led approach to global strategy management)
- (c) Whether the company consults with its supply chain in terms of mitigating and managing risk in relation to its impacts on biodiversity

For the standard-provider interviews, the subdivisions are as follows:

- (a) How standards conceptualise and recognise the need for establishing legitimacy within the communities that they operate (such as recognising the need to establish the theoretical 'license to operate') This can be from both a design aspect, and also from an implementation perspective.
- (b) Whether their standard is being used strategically by businesses as a demonstration of effective stakeholder engagement channels (and thus being used as a route to satisfying the 'strategic CSR' stakeholder-led approach to global strategy management).
- (c) Whether standards observe companies consulting effectively with their supply chains, in terms of mitigating and managing risk in relation to its impacts on biodiversity.

This final step enables the identification of appropriate interview questions that will ensure that the answers provided by the interviewee subjects will generate appropriate and relevant contributions for answering the identified research question(s) relating to the case study phase. From the deductive coding approach, it is possible to capture the common themes that emerge from these areas that provide insight into the research propositions that have emerged from the literature review. Coding methods are discussed in the next section.

3.6.5 Data collection and Coding methods (1); Interviews

Interviews are planned as being between 30-60mins in length based on participants availability and willingness to participate; 60min interviews are requested and then revised based on participant scheduling. Interview participants from best-practice companies were contacted.

All interviews were conducted by telephone, with calls recorded and transcribed for detailed inclusion in relevant analysis sections. While this made it possible for the interviewees to share their knowledge and insights verbally, the interview material does not provide insight into more subtle aspects of their responses as the body language of interviewees was not observed.

Consistent with the interview structure, transcribed interviews are then analysed and tagged based on the mentioning of themes within the coding. Due to the number of interviews, the interviews are transcribed into Microsoft (MS) Word and organised for coding using Microsoft (MS) Excel.

Interviews with companies follow the company-specific line of questioning in Section 3.6.4 in order to generate responses appropriate for research subquestion 3. For specific coding of company interviews see Appendix E. Interviews with companies follow the line of questioning B in Section 3.6.4 in order to generate responses appropriate for research sub-question 4. For specific coding of standard provider interviews see Appendix F.

The MS Excel grid includes columns covering (i) Questions asked (Column 1), (ii) Description of response (Column 2), and (iii) Theme Coding / Tags (Columns, 3, 4, 5).

(i) Questions asked (Companies OR Standard Providers)

The logging of questions in the Excel sheet records which of the pre-determined questions have been addressed in the time available. Appendix G contains a list of the research questions.

(ii) Descriptive Codes

The brief summary of each interviewee response enables a simple cross-reference in the analysis stage between the part of the response relevant to a particular theme.

(iii) Theme Coding / Tags

For the company interviews, codes that relate to the main themes of the interview design are:

- Motivations for joining standards
- Strategy Interpreting risk
- Internal policy / programme development
- Sources of credibility / legitimacy
- Policy / standard review mechanisms
- Engagement with NGOs or Communities
- Engagement with suppliers
- Engagement with consumers

For the standard-provider interviews, codes that relate to the main themes of the interview design are:

- Motivations for joining their standard (and interpreting risk)
- Programme creation process
- Sources of credibility / legitimacy
- Standard review/development mechanisms
- Engagement with stakeholders

Where a theme is discussed in the interview, one of the above codes is mentioned in the respective line on the Excel sheet. This then allows for an aggregation of responses under the respective themes in the subsequent analysis.

3.6.6 Data collection and Coding methods (2); Secondary Sources

The collection of data using secondary sources supplements the interview stage, through both informing the interview stage, and also providing a source of data analysis.

Secondary sources are analysed manually using MS Word to assess company activities relative to the research questions. Secondary sources are aggregated in Word and tagged when one of the key themes is covered in secondary sources. Secondary sources include:

- 'Best-practice' Company-owned sources
 - Company Annual Reports (most recent); Company Sustainability and/or Report (most recent); Company investor website
- Certification standard sources
 - o RSPO website; Rainforest Alliance website
- Third-party Sources
 - o General Google search engine, Dow Jones 'Factiva' news/media source (covering over 1,000 news outlets globally, including industry-specific websites, trade papers and periodicals), NGO websites (including 'Business and Human Rights', Greenpeace, WWF, Oxfam); websites for collaborative industry initiatives in the area of sustainable sourcing, palm oil, sustainable agriculture

Sources analysed and searched for any company supported website is searched for information relating to the following subjects:

• Environment

o Environmental and Social sustainability, climate change, biodiversity, fairtrade, certification, corporate responsibility, sourcing policies, diversity, land management, water management, waste management, value chain, palm oil, coffee, tea, cocoa, dairy.

• Social performance

- o Labour policies, human resources, labour rights, human rights, land rights, governance, health and well-being, agriculture.
- Responsible sourcing (general) Certification, certified sourcing,
 RSPO, Rainforest Alliance, certified palm oil

• General Financial information

o Country of Incorporation, Market Capitalisation (USD millions), Revenue / Sales, the number of countries with operational locations, no. of developing countries with operational locations.

Where sources have been identified as being related to the themes being addressed within the research question design, information is stored and tagged with the specific code.

3.7 Limitations of Scope of Research

The following limitations are recognised in the research, and identify the scope of the research conducted in this thesis:

• The availability of interview participants that will provide relevant input in terms of a company's approach to policy design, stakeholder engagement channels and the selection of certification standards

The 'strategic development' nature of the questions is a limitation. The explicit requirement for participants to give views on how companies and standard-providers have designed their internal policies and systems requires considerable access to key people that is difficult to acquire. The more access you can achieve, the better the potential analysis, however gaining access to multiple people within organisations presented a limitation in the research.

• The number of best-practice companies identified in the Quantitative Data analysis section

Through targeting best-practice companies and their specific experiences, this limits the number of potential participants, and potential views, in the research design. This limitation in the study represents an opportunity for further research on this subject, with the garnering of additional inputs to assist in the refining of the analysis through access to sufficiently senior people in food companies involved in the strategy design and exposure to stakeholder groups.

• The obtaining of interviews with external stakeholders.

Attempts were made to obtain interviews with a series of global and regional NGO participants who would have experience of engagement with the companies and standard-providers featured in the research, however these were not obtainable within the timeframe. For the purposes of this research, external stakeholder views were obtained via media sources and NGO reports.

• Location of business activities

The country of incorporation for the public companies is used as our basis for placing business in a specific region. The scope of the analysis has not been to

capture a variety of views within each organisation in terms of competing views at the local, global and regional levels of operations, and consequently represents a limitation of the research.

Global analysis using English language sources only

Because this analysis has a reliance on public reporting and policy disclosure, therefore there is potential for an English-language 'bias' for assessing whether there is a regional and/or cultural bias in the addressing of biodiversity risk. Therefore, where Companies do not comprehensively report in English on all company environmental areas, there is a potential bias towards those that do.

3.8 Ethical Research and Issues of Confidentiality

The project uses a combination of primary and secondary data.

The primary data collection is in the form of semi-structured interviews with managerial participants from the three best-practice companies (Unilever, Nestlé and Danone), plus the two certification standards selected for detailed scrutiny under the case study approach (RSPO and Rainforest Alliance / SAN).

Secondary data collection and analysis is entirely based on publicly available sources, as outlined in section 3.6.6, and as a result is considered as presenting a low risk in terms of ethical considerations. This consideration is included in the overall ethical sign-off of the project. The primary data collection represents the main ethical issue. In order to satisfy ethical requirements, and in order to protect all contributors and maximise a full and frank contribution, ethical consent forms were sent to all contributors, clarifying exactly what would be acceptable to the contributors. The main questions in the consent forms were as shown in Figure 2:

Figure 2 – Interview Questionnaire Consent

Do you consent to... (Please tick)

1. The recording of the interview?

2. Your organisation being named as participating in the project?

3. Direct quotes being attributed to you by the above job title?	
(Other, write in)	

Where a form was not received, verbal confirmation was secured at the commencing of the conversation.

- In terms of question 1, all participants agreed to the recording of interviews, enabling an accurate transcription of all responses.
- In terms of question 2, all participants agreed to their organisation being named as a project participant.
- In terms of question 3, the response varied depending on whether they were a company or a standard provider.
 - o Both standard providers agreed to allowing all quotes to be attributed and names mentioned in all circumstances of public disclosure.
 - o Company participants were content with contributing names, job titles and quotes on the basis that the <u>submissions would not be publically or externally available</u>, and would be for internal academic assessment at the University.

Ensuring informed consent entails that: Subjects were informed about the aim of the research, in terms of (i) who was undertaking it (ii) who was participating (iii) how much of the participants' time was required, (iv) that participation in the study was voluntary, (v) that responding to questions was voluntary, (vi) who would have access to the data once collected (vii) how anonymity of respondents would be preserved unless respondents has requested otherwise.

Consequently, where there was any potential for this project to be available for wider or public consumption, then the project requires a re-drafting to eliminate specific references to names, job titles and any direct attribution to quotes.

Where the latter is the case, names and job titles are edited as being references to generic Manager tags, and references to a general level of seniority within the company.

Additionally, as part of contractual arrangements between the companies and the RSPO especially, there are conditions of membership that restrict public comments by members that might bring the standards into disrepute.

Consequently, this version represents a version of the project that is available for internal assessment purposes, and is to be treated as confidential in terms of restrictions on external publication in its current form.

Ethics Approval was granted on January 15th 2015 (attached as Appendix I).

3.9 Summary

This chapter presents the research design, outlining the methodological approach selected to address each of the research sub-questions. The study implements a multidisciplinary, 'mixed methods' strategic approach – the methodology combined a composite index, a quantitative analysis using comparative analysis and logistic regression methods, and a qualitative case study method of analysis focusing on the practices of a sub-set of the index sample. The selection of methods are justified within the context of the design's pragmatist, realist philosophical positioning.

The design creates an index-based cross-regional analysis of the food manufacturing sector, creating a quantitative measure of the quality of internal operational processes created by individual companies, addressing the effects of company size, operational base and subsidiary location on the likelihood of a company having high-quality internal environmental management systems (EMS) and environmentally-focussed stakeholder engagement channels. The method for constructing the EMSR Composite Index incorporates an exploratory factor analysis of the index structure, which is shown to be normally distributed, and multi-collinearity is observed between one pair of variables relating to biodiversity, which is justified in the analysis. The composite index provides an indication of the requisite internal management systems and engagement channels of food manufacturers, as indicated by the composite index 'Total Overall' score.

The research design incorporates correlation analysis, multi-linear regression (MLR) and logistical regression modelling methods. The methods address the first two research sub-questions. Firstly, whether there is a statistically significant relationship between company commitments to external voluntary CSR standards and key explanatory variables reflecting the size and location of

subsidiaries, and the completeness of its internal EMS / stakeholder engagement systems. And secondly, whether there is a statistically significant relationship between company internal systems and key explanatory variables relating to size, location of activities, and commitments to external standard providers.

Further to this, the design uses a qualitative, case-study approach, combining primary interview data and secondary publicly-available data sources and interviews for addressing the final two sub-questions. The EMSR Index selects best practice companies within food manufacturing to be subject to the case study, as a means of addressing whether companies are committing to voluntary certification standards as a means of increasing legitimacy with supply-chain-related stakeholder groups; and whether CSR standard-providers integrate notions of stakeholder 'legitimacy' into standard-design, as a means of reflecting adherence to a theoretical 'license to operate'.

The following chapter outlines the results of the composite index and further quantitative analysis to address the initial research sub-questions.

Chapter Four

4 Phase 1 - Quantitative Analysis: Analysis and Results

This chapter presents the results of quantitative analysis outlined in the methodology design (iii) correlation analysis, (iv) Multiple Linear Regression analysis, and (v) logistic regression analysis.

The chapter presents the results of the statistical methods for data analysis, building upon the descriptive analysis of the composite data points and presents the calculation outcomes of the Environmental Management and Stakeholder Responsiveness (EMSR) composite index. The results include an exploratory analysis of the nesting structure for the composite index, testing for internal consistency between the nested structure of the composite index.

The results are presented in the context of the null hypotheses presented in Chapter 3, which is also used to inform the topic guide for the case study, and offers potential insight into relationships between the datapoints, including participation in external certification participation, geographical presence and company size, and acts as a means of addressing research questions 1 and 2.

Research sub-question 1 is addressed through a linear regression analysis, testing the hypothesis of a statistically significant relationship between the EMSR Index (representing the quality of internal environmental management systems and environmentally-focussed stakeholder engagement channels), and explanatory variables including company size, operational base and subsidiary location.

Research sub-question 2 is addressed through a logistical regression analysis to test the hypothesis of a statistically significant relationship between companies committing to external certification standards, and the quality of internal environmental management systems and environmentally-focussed stakeholder engagement channels.

The results also identify the best-practice companies that were subsequently approached to participate in the case study stage, as a means of scrutinizing their stakeholder engagement and standard participation processes.

4.1 Composite Index Results

The results of the composite index scoring (effectively awarding a score of a maximum of 12) is presented in Table 14 (below).

Table 14 - EMSR Index - Composite Scores

Company Name	Country	Total Internal	Total Biodiversity	TOTAL OVERALL
Ajinomoto Company	Japan	8	4	12
Nestlé	Switzerland	8	4	12
Unilever	UK	8	4	12
Danone	France	8	3	11
Olam International		7	3	10
	Singapore USA	8	1	9
Campbell Soup Associated British Foods	UK	8	0	8
Nichirei Nichirei		8	0	8
	Japan			
Strauss Group	Israel	8	0	8
Tyson Foods	USA	8	0	8
Yakult Honsha	Japan	8	0	8
Cranswick	UK	7	0	7
Ezaki Glico	Japan	7	0	7
General Mills	USA	7	0	7
House Foods Group	Japan	7	0	7
Kikkoman	Japan	7	0	7
Nissin Foods Holdings	Japan	7	0	7
Tate & Lyle	UK	7	0	7
The Hershey Company	USA	7	0	7
Archer Daniels Midland	USA	6	0	6
Calbee	Japan	6	0	6
Grupo Bimbo	Mexico	5	1	6
JBS	Brazil	6	0	6
Kellogg	USA	6	0	6
Kewpie	Japan	6	0	6
Nongshim	South Korea	6	0	6
Yamazaki Baking	Japan	6	0	6
Conagra Foods	USA	5	0	5
Grupo Herdez	Mexico	5	0	5
Osem Investments	Israel	5	0	5
Toyo Suisan Kaisha	Japan	5	0	5
Wilmar International	Singapore	4	1	5
Chocoladefabriken Lindt	Switzerland	4.5	0	4.5
Lotte Confectionery	South Korea	4.5	0	4.5
Meiji Holdings	Japan	4.5	0	4.5
NH Foods	Japan	4.5	0	4.5
Mondelez International	USA	4	0	4
China Mengniu Dairy	Hong Kong	3.5	0	3.5

Glanbia	Ireland	3.5	0	3.5
Barry Callebaut	Switzerland	3	0	3
Bega Cheese	Australia	3	0	3
Dairy Crest Group	UK	2	1	3
The J.M. Smucker Company	USA	3	0	3
Bellamy's Australia	Australia	2.5	0	2.5
Suedzucker MO	Germany	2.5	0	2.5
WH Group	Hong Kong	2.5	0	2.5
Aryzta	Switzerland	2	0	2
CJ CheilJedang	South Korea	2	0	2
Greencore Group	UK	1	0	1
Want Want China Holdings	Hong Kong	1	0	1
Kraft Heinz	USA	0.5	0	0.5
Tingyi Holding	Hong Kong	0.5	0	0.5
Freedom Foods Group	Australia	0	0	0
Gruma	Mexico	0	0	0
Parmalat	Italy	0	0	0
Patties Foods	Australia	0	0	0

For the purposes of the subsequent case study in Chapter 5, the following companies have been identified as being 'best practice', defining this as the top companies in the EMSR Index who achieved a Total Score of 10 or more, and also received high scores in both the 'Total Internal' (sub-groups 1 and 2) and 'Total Biodiversity' (sub-group 3) areas of the nested scoring structure. The companies identified are below.

Table 15 - 'Best Practice' Companies

Company Name	Country	Total Internal	Total Biodiversity	TOTAL OVERALL
Ajinomoto Company	Japan	8	4	12
Nestlé	Switzerland	8	4	12
Unilever	UK	8	4	12
Danone	France	8	3	11
Olam International	Singapore	7	3	10

4.2 Results of Multiple Linear Regression (MLR)

In order to predict the factors that impact on Total Overall Score (Total Overall is the dependent variable), a linear regression analysis is conducted to examine the factors that influence the total score of a company in the EMSR Index. The 'Total Overall' relates to the EMSR Index, and is the composite index score attributed to each company. The EMSR Index is a proxy measure for each company's approach to (i) operational and supply chain environmental management system coverage, (ii) biodiversity risk management, and (iii) evidence of stakeholder engagement channels relating to its environmental impacts in its operations and supply chain.

Following the correlation analysis, 'Total subsidiaries' and 'Developing' country subsidiaries are identified as significant predictors of the EMSR Index. Both indicators are on a continuous scale, measuring the total number of countries in developed/transition/developing regions. These indicators are selected for inclusion as appropriate variables for inclusion in the OLS linear regression.

Table 16 is a summary of the MLR model, it presents the total proportion of variability in the independent variable that the model explains.

Table 16 – MLR Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.596ª	0.355	0.318	2.58415	2.047

a. Predictors: (Constant), No. of Developing countries with subsidiaries, Proportion in Developing countries (%), Size of Company (Market Cap)

b. Dependent Variable: Total Overall

The model includes three explanatory variables (No. of Developing countries with subsidiaries, Proportion in Developing countries (%), Size of Company), and explains 36% of the variability of the dependent variable (EMSR Index Total Score). This can be considered a significant percentage for this type of data.

This table also shows the Durbin-Watson statistic which is 2.047; it indicates that there is no auto-correlation of the residuals. It means that the residuals are independent or not auto-correlated because of its closeness to 2.

Table 17 – Analysis of Variance table (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	191.533	3	63.844	9.561	.000b
	Residual	347.248	52	6.678		
	Total	538.781	55			

a. Dependent Variable: Total Overall

Table 17 (analysis of variance, ANOVA) present the results of F-statistic test for goodness-of-fit model. The null hypothesis is that the two regression coefficients are jointly zero. The alternative hypothesis is otherwise. The model is a good fit of the data, because the F-statistic equals 9.561, p=0.00 < 0.001. Therefore, the null hypothesis is rejected, and the alternative is accepted, that the model is a good fit of the data.

Table 18 - MLR Table of Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients				nearity stics
		В	Std. Error	Beta	t	Sig.	Tol	VIF
1	(Constant)	2.45	0.792		3.092	0.003		
	Market Cap	-2.08E- 05	0	-0.158	-1.02	0.311	0.521	1.92
	Percent Developing	0.027	0.012	0.251	2.209	0.032	0.959	1.043
	Total Developing	0.117	0.031	0.59	3.77	0	0.506	1.975

b. Predictors: (Constant), Developing, Percentage Developing, Market Cap

a. Dependent Variable: Total Overall

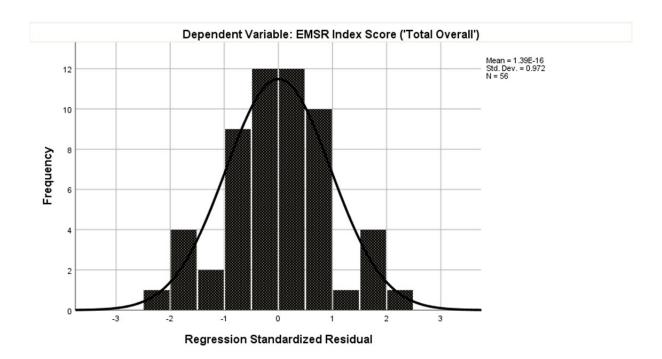
Table 18 indicates that only the two variables – Percentage of subsidiaries in Developing countries and No. of Developing countries with subsidiaries – are significant predictors of the EMSR Index 'Total Overall' variable.

An additional one percent (1%) increase in the share of countries with subsidiaries in developing would increases, on average, the EMSR Index by 0.027 at 5% significance, ceteris paribus. One additional developing country with a subsidiary present within it would increase, on average, the EMSR Index total score by 0.117 at 1% significance, ceteris paribus.

There is no multicollinearity in the model because the tolerance is greater than 0.1, whereas VIF is less than 10 for each of the independent variables.

Finally, it is examined whether the residuals follow the normal distribution and whether they are homoscedastic. The histogram and scatterplot of the residuals are shown in Figure 3 and Figure 4.

Figure 3 - Histogram of Residuals 2



Dependent Variable: EMSR Index 'Total Overall'

Sequence of the state of the state

Figure 4 - Scatterplot of EMSR Index Residuals

The histogram shows the normal distribution of the standardized residuals. The scatterplot presents the standardized residuals and the standardized predicted values. Because it does not present any particular form (e.g. to have the form of a funnel or form curve), there is a similar fluctuation / variation around the predicted values of the dependent variable. Hence the requirements for the homoskedasticity of the residuals is fulfilled.

Regression Standardized Predicted Value

4.3 Logistic Regression

The outcomes of the binomial logistic regression model in Chapter 3 are covered as follows:

Variance

In order to understand how much variation in Total Score in the EMSR Index (the dependent variable) can be explained by the model (the equivalent of R

Squared in multiple regression), the Cox & Snell R² and Nagelkerke R² are used in Table 19 (the full SPSS output is in Appendix C).

Table 19 - Logistic Regression - Model Summary

	Any Certification commitments (any of the following variables: 'Rainforest', 'RSPO', 'Any Other Cert')
Dependent Variable	(combined, this indicator is called 'Any Certification')
Independent Variable 1	Size of company ('Market Cap')
Independent Variable 2	Percentage of subsidiaries in Developing countries ('Percent Developing')
Independent Variable 3	EMSR Index score ('Total Overall')
Cox & Snell R Square	0.189
Nagelkerke R Square	0.253

The explained variation in the dependent variable ranges from 18.9% to 25.3%, depending on which R² is used. Nagelkerke R² is a modification of Cox & Snell R², the latter cannot achieve a value of 1. For this reason, it is preferable to report the Nagelkerke R² value. In summary, 25.3% of the variation in commitments to certification standards captured in the three dependent variables can be explained by the independent variables in above model.

Category prediction

Binomial logistic regression estimates the probability of an event occurring, and is as follows (Table 20):

Table 20 - Logistic Regression - Classification Table

		Predicted			
			tification	Percentage	
Observed	Observed		Yes (1)	Correct	
Any Certification No	(0)	19	5	79.2	
Yes	s (1)	8	24	75.0	

24 companies are in the category of companies have not committed to any combination of standards (i) Rainforest Alliance, (ii) the Round-table on Sustainable Palm Oil membership, or (iii) any other biodiversity-related certification standard. Nineteen of these companies were predicted by the logistic model to have a probability of committing to these standards below the cut-off probability of 0.5. Therefore, 19 (79.2%) of the companies in this group of not committing to the standards were correctly predicted; 20.8% of this group were incorrectly classified by the logistic model. Overall, 43 companies have been correctly classified in their respective groups, either committing or not committing to those standards. This is an overall success rate of 76.8%.

• Variables in the Equation

The Variables in the Equation table shows the contribution of each independent variable to the model and its statistical significance, and is as follows (Table 21):

	В	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a Market Cap	.000	.000	.122	1	.727	1.000
Total Developing	.109	.047	5.385	1	.020	1.116
Total Overall	074	.120	.377	1	.539	.929
Constant	746	.831	.808	1	.369	.474

Table 21 - Logistic Regression - Variables in the Equation

The Wald test is used to determine the statistical significance of each of the independent variables. The only determinant of commitment to any standards ('Any Certification') is whether or not a company has a subsidiary in a developing country, at 5% level of significance. The size of the company ('Market Cap') and the EMSR Composite Index score ('Total Overall') were

not significant predictors of commitment to the standards. Companies with subsidiaries in a developing region are 1.116 times more likely to commit to these standards (Exp(B)=1.116).

Hosmer-Lemeshow (HL) test

The HL test has its null hypothesis, H_o: the model adequately predicts group membership and the null is rejected if the associated level of significance is less than 5%. HL=12.897 with significance 0.075, so the null would not be rejected and the logistic model is deemed an adequate representation of the data.

Table 22 - Logistic Regression - the H-L Test

Chi-square	df	Sig.
12.897	7	.075

4.4 Summary

Addressing research sub-question 1, the quantitative results test the null hypothesis relating to potential wealth bias within motivations to join certification. Linear regression tests the hypothesis of a statistically significant relationship between the EMSR Index (representing the quality of internal environmental management systems and environmentally-focussed stakeholder engagement channels), and explanatory variables including company size, operational base and subsidiary location.

Explanatory variables representing company size, location in 'rich' countries produced no statistically-significant relationship with the companies having a high score in the EMSR Index, the dependent variable and proxy for quality stakeholder engagement and management system mechanisms. Additionally, no statistically significant relationship was identified between the EMSR Index score, and the companies' potential to have commitments to certification standards. However, a statistically significant relationship was identified between the Index score, and location of subsidiaries in developing countries.

Related to research question 1, specific findings of interest were:

• The Multi Linear Regression (MLR) model shows that only two variables percentage of subsidiaries in Developing countries and No. of Developing countries with subsidiaries - are significant predictors of the EMSR Index

'Total Overall' variable (Table 18). The MLR model includes three explanatory variables, and explains 36% of the variability of the dependent variable (EMSR Index Total Score), a significant percentage (Table 16).

• No statistically significant relationship between the EMSR Index 'Total Score' and the size of the company, or indeed whether they are primarily based in western markets ('Percent Developing').

Addressing research sub-question 2, logistic regression model tests for the relationship between company commitments to external certification sustainable sourcing standards, and explanatory variables relating to company size, location and systems quality. The model in Table 19 identified 25% of change in the EMSR Index captured in the model, showing a weak but significant frequency of companies choosing to commit to standards excluding consultation with supply chain stakeholders. The analysis does not support the null hypothesis that there is no relationship between poor quality systems and engagement channels, and existence of evidence of commitment to standards.

No statistically significant relationship between the strength of performance in the index and the companies' potential to have commitments to certification standards. From the logistical regression model, the only determinant of commitment to any standards ('Any Certification') is whether or not a company has a subsidiary in a developing country, at 5% level of significance. 'Total Overall' was not identified as significant.

Companies that had more presence in developing countries were more likely to have commitments to certification standards than those that did not.

Within the same logistic regression model, when considering the size of companies and whether they were located in western markets, the larger companies with the larger market capitalisations, the companies that were located in major western regions and in developed countries (as opposed to those located in developing countries), did not reveal the statistically significant relationships with subsequent commitments to certification standards that the literature review claimed. This is an important finding because it provides the basis for a counterargument to some of the views expressed in the literature review that a bias may exist in this regard.

The findings provide an informed lead into the topic guide for the case study interviews. While no significant relationships appeared in the list of findings above, a significant relationship emerged between the EMSR Index score and the number of subsidiaries in developing countries.

These findings inform the topic guide that feeds into the case study interview process, with the view that has been determined that there is a potential connection between getting involved with these standards, and being more likely to be operationally-located in developing countries.

The next chapter is the implementation of the case study approach outlined in the methodology, applied to analysing how the identified 'best-practice' companies develop mechanisms for the interests of its stakeholders, in the context of (i) developing its own sourcing policies and processes, and (ii) integrating externally-recognised certification standards into their sustainable sourcing approaches.

Chapter Five

5 Case Study: Best Practice Companies and Standard Providers

The case study section provides support for answering research questions 3 and 4. The literature review raises issues over the selection process of Corporate Responsibility-related standards (with this study specifically considering environmentally-sustainable sourcing standards), and the level of consultation that occurs with specific stakeholders.

Research questions 3 and 4 are addressed in this chapter, and consider the implications of the research findings for companies deciding whether committing to specific biodiversity-related certification standards increase legitimacy with stakeholders at operational, supply chain or community level.

Research question 3 addresses the nature of best-practice companies choosing to commit to external certification standards, their interests and motivations for participating, and where motivations emanate from. In particular, how companies prioritise these interests and motivations in its decision-making, particularly where interests conflict between stakeholders. Research question 4 asks how standards conceptualise and recognise the need for establishing legitimacy within the communities that they operate (such as recognising the need to establish the theoretical 'license to operate').

The case study approach is developed to gain greater insight into company motivations in decision-making around (i) the establishing of sustainability-specific stakeholder engagement channels and (ii) participation in certification standards at the design and/or implementation stage. This case study further addresses what standard creators / designers consider to be the defining motivations for joining the process, so that it is considered an effective and credible standard in the eyes of its audience.

5.1 Best-Practice Company and Certification Standard Selection

The case study approach focuses on the activities of the following best-practice companies that were able to participate in primary data collection (semi-structured interviews), as identified in the quantitative analysis in Section 4. Best practice companies identified for potential further analysis are in Table 23 below:

Table 23- Logistic Regression - Classification Table

Company Name	Country	Total Internal	Total Biodiversity	TOTAL OVERALL
Ajinomoto Company	Japan	8	4	12
Nestlé	Switzerland	8	4	12
Unilever	UK	8	4	12
Danone	France	8	3	11
Olam International	Singapore	7	3	10

All five companies were requested to contribute to a semi-structured interview, a stage considered essential to the case study due to the necessity of a deep scrutiny of the strategic planning that informed much of the sustainable sourcing policy development, the identification and integration of stakeholder interests, and also the decision-making behind participation in the specific certification standards

Of the five companies, three companies responded to the requests for interview (Unilever, Nestlé and Danone), and consequently these companies were included in the case study developments that occur in this chapter. Exclusion of Ajinomoto and Olam is included in the limitations of the research, and also noted as an opportunity for further research.

In summary, the three companies included for case study analysis are:

- Unilever (UK / Netherlands)
- Danone (France)
- Nestlé (Switzerland)

Research question 4 considers how these competing forces mould the standard in the way that suits the commercial environment within which they are intended to operate. Thus, question 4 looks specifically at the two certification standards of interest from the quantitative analysis in Section 4:

- The Round Table for Sustainable Palm Oil (RSPO) and
- The Rainforest Alliance, as supported by the Sustainable Agriculture Network (SAN).

5.2 Best-practice Company Information and Policies

Table 24- Best Practice Companies Summary

	Unilever	Danone	Nestlé
Country of	UK / Netherlands	France	Switzerland
Incorporation			
Market	EUR 250 billion	EUR 44.7 billion	EUR 250 billion
Capitalisation	(2017)	(2017)	(2017)
Revenue / Sales	EUR 52.7 billion	EUR 24.28 billion	CHF 89.5 billion
	(2016)	(2016)	(2016)
No. of countries	89	56	121
with operational			
locations:			
No. of developing	60	28	80
countries with			
operational			
locations:			
Key Summary	Unilever is an Anglo-	Group Danone is an	Nestlé is the
	Dutch multinational	international food	largest food
	consumer goods	Company, operates in	Company in the
	Company. Its products	four segments: Fresh	world providing
	include food,	Dairy Products	nutrition, health,
	beverages, cleaning	Division, Medical	and wellness
	agents and personal	Nutrition, Early Life	products. Nestlé
	care products. In	Nutrition and Waters.	has 436 factories
	effect, Unilever sells	The Company derives	in 85 countries
	over 400 brands.	an estimated 60% of its	around the world.
	Currently, Emerging	revenues from outside	It has sales
	Markets account for	of Europe, with its top	(operations) in
	around 57% of its	five global markets (for	189 countries.
	business revenues.	revenues) being the US,	The Company
	Unilever PLC	France, China, Russia	reported on a
	manufactures branded	and the UK in 2015.	number of
	and packaged		consolidation,
	consumer goods,		expansion, and
	including food,		divestment
	detergents, fragrances,		projects. The

	home and personal care products.		Company was founded in 1866 and is headquartered in Vevey, Switzerland.
Geographical Spread	Operates (and supplies) in over 190 countries with emerging Markets account for around 57% of its business revenues.	Currently operates in over 190 countries with emerging Markets account for around 57% of its business revenues.	Has operational presence in 189 countries, and currently directly operates in over 130 countries.
Key Brands	Becel, Persil, Dove, Blue Band, Axe, Omo, Knorr, Rexona. 13 main brands have sales in excess of EUR 1 billion each.	Activia, Actimel, Danette, Danimals, Yocrunch, Danette POP, waters including Evian, Aqua, Volvic, Aptamil, Badoit.	Nescafe, Kit Kat, Nespresso, PowerBar, NUTS, Wagner Pizza, Maggi, Coffee Mate, Nestlé Crunch Crisp.
Sustainable Sourcing Approach	Overall Strategic Approach: Unilever Sustainable Living Plan (USLP) since 2010. Within the USLP, the Unilever Sustainable Agriculture Code (SAC) defines terms of suppliers.	'Nature' strategy (covering its four priorities of climate, water, packaging and biodiversity/sustainable agriculture).	Nature 2020 Plan, covering 42 separate commitments including rural development and environmental sustainability.
RSPO Member since	2004	Yes	Yes
Total Volume of palm oil used in 2015 (Source: WWF)	1,513,265 tonnes	64,292 tonnes	459,236 tonnes

Volume of Sustainable Palm Oil	100% Certified Sustainable Palm Oil; 100% RSPO certified palm oil products from any supply chain option completed in 2012; 100% RSPO certified palm oil from physical supply chains (Identity Preserved, Segregated and/or Mass Balance) by 2019.	By end 2014, Danone already achieved 100% segregated sustainable palm oil. 100% RSPO certified palm oil from physical supply chains (Identity Preserved, Segregated and/or Mass Balance) – achieved in 2015.	24% Certified Sustainable Palm Oil; Nestlé palm oil intake to be 100% from RSPO certified sustainable palm oil by 2023; In 2013 Nestlé achieved 100% certified palm oil products. In 2015 Nestlé started to phase out the use of GreenPalm certificates, instead moving towards Nestlé RSG compliant oil.
Company Palm Oil Policy	Sustainable Palm Oil Policy (SPOP) updated 2016; five principles with objectives/principles beyond RSPO Principles.	Palm Oil Policy, updated 2015.	Palm Oil Policy is a subsection of its 'Responsible Sourcing Guideline (RSG)'. PO identified as 1 of 12 key raw materials.
Rainforest Alliance-certified Products? (Y/N)	Yes	Yes; Developed bilateral Forest Policy with Rainforest Alliance.	Yes
Other External Certification Standards recognised	Fairtrade, Round Table for Sustainable Palm Oil (RSPO), Marine Stewardship Council (MSC), Forestry Stewardship Council (FSC), any organic standard recognised by IFOAM and PEFC for paper & board	Palm Oil Innovation Group (POIG).	UTZ, the Sustainable Agriculture Initiative (SAI) Platform, the Natural Capital Coalition, the International Food and Beverage Alliance (IFBA), WRAP and the World Cocoa Foundation and CocoaAction.

5.3 Certification Standards Information and Policies

Table 25- RSPO Summary

Section	Content	
Background Summary	• Multi-stakeholder not-for-profit supports the RSPO certification standard for sustainable palm oil.	
	The RSPO was created in 2004, the end of a process commenced by the WWF in 2001, motivated by most of the palm oil being sourced from Malaysia and Indonesia, where it was being grown on land that was previously forest. Deforestation was deemed by the NGO to threaten species including orang-utans, tigers, elephants and rhinos, and displaces local communities that rely on the same forests for food and shelter (WWF, 2019). Informal co-operation emerged from this among companies Aarhus United, Migros and Unilever, the WWF and the Malaysian Palm Oil Association, finally resulting in the Roundtable on Sustainable Palm Oil (RSPO), the multi-stakeholder initiative dedicated to promoting sustainable production of palm oil worldwide (RSPO, 2019).	
Market Summary	As of the end of 2016, 19% of the palm oil created globally is RSPO-certified, covering:	
	• 11.46 million megatonnes of Certified Sustainable Palm Oil (CSPO) by volume	
	• 2.4 million hectares of certified production area	
	• A total membership of 3,583 members in 92 countries	
	• 73 companies with growers certification, responsible for 306 mills	
	• 2,409 supply chain certificates covering 4,170 facilities.	
	• 558 trademark licenses in 50 countries	
Stakeholders within membership	Oil palm producers; processors and traders; consumer goods manufacturers; Retailers; Banks/investors; Environmental non-governmental organisations (NGOs); Social NGOs.	
Vision and Mission	•Advance the production, procurement, finance and use of sustainable palm oil products	
	•Develop, implement, verify, assure and periodically review credible global standards for the entire supply chain of sustainable	

	palm oil
	•Monitor and evaluate the economic, environmental and social impacts of the uptake of sustainable palm oil in the market
	•Engage and commit all stakeholders throughout the supply chain, including governments and consumers.
Principles	The 8 principles are:
	1. Commitment To Transparency
	2. Compliance With Applicable Laws and Regulations
	3. Commitment to Long-term Economic and Financial Viability
	4. Use of Appropriate Best Practices by Growers and Millers
	5. Environmental Responsibility and Conservation of Natural Resources and Biodiversity
	6. Responsible Consideration of Employees and of Individuals and Communities Affected by Growers and Millers
	7. Responsible Development of New Plantings
	8. Commitment To Continual Improvement In Key Areas of Activity
Updates / Revisions process	Principles are reviewed every 5 years, and are reviewed using a consensus mechanism by its membership in the collective, representing all of the membership constituents.
	The standards setting process is done following the Standard Operation Procedures for Standards Setting criteria as stipulated by ISEAL (ISEAL, 2017), however ISEAL does not determine content or revisions to the RSPO criteria).

Table 26- SAN/Rainforest Alliance Summary

Background	Coalition of non-profit conservation organizations in America,	
Summary	Africa, Europe and Asia, promoting the environmental and social	
	sustainability of agricultural activities through a certification	
	standard and other customized, credible and innovative solutions for	
	businesses and organizations.	
	10 member organisations, 7 based in lower-middle income tropi	

	nations.
Market Summary	• 42 countries, covering 101 different crops
	• 1.2million farms, with 76% covering less than 2 hectares
	• 15% of tea production certified to SA/RAN
	• 13.6 of cocoa production certified to SA/RAN
	• 5.4% of coffee production certified to SA/RAN
	• 5.6% of bananas certified to SA/RAN
Stakeholder Involvement	RA/SAN has an international standards committee (ISC) representing various people from the different stakeholder areas (SAN, 2017), partner organizations that are primarily NGOs.
	NGOs act as 'proxies' for local knowledge of impacts and sustainability challenges at grower and community level; are considered locally-known, credible NGOs, recognised at community level, include people from social movements and groups implementing the RA standard.
	Stakeholders integrated into the central decision-making process, enables "credible consensus building and encourages democratic, inclusive and transparent discussions".
Governance	General Assembly (GA) - Includes all members of the Sustainable Agriculture Network (SAN). GA meets annually; is responsible for electing the SAN Board of Directors. General Assemblies are held at least once a year. One representative for each member organization attends GA.
	Board of Directors (BD) – Elected by the GA from membership; maximum of 12 representatives; approves annual plans, goals and strategies of the organization.
	Secretariat - Administer the daily operations of the SAN, facilitate communication, promote cooperation with existing initiatives, coordinate support activities.
Updates / Revisions process	SAN conducted a public consultation in 2014-2016 which resulted in the release of new 2017 SAN Standard.
Areas of	10 required areas of implementation (Rainforest Alliance, 2016,

Implementation

p.21):

- 1. Social and Environmental Management System This principle addresses policies and procedures of the farm management or group administrator to support the implementation of the best management practices indicated in the SAN Standard. Effective farm planning, record-keeping, worker training and managerial commitment to sustainability can all support more robust social and environmental management.
- 2. Ecosystem Conservation
- 3. Wildlife Protection
- 4. Water Conservation
- 5. Fair Treatment and Good Working Conditions for Workers
- 6. Occupational Health and Safety
- 7. Community Relations This principle requires farms to consider the interests and needs of the local community and manage their operations to minimize negative impacts to the community. It encourages farms to engage in positive ways with the surrounding community through employment opportunities, education and other means.
- 8. Integrated Crop Management
- 9. Soil Management & Conservation
- 10. Integrated Waste Management

5.4 Themes addressing the Research Questions

As a means of addressing the research questions, the case study evidence is grouped around the following areas: corporate Strategy and interpretations of risk; perceptions of sources of legitimacy; motivations to join standards, and the nature of company engagement with specific stakeholder groups (communities, NGOs, consumers, suppliers).

5.4.1 Corporate Strategy and Interpreting risk

General themes emerge in relation to the nature of company strategies and the value embedded within the environmental and social sustainability of the product manufacturing process, the interpretation of environmental and biodiversity-related risk as primarily an operational risk concern, and the importance of establishing stakeholder engagement relationships as a strategic concern.

Sustainability Strategy and differentiation

There are significant similarities between the three companies in how their environmental sustainability-focussed business strategies manifest themselves in the context of their operational structures. The companies generate products that require broad market access and mass appeal across all global consumer markets, with the companies all seeing the environmental sustainability element of their products as a source of competitive advantage or product differentiation.

The companies seek to infuse the sustainability-related differentiation into their brands' value, as both a reputational risk 'shield' and a positive recognition factor, which will provide the companies with value in terms of both profitability and also credibility. The importance of being perceived as credible in their markets is considered to be a source of influence to enable market transformation in the sourcing of raw materials within its supply chain. The global distribution of assets in all three companies' global food manufacturing supply chain, and the global spread of their revenue generation, identify them as global players that are broad, adaptive and differentiated, and work towards establishing a sustainable competitive position in their consumer markets (Lasserre, 2007, p.38).

In terms of competitive advantage and achieving product differentiation in the food manufacturing industry for mass consumer products, all companies appear to take a similar approach with their sustainability claims. Unilever has presence in over 130 countries regarding its food production, resource sourcing and manufacturing operations and supply chain, Danone has a similar number of locations and Nestlé has 190 countries in its portfolio, with presence in both developing and developed markets and supply chains that source considerably from developing countries for raw materials (most notably palm oil, tea and cocoa).

Unilever similarly approaches a business growth strategy through increasing sales, margin and capital efficiency with an environmental and social sustainability-focussed Sustainable Living Plan differentiating under its three-pronged Unilever Sustainable Living Plan (USLP) focus on improving health and well-being (covering nutrition, health and hygiene), enhancing livelihoods (covering fairness in the workplace, opportunities for women and inclusive business), and reducing its environmental impact (covering greenhouse gases, water sustainability, waste and sustainable sourcing) (Unilever, 2015).

Table 27- Unilever Sustainable Living Plan and SAC

Unilever Sustainable Living Plan (ULSP)

Unilever's approach to sustainability is its 'Unilever Sustainable Living Plan' (USLP) strategy. Formulated in 2010, this strategy commits to addressing the impacts of each of its brands and integrating sustainability in the development plans of each brand. It is framed broadly on three pillars: Improving Health and Wellbeing, Reducing Environmental Impacts and Enhancing Livelihoods (Unilever, 2010). Under its USLP strategy it has a number of policies and codes relating to environmental sustainability in the supply chain.

The Sustainable Agriculture Code (SAC)

Within the USLP, the Unilever Sustainable Agriculture Code (SAC) (Unilever, 2017) relates specifically to driving sustainable sourcing practices within its supply chain. The SAC, most recently reviewed in 2015, identifies its requisite good practice approaches to be implemented by suppliers, and allows suppliers and standard-providers to benchmark their efforts against the requirements of the SAC. Issues covered by the SAC include: Water Management (Resource and Environmental Management); Biodiversity and Ecosystem Services; Energy and Greenhouse Gas (Carbon) Emissions; Social (including and Relationship-building, Health Safety, communities); Responsible Sourcing for farms. The SAC covers all aspects of sustainable agriculture including environmental and social considerations, and is designed to recognise the variability of political and governance contexts that its suppliers operate within, in particular within developing countries, includes the nature of presence of resources and training support to develop productive and resilient food production systems (Unilever, 2015).

Unilever provides advice to suppliers whose produce meets standards that may not have been mapped to the SAC, and where there is no appropriate certification scheme in place "we ask you to work towards the standards set out in our Code. Unilever states that the SAC is publically-available, and

independently endorsed. Unilever provides a number of comprehensive SAC compliance and implementation guides online for its suppliers (Unilever, 2010).

The SAC is applicable to (i) all Unilever suppliers of agricultural goods, (ii) all farmers producing raw materials for Unilever, and (iii) all contractors working on farms. Both (i) and (ii) are responsible for ensuring implementation of the SAC at each given site. Community-focussed elements in the SAC with relevance to developing countries relate to building positive relationships including informing communities of planned activities and effective community complaints management, in addition to the land rights issue.

In addition, a Greenlight Assessments (GA) software tool has been developed to support suppliers checking compliance with the SAC, and to collect data in order to aid demonstrating their sustainable farming practices. The GA is available in 11 languages and is delivered as a hosted service with multi-user access through permissions controlled by Unilever. Unilever also uses the GA tool to collaborate and share the task of collecting self-verification data. The SAC recognises several certification standards as evidence of compliance with the SAC, including the Rainforest Alliance (Sustainable Agriculture Network) standard, Fairtrade and the RSPO" (Unilever, 2015).

Nestlé identifies the importance of differentiation in its strategy, with its 'Nature 2020' plan central to this. The Company outlines its strategic approach to corporate social responsibility and sustainability covering 42 separate commitments in the area of (i) nutrition health and wellness, (ii) rural development, (iii) water, (iv) environmental sustainability, (v) human rights and compliance, and (vi) employees ('our people') (Nestlé, 2016).

Table 28- Nestlé 'Nature 2020' Sustainable Sourcing Strategy

'Nature 2020' Sustainable Sourcing Strategy

The Company's 'Nature 2020' sustainability strategy incorporates 42 commitments in the areas of (i) nutrition health and wellness, (ii) rural development, (iii) water, (iv) environmental sustainability, (v) human rights and compliance, and (vi) employees ('our people') (Nestlé, 2016).

The company's Responsible Sourcing Guidelines (RSG) code for suppliers, created in 2013, relates to all stages of the upstream value chain (from farmer, grower and plantation) to the primary production level, with the intention of

committing suppliers to complying with its supplier code. The RSG includes the following four broad general principles of (i) continuous improvement, (ii) transparency across the value chain, (iii) supplier accountability and supplier support, and (iv) credible verification.

The RSG lays out the standards that Nestlé demands of its suppliers, with guidelines, specifications and practical implementation tools for use at the local or regional level (according to the region and its climates, ecological variables, farming systems, cultures, consumer preferences, etc.) and for ensuring the respecting of national laws and regulations. Specifically relating to Palm Oil, in 2013 Nestlé's Palm Oil, last updated in 2013, established a specific linkage and connection with the RSPO, requiring suppliers to comply with RSPO Principles and Criteria as a minimum. The policy states that RSPO certification is accepted by Nestlé as a proxy for compliance with the Nestlé RSG in most of its policy areas.

A key Responsible Sourcing objective (Nestlé, 2017) is to demonstrate traceability of all products back to their place of origin, such as mill, farm, plantation or fishery, covering a priority list of 12 key raw materials within Nestlé's food production processes: cereals; cocoa; coffee; dairy; fish and seafood; hazelnuts; meat, poultry and eggs; palm oil; pulp and paper; soya; sugar; and vanilla. Nestlé has established targets that by 2020, for Tier 1 suppliers, that they must cover 80% of the total volume sourced from audited and compliant suppliers, and for upstream, that 80% of the volume of priority categories are to be traceable, and 70% to be responsibly sourced in-line with Nestlé's responsible Sourcing policy. Note that this is a weaker version of the Unilever USLP which has a compliance for all products, rather than selecting product compliance on a priority-basis.

Nestlé's 'Cocoa Plan' (NCP) addresses (i) agricultural practices and rejuvenation of plantations, (ii) the empowerment of women and elimination of child labour, and (iii) the role of certification and building long-term relationships in Nestlé's supply chain, underpinned by a principle of transparency and partnerships (Nestlé, 2017). Nestlé works with the World Cocoa Foundation's CocoaAction, the industry strategy for cocoa sustainability, with a 2020 target to source 230,000 tonnes of cocoa through the Nestlé Cocoa Plan. Nestlé has an ongoing relationship with the German Federal government's global development function UTZ, through its NCP.

Danone's own product differentiation and competitive advantage is similarly based around its sustainable products approach, with a strategy designated for each of its key businesses (Danone, 2017), namely Fresh Dairy Products, Waters, Early Life Nutrition, and Medical Nutrition. Danone's mission

statement, based around its 'Nature' strategy (covering its four priorities of climate, water, packaging and biodiversity/sustainable agriculture), is to "bring health through food to as many people as possible and our dual project for business success and social progress". Its overarching approach is subdivided under the generic categories of (i) better health (relating to the health and wellbeing contributions of its product range), (ii) better lives (covering general societal support, and (iii) better world (covering its environmental impact and sustainable sourcing approach (Danone, 2017). The 'better world' element of the strategy contains a number of sustainable sourcing policies and position papers that are of interest to this project, namely Danone's approaches to Climate Change and Carbon Management, Palm Oil, Sustainable Agriculture, Sustainable Soy and Biodiversity.

Table 29- Danone 'Nature' Strategy

Danone 'Nature' Sustainable Sourcing Strategy

Danone's 'Nature' strategy relates to its four main environmental challenges of climate, water, packaging and biodiversity/sustainable agriculture. Its overarching approach, like the Unilever USLP, has three broad objectives, specifically to support (i) better health (relating to the health and wellbeing contributions of its product range), (ii) better lives (covering general societal support, and (iii) a better world (covering its environmental impact and sustainable sourcing approach.

The third category captures a number of sustainable sourcing policies and position papers that are of interest to this project, namely Danone's approaches to: Climate Change and Carbon Management; Palm Oil Policy; Sustainable Agriculture; Sustainable Soy; Genetically Modified Products; and Biodiversity. Within its Sustainable Agriculture 'Food Chain Vision' company position, Danone emphasises the importance of partnerships with stakeholders, conceptualising its food value chain as a 'partnership' due to the geographical spread and product range, covering the four competing priorities that Danone identifies: (i) health through food; (ii) profitability and competitiveness, (iii) creation of societal value, and (iv) environmental protection (Danone SA policy, p.2).

Danone places much emphasis on the collaborative approach that such a

strategic business model structure allows, focusing on 'sustainable brands' in order to allow its end product to maintain credibility:

"Trust-based relationships with our stakeholders are at the heart of our philosophy, and we cultivate that trust over the long term by living up to our promises... We recognize the vital role of our fellow stakeholders in the food chain ecosystem and actively encourage entrepreneurship, innovation, and skill-building" (Danone, 2017, p.2).

Danone further recognises the multitude of stakeholders that this approach includes, namely "farmers, scientists, suppliers, consumers, government, local communities and more", in order to protect its branding and overall credibility:

"Today our consumers trust brands that are actively engaged in managing sourcing responsibly. More generally, civil society expects stakeholders in the corporate world to do business responsibly and strive to constantly improve their direct and at times indirect social, economic and environmental footprint". (p.2)

In terms of stakeholder engagement, Danone's 'Nature' strategy recognises the need to respect and be receptive to the local situation within its supply chain, emphasising production based on local agricultural methods and unique food cultures and local production methods, and the integrity and independence of farmers. In particular, Danone notes the need to generate value, in both an economic context and also an emphasis on social value, in particular with a focus on building understanding and credibility at the local level within the supply chain. (Danone, 2017, p.6)

Danone is organizing its 'Nature' strategic thinking with an external expert panel of opinion leaders and NGOs through the Key Opinion Leaders Board, formerly the 'Nature Stakeholders Board', with Danone ranking and reflecting on the major challenges and the organization's significant environmental impacts, in order to identify or confirm the various topics' relative priority level that would substantively influence the decisions of key stakeholders. NGOs that Danone cites as being involved, demonstrate a wide spread of global and local NGOs, including the WWF, the IUCN, the Ramsar Wetlands Convention, UNEP, Forum for the Future, the EU Director General for the Environment, the Rainforest Alliance, IPE, Carbone4, Ethicity, Utopies, Futerra and Greenpeace.

Importance is placed on collaborative arrangements with local and regional organisations, and especially when considering the operational and reputational risks that can occur when supply chain performance and transparency is inextricably linked to the product brand differentiation, as is the case with Unilever, Nestlé and Danone. All three have moved towards developing partnerships that are aimed towards creating and co-owning solutions with not-for-profit organizations, the public sector, local stakeholders, other companies and academics. A key direction of forming partnerships in a 'pre-competitive' environment with a focus on sustainability, with partnerships taking place in inter-professional organizations such as Sustainable Agriculture Initiative Platform (SAI) which is a global food chain initiative for sustainable agriculture (Nestlé, 2017) and was formed by Danone, Unilever and Nestlé in 2002, covering collaboration and knowledge-sharing.

Unilever has created a series of sourcing and trade relationships across its organisation that is not necessarily focussed on partnerships to enable market access, but to achieve gains that are market-transformational for resources that it requires in its manufacturing. Unilever's Sustainable Living Plan requires a broad set of partnerships, covering its main strategic sustainability foci. Its Environmental sustainability approach includes partnerships with the Rainforest Alliance and the WWF. In terms of enhancing livelihoods it has formed relationships with a wide range of partners to improve agricultural practices. Unilever works with partners (Unilever, 2015) including Oxfam, Acumen, Clinton Giustra Enterprise Partnership, the Ford Foundation, the International Fund for Agricultural Development (IFAD), GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit), PSI, the Rainforest Alliance, and national and local government agencies.

Unilever works with the Rainforest Alliance and the Fairtrade organisations to source 100%-sustainable cocoa and sugar, and to create greater resilience and transparency in its supply chain through partner collaborations. Unilever has a commitment to 100% sustainable cocoa and sugar by 2020, and Unilever estimates that it purchases approximately 1% of the global production in cocoa. For example, Unilever works with suppliers to achieve Fairtrade Certification for its Ben & Jerry's product, and all chocolate in its Magnum ice cream product is made from Rainforest Alliance-certified cocoa. Additionally, Unilever and the Rainforest Alliance work together to certify key ingredients that are important to brands including tea for Lipton and PG tips, vanilla and

cocoa for its ice-cream category, and pepper for Knorr. Unilever claims that via its collaboration with the Rainforest Alliance, 750,000 smallholders have transitioned to sustainable practices through the partnership. The partnership is a collaborative process with growers in developing countries, covering a range of sustainable agriculture programmes in a variety of territories and commodities, which have improved livelihoods in crops such as tea, cocoa, pepper and vanilla-producing communities (Unilever, 2017).

Unilever is also a signatory to the Cocoa and Forests Initiative (World Cocoa Foundation, 2017) jointly led by (i) the World Cocoa Foundation, (ii) the International Sustainability Unit (ISU) of HRH The Prince of Wales, and (iii) IDH – a Dutch-based Sustainable Trade Initiative based in The Netherlands.

Unilever's tea commitment is to sustainably source 100% of its tea by 2020, and was bi-laterally and collaboratively developed between Unilever and the Sustainable Agriculture Network, who worked with Unilever on its largest tea estate in Kenya to give the estate Rainforest Alliance Certification. Rainforest Alliance Certified tea accounts for around 20% of the world's tea production. Unilever states that it (i) actively works with suppliers in 14 countries in Africa and Asia to train smallholder farmers for RA certification, and also (ii) has worked to train 86,000 lead tea farmers to-date through its public-private partnership with the Kenya Tea Development Agency (KTDA) and The Sustainable Trade Initiative (IDH), a partnership established in 2006 (Unilever, 2017).

Within its Sustainable Agriculture 'Food Chain Vision' company position, Danone places emphasis on partnership with stakeholders through conceptualising its food value chain as a 'partnership' due to the geographical spread of its operational activities, and product range (Danone SA Policy, 2014). Danone recognises the multitude of stakeholders that this approach includes, namely "farmers, scientists, suppliers, consumers, government, local communities and more" (Danone, SA Policy, p.2), in order to protect its branding and overall credibility. MD states the importance of its 'ecosystem' of regional partners in specific areas where it can achieve net-positive benefits in environmental and social areas beyond those that it says it would struggle to achieve alone. MD states that "today our consumers trust brands that are actively engaged in managing sourcing responsibly... more generally, civil society expects stakeholders in the corporate world to do business responsibly

and strive to constantly improve their direct and at times indirect social, economic and environmental footprint" (Danone SA Policy, 2014, p.2).

The company also states its reliance on the knowledge of local stakeholders, emphasising a fully-integrated, linked-up supply chain with all stakeholders included, in a 'pre-competitive' approach for market transformation, with MD stating the company "must set aside competition and work together for a common understanding and framework, and to find solutions. Reconciling different points of view, working together, forming partnerships and encouraging co-creation are the most effective ways to move toward a more sustainable food system that will benefit everyone" (Danone SA Policy, p.4).

Danone has also formed corporate partnerships to support the efforts of poor rural communities in developing countries who are restoring natural ecosystems, as a means of creating greater resilience in their long-term supply chain requirements (rather than being from a philanthropy perspective). The Livelihoods Fund (Livelihoods Fund 2017) gathers nine partner companies, including Danone: Schneider Electric, Crédit Agricole, Michelin, Hermès, SAP, CDC Climat, La Poste, Firmenich and Voyageurs du Monde. The Fund focuses on sustainable supply chains, to sustainably transform company supply chains while supporting smallholder farmers.

Danone also has a Forests Policy (Danone, 2015) that is underneath the 'Nature' strategy, co-created with Rainforest Alliance, with the aim of eliminating the deforestation of its supply chain, and supporting reforestation programmes. This policy covers the elimination of deforestation from its supply chain by 2020 by developing specific sourcing strategies for commodities associated with high deforestation risk, with any 'virgin fibre' requirements at Danone being sourced via its sourcing strategy with Rainforest Alliance to ensure that the materials come from sustainable, responsibly managed forests.

Under its Nature 2020 strategy, Nestlé's 'Green coffee supply chain' policy (Nestlé, 2017) contains elements of partnership collaboration with the Rainforest Alliance. Nestlé coffee is sourced through trade channels and Nestlé's own Farmer Connect direct sourcing channels, as part of its Nescafé Plan and the Nespresso AAA Sustainable Quality Program that it conducts in collaboration with the Rainforest Alliance. The Nespresso AAA Sustainable Quality Programme (SQP) is a direct action initiative by Nestlé and the Rainforest Alliance, supported by direct financial assistance from the World

Bank's International Finance Corporation (IFC) which has provided a joint investment of CHF 5.9 million (USD 6 million) to help 40,000 farmers in the form of climate resilience (tree-planting on farm sites) and training on agriculture best practice techniques, with the aim of enhancing farmer's economic livelihoods.

The SQP is a combination of on-the-ground support for farmers, compliance with the Nestlé Responsible Sourcing Guideline (RSG) and improving the environmental impact of Nescafé factories, focusing on improving livelihoods of farmers and their communities, and assisting on the sustainable management of landscapes. The SQP, collaboration aims to protect the quality of coffees required for its Nespresso Grands Crus product, as well as preserving the environment and enhancing farmer welfare.

Nescafe demonstrates specific bespoke partnership arrangements in order to support its raw material sourcing and responsible sourcing commitments through direct supplier and farmer engagement and support programmes, with a part-requirement to source a specific tonnage of SAN-compliant coffee. The emphasis in on providing a long-term, collaborative effort between themselves, the Sustainable Agriculture Network (providers of the Rainforest Alliance branding) and its farmer supply network, including its Farmer Connect supply of coffee suppliers in order to meet the requirements of its Nature 2020 plan.

Nestlé also demonstrates a considerable network of partners across its areas of value chain sensitivity, including hundreds of global partnerships and alliances, regional partnerships and alliances, memberships in multi-stakeholder platforms and alliances, and also Industry-specific alliances. All alliances are determined to be in areas that have a resolving quality demonstrating its policy requirement of 'creating shared value' and alignment with its own Corporate Business Principles (code of business conduct and ethics) (Nestlé, 2017).

Global partnerships and alliances with relevance to palm oil and sustainable sourcing generally include the International Cocoa Initiative, Proforest, Solidaridad, TFT, Verité and the WWF, and memberships in multi-stakeholder platforms and alliances include the UN Global Compact, the World Economic Forum (WEF). The most numerous include those that are industry alliances with other corporate entities including the Rainforest Alliance, UTZ, the Sustainable Agriculture Initiative (SAI) Platform, the Natural Capital Coalition, the International Food and Beverage Alliance (IFBA), WRAP and the World Cocoa

Foundation and CocoaAction. It is clear to Nestlé that in order to achieve its goals in environmental sustainability, water, rural development and nutrition, pre-competitive alliances and collaborations at sector operational level are key.

Environmental risk is primarily an operational risk concern

All three companies approach environmental and biodiversity risk primarily from an operational risk approach, with some elements of reputational risk included. There are some elements of normative, ethical motivations within the company strategy, with sustainable product featuring being a key differentiating factor for their goods. This is more pronounced in Unilever than it is in Danone and Nestlé.

Unilever approaches environmental and biodiversity risk from an opportunity perspective, which can also be interpreted as being an operational risk perspective with an instrumental, economic opportunity element. Where product sourcing and the potential impact of poor sourcing practices have the significant potential to produce reputational damage to the companies, Unilever's centralising of its Sustainable Living Plan within its corporate strategy has allowed the innovation of its product portfolio to provide a meaningful link to enhanced value to the company, through better operational practice meaning better margins and efficiency economies that in turn allow effective research and development into new and more sustainable products.

In an interview, Unilever Manager (MU) states that the company approaches environmental risk and biodiversity risk from an "opportunity" perspective, something that has evolved over time, primarily driven by its own internal programme development. MU was responsible for starting the Sustainable Agriculture programme in 1998, within an R&D type environment with the intention to learn what sustainability would mean in agriculture, from the plantation operations which it owned, and the complex farming arrangements it had at the time. However, it was with the 2008-09 arrival of (current CEO) Paul Polman, that the company meaningfully considered how it could make sustainability a part of the business strategy, but continuing to see it as an opportunity perspective rather than one of risk:

"if we approach R&D and innovation programmes from a sustainability point of view, or through a sustainability lens or whatever you want to call it, we will then innovate our product portfolio in such a way that our brands do better, that consumer loyalty improves, that we get better growth, better margins in the business, and then if we do, then we would be generating economies of scale, and efficiency economies that would generate additional funds, to put into R&D, and to close the circle" (MU, 2017).

Danone approaches the same risk as a combination of operational risk and the material threat to ongoing business operations from not protecting its supply chain dependencies, and also from a reputational risk perspective. Danone operates with a highly-centralised sourcing, purchasing and procurement system, and sees the upside of value creation from a strong approach to safeguarding against the operational risk that raw material sourcing can present.

In an interview, Danone Manager (MD) states that it is initially from an operational risk perspective with an emphasis on security of supply in the long-run, plus also the relevant reputational risks associated with the identified elements. The company conducts a material risk assessment of environmental and social elements, for all the sources where it purchases its raw materials, such as human rights or working conditions, and also environmental elements, taking into account pollution, carbon etc., biodiversity, deforestation and so on, and the company ranks these elements in terms of both operational and reputational risk.

MD states that decision-making on the magnitude and appetite for risks is made through a single process, due to Danone having a highly-centralised sourcing process. Its 'One Direct' procurement team is responsible for sourcing all fruit and vegetables, oils, sugars, texturing agents, flavours and colours, and all packaging, excluding plastics and glass, that it requires. This also allows the company to interpret and capture a 'value' from the management of such risk factors:

"...we look at the value that we can create, as a means of reducing this risk. This can be in the form of corporate value, or indeed top-line value, so in the form of sales and revenue from products. So there is an opportunity aspect within the analysis of risk" (MD, 2017).

Nestlé also asserts the approach as being one relative to the operational risk associated with potential interruption to ongoing operations. Nestlé largely rejects the idea of biodiversity protection as a safeguard against the risk of damaged perception at the consumer end. In interview, Nestlé Manager A recognises biodiversity risk as an operational one, specifically relating to

ensuring the ongoing supply of the requisite raw materials products to its factories, with biodiversity risk being captured in a capacity-building context when assessing suppliers at a farm level:

"[protecting] biodiversity is part of the requirements that we have for suppliers and their suppliers, and the origins of our engagements is to look after and start with the assessment and monitoring and capacity-building... it is not really perceived at Nestlé as a 'perception' (reputation) risk coming from the consumer or client/end user element of the company" (MNA, 2017).

Policies versus Performance – NGO criticisms and assessments on Palm Oil

Under the USLP strategy, the Sustainable Palm Oil Policy (SPOP) covers the entire operations and contractual relationships of all Unilever's suppliers, including all third parties and traders. It is based on five principles: (i) no deforestation; (ii) no development on peat; (iii) no exploitation of people or communities; (iv) driving positive social and economic impact for smallholders and women while protecting forests; and (v) transparency. The final point emphasises encouraging suppliers and their third parties to be transparent about their supply chains, to disclose to Unilever any complaints made, and to report to Unilever any breaches of the Responsible Sourcing Policy.

Danone produced its Palm Oil Policy (POP) (Danone, 2015) in November 2015, an effective update to its previous versions (from 2012 and 2014) with a renewed approach to incorporate its existing commitments in its Forest Footprint Policy from 2012, with a commitment to the elimination of deforestation from its supply chain. Its climate change policy had previously been updated to assume a commitment to zero-net carbon, with the POP now being updated to incorporate Danone's commitment to eliminate deforestation from its supply chain by 2020 while respecting the people living in forests nearby palm oil plantations, seeking long-term benefits. The policy demands that palm oil used by Danone should comply with the following conditions: (i) Traceability, (ii) Community Engagement, and (iii) Worker's rights.

Two leading global environmental NGOs (Greenpeace and WWF) score-carded the policy and systems approaches to palm oil and the responses to the threat of deforestation from supply chains of 14 leading manufacturing companies, including the three companies analysed in this thesis, that all had significant

palm-oil exposure in their supply chain (Greenpeace, 2015; WWF, 2015). Commenting generally, the report was critical of the overall progress made by companies with regards to their policies, stating that progress towards deforestation-free supply chains is low (p.4), specifically stating that only 1 of 14 companies (not including any of the companies in our best-practice group of companies) could trace 100% of its palm oil back to the plantation on which it grew. Scoring all companies against (i) Responsible sourcing (the practical steps each company is taking towards ensuring that the palm oil it buys is not linked to deforestation), (ii) Transparency (how open each company was about its palm oil suppliers, including how it was tackling suppliers that breach its 'no deforestation' policy), and (iii) Industry reform (how each company was supporting wider industry reform), the report was largely neutral/positive on the overall efforts of the three companies this project is focussing on.

Table 30- NGO Assessment Summaries

	Unilever	Danone	Nestlé
Greenpeace:	'Decent'	'Decent'	'Strong'
Summary			
Assessment			
Greenpeace:	'Strong'; "actively	'Strong'; Member of	'Decent'; Member
Approach to	supports the HCS	RSPO and POIG,	of RSPO and POIG,
Industry Reform	Approach Steering	with a strong	with a strong
	Group but has also	approach to industry	approach to industry
	supported the competing	failings and	failings and
	Sustainable Palm Oil	supporting reform	supporting reform
	Manifesto HCS Study"	initiatives	initiatives
Greenpeace:	'Decent'; low	'Failing'; Supplier	'Strong'; However,
Transparency:	traceability, however	audits are not	does not have "a
	cited Unilever positively	required as part of	time-bound action
	"has recently built a	its overall policy	plan to have its
	fractionation plant in	approach.	suppliers verified by
	North Sumatra to gain		an independent third

	full traceability to plantation of that supply".		party".
Greenpeace: Responsible sourcing	'Decent'; "needs to rapidly phase-out Greenpalm and obtain third-party verification that its suppliers are meeting its 'no deforestation' commitments".	'Strong'; 100% traceability to the mill, albeit not to the plantation.	'Strong'; substantial traceability of its palm oil to the plantation level, "notable given its high volume of supply".
WWF: Palm Oil Scorecard (out of 9)	9	9	6
Sources	Greenpeace, 2015, p.13; WWF, 2015	Greenpeace, 2015, p.7; WWF, 2015	Greenpeace, 2015, p.11; WWF, 2015

Despite the high level of assessment in these NGO summaries, there remains credibility issues within the NGO community over involvement in palm oil, with varying company responses to media reports that may lead to claims over standard involvement raising legitimacy concerns.

Unilever has created responses to the number of issues that have emerged since 2015 regarding the palm oil industry, and the issues that the NGO community has had with the impact of palm oil, driven by a series of high profile investigations into the palm oil industry, and through wider stakeholder pressure.

Leading NGOs have created a difference of opinion with regards to how issues over deforestation and carbon sequestration are interpreted, and how these should relate to policy commitments by corporations. The Unilever position paper (Unilever, 2016) from May 2016 outlines its position on a number of issues and distinctions made by the NGO community. Key issues were:

 No deforestation (favoured by Greenpeace and other groups) versus Zero Net Deforestation (developed by WWF, with endorsement by a number of companies).

- High Carbon Stock (HCS) Approach (developed by the TFT and Greenpeace, in collaboration with a number of others) versus HCS Science Study (developed by the Sustainable Palm Oil Manifesto group).
- Exclusion of small-holders
- The RSPO itself, the credibility RSPO and its proposed 'RSPO Next' development
- Greenpeace created a high-profile report (Greenpeace, 2013) criticising the RSPO and a failure to stop deforestation through its mechanism. Main criticisms were that the RSPO (i) did not prohibit forest conversion, it (ii) did not limit GHG emissions associated with the development of palm oil plantations, for instance through conversion of peatland, that (iii) its rules failed to prevent peatland and forest fires, and (iv) appeared (according to Greenpeace) to be reluctant to act on blatant breaches of its standards. Additionally, in terms of trade, Greenpeace claimed that RSPO members laundered dirty palm oil into global supplies, and its main supply chain systems did not lead to clean palm oil. Specific criticisms by Greenpeace include:
- "The RSPO has recently reviewed its Principles and Criteria. It now includes improved standards on social issues, but has failed to address the crucial questions of deforestation and GHG emissions, leading to criticism both from consumer companies and NGOs" (Greenpeace, 2013, p.5)
- "The RSPO seems reluctant to act on blatant breaches of its standards... Palm oil producer Duta Palma has a long history of deforestation, community conflict, illegality, and noncompliance with RSPO regulations..." (Greenpeace, 2013, p.2)
- "In 2009, a coalition of village heads and NGOs brought a formal RSPO complaint against activities of two Duta Palma subsidiaries, including clearance of HCV forests and the use of fire to clear land. In 2011, the RSPO briefly suspended Duta Palma for administrative breaches, but failed to address complaints. It took nearly six years from the initial criticisms and a new report by Greenpeace in April 201331 before the RSPO finally expelled Duta Palma" (Greenpeace, 2013, p.3).

These criticisms fed into the development of both the POIG initiative as competition to the RSPO, and also to the development of the RSPO Next.

Certainly, companies, including Unilever, created increasingly strong Palm Oil policies.

Danone states within its policy that its approach to using RSPO as a fundamentally appropriate proxy has changed. It initially undertook to source 100% of its palm oil requirements from physically segregated sustainable palm oil suppliers certified by the Roundtable on Sustainable Palm Oil (RSPO), however it states that the status of the RSPO has diminished as the industry standard over time. Recognising that RSPO has had problems, MD stated that:

"By the end of 2014 this commitment was met... the RSPO standard protects primary or old-growth forests, however, it has proven unable to safeguard other vulnerable eco-systems including tropical peatland and second-growth forests" (Danone, 2015, p.4).

Danone takes the opportunity to emphasise how its own commitments are beyond the RSPO (not necessarily the RSPO Next standard however), that Danone promotes "sustainable palm oil production practices that both preserve eco-systems at risk and offer local communities long-term benefits. Under this policy, Danone has committed to sourcing traceable palm oil offering guarantees of no-deforestation and no-exploitation" (Danone, 2015, p.4).

Furthermore, Danone identifies key relationships with stakeholders in the RSPO that go beyond the RSPO, to incorporate The Forest Trust (TFT) in terms of enhanced supply chain risk assessment and engagement with stakeholder groups including the establishment of the Livelihoods Fund for Family Farming (Livelihoods 3F) as funding investors with a competitor in the industry, Mars Inc., with a goal of "implementing projects that will simultaneously restore the environment and put degraded ecosystems back on track" (Danone, 2015,p.8).

Danone also include details of it joining a competing initiative in the palm oil industry, the Palm Oil Innovation Group (POIG). This initiative was launched in 2016, partly as a response to the deterioration in the public standing of the RSPO through the numerous NGO disclosures regarding the standard: "POIG aims to support the RSPO through building on RSPO standards and commitments by both demonstrating innovation to implement RSPO existing standards as well as highlighting critical issues for improvements" (Danone, 2015, p.7).

The official position of Danone regarding the POIG is that, together with other POIG members, Danone believe that reforms and improvements of RSPO audit procedures, quality control and complete and comprehensive reporting in ACOP reports should be done, and that the RSPO's Greenpalm Certificate system should be phased-out. Danone emphasises that it continues to support the integration of POIG grower indicators into the Principles & Criteria of the Roundtable on Sustainable Palm Oil (RSPO).

5.4.2 Perceptions of Sources of Legitimacy

A common theme in terms of legitimacy is that quality engagement with the grass-roots level within the supply chains is a potential source of legitimacy, however the participation in certification standards is not such a source, as far as the best-practice companies included in the case study have communicated.

Legitimacy is perceived by companies as primarily a product of the level of trust that consumers have in its brand, and recognise how poor activity, and a failure to conduct good quality normative stakeholder engagement, will result in a deterioration of trust in its brands. From this there is a clear linkage to reputational risk management and legitimacy.

Unlike companies who view the end-user and the consumer as being a key source of legitimacy through a clear demonstration of a well-managed supply chain, both standards consider that gaining traction at the consumer-end in terms of understanding what sustainable sourcing means is hugely difficult. However, a key element in terms of recognition is how a raw material is perceived as being the finished product, and how a consumer might identify with the product. In this context, the SAN seeing the RA badge as a 'buyer-driven' tool allows for the financial benefit from compliance with the certification standard (RA/SAN Manager (MRA) in interview, 2017).

While the SAN sees products such as tea and cocoa as being less problematic in terms of deriving a consumer premium, the RSPO sees palm oil as less-understood a raw material input, and this leads to a perceived failure of legitimacy for the basic standard itself at the consumer end. Elements such as brand 'resonance' appear to be important in this context, however the two standards are less concerned with how a branding badge such as the RSPO and

RA symbols are marketed, and are more focused on ensuring that the fundamentals of assurance, transparency and engagement with the upstream supply chain are managed correctly.

Engagement with the grass-roots level within the supply chains and NGOs

Unilever recognises how western-based global NGOs as stakeholder representatives have not been effective partners as a means of demonstrating good quality engagement at the local level, and especially within developing countries. Quality engagement channels with local NGOs as well as international NGOs will act as the 'canary in the mineshaft', the early warning indicators for recognising where the company supply chain might be failing.

MU in interview considers the involvement of NGOs as being an area where credibility and legitimacy is compromised or challenged by the use of NGOs in the round-table process, particularly with the RSPO. In particular, Unilever questioned the involvement by large global NGOs such as the WWF in the RSPO development process as bodies supposedly representing local developing country interests:

"...while it could be said that the presence of NGOs would have worked as a mechanism to ensure that local interests were represented in standard ..., in the reality what has happened is that both the palm oil and the soy roundtable standards are seen by local farmers as standards that were dominated by western NGOs" (MU, 2017).

MU views the structure of the Rainforest Alliance-supporting Sustainable Agriculture Network (SAN) as being one where credibility is less of an issue at developing country level when dealing with suppliers, with the organisation being 'grass-roots' in terms of structure, where the 'bottom-up' approach allows for a less prescriptive, more collaborative structure and where the SAN membership:

"...consists of local grassroots NGOs, who work very closely together with local farmers in Central and South America and in Africa, so the SAN standard is a standard that is considered to be owned by farmers. The RSPO standards are not seen as such" (MU, 2017).

Importantly, what is not factored into this is how NGO engagement is important, however as a communications tool for receiving 'early warning' signs for where poor practice is occurring within its supply chain, within the communities that it operates, and what emerging issues are likely to be challenging its sustainability strategy in the short-to-medium term, and it is in this regard that NGOs are essential:

"The relationships that we have with a lot of NGOs, both locally and internationally we use, largely, simply to keep our fingers on the pulse of society, in terms of where are things going, what is the next issue that will be laddered-up on the international agendas... and at the same time, yes we do get early warning signs from the NGOs if something is going wrong" (MU, 2017).

In the Danone manager's view, further sources of credibility come through an emphasis on inclusivity at the farmer/supplier level and at the community level, however, to best practice companies the participation of standards alone will not generate this legitimacy within their own supply chains.

MD states that the company recognises its relevant external stakeholders as constituted by three groups, (i) suppliers, (ii) farmers (last tier suppliers), and (iii) the whole community, including NGOs, media and academics. At the community level, Danone sees credibility from a community perspective being achieved through greater inclusion of groups (ii) and (iii), primarily (ii). Danone sees this being most achievable by ensuring that for the sourcing of products such as palm oil and tea, the use of smallholders is maximized to ensure that the economic benefits and social / environmental benefits are captured at the local level, in conjunction with local NGOs. Using palm oil as an example, MD states in interview that the company has an objective to ensure that more smallholders are included, and with this commitment comes a requirement to work with local NGOs to have a greater understanding of the conditions and requirements on the ground in developing countries:

"...if we want to include such smallholders then we need to have a greater understanding of their needs and wishes, requirements, obstacles to succeed, and then work with local NGOs to make a socio-economic assessment with the support of the suppliers who will be based there, and then design a project that will overcome the obstacles that would have excluded them from the supply chain" (MD, 2017).

MNA sees that its own policies, structured to engage intensely with operations at the developing country level, serve as quality generators of credibility built on continuous assessment and engagement with the supply chain (MNB, 2017).

Consumers and end-users as a key source of legitimacy

In terms of legitimacy, the Unilever manager perceives that its 'social license to operate' is something acquired and generated at the consumption end of its supply chain, rather than at the supplier end or within the communities it operates. The manager describes the process in the following way:

"...it starts with the quality of the product, the function that we offer through our brands, and that includes food safety issues, it includes ethical behaviour in our marketing campaigns, everything to do with nutritional advice, balanced diets etc etc, and then within the supply chain, everything that comes with how we source raw materials, how we deal with suppliers" (MU, 2017).

MNA in interview views its own non-standard based approach as being one that generates better credibility in the eyes of its consumers, and also investors, however this is as much due to a deterioration (it believes) in the credibility of certification standards that have occurred since 2015/16. Where previously Nestlé viewed certification standards as being a significant source, its own looser approach to commitment has been of benefit to its company:

"...there have been so many ethical issues in certified plantations or farms, that consequently this credibility has eroded, and some of the approach that exists, like the Nestlé approach, like the Danone approach, starts to get more merit" (MNA, 2017).

Company participation in certification standards as a source of legitimacy

In terms of standards, Unilever sees the respective structures and approaches of certification standards as being key determinants for whether they will be meaningful sources of credibility. The contrast made between the RSPO and the RA/SAN mechanisms is a useful differentiator, where the top-down governance of the Palm Oil mechanisms, with a perceived lack of granular understanding at the local level, contrasted with the grass-roots, close-collaboration approach of the RA/SAN can be identified as capable of producing diverging outcomes in terms of legitimacy.

In interview, Nestlé managers do not necessarily interpret commitments to externally-recognised standards as a source of credibility within its supply chain. The key indicator from the approach of the company is that it does not formally commit to any given sustainable sourcing standard within its overarching 'Nature 2020' sustainability policy. It does source certain products that have been subject to certain certification standards, however it does not have commitments to be 100% certified RSPO for palm oil, or to be 100% Bronsuco, or 50% UTZ or Fairtrade for example, this does not exist at Nestlé.

MNA states the key reference is that it has effectively created its own 'Nestlé Standard', a self-defined commitment that may utilize certain standards in order to deliver on this company-own sustainable sourcing standards, but without the formal mapping that Unilever has conducted, for example:

"we do use for certain products and certain locations, these external certification seals. So for example coffee in Guatemala and Mexico, instead of deploying our own Nestlé agronomies, or deploying NGOs, we may decide to buy the common code for the coffee in certain certification volumes, be it UTZ, or Fairtrade" (MNA, 2017).

MNA also states Nestlé engages with its supply chain over producing in line with a given certification standard, however its own experience is that the farmers do not initially see the value in the commitments, so it alone does not cultivate a sense of legitimacy for Nescafe at supply chain and community level when pursuing such commitments and communicating this to suppliers. Nescafe explains that a common engagement with suppliers, smallholder farmer or cooperative over external standard compliance is initially a tough sell, with the suppliers keen to understand what the value will be to them:

"...when you discuss with farmers, at the beginning they are a bit like 'what is it really going to bring to us?', they talk a lot about 'premium', and so the sad reality is that there is not really any financial value reaching the farmers in most of the certification processes" (MNA, 2017).

MNB states that when it reaches out to its suppliers, to sub-suppliers or farmers, alignment with certification standards is being seen as a positive, and they state that it is clearly of huge value to be aligned to an internationally-recognised industry standard. However, at the same time, it very much doubts that there is a meaningful cash benefit to farmers at the very end of the supply chain, due to

much of the value having been diluted in the multi-tier upstream supply chain; Nestlé concedes that it is the engagement, the process, the learning, the know-how and the knowledge which anecdotally represents the value for the farmer:

"...most of the origins, most of the farmers will say that the learning, the knowledge and the 'process benefit' is, really, higher than being capable to sell RSPO or Bonsucro or Ecocert or other certifications... a large proportion of [farmers] will say in many cases they will say that they have improved their yield, and it has made them more resilient... however very few of them will say that they are getting more money, or that they are more resilient from a financial perspective" (MNB, 2017).

Standard providers, stakeholder legitimacy and maximizing inclusiveness

A common theme is the generation of legitimacy through the development of representative, participatory networks of stakeholder engagement, consensus building and intermediary outreach within its governance structure, stakeholder committees and working groups. Both the RSPO and Sustainable Agriculture Network have developed representative committees as part of their creation and development mechanism, with a view to representing all stakeholders in the process, as a way of creating validity and credibility within their development processes. Both organisations recognise shortfalls in the way that local communities have been represented in these processes, however.

The RSPO recognises a collection of seven different stakeholder groups that are interpreted to form the palm oil supply chain and surrounding affected groups: 7 sectors of the palm oil industry, including the producer representatives themselves in addition to environmental and social non-governmental organisations (NGOs), were all included in the design process. However, the representation of smallholder growers is somewhat lacking, with only one grower representing smallholders. The RSPO considers its overall approach to assurance, transparency and third-party certification as being a lead driver of legitimacy for its standard. Transparency also includes consensus building through creating media areas for challenges to the palm oil market and the RSPO itself as a means of showing its willingness to move the market transformation debate forward.

The Rainforest Alliance standard provider has a clear focus on representing local NGO and community-level representative groups, demonstrating a series

of localised, developing country-focused representatives on its International Standards Committee (ISC), and while accepting that it only has one direct farm owner on its committee, the ISC is clearly not relying on NGO input that could be defined as 'western', with organisations having established track records representing local developing country community interests. This is an organisation that the SAN believes is a vital source of credibility and legitimacy when using their work to encourage market transformation.

In the most recent SAN/RA Impact Report for 2015 (Rainforest Alliance, 2015), the joint-report makes numerous conclusions on the use of its SAN/RA certification:

 Certified farms apply more sustainable farm practices than non-certified farms – Implementation of sustainable practices occurred at a higher rate than non-certified farms, citing numerous multi-source studies demonstrating certified farms applying good practices including environmental management and farm productivity more than noncertified farms.

Certification benefits small-scale producers; however, there is minimal evidence of financial benefits being derived in terms of large certification price premiums due to Rainforest Alliance certification. Farmers recognise that the improved agronomic practices in the process increase productivity and profitability, in addition to effective training, environmental quality and health, justify the retention of Rainforest Alliance certification.

Formation of the POIG shows sensitivity to concerns over RSPO legitimacy

In 2015, and in response to the amount of criticism that association with the RSPO was receiving from media sources and NGOs, leading brands including Ferrero, Danone, Stephenson and Boulder Brands and Indonesian palm oil giant Musim Mas Group, growers Agropalma and DAABON, along with international NGOs including Greenpeace, WWF, Rainforest Action Network (RAN) and Forest Peoples Programme (FPP), committed to build upon the RSPO standards and commitments¹, creating an alternative group of best-practice actors called the Palm Oil Innovation Group (POIG, 2017)

Launched in 2016, it is for RSPO member companies that have met the current requirements and guidance of the RSPO Principles and Criteria and in addition, through their voluntary policies and actions, have exceeded them. RN represents next-level certification that is beyond policy statements of basic RSPO commitments. RSPO Next (RSPO, 2017) allows for third-party verification of efforts by credible, independent third-parties.

RSPO Next applies to the practices on the ground, not only of the RSPO Certified operations, but additionally sets up requirements regarding suppliers of raw material, regardless of the path of delivery of that supply. RSPO Next covers production level, however it does not yet cover the refining, manufacturing and consumption portions of the supply chain. Categories of RSPO Next (from the RSPO Next website) are:

- No Deforestation
- No Fire (requiring companies to implement fire prevention policies)
- No Planting on Peat (peatland and other carbon-rich soils)
- Reduction of GHGs
- Respect for Human Rights (e.g. Labour standards, enhancement, requiring payment of living wage)
- Transparency

All categories are applicable at an organization wide level, including investments, joint ventures and in the organization's wider supply base. This represents a fundamental upgrade in the overall coverage of the standard, compared to the original RSPO standard which:

- Only banned cutting of primary forests or those of HCV
- Fire to clear land IS banned, but does not require companies to have procedures to prevent fire on land they manage.
- Discourages planting only on peatland
- Has less comprehensive GHG reduction requirements

5.4.3 Motivations for join standards

General themes emerging are that there is consistency between how companies interpret and perceive the motivation for implementing an externally-designed

sustainable sourcing standard, and how standard-providers themselves perceive the motivations to join.

Best practice companies perceive externally-recognised standards as being a useful tool for mitigating potential down-side reputational risk issues, a perception consistent with that of the certification standard providers themselves.

Standard providers also perceive their usage as an off-the-shelf stakeholder engagement mechanism, effectively acting as a company proxy or replacement for developing their own standards, however this is not relevant to best practice companies who will have their own engagement channels for stakeholder groups linked to their own operations or supply chains.

Comparing company and standard-provider perceptions of joining certification standards

In terms of the motivation to join certification standards, best-practice companies see the mitigation of reputational risk associated with agricultural supply chains as being an important driver for implementing standards.

Unilever became involved in the RSPO in 2005, and in 2006 the company became involved in the Lipton sustainable tea partnership with Rainforest Alliance. Palm oil round-table involvement was primarily due to its view of how the palm oil market had grown up to that point, seeing the initiative as a way of protecting against wider industry malpractice and creating distance from their own processes. MU in interview states

"most palm oil and soy have gone through rather unbridled and uncontrolled expansions in the 80's and 90's ... palm oil in south-east Asia of course, soy mostly in Brazil but also in some countries in South America, and so those concerned NGOs, the WWF in particular have participated in those discussions" (MU, 2017).

Standards provide this shield for the laggards, however the question remains whether there is a defined and clear economic benefit for solely demonstrating compliance. MU views 'laggard' companies participating in standards post-design as motivated by the involvement of best-practice leaders, rather than the decision to participate being informed by their own engagement channels, and with a geographical bias on European and North American companies, regions

considered by Unilever to be more sensitive to high-profile pressure from NGOs in Western Europe and North America, particularly when NGOs are themselves members of standards. MU states:

"certainly in the European market, also in the North American market, there is of course pressure from NGOs who are also members of RSPO, and even NGOs who are not members of RSPO ...there is still a risk of being associated with palm oil.....it's still very much a reputational issue" (MU, 2017).

Danone also sees the reputational risk motivation. However, while the standards can act as a shield, Danone points to standards as a source of reputational risk in themselves, should the standard be subject to governance issues or controversial media coverage. Danone is particularly emphatic that it sees participation as being 'pre-competitive', and will abandon initiatives that are considered risky by association where things are deteriorating within the standard, in the eyes of wider stakeholders (MD, 2017).

The standard providers see themselves as a reputational risk shield

Both standards emphasise that using the verification and branding element of the standards alone is not an effective use of the participatory mechanism, and this approach is claimed by RSPO to be responsible for the observed failings by members, however this is less the case for the RA / SAN due to the nature of its bottom-up governance structure.

RSPO believes that company manufacturers approach membership of RSPO from two motivational directions: (i) as a shield against reputational risk, where a company can effectively 'outsource' this risk to the standard, and (ii) as an engagement mechanism with suppliers.

RSPO Manager (MRS) is critical of the approach taken by companies that become members, and which ultimately causes issues for the certification standard. MRS suggests some members join with the intention of receiving the reputational risk 'shield' by association, however they then place too little effort into the engagement aspect. MRS states:

"the vision was very clear, and in time people started putting the expectations on the RSPO as a 'shield' as a standard, and now we are moving towards a place where there is a shared responsibility, where people are coming together also at the board level" (MRS, 2017).

The Sustainable Agriculture Network (SAN) recognises the reputational risk management aspect as being a motivation, however this approach SAN believes is less commonplace than it was. Where a company is looking at their supply chain, and having analysed it for the various risks that may affect its reputation, it maps its risks to the elements of the RA labelling that allows for the identified risks to be considered mitigated, using the labelling as a tool for this risk. However, the process of getting the entire supply chain certified can take a long time, so successful companies are those that are looking beyond using the RA labelling as a risk management type of tool. RA/SAN Manager (MRA) states:

what they are seeing more of is where companies are interested in more than just risk management... where they will have commitments..., I think that they'll be interested in the certification or in our system. If they are companies that really just want to have risk management, this is really not the way to go, and they will probably not have a future in our system' (MRA, 2017).

Standards are not automatically seen as a stakeholder engagement or policy alternative, but the Rainforest Alliance is considered an exception

The evidence of best-practice companies utilizing a certification standard / round-table as a proxy or replacement for this process does not support this directly. Standard providers see their platforms as having the potential for 'off-the-shelf' stakeholder engagement mechanisms for communicating with suppliers. However, the latter point is questionable as to whether this applies to best practice companies, as it appears a more relevant and meaningful feature to these companies within a collaborative, bottom-up structure such as the Rainforest Alliance/SAN process. Unilever makes the case that this potential is more substantial due to the collaborative nature of the standard and due to the way that the Rainforest Alliance standard is structured.

The engagement process that the RSPO Next offers, moving away from verification-only and becoming a platform for engagement and co-ordination between members is less useful for best-practice companies that are resistant to diverting resource or attention away from their own direct engagement channels. However, companies see standards as being useful to supplement existing channels on a product basis.

In the case of standards such as the Rainforest Alliance, Unilever sees that certain standards are considered as strong proxies for having their own policies

in certain areas of sustainable sourcing. Unilever sees the potential for such a standard as a proxy for having a sourcing policy in a particular area, but only where such a policy can be considered sufficiently robust in terms of how it deals with suppliers and other associated third-party stakeholders. In interview, MU states:

"I don't really see the need for us to have a specific sustainable sourcing policy for paper or a specific sustainable sourcing policy for palm oil, or for soy, or perhaps where we have published at one point for tea as well" (MU, 2017).

The Unilever approach within its Sustainable Sourcing policy is that there is a 'mapping' compatibility between certain external sustainability standards and the sustainable agriculture code (SAC) scheme rules. Unilever has a number of certification standards that it has benchmarked against its sustainable agriculture code, either as equivalent to the code, industry programmes equivalent to the code (Annex 1A and 1B of the scheme rules), and then a number of certification standards that are partially equivalent to the code (Annex 2 of the scheme rules).

The 'shared responsibility' approach is one that the RSPO sees as being vital to its success, and also represents the reason for the RSPO failing to live up to expectations by members. MRS states:

"it is only through engagement and direct engagement with other players in the market, by being inclusive, that we can resolve what are going to be the reputational risks of tomorrow" (MRS, 2017).

RSPO views standard participation as being most effective when it is realised that "the engagement element is a continuous demand and participation requirement, with the reputational risk element being most effective when engagement is continuously worked upon". MRS further states that, as the standard has become more popular and numerous in terms of membership:

"the initial business-to-business model has come under some strain, with a loss of the cohesiveness and participation that was in evidence when the organisation was at a smaller level" (MRS, 2017).

The additional motivation that RA/SAN recognises relates to branding and marketing, where a company can make a sustainability claim about a product by using the standard's branding. Although the value of joining an alreadyestablished RA as a 'white label' branding exercise, that is, off-the-shelf

sustainability and assurance as a reason is difficult to capture, but SAN sees that there is some support for that approach. This effectively allows a company to take on the governance and assurance mechanism as a proxy for their own sustainability process, where the RA believes in the need for the buyer to develop their own standard:

"...instead of having to develop all this work, to develop a standard in a participatory way, which appeals to stakeholders, to develop an assurance system, and to provide transparency that people would be comfortable with, I will reference the scheme that I think is good, and will point a company in the direction of [the RA label]" (MRA, 2017).

When asked whether the company find instances where standards are effective proxies for having your own processes and supplier engagement channels for certain products, an interviewee at Danone states that this can be the case, however it very much depends on the product and also will depend on whether a review of its supply chain finds the standard sufficiently appropriate and applicable to its own supply chain circumstances. Citing the FSC and RSPO as being standards where a mapping of the supplier requirements to the standard has occurred, in other instances such as fruit or cocoa or sugar cane, MD states:

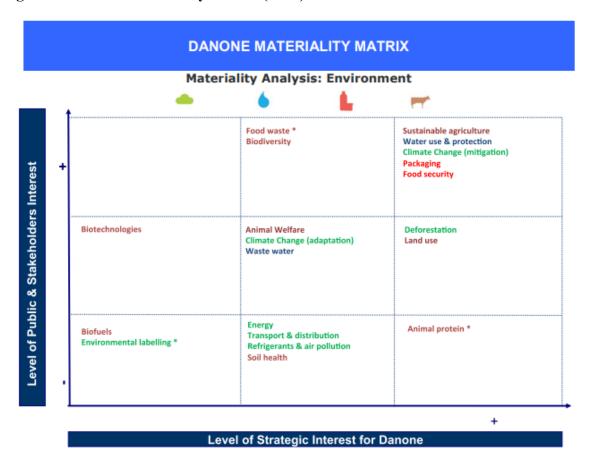
"we are not 100% sure that we should follow the existing certification programmes that do exist" (MD, 2017).

Key to this is Danone explaining its two-stage process for first making a detailed evaluation and assessment of its supply chain to understand the specific risks that exist, and then secondly in determining the specific risk mitigation processes that are required. Rather than a standard being inadequate from a governance and assurance perspective, MD states that it can just be the case that the standard is not an appropriate match for its own supply chain:

"...instead we believe we have other ways that are both more efficient and more impactful, like the fact that we have internal funds dedicated towards having social and environmental impact" (MD, 2017).

The company materiality matrix developed in 2017 (Danone website, 2018), states that 'environmental labelling' is classified as being of low strategic interest to Danone, and Danone considered it as being of low interest to both the stakeholders and to the public.

Figure 5 - Danone Materiality Matrix (2017)



An interpretation of this, within its definition of environmental labelling, is that there are two elements at play. Firstly, from the Danone perspective, the use of environmental labelling as a strategic element is low due to the company's lack of reliance on such tools as a replacement or proxy for the company creating its own systems, practices and performance in areas such as sustainable agriculture, for deforestation. While it is clear that the issues most relevant to Danone that are most relevant to environmental labelling are considered of at least medium or high strategic importance (in particular sustainable agriculture, deforestation, packaging, land use, biodiversity and animal welfare), the aspect of ensuring that its practices are compliant with externally recognised standards is not of high strategic importance.

In terms of the level of public and stakeholder interest in environmental labelling, this raises questions about exactly which stakeholders the external NGOs, together with Danone themselves, consider environmental certification standards as being of importance to them. Key to this is understanding further exactly where the sources of legitimacy and credibility are considered by

Danone, and indeed how much credibility such standards hold for specific stakeholder groups.

Standards and market transformation in sustainable sourcing

Companies see that participation in collaborative initiatives allows best practice companies to support their own sustainable sourcing efforts externally, in particular through standards generating market transformation. Unilever recognises that it cannot benefit from market transformational initiatives in isolation or 'in a bubble', and so the involvement in sustainability round-tables, and supporting sustainable sourcing standards, is a key part of its overarching strategy. Unilever recognises the heavy-lifting element of being a first-mover and early supporter of environmental sustainability standards places a financial and reputational risk burden on its company, and has a long-standing legacy of working with internationally recognised NGOs to mitigate such risks. However, Unilever's principle that sustainability is about economic growth, economic improvement, and environmental protection shows that the company understands its involvement from a perspective that can be interpreted as instrumental stakeholder theory, justifying involvement from a bottom-line perspective.

Unilever considers itself a leader within a number of certification standards, including the RSPO, and recognises that in the development of programmes such as the RSPO it is necessary for certain companies to do, as they say, the 'heavy-lifting' in order to support a programme through its various stages of development (MU, 2017), recognising the reality that the relationship between best-practice companies and certification standards needs to be particularly symbiotic over a long period of time for it to achieve market transformation. One aspect of this is the standard acting as an information conduit for other companies operating in the same area, in terms of explaining and supporting the arguments for motivating 'laggard' companies to join, and for support for a particular programme. MU states:

"we are certainly being approached by others in the sector, who ask us 'should we join this', 'should we join that', 'what would be the benefit', 'what would be the commitment', 'what would we have to do', and we always make the time to talk with these people, explain to them why we are doing it, why we would like them to join' (MU, 2017).

Unilever acknowledges that there is a cost associated with supply chain programmes that include standard commitments; however, it recognises that there is a normative benefit that can potentially outweigh the costs of continuing association with the standard, and particularly when it relates to small farmers and growers. In particular, Unilever sees in some cases that there are certification programmes with a social benefit for farmers in developing countries that also create loss-making situations in the short-term:

"there is a cost associated with those programmes, but what we ensure we do is that the effort we put in or the cost we put in will somehow be translated into brand" (MU, 2017).

However, there is a business necessity that remains the overriding and key motivation to maintaining large scale certification programmes, and this is the need to source high volumes of raw materials for its product needs:

"...where we are involved in really large scale certification programmes, those are usually the situations where we need those suppliers, and we need them for the volumes of raw materials that we need" (MU, 2017)

Danone sees joining sustainability standards as being vital to achieving market transformation, however, the company places considerable emphasis on an ongoing scrutiny of standards in order that standards are sufficiently ambitious and is continually ensuring that any standard continues to represent the type of meaningful collaboration that will represent Danone as a leader for maintaining involvement.

Danone states that the company does not use wider standard initiatives as the main-driver of its initiatives, indeed it actually observes such collaborative certification standards as being an accessible, lower-level version of the company's own higher-level, more ambitious initiatives, RSPO particularly so. The company recognises its participation in certification standard as an influential factor within such standards as a means for pushing for better practice and higher standards within the standards. MU states that it will push even harder and say 'we will only continue to work with the RSPO if it remains like X', the issue for us is that the RSPO should be a 'basic', and then it will go further, although it also has to work within the options available:

"indeed we have to go beyond this, but it is not like we can do without [RSPO] at the moment because there is not really much alternative. So it is the RSPO as a basic, and how we can improve it, and then we will go beyond like in our own project" (MD, 2017).

Nestlé Manager A states that its overarching view is that external or industrywide certification schemes represent only one of the tools used for responsible sourcing at Nestlé, with MN stating

"we do not have commitments to certain volumes or percentage to be certified by a certain date, we have commitments against our own Nestlé policies and requirements" (MNA, 2017).

Degrees of commitments to standards can differ as transformation conflicts with reputational issues

The effectiveness of certification standard memberships, and how this is conducted by companies to evaluate effectiveness compared to the company's own ambitions and policies, is a common theme. While companies recognise the importance of standards in the context of market transformation, the extent to which companies see affiliation with standards as a robust, long-term commitment can vary when this conflicts with concerns over reputational damage. Unilever presents a more committed and engaged approach to maintaining links to difficult standards with difficult performance issues, and Danone and Nestlé are more comfortable with disconnecting based on reputation-related complications.

All companies emphasise that all discourse regarding continuing participation includes engagement with its supply chain, and that they maintain a regular and continuous internal review mechanism, allowing consultation with the supply chain to determine whether continued participation remains the appropriate position for the company. While Danone and Nestlé have taken stronger positions in terms of willingness to withdraw due to governance failures at standards, Unilever's view is that as market leader and often-original supporter of standards, withdrawal is considerably less preferential than seeking reform of their failings through ongoing participation.

Unilever reviews membership of such initiatives on a regular basis (approximately every two years) evaluating the impact of retaining standard

membership, covering elements such as the cost of retaining membership, the cost in terms of management, and the benefits generated in terms of risk management, reputation management, brand growth and also brand revenue (a continuing cost/benefit analysis – instrumental stakeholder theory aspect).

As shown in its SAC, Unilever has its own comprehensive policies in place regarding particular product sourcing, and when external standards overlap with these, the motivation to commit to an externally-recognised standard is considered a complicated dynamic. This is particularly the case when attempting to embed standards into its global procurement processes, and especially when its own policies are much more comprehensive, and where Unilever considers itself more embedded at the community level than the specific standard. MU states that:

"...certainly in RSPO it has been proven difficult to do, because there are conflicting interests at work. So if you look at the U Sustainable sourcing policy for palm oil, we do require things that go above and beyond what the RSPO standard currently requires growers to do" (MU, 2017).

Unilever sees standard-development issues within the RSPO as something that demonstrates conflicting interests and challenges at work within certification standards, and whilst continuing membership of external certification standards is the intention, at certain points the interests of companies and standards will diverge. However, their view is that Unilever cannot just withdraw from standards without damaging both their own brand and also the sector. MU states:

"there are a couple of sustainability programmes, I've mentioned palm oil, I've mentioned soy, I've mentioned tea, where Unilever's present [presence] is very relevant, not only for ourselves and for our brands but also for the sector, that it would be a big effort for us to withdraw from that" (MU, 2017).

Unilever's Sustainable Palm Oil policy is an example of where it required its suppliers to undertake standards that are beyond those of the RSPO, such as demanding:

"no deforestation, no peat, no social conflict, as a central dogma in [its] sustainable sourcing policies, none of the existing sustainable sourcing

standards actually talk about zero deforestation or zero peat" (MU, 2017).

So, when it is time to review, this is considered an ongoing process, and actions that follow, according to Manager A, will depend on the level of visibility it has within the standards, and also the extent that membership complements its own policies. Citing its SLP, MU states that the company is publicly-committed to market transformation:

"Transforming both the palm oil and the tea sector... where we have less visibility, we have the same trade-off that we will look at from time to time, and actually we will come with an announcement of a Sustainable Sourcing programme that will look like 'from now on until 2020' and that will be slightly different from what it was between 2010 and now, with more of a focus" (MU, 2017).

Danone recognises that commitments to standards are subject to an ongoing review primarily due to the passage of time providing a more nuanced learning of the standard in question. MD states that Danone includes individual farmers and suppliers in the review process for determining a potential change to commitments in areas where particular external standards represent the requisite standard of produce that Danone has previously determined.

Danone cites Palm Oil as an example of continuous improvement; its internal palm oil sourcing policy was first written in 2012, and within this policy Danone recognises that it refers to RSPO compliance as being its recognised standard, or what the company describes as their 'referential concept', and as such it requires suppliers to be 100% compliant with this standard. However, the actual commitment is subject to continuous review by its governance structure. Its steering committee includes all of its purchasing team, the corporate team, and various divisions that meet every two months, retaining an ad-hoc and flexible approach to a review process, and the process is primarily between internal departments. MD states:

"I would not say that we have an official process, Danone is not so much a company of process, but we do have frequent reviews on what we are doing, and a regular review of our policies" (MD, 2017).

Nestlé also has an internal steering committee review process within its engagement process for determining both updates to internal sourcing policies,

and also whether it continues participating with certain external standards. MNA states that where there are concerns that there is insufficient progress being made within a specific standard, then this will be raised to the steering committee, stating also that:

"this is not scheduled for a specific period of time, the steering committee meets regularly and will be alerted" (MNA, 2017).

There is no evidence however that this decision incorporates the breadth of stakeholder opinion that are included when updating its internal sourcing policies, such as International NGOs and evidence from its Responsible Sourcing team.

Satisfying consumers more likely a motivator to join, rather than satisfying needs of suppliers and community stakeholders

In terms of the stakeholder groups most responsible for demanding participation in standards, all companies view this as being driven by consumer end-users, rather than this being a response to interest within their own operations or supply chains.

Nestlé's approach is similar to Unilever's in that it sees the motivation as being one that is driven from an end-user perspective, such as the consumer and its own client base, however it does not see standards as being as being a meaningful driver for their own policies and systems, as they see their efforts as being of a higher-quality standard (MNA, 2017).

Nestlé suggests a further similarity with Unilever in products compliant with a sourcing standard delivering a level of credibility with consumers, and in such cases they see clients and retailers creating requirements for specific products to comply with particulars standards.

When explicitly asked where the motivation and recognition for joining particular certification standards comes from, MNA suggests the main pressure comes from consumers and from commitments to retailers and to its clients. Nestlé does not see the motivation to deliver certified products coming from a risk perspective, or from a brand differentiation aspect, and even the source of the demand (consumers) leaves a lot to be desired in understanding exactly why their own clients see the value in having products being certified to a standard. MNA states:

"when we are having conversations with our clients, and again we dive into the details of the standards and what we do etc., and I feel that we lose them. But I don't believe it is being made because of risk, I don't think it's being made even to differentiate, I think it is being made because it is being asked for by consumers" (MNA, 2017).

Citing an example of an established supply contract Nestlé has, MNA states:

"some of our retailers and clients may say 'we don't want the Nestlé responsibly-sourced product volume, we want UTZ-certified coffee to sell in our KLM flights', for example. So for these clients, and for certain markets, or where retailers want a certain specific type of certification, we will definitely buy and deliver products with this particular type of certification" (MNA, 2017).

The RSPO sees motivations to join within their membership varying depending on what type or size producer that they are. The RSPO differentiates between large plantation owners and smallholders in terms of understanding motivations, however also recognising that the latter is quite a broad church, such as those known as 'scheme owners' that are operating under the supervision of larger companies, and then small-scale independent smallholders. In terms of smallholders, MRS suggests there are some that recognise the financial and economic benefits that exist from RSPO membership, citing examples such as partnerships where market access is enabled through RSPO certification and this entices them to push towards certification, with some further cases where:

"the mere fact of pride of getting certification and doing things right pushes smallholders to do this and the bottom line is not really the biggest factor. It depends I believe there are many different reasons and motivation" (MRS, 2017).

As far as how RA resonates in terms of recognition with farmers at the end of the supply chain, SAN sees that this depends on the operational size of the grower; the larger the farmer, the more that having RA standard labelling will be recognised as a positive. However, this can depend as much on the extent that the farmers participate in the overall process. MRA states:

"...where farmers are medium-to-large sized operations the SAN resonates very well, for smaller farmers it will depend on how well they are organised, if they really understand why they are doing things, or

they aspire to doing things... in cases where the SAN resonates very well, then they will work towards the standard, and they will consult with and have an opportunity to contribute, and they will like what is coming out of being in the standard, but other parts, this is not so necessarily the case" (MRA, 2017).

Standard providers recognise vulnerability to changing market and governance landscape

The RSPO and RA/SAN understand that inflexible, one-size-fits-all approaches to regional and jurisdictional differences are insufficient to adequately integrating the needs of all suppliers and community stakeholders, however the SAN is considerably more developed in adapting requirements to local requirements. Governmental and national legislative restrictions and/or considerations is seen as a key cause of problems for standards that fill 'gaps' between global corporate activity, national conditionals and local communities. Additionally, pressure from NGOs and best-practice companies has emerged in relation to high-profile campaigns and reactions to governance issues within certification standards, particularly the RSPO, with demands for participants to be able to differentiate themselves from laggard participants, under the threat of losing credibility across a range of participating and affected stakeholders.

The RSPO system at inception was a business-to-business model due to the view by the initial members that this was an impact / expediency motivational approach, MRS calling it "the quickest way to have the biggest impact in the smallest time" (MRS, 2017). RSPO highlights developments to meet such changes, where previously certifications were created "to fill the gap between set [fixed] legislation, and the expectations for companies to have a social license to operate were also largely set [fixed]....and that gap was to be filled by the market if it was to be done fast" (MRS, 2017). However, with sustainable palm oil in 2017 representing over 20% of the global marker, RSPO has to work with governments to proceed further in order to combat issues such as deforestation, which is an example that the RSPO uses as a means of reflecting how looking at an issue in isolation is problematic unless there is a significant incentivising approach at government level for grower stakeholders. RSPO has been developing jurisdictional certification, with the RSPO as facilitator in the discussion, and is developing 4 pilot processes with (i) SABA (one of the state governments in Malaysia) which pledges to have all of its production certified

by 2025, (ii) in Borneo, (iii) South Sumatra in Indonesia, and (iv) the Government of Ecuador which pledged in 2016 to move its palm oil production to be sustainable.

In addition, significant pressure has recently been placed on the RSPO resulting from public criticism from NGOs and standard participants such as Unilever, and in response to movements by best practice organisations to develop rival associations.

The process taken by Unilever was to push within the RSPO standard for the development of an evolution of the RSPO standard, 'RSPO Next', that allows differentiation with progressive levels of RSPO membership. This is not just to allow differentiation, but also to help fulfil market-transformation commitments within its own sustainable sourcing programmes. However, this push with standards emerges from within its own organisational review process.

SAN also emphasises the importance of remaining flexible to local adaptation versions of the standard in the implementation phase, recognising where standard developments are in conflict with governance, such as local legislation. SAN emphasises the need for standards to allow for improvement and progression, and like the RSPO the SAN (and therefore the Rainforest Alliance) has created a levels approach, an A, B and C classification system to accommodate both new entrants and best-practice leaders, with an emphasis on such a process encouraging a 'race to the top', as stated by MRA, combining healthy competition amongst participants with the possibility for differentiation, and for farmers who have worked through the system to differentiate themselves to buyers. This is intended to allow greater engagement with the standard by supply chain stakeholders, especially for price-competitive farmers and growers, and to allow farmers to show that his or her neighbour is at level C, whereas they are at level B, and maybe then they can push the buyer up (MRA interview, 2017).

Such developments are intended to open possibilities for farmers to see a more tangible economic benefit through this differentiation. However, this does not detract from the previous statement that it is difficult to identify where farmers are recognising the standard as having clear and tangible economic benefits to smallholder farmers.

Criticism of RSPO in media has generated reputational risk for participants

The recent NGO-driven controversies surrounding the RSPO have highlighted how association with certification standards can create reputational damage by association, in instances where the standards are suffering from potential governance and reputational issues. Investigations by media agencies sources such as *The Guardian* in the UK, and reports by the social justice and human rights advocacy organisation NGO Amnesty International, implicated large corporate manufacturing buyers of RSPO-certified palm oil, including Unilever and Nestlé, of causing deforestation and employing child labour in their supply chains, courtesy of alleged chain-of-custody failures in the Singaporean palm oil trading giant Wilmar International, a fellow RSPO member.

The Guardian investigation (Guardian, 2017), supported by the Rainforest Action Network (RAN), issued a highly-critical statement regarding the practices of the PT Agra Bumi Niaga (ABN) logging company, which delivers to a processing mill owned by PT Ensem Sawita (ES), which then sells the palm oil on to Wilmar International, a palm oil trader and client of Unilever and Nestlé. The ABN organisation was causing thousands of hectares of illegal deforestation in northern Sumatra's last remaining rainforest tract that formed a habitat shared by elephants, orangutans, rhinos, and tigers together in one ecosystem. Unilever responded to *The Guardian* investigation and RAN allegations, and admitted that it had indirectly bought palm oil from PT ABN through its suppliers, Wilmar and Musim Mas, and said that it had requested a response and an action plan from them.

The Amnesty report (Amnesty International, 2016) investigated palm oil plantations in Indonesia run by Wilmar International, tracing palm oil to nine global firms including Unilever and Nestlé, including allegations of human rights abuses in Indonesia, with children as young as eight working in hazardous conditions, and workers suffering severe injuries from the toxic chemical Paraquat being used in the plantations despite being banned in the EU and by Wilmar itself. Amnesty International's investigator stated that "companies are turning a blind eye to exploitation of workers in their supply chain. Despite promising customers that there will be no exploitation in their palm oil supply chains, big brands continue to profit from appalling abuses. These findings will shock any consumer who thinks they are making ethical choices in the supermarket when they buy products that claim to use sustainable palm oil". The Amnesty report stated that Wilmar acknowledged that there were ongoing labour issues in its operations, however despite the alleged abuses,

three of the five palm growers that Amnesty International investigated in Indonesia were certified as producing sustainable palm oil under the Roundtable on Sustainable Palm Oil.

Unilever and Nestlé responded to the Amnesty investigation; however, the allegations demonstrated how such certification standards, while intended to be reputational risk protectors and positive collaborative initiatives, can become sources of risks and diminished credibility for the company when there is separation or distance between the company, and its supply chain and chain-of-custody assurance oversight.

The environmental NGO Greenpeace has been heavily critical of the RSPO over the last few years. Greenpeace released a report² criticising the RSPO certification process, where a chain of custody issues allows uncertified PO to mix with certified oil and combine in products with RSPO certification.

"The RSPO has recently reviewed its Principles and Criteria. It now includes improved standards on social issues, but has failed to address the crucial questions of deforestation and GHG emissions, leading to criticism both from consumer companies and NGOs" (Greenpeace, 2013, p.5).

The RSPO seems reluctant to act on blatant breaches of its standards... Palm oil producer Duta Palma has a long history of deforestation, community conflict, illegality, and noncompliance with RSPO regulations..." (Greenpeace, 2013, p.2).

"In 2009, a coalition of village heads and NGOs brought a formal RSPO complaint against activities of two Duta Palma subsidiaries including clearance of HCV forests and the use of fire to clear land. In 2011, the RSPO briefly suspended Duta Palma for administrative breaches, but failed to address complaints. It took nearly six years from the initial criticisms and a new report by Greenpeace in April 2013 before the RSPO finally expelled Duta Palma" (Greenpeace, 2013, p.3).

The Roundtable on Sustainable Palm Oil's RSPO Next allows manufacturers to demonstrate a tougher stance on deforestation, forest fires and peatland clearance. However, it has been criticised by Greenpeace which says many

progressive companies and governments have already gone further. Greenpeace Forest campaigner (Indonesia) Ratri Kusumohartono (Greenpeace, 2016):

"Established in 2013, the Palm Oil Innovation Group (http://poig.org/) of progressive palm companies — supported by Greenpeace together with other NGOs — has developed a benchmark for socially and environmentally responsible palm oil production, including higher standards for many areas including human rights and labour. Critically, independent third-party verification of standard is a requirement...

...the Roundtable on Sustainable Palm Oil is struggling to respond to criticism that it fails to provide an answer to continuing forest destruction for palm oil. It seems the RSPO has recognised the urgent need for the sort of commitments made by the Palm Oil Innovation Group (POIG). Sadly, instead of adopting the POIG charter wholesale, it has created a weak new standard and made it purely optional for RSPO membership." (Greenpeace, 2016).

The Rainforest Alliance certification has received some negative press over the last few years, however, for context the overall weight of the criticism that the standard, and criticism levelled at the SAN, is minimal in comparison with that levelled against the RSPO. One prominent occasion has been identified:

A BBC investigation³ in 2015 found dangerous and degrading living and working conditions on tea estates in the Assam region of India. Allegations included evidence of child labour and poor housing conditions. All of the estates the BBC visited had been certified by the Rainforest Alliance and awarded its frog seal, displayed on the packaging of many leading tea brands (BBC, 2015).

Rainforest Alliance acknowledged issues with the certification process and its director Edward Millard said in a media report that, "clearly an auditing process, because it rests on an annual inspection, is not going to be perfect".

The RA admitted housing was a "systemic problem" in Assam and said "a really serious and long term upgrading of housing conditions" was necessary. If its auditors had found any evidence of child labour or workers using pesticides without protective equipment, he told the BBC, then the plantations in question

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³ http://www.bbc.co.uk/news/world-asia-india-34173532

would have been decertified. The RA/SAN organisation released a 'long' statement in response to the allegations, with an extensive outline of the local and regional conditions, plus the remedial actions that the organisation had taken.

Most notably, in response to this allegation, the RA/SAN made a statement confirming its commitment to working with the regions in question regarding the housing issue:

"Inadequate housing on tea estates is a serious issue in the region, and the Rainforest Alliance is working with the tea industry and other stakeholders to make measurable improvements. The certification standard requirement on housing is expected to be updated in a revised SAN standard that will be released in January 2016" (SAN to BBC, 2016).

The combination of the revisions, detail of local conditions and commitment to embedded engagement with local representatives is reflective of the nature of the RA/SAN organisation and its method of working closely with operations to improve standards.

5.4.4 Engagement with Stakeholders

Company approaches vary relative to the strength of their commitment to creating engagement channels with local communities, and particularly those in developing countries.

This varies in terms of the number of relationships and partnerships that a company can have, and varies in terms of the scope of coverage in terms of which products are covered. None of the best practice companies use the certification standards of interest as replacements for having their own community engagement channels.

Best practice companies are creating bi-lateral relationships and collaborations with organisations beyond the major environmental NGOs such as Greenpeace and WWF on a series of issues. However, the companies often stress that their relationships with large NGOs are invariably built up across a series of smaller

initiatives, across a wide range of products, and across a number of jurisdictions.

While some companies identify the supplier relationship as being the key engagement channel, with the vast majority of community impacts coming through the respective engagement channels with other companies (Unilever), this is in fact less the case for Nestlé (recognising its general weakness in this area), and Danone somewhere in the middle. For Danone and Nestlé, select supplier engagement relationships effectively represents the sum-total of the approach to supplier engagement, and this is also reflected by Nestlé in its consultation process with suppliers over potential commitment to certification standards.

Divergent themes occur within the standards approach, reflective of the differing governance structures between the RSPO and Rainforest Alliance.

Engagement with suppliers

To accommodate the concerns of societal stakeholders in the supply chain located in developing countries in the overall company strategy, Unilever has developed numerous mechanisms. For supply chain partners, its 'Partner To Win' programme involves 200 of its key suppliers who provide Unilever with large volumes of raw materials. For these suppliers, Unilever organises regional and global events. Additionally, the company has developed a communications channel called Supply.net, accessible for Unilever suppliers, through which it keeps suppliers up-to-date on developments in standards and strategy, business partner codes, responsible sourcing codes etc.

Committing to external standards plays a role in Unilever's outreach and commitments to suppliers, however it recognises there are limitations within standards commitments. In particular, committing to certification standards as part of global sourcing and procurement commitments has scale implications, where standards that were designed as a means of fostering business-to-business (B2B) relationships become compromised. Up to a particular size of business relationship level, B2B arrangements with NGO input is considered a viable arrangement, however there is a limitation to what can be reached with sustainability certification standards. MU states:

"if you look at the stakeholder platforms that create the commodity standards, there is no government at all in these, and so it is an example of business-to-business agreements, with overview and oversight of the NGO partners in these networks, but there are a number of issues that you simply cannot fix at the business to business level" (MU, 2017).

Recognising limitations that external certification standards can have, either in the breadth of products or regions covered, is important when incorporating certification standards within its wider global sourcing and procurement commitments. However, the governance structures will dictate the extent that such commitments can and will be used to fill in the governance gaps that occur in particular regions.

Business-to-business based standards, such as the Rainforest Alliance / SAN approach, plus its tea suppliers KTE in Kenya, and indeed the larger governance structure that the RSPO offers in particular jurisdictions, are prevalent in the Unilever approach, however it never uses standards as a replacement for a supplier engagement channel due to the belief that it has established a greater understanding of local supplier issues and how they relate to their own operations, more so than any standard could achieve:

"we actively pursue our suppliers to participate in programmes. And that is anyone from our tea suppliers in Kenya KTE (Kericho Tea Estates), to Sime Darby, IOI, Unimas in palm oil, or Cargill in soy" (MU, 2017).

Having a mapped compatibility with a standard does not, and would not, replace having an engagement programme with its own suppliers in a particular product area, regardless of how robust it considers a standard, or how positive the relationship is that it has with the third-party governance and assurance structure. This is not necessarily a trust issue, it is an acknowledgement that a company such as Unilever, with its broad fostering of business relationships, will often have a better understanding of particular raw material issues in certain areas than a standard, such as the Rainforest Alliance. MU emphasises the 'engagement journey in this regard:

"When we signed a partnership with the RA in 2006, that's Lipton and another brand. RA had never worked in tea and RA had never worked outside South America. And so what we signed with them was that we would introduce them to the world of tea, and to producers in Africa, in Asia, in Argentina, etc and that is what we have done. And so that

journey that we have gone through is very much, and has been very much, an engagement journey" (MU, 2017).

Unilever states that cocoa supports an estimated 40 million people worldwide, including 5.5 million farmers, and for many cocoa farmers, lack of access to training and other services result in poor yields, which in turn can lead to farmers switching crop or leaving farming altogether. This is particularly acute in the next generation of cocoa farmers who often do not see cocoa as a viable livelihood. In response to this, MU states that

"Certification is one way of helping to improve the livelihoods of smallholders and it can play an important role in capacity building in agricultural supply chains. We are working with our suppliers to drive interventions in support of smallholder livelihoods" (MU, 2017).

Danone also emphasises its reliance on strong bilateral arrangements with its suppliers as a means of understanding issues that may be occurring in developing countries, and emphasises how collaborative supplier platforms, such as the SAI platform (which it co-established with Unilever in a precompetitive environment) provide key engagement channels. MD states:

"...we co-funded the SAI initiative with Unilever, so this is where we are very much involved with fruits and nuts (SAI Fruits and Nuts initiative), because there are not official standards in that area, and so we basically use the industry approach to try to find out the right ways of working, and to mitigate the risks we find in our supply chain" (MD, 2017).

Danone also maintains an advisory board to advise on these issues. Rather than specific smaller NGOs at the local level, it is the larger NGOs that provide the main perspective for Danone in this mechanism.

At the corporate management level the company has set-up a Key Opinion Leaders (KOL) Board, covering the 4 different topics that underpin the Danone Nature 2020 policy, covering climate change, sustainable agriculture and water, with the key external figures providing insight making specific decisions, to consult with them on some specific issues and strategies.

"... We meet with NGOs to know what are the expectations, to know what the industry is doing so that if we can team-up with other initiatives... we believe it is key to actually understanding the way we are running, to understand the local aspects in general, and then sometimes to implement, because NGOs are powerful stakeholders that know the local context and can help us to design and implement accurate and relevant projects for the region" (MD, 2017).

Danone Manager in interview explains that its own policy development mechanism process is an extended, organic process and reiterates that it certainly includes consultation with its supply chain. The policy-creation process includes a review of its positioning within the market for given products, and the views of external stakeholders, and especially its supply chain before being signed-off by senior management.

"They are ultimately a part of the solution, so it is important that we work together. We are all in the same (supply) chain, and are all pulling in the same direction, and so it is essential that we communicate effectively so that we get to where we want to go. Otherwise the different parts of the chain will go in different directions, so we must put all of our efforts into ensuring that we go in the same direction" (MD, 2017).

Nestlé Manager A admits in interview that there is a bias within their supplier and community engagement generally towards international NGOs as providing the proxy for engagement at the local level in developing countries. Nestlé Manager A raises concerns over the use of engagement with direct suppliers as effective drivers of market transformation within their own supply chains. With its responsible sourcing policy approach, it states that it directly engages with only 100 suppliers from the total of 28,000 suppliers that it uses, and raises concerns over the desire for suppliers to go beyond legal minimums or established industry norms, meaning that the onus is on Nestlé to place very demanding requirements on their suppliers. Citing the intensive nature of the dairy farming industry, or the potential for impact of high-conservation value forestry in the paper and packaging industry:

"...most of our suppliers when we approach them with our requirements, we will say 'these are not the requirements in our industry', or 'this is not required by law', we understand that [particular best-practice initiatives/best-practice requirements] that have a positive impact on production, but for the time being this is not absolutely required" (MNA, 2017).

Supplier accountability and support is of interest here due to the two-way nature of the relationship, with Nestlé stating that it:

"...expects its suppliers to take ownership and leadership in developing and implementing continuous improvement measures against all aspects of the RSG. As appropriate, Nestlé will provide support to suppliers that are not yet able to comply with all aspects of the RSG, but are committed to becoming compliant over time and demonstrate continuous and tangible progress" (p.3).

Engagement with Communities

Unilever emphasises that its relationship with organisations such as the Rainforest Alliance / SAN are based on the fact that the organisation has a comprehensive approach to engaging with smallholder farmers in a number of geographical regions in developing countries and across a multitude of products, in support of its Sustainable Agriculture Code (SAC). The SAC is applicable to (i) all Unilever suppliers of agricultural goods, (ii) all farmers producing raw materials for Unilever, and (iii) all contractors working on farms. Both (i) and (ii) are responsible for ensuring implementation of the SAC at each given site, and community-focussed elements in the SAC with relevance to developing countries relate to building positive relationships including informing communities of planned activities and effective community complaints management.

In terms of including local communities in the review process, Unilever Manager states Unilever does not use the financial benefits to suppliers and communities as a motivating force for stakeholders to continue support for ongoing participation, in terms of how the standard contributes to communities, further questioning the value that communities see in standard-commitments, MU stating:

"I think it's difficult to quantify what benefit a standard brings to local communities" (MU, 2017).

Danone was questioned about the extent of accommodating the concerns of its non-economic, non-operational stakeholders, not just in terms of having engagement channels with them, but more importantly engaging with them before or during the wider collaborative efforts for better sustainable sourcing initiatives within the areas Danone sources products. MD in interview cited examples of initiatives with large scale NGOs and Development agencies on specific projects including Oxfam, Greenpeace and GIZ in Germany as main points of reference.

"We work with Oxfam in the establishment of a project we are starting in Morocco for strawberries. We also worked with the GIZ (the development agency from Germany) on this project. So this is one project regarding strawberries, but when discussing Palm Oil, we have been working with TFT (The Forest Trust)... we also discussed with Greenpeace on that matter [Palm oil]" (MD, 2017).

Danone's sourcing strategy relies on the knowledge of local stakeholders to help adopt the best solutions and produce sustainable foods. The agriculture position emphasises a fully-integrated, linked-up supply chain with all stakeholders included, in a pre-competitive approach for market transformation:

"[we] must set aside competition and work together for a common understanding and framework, and to find solutions. Reconciling different points of view, working together, forming partnerships and encouraging co-creation are the most effective ways to move toward a more sustainable food system that will benefit everyone" (p.4).

Nestlé's method for capturing feedback and/or input on the views of the local communities affected by its Responsible Sourcing policy is through its partnerships with international NGOs. The company cites its partner relationship with the French NGO Verite, where it uses the international network of local teams in key sourcing countries of interest including Thailand, Myanmar and Indonesia, with a view for their staff to engage with the local cooperatives and collective companies or associations that exist in the villages or cities that Nestlé sources from. Nestlé defends this approach to external stakeholder engagement by emphasising how this elevates its contacts with civil society, NGOs and clients, rather than purely engaging directly with its suppliers as proxies for community representatives.

Nestlé acknowledges a bias towards its use of international NGOs, despite there being concerns that such organisations may not be sufficiently connected at the grass-roots level or to communities due to their structure. Of the 25 partnerships

that the company previously explained it has, there is primarily a bias towards the international NGOs (20) compared with 5 that represent partnerships (5) in only certain countries that it sources from. Nestlé recognises that it is developing its approach "from a very low interaction and engagement with civil society to where we are today" and is "far from being exhaustive and perfect" (MNA, 2017).

Engagement and relationships with NGOs

Unilever Manager A states that the Company does not employ a top-down strategy for stakeholder engagements, and has instead used an organic approach to developing a series of informal relationships with major NGOs. Unilever uses its relationship with the WWF as an example of this, explaining how it creates multiple contact points with NGOs in developing countries on issue and product bases:

"...approximately 10 years ago I tried to get an overview of where we were in the world with the WWF and I found 22 projects in 20 different countries where Unilever and WWF had worked together, without any formal partnership or agreement ever in place, simply because the people there, the people in the location had found an alignment of agendas and had decided to work together" (MU, 2017).

Danone largely works on a bilateral basis relating to specific sourcing requirements, citing initiatives with large scale NGOs and Development agencies on specific projects including Oxfam, Greenpeace and GIZ in Germany.

Nestlé admit in the interview that there is a bias within their supplier and community engagement generally towards international NGOs providing the proxy for engagement at the local level in developing countries. Nestlé's 2020 plan is less comprehensive in terms of being underpinned by a supplier requirement, and concedes that its method for capturing feedback and/or input on the views of the local communities affected by its Responsible Sourcing policy is not only through its partnerships with international NGOs.

Engagement with consumers

This engagement focus represents an interesting divergence in how consumers are considered to affect the motivations of companies to source based on specific areas of certification. Unilever largely does not place consumer preferences as an influencing factor at the granular level of certification-compliant sourcing. In terms of perceived value in consulting with consumers prior to committing to a standard, Unilever's experience is that very few of these certification standards are recognised at a consumer level, consumers are not interested in this topic, and consequently they are not involved.

Danone make a specific point about how procurement has no influence over Danone's purchasing decisions, and does not consult with consumers on the issue of whether to commit to specific standards. Its structure is such that its procurement/purchasing and marketing teams are separate in terms of decision-making, and do not collaborate on such issues prior to creating a commitment policy to certain standards. The purchasing team covers the entire company's raw materials requirements, upon which the subsequent unit of food manufacturing is based, and whatever brands are being supported. Danone recognises that some product/brand/unit may need some traceable fruit, another unit may need sustainable cocoa etc..., however, the distinction on this subject is that communication between the Marketing and the Purchasing functions are not necessarily needed when it comes to sourcing and risk mitigation. MD states:

"So here in sourcing, we may implement some projects that are not requested or recognised by consumers. We just believe that they represent what we should do" (MD, 2017).

Additionally, Danone emphasises that there are regional sensitivities to what consumers may want in different regions, and this is on a product-by-product, country-by-country basis, and so the balancing of supply chain risk mitigation with brand enhancement / marketing is difficult to balance. MD states that due to the separation of the Marketing and Purchasing functions:

"...the connection that we are continuing to try to make about the needs from the brands and from our own risk mitigation actions, inevitably sometimes it will not go in the same direction" (MD, 2017).

Nestlé recognise a key role in the company fulfilling the needs of particular clients who produce products in line with a sourcing standard where the clients and retailers require certain products to be a particular standard (the UTZ-certified coffee for KLM airlines being an example) to satisfy the requirements of its end users. Nestlé's clarification on this point is that their Nestlé policies and commitment targets no longer include specific levels of sourcing in line with specific external standards.

Standard providers engagement approaches reflect the governance structure.

The Rainforest Alliance/SAN structure demonstrates an ability and suitability for effectively engaging smaller farmers in developing countries, as a result of its developed governance and engagement structure. The RSPO structure however has explained that as it has moved further away from a business-to-business model to a broader and larger organisation since inception, social and environmental NGOs have been used more commonly in the representation of local communities.

However, both organisations have also demonstrated a willingness to engage in the development of initiatives with regional organisations on a bilateral basis. The RSPO in particular has emphasised how its transparency auditing and assurance model, coupled with a transparent and accessible complaints mechanism, represents its inclusivity. The RSPO has been the subject of heavy criticism in the media regarding a failure to demonstrate a strong and credible presence in specific areas of concern, such as in Indonesia.

5.5 Summary

Table 31 below presents a summary of findings from the case studies.

Table 31- Case Study Findings

Perceptions of	• Quality engagement with the grass-roots level within the supply chains is a
Sources of	potential source of legitimacy, however for best-practice companies'
Legitimacy	participation in certification standards is not such a source.
	Companies see legitimacy primarily as a product of the level of trust that
	consumers have in their brands. Satisfying consumers is more likely a
	motivator to join than satisfying needs of suppliers and community

Motivations to join standards	 stakeholders. For certification standard providers, legitimacy emerges through the development of representative, participatory networks of stakeholder engagement, consensus building and intermediary outreach with stakeholders. Participation in collaborative initiatives allows best practice companies to support their own sustainable sourcing efforts externally, in particular through standards generating market transformation. However, degrees of commitments to standards can differ as transformation conflicts with reputational issues. Best-practice companies see the mitigation of reputational risk associated with agricultural supply chains as being an important driver for implementing external standards. Standards see themselves as a tool for mitigating potential down-side reputational risk issues, as do certification standard providers. Standard providers also see perceive themselves as off-the-shelf stakeholder engagement mechanism, effectively acting as a company proxy or replacement for developing their own standards. Standard providers recognise vulnerability to changing market and governance landscape, recognising the dynamic nature of standard participation relative to the external stakeholder pressures faced by companies.
Company engagement with stakeholders	 Company approaches vary relative to the strength of commitments to creating engagement channels with local communities, and particularly those in developing countries. None of the best practice companies use the certification standards of interest as replacements for having their own community engagement channels. Unilever states Rainforest Alliance / SAN relationship is based on the it having a comprehensive approach to engaging with smallholder farmers in developing countries. Danone and Nestle rely on global NGOs to a greater extent for developing country engagement than Unilever. Unilever does not place consumer preferences as an influencing factor for certification-compliant sourcing, however Nestle and (to a lesser extent) Danone do. Standard providers engagement approaches reflect the governance structure.

The case study findings contribute to answering research questions three and four, and consider the implications of the research findings for companies deciding whether or not committing to specific biodiversity-related certification standards increase legitimacy with stakeholders at operational, supply chain or community level.

Key themes emerge regarding how the use of externally-certified certification standards are viewed from the company perspective, the ways in which these are considered within their developing country-based stakeholder groups, and the extent to which the participating best-practice companies have included their stakeholder groups within their supply chain and community engagement mechanisms.

Complementary perceptions exist of certification standards as a shield against reputational risk, and both participating standard-providers consider themselves as reputational risk shields. Standards are useful tools for driving market transformation, however degrees of commitments to standards by participants can differ as transformation conflicts with reputational issues. Standards are not automatically seen as a stakeholder engagement or policy alternative, but the Rainforest Alliance is considered an exception due to the nature of its bottom-up governance structure.

Quality engagement with the grass-roots level within the supply chains is a source of legitimacy. However, participating in certification standards without a separate, complementary relationship with suppliers is considered by companies an inadequate route to attaining legitimacy. This is consistent with positions in the literature review, where companies considered most successful in preserving stakeholder legitimacy create multiple structural and contextual arrangements, in order to address the numerous and heterogeneous sustainability-related challenges faced. (Scherer et al, 2013). Best-practice perceptions of 'laggard' companies were also consistent with the review, where such laggards would isomorphically-adapt to external stakeholder expectations (or manipulating those expectations) while maintaining a 'business-as-usual' approach to ongoing operations (Scherer, 2013).

Concerns in the case study were raised by both companies and standards over the use of western-based NGOs (such as Greenpeace and the WWF) as effective participants. The literature review criticized the use of global organizations and NGOs as proxies for developing country interests, due to such organisations being too remote from local realities (Dahl, 1999), with a challenge to legitimacy being the ineffective integration of stakeholder interests into the design and/or the implementation stages of voluntary standards (Gilbert, Rasche and Waddock, 2010). The literature review suggested that, rather than imposing generic standards, it was worthwhile for lead firms and international NGOs to identify and employ effective local problem-solving strategies (Vellema, 2015).

Such an approach would result in a two-stage dynamic of embedding; at the international level, multinational enterprises (MNEs) partner with NGOs to work within the global value chains and in consumer markets, while also responding to ethical consumer preferences. Securing legitimacy requires standards to be both inclusive and also to be designed to ensure free-and-equal discourses among participants (Bernstein, 2005).

The case study also captures companies viewing consumers and end-users as key sources of legitimacy and of the 'social license to operate'. with consumer satisfaction as a primary motivation for standard-participation, rather than satisfying suppliers and community stakeholders. For standard providers, stakeholder legitimacy is through maximizing inclusiveness across all stakeholder groups, however the emergence of competing sourcing in response to reputational risk concerns demonstrates the pressure that providers such as the RSPO are under. The literature suggested that legitimacy in the context of transnational governance was built on a foundation of dynamic deliberation and communication, and the fostering of understanding amongst all stakeholders, both public and private, with CSR discourse requiring a basis of 'moral legitimacy', input-focussed and discursive in nature (Palazzo et al, 2006).

The following chapter consolidates the findings of Chapters 4 and 5, providing an overall analysis in relation to the research questions, and the project's contribution to knowledge relating to the content summarised in the literature review.

Chapter Six

6 Analysis, Conclusions and Policy Recommendations for Business

The innovative multi-disciplinary approach adopted by this research project has led to findings that in the aggregate represent a significant contribution to knowledge in the research area of CSR and sustainable business management. The research combines the EMSR composite index design with a quantitative analysis and case study analysis of the global food manufacturing sector.

The EMSR composite index, designed to be consistent with OECD best-practice guidelines, forms the basis for analysing both the extent that decoupling of policy and practice occurs in the area of sustainable food sourcing. Additionally, it supports the analysis of whether certification standard participation has a significant relationship with the presence of internal management systems and stakeholder engagement channels. The analysis identifies no relationship that would assert a wealth bias, or a developed country bias, related to companies committing to external certification standards in the food manufacturing sector. However, the statistically significant relationship is identified between high EMSR Index scores and the quantity of presence of subsidiaries in developing countries, challenging the view of a wealth bias in the literature review. The quantitative analysis identifies no evidence of decoupling between company internal management systems and engagement channels, and commitments to external certification standards.

The ESMR index also allows for the identification of best-practice companies, supports the selection of case study subjects, and informs the topic guide for the interview stage for the companies and the certification standard providers. The case study generally does not support positions identified in the literature review that externally-recognised commitments are perceived as a source of legitimacy by companies, relative to its supply chain group of stakeholders. While standards are particularly recognised as a key mechanism for mitigating reputational risk, legitimacy-specific relevance is observed within the end-use and consumer group of stakeholders. Issues are raised about the level of stakeholders in developing countries in the standard-design phase. In particular, the RSPO leans heavily on western-based NGOs as proxies for the representation of local community interests in the design phase. Combined with

the innovative approach to designing the research methodology and approach, the thesis provides a platform for further research opportunities to enhance knowledge of approaches to sustainable sourcing in the food manufacturing industry. This is particularly the case when considering further the dynamic nature of decoupling by standard implementers, between external standards and internal systems.

6.1 Analysis and Readdressing the Research Questions

Sub-question 1: Wealth Bias

The literature review identifies claims of bias towards large companies based in developed countries being able to implement comprehensive internal management systems, and this asserts a potential wealth 'bias' towards companies in developed countries establishing comprehensive internal management systems.

Reflecting this, research question 1 asks about the effects of company size, operational base and subsidiary location on the likelihood of a company having quality internal environmental management systems and environmentally-focussed stakeholder engagement channels.

The EMSR Index composite construction represents a measure of the quality of these channels, and the consistency of the construction is supported by the exploratory factor analysis of the Index nested structure. The findings support the null hypothesis that claims that no wealth bias exists, the measures of companies being larger company sizes by market capitalisation, or being based in 'richer' companies based on the location of the parent company. These measures do not demonstrate statistically significant relationships with the EMSR Index composite index. Higher composite index scores represent higher-quality stakeholder engagement and management system mechanisms. This finding rejects the position in the literature review by Gilbert (2011) that such a bias may exist.

Sub-question 2: Decoupling

The review captures the issue of 'decoupling' and the ongoing debate over the nature of policies and practices mismatching. In particular, the extent that

'policy-process' decoupling is the defining representation of the 'decoupling' phenomenon, and how this translates to certification standards in the food sector.

Research question 2 subsequently asks about the relationship between food manufacturing companies committing to biodiversity-related certification standards, and the quality of internal environmental management systems and environmentally-focussed stakeholder engagement channels.

As explained in the Chapter Four summary, based on the analysis of the EMSR Composite Index model, there was a weak and positive statistically-significant relationship between a company having commitments to certification standards, and demonstrating evidence of internal management systems and engagement channels with stakeholders, and there was a weak relationship between such commitments and the size or location of the parent company. Consequently, the analysis did not support the null hypothesis that claims no relationship between poor quality systems and engagement channels, and evidence of commitment to standards.

However, the logistical regression model in Table 19 explained 25% (Nagelkerke R²) of the variance in commitments to certification standards, and correctly classified 76.8% of the observations or cases in the database. Increasing numbers of subsidiaries in developing countries was associated with an increase in the likelihood of companies having commitments to externally-verified standards.

These findings were subsequently further used in the case study to address subquestions 3 and 4, the relationship between the utilization of certification standards and presence in developing countries informing the case studies for best-practice companies. The case study captures the motivations for using externally-recognised certification standards in supply chains, and the extent to which such standards were recognised for their capacity to generate legitimacy amongst its developing country-based supply chains and community stakeholders.

Sub-question 3: Legitimacy and company utilization of standards

The third research sub-question relates to the approach of best-practice companies, asking whether committing to specific biodiversity-related

certification standards increase legitimacy with stakeholders. The review identifies varying interpretations of securing legitimacy within CSR-related discourse, comparing the moral, input-focussed, discursive interpretation of legitimacy to interpretations that are instrumental and output-focussed, and XYZ. The review also captures discussions relating to the use of large global NGOs by companies and standards, and the impact of this on local-level suppliers and community stakeholders, and the contributions relating to the legitimization challenges that private governance initiatives such as the RSPO face.

The methodology results in the selection of Unilever, Danone and Nestlé as the focus of attention, considering the reasons for a best-practice company to choose to commit to an external certification process; what interests and motivations are observed to be at the company level, and the mechanisms supporting these decisions.

Sustainability and Stakeholder Collaboration represent opportunities for differentiation

The decision-making of best-practice companies is related to company strategies embedding leadership in the area of sustainable sourcing within it, as a means to achieving market transformation in the agricultural products they source. A common factor was the perception that this practice will situate its products as both a key source of competitive advantage, and also a method of product differentiation.

All three best-practice companies that form the focus of this study implemented a version of global 'strategic corporate social responsibility' similar to the Lasserre explanation (2007), embedding corporate responsibility into their global ambition and positioning, and consequently in their global business strategy. Best practice companies were likely to interpret their own initiatives, policies and programmes as being different to their decisions to commit to externally certified standards; the former (own policies initiatives) were considered to be more likely to be closely linked to a combination of operational risk, and 'opportunity' in the form of (i) value creation in its branding, and (ii) increased long-run margin through more robust supply chain management and natural capital management.

Standards are useful tools for driving market transformation

A key feature amongst these companies is an emphasis on the importance of collaborative participation in sector-wide and market-wide sustainable sourcing certification initiatives. The motivation is noted as being more than a simple instrumental stakeholder approach or indeed a normative stakeholder approach. The motivations for companies joining standards and engaging with stakeholders are complex, and go beyond a simple demonstration of economic benefits.

Standard recognition and participation interest amongst supplier and community stakeholders was not likely to be perceived as a motivation to join. However, on joining the standard, mechanisms were likely to be seen as a method for communicating the benefits of participation, and enhancing transparency, within upstream business operations and supply-chain management.

Consumers tended to be recognised as key influencing factors in participation in standards, in terms of how participation could enhance the overall value to a product. However, there was little evidence amongst 'best practice' companies of consumer participation in standards.

Evidence was found that best practice companies took an instrumental approach to participation in standards. However, none of the companies admitted to or identified a direct financial benefit from signing up to any of the standards, or to the creation of a tangible financial benefit from the associations.

When asked about the motivations of 'laggard' companies participation, best practice companies identified a likely reputational shield effect / value that came with joining recognised standards.

Standards are not considered by implementers as a source of legitimacy

When considering sources of legitimacy, the research design considers where the motivations to join certification standards emanates from, in addition to how companies prioritise these interests and motivations in their decision-making, particularly where interests conflict between different stakeholders.

Best practice companies are not likely to use sustainable sourcing standards generally as templates or proxies for their own initiatives, having a much clearer view of their own supply chain engagement channels in terms of what are considered appropriate levels of environment-related performance. The demands of their own initiatives were also likely to be at a higher level

performance-wise that any relevant externally-recognised standards in a particular area of raw materials sourcing.

Bespoke policy development processes developed by those companies, or in bilateral association with NGOs and communities, are likely to be in-house, with a nuanced specificity to operations that external standards did not have. However, for these companies, conflicts are rare due to existing engagement and policies representing a level of transformation that tend to exceed those of the certification standards.

Furthermore, best practice companies are perceived to be likely to have different views over how certification standards could enhance legitimacy within local communities in developing countries where they have their supply chains. Unilever in particular highlighted how the grass-roots, close-collaboration approach of the RA/SAN was considered to be better-equipped to enhance credibility within the communities they operated in, due to the collaborative, engagement-heavy approach the SAN takes to applying their standards.

Company engagement with its stakeholders relating to ongoing participation in certification standards tends to be largely focussed on stakeholders within the supply chain (suppliers, buyers, growers), with little in the way of engagement with community stakeholders specifically. In terms of motivation for engaging, there is evidence of divergence amongst 'best practice' companies also relating to ongoing participation in standards when there are potential reputational issues associated with a standard.

While there is evidence of normative elements to working collaboratively with competitors in a pre-competitive space, companies are sensitive to distancing from a reputational tool, should that tool itself become a source of reputational risk. Nonetheless, there is much evidence of a high level of pre-competitive collaboration that occurs between best-practice companies in the food manufacturing industry, in terms of supplier management, and sustainable sourcing initiatives aimed at market transformation.

Specifically relating to engagement with communities, approaches and experience can vary from company to company, and is considered to be largely based on the strength of the company's legacy of commitment to creating

engagement feedback channels with local communities in developing countries. Where companies such as Unilever tended to have a broad approach to ensuring supplier compliance with its sustainability agenda, Nestlé, and to an extent Danone, have applied a materiality risk approach that tended to focus on ensuring engagement with the largest suppliers and main raw materials. Major international NGOs are likely to represent key stakeholders with regards to developing countries, however, once again the engagement channels that best practice companies cultivate tend to have a much stronger linkage to its supply chain environment, and the smaller the supplier, the more representative such stakeholders tend to be to their local environ.

Sub-question 4: Certification standard providers and legitimacy

The fourth research sub-question considers how standards conceptualise and recognise the need for establishing legitimacy within the communities that they operate (such as recognising the need to establish the theoretical 'license to operate').

There are complementary company and standard-provider perceptions of certification standards, as a shield against reputational risk. Those who design standards consider reputational risk mitigation to be the defining motivation for the joining process, so that the standard is considered effective and credible in the eyes of its audience.

Standard providers tend to understand that the collective benefit of sourcing based along an externally recognised standard had clear reputational risk-mitigation benefits as a potential off-the-shelf stakeholder engagement tool, and also as a means of instantly enabling participants to make significant sustainability claims. However, when corporate institutions were observed working through the process of sourcing in-line with their standard, the latter element of 'making sustainability claims' tended not to be observed.

Standard providers tended to recognise that they were also subject to reputational risk themselves due to laggard or late-joining companies failing to go beyond the initial 'reputational-risk' element, rather than making use of the standard provider processes to create better linkages with their supply chains and/or affected communities.

Both standard providers considered that key elements of their sources of credibility lay in having comprehensive transparency, assurance and comparability features, so that those affected by certified operations could have routes of recourse in the event of malpractice on the part of the company participants.

Standards tended to be consistent in their view that direct economic benefits to participants were neither automatic nor inevitable, and while indirect benefits were obtainable (through improved farming practices, enhanced approaches to natural resource usage and biodiversity impacts leading to improved long-term value), it was viewed that economic benefits tended not to be used as marketable benefits for enticing smallholder and small farmers to endure the cost and scrutiny of being standard-compliant.

The RSPO tended to rely considerably on large western NGOs as a means of representing the interests of communities in developing countries, whereas the Rainforest Alliance / SAN has placed considerably less emphasis on such groups, instead demonstrating robust linkage to local NGOs and community bodies in developing countries. At the design phase, while both standards recognise that at the point of formulating the standards, the representation of local and regional interests into the governance structure that seeks to demonstrate representation across all links in respective markets tends to differ depending on the standard.

The Rainforest Alliance standard, supported by the Sustainable Agriculture network, tended to demonstrate a clear engagement link with regional and smallholder interests, due to its approach of bespoke engagement with participants, and the integration of such interests into its standards committee, in a way that was geared towards reinforcing legitimacy amongst its primarily-smallholder participants. Furthermore, the RA standard's updating/revision process tended to demonstrate a clear route for it to ensure that local and regional variations and governance restrictions are responded to, via comprehensive feedback mechanisms incorporating concerns.

The RSPO tends towards incorporating local community and smallholder elements as much as possible, however there was considered to be a recognition amongst its management that smaller participants were under-represented in its governance structure, and as such a credibility 'gap' was a possible outcome in such scenarios.

In terms of addressing governance failures, standard structures such as those employed by the Sustainable Agriculture Network (SAN) were considered to be generally better-equipped to manage and be responsive towards emerging environmental issues in the supply chain and affecting communities, due to a perceived closer understanding of each standard participant. Additionally, where issues at the community level occurred, SAN demonstrated an ability to respond in a manner that supported the implementation of its standards effectively with growers most sensitive to associated negative community impacts e.g. small growers and farmers.

6.2 Restating the Contribution to Research

The findings summarised in 6.1 challenge Donaldson's (1995) and Freeman's (1999) general view of how companies adopt a normative approach to involving stakeholders in their in-house development and in terms of determining their moral responsibilities. The evidence produced in this thesis demonstrates that best-practice companies have taken clear steps to embed sustainability-related approaches to business within their business strategies, and that long-term commitment to market transformation within areas of sustainable sourcing is evident, with pre-competitive phases of collaboration with market competitors and its associated costs rationalised by the view that in the long-term this will have a clear benefit for both its supply chain participants and profitability. The testimony of evidence supports Margolis (2003) who argues that companies establish a workable balance between instrumental and other moral criteria, particularly where company managers confront difficult dilemmas when normative and instrumental claims do not perfectly align.

The strategic approach suggested by Post et al. (2002) is apparent, – Unilever in particular has recognised that long-term business success requires the firm to develop and integrate relationships with its multiple stakeholders within a comprehensive management strategy, based on a level of trust in mutually beneficial activities, combined with the outcome of enhanced value and profitability. The overall approaches by all of the identified best-practice companies strongly reflect a 'strategic CSR' approach, including a clear

prioritization of stakeholders. A global strategic management analysis of the companies is captured as part of the subsequent company case study analysis, with a specific focus on how sustainability and company corporate responsibility is integrated with, and made central to the key brand and product differentiation (Werther, 2011).

The thesis considers whether 'decoupling' occurs due to a failure to sufficiently integrate the voices of affected local communities in the design of sustainability standard governance structures, and whether a failure to integrate the views of communities in the decision-making feeds into company decisions over suitability or appropriateness of standards relative to their processes. It is clear from both the RSPO and RA/SAN that the involvement of wider societal and environmental NGOs in its design and review stages is an important factor, although it is clear that the RA/SAN structure provides a much greater template for reinforcing credibility through a close-knit relationship with the participants who are responsible for adhering to the rules of the standard.

The collaborative, engagement-heavy approach the SAN takes to applying their standards supports Palazzo and Scherer's (2006) view that legitimacy is based on 'moral legitimacy' that is "built on a foundation of deliberation and communication, and the fostering of understanding amongst all stakeholders, both public and private" (p.38). This argument runs counter to CSR discourse based on notions of 'cognitive and pragmatic legitimacy' that is power and output-based. Instead, more effective standards are based on 'moral legitimacy' that is input-focussed and discursive in nature.

A lack of inclusiveness within standards represents a major problem, due to the voluntary nature of such private standards meaning that there is no legally-enforceable means of rules-compliance, and thus the reliance on authority emanating from within the standard requires a considerable emphasis on a broad level of inclusiveness in the creation of, and ongoing discourse within, the relevant standards (Palazzo, 2006). This is consistent with Mueller's (2009) discussion of the importance of the 'inclusiveness' of standards as a key legitimacy source, covering all of the participants or indeed as many as possible. This form of internalising authority, and the embedding of authority within its participants, is represented in the academic literature within the concept of 'legitimacy', and certainly for the RA/SAN this is particularly in evidence, providing a contribution to the body of academic research with regards to the gap identified by Gilbert (2010) over how standards structures integrate non-

economic stakeholders at the design level. The RA/SAN standard in particular as a certification standard shows how to create a credible standard whilst also ensuring there is no 'decoupling' from the stakeholders who are most affected.

The research has shown that although externally-verified standards have appealing features focussed on transparency and verification, there is no evidence of (i) clear economic benefits through adherence, or (ii) the benefits of allowing companies to 'buy' credibility. Adherence to standards do not necessarily imbue companies with the level of trust and collaboration that can only be achieved through regular, long-term work within their own supply chains. Essentially, you cannot purchase legitimacy off-the-shelf.

6.3 Recapping the Originality and Innovation of the Thesis

The construction of an integration index such as the EMSR Index for the food industry is a significant innovation in the area of stakeholder engagement and corporate social responsibility. As a means of understanding the relationship between companies committing to certification standards and developing their own policies and engagement mechanisms in similar areas, the composite index has been an essential development. In addition, use of the composite index to both (i) identify best-practice food companies for further case study-based analysis, and (ii) informing the interview topic guide, emphasises a fully-integrated, multi-disciplinary approach to developing understanding in the area.

The EMSR Index also feeds into the case study approach by using the ESMR Index to identify the sub-set of 'best practice' food-manufacturing companies that would be approached as part of the case study method for answering questions 2 and 3. Three of the five companies identified as the best-practice companies form the basis for the analysis, specifically Unilever, Danone and Nestlé. The case study also demonstrates an innovative and effective approach to broadening an understanding to the existing environment by considering specific company approaches in bespoke and distinct circumstances.

6.4 Limitations and opportunities for further research

Quantitative Data analysis – Binary and qualitative-based data point analysis

There are general issues with analysing binary-based data points within the types of internal analysis of composite index construction best-practice guidance (OECD, Yale); also, this is not an area that is particularly prevalent in quantitative analysis material or research papers. However, the chosen approach nonetheless represents an innovative approach to providing a credible basis for the subsequent case study analysis, and has followed best-practice guidance as fully and completely as possible.

Access to appropriate interviewees

As previously explained, the 'strategic development' nature of the questions is a limitation. The explicit requirement for participants to give views on how companies and standard-providers have designed their internal policies and systems requires a considerable amount of access to key people that is difficult to acquire. The more access you can achieve, the better the potential analysis, however gaining access to multiple people within organisations is an experience of the research that presents a limitation. The candidates from Danone, Nestlé and the RSPO were insightful and sufficiently senior in terms of the view of operations, strategic approach and process design that the inputs were deemed sufficient in the analysis approach to give important input into the theorygeneration approach. However, the more inputs that could be derived from other senior personnel in these best practice companies would produce more important input, and this would undoubtedly enhance the findings further. Additional time to develop relationships and contacts within the identified companies would improve the findings. Within the time that was available for the research, the achievements are considered to represent an adequate spread of vital primary evidence inputs into generating credible case-study based academic analysis contributions.

Interview input from non-European based best practice companies

Ajinomoto (Japan) and Olam International (Singapore) were identified as being best practice companies, however there was no response from either company to participate in interviews. The collection of interview-based primary data for the case study has proved to be key inputs for analysis. Further input from stakeholders beyond the geographical reach of this study would provide a clear opportunity for further insight and for the development of theory that incorporates the views of companies that are more distant from the western

NGOs that the literature review highlights as a potential cause for disconnect between companies and communities in developing countries. However, more input from food manufacturing companies that are not European-based would further enhance the findings considerably, capturing the considerations and impacts of companies from both (i) North American, and especially (ii) major food manufacturing companies in developing countries.

Interview input responses from community-based NGOs

While attempts were made to reach out to a selection of international NGOs including the WWF and Greenpeace, interviews of experiences with the identified best practice companies and certification standards meant that a more comprehensive triangulation of company and standard efforts within developing countries was not secured. With additional time these insights would have provided for more comprehensive analysis and conclusion-building within the case study analysis.

The number of best-practice companies identified in the Quantitative Data analysis section

As previously explained in Chapter 3, targeting best-practice companies and their specific experiences limits the number of potential participants, and potential views, in in the research design. This limitation in the study represents an opportunity for further research on this subject, with the garnering of additional inputs to assist in the refining of the analysis through access to sufficiently senior people in food companies involved in the strategy design and exposure to stakeholder groups.

The obtaining of interviews with external stakeholders.

An opportunity for further research is in the ability to gain access to multiple people within the organisations, plus conducting interviews from additional external stakeholders. Attempts were made to obtain interviews with a series of global and regional NGO participants who would have experience of engagement with the companies and standard-providers featured in the research, however these were not obtainable within the timeframe. For the purposes of this research, external stakeholder views were obtained via media sources and NGO reports.

6.5 Policy Recommendations for Business

Based on the innovative and original research emerging from this thesis, a number of policy recommendations for companies seeking to utilize certification standards as a meaningful route towards enhancing its sustainable sourcing credentials are presented below.

Best practice companies do not use standards as a proxy for engagement, and so where a company is using such instruments as a proxy, a cautious approach should be taken depending on the type of structure and organisation that said standards take.

Additionally, it is recommended that companies use external standards as a template for working with the supply chain in terms of encouraging transparency, developing complaint and feedback mechanisms and finding ways of integrating third-party verification into processes.

However, an understanding of the environmental and social impacts of sourcing raw materials from developing countries will best be gained through a focus on fully representing the entire supply chain and engaging with suppliers of all sizes, in order to capture an understanding of where issues may be arising.

Smaller companies with limited resources may see such an off-the-shelf approach as a route to making substantial sustainable sourcing claims, and this is not necessarily a bad route towards integrating sustainability into the overall company strategy. However analysing smaller companies has not been feasible, primarily due to the global, publicly-listed nature of the company 'universe' that was used as the first point of company selection. Extending the best-practice company case study approach to focus on smaller companies represents a further opportunity to progress the findings.

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Appendices

Appendix A - Datapoint Selection

Sub- group	No.	Datapoint Summary	Area	Indicator Description	Source	Answer Type	Score	Explanation of indicator / Comments (Incl. reasoning for conversion to binary answer)
1	I1	Quality of management systems	EMS - General	Presence of an Environmental Policy	Company Docs	Y/N	If Y, 1 x I6	Presence of Anv Policy documentation
1	12	Quality of management systems	EMS - General	Completeness of Environmental Policy (ex-biodiversity) - Identification of core key environmental impacts being covered within the environmental policy (ALL OF: climate change/energy efficiency, air emissions, water emissions, waste, water management)	Company Docs	Y/N	If Y, 1 x I6	Identification of core key environmental impacts (climate change, air emissions, water emissions, water emissions, water emanagement). If all issues are covered in EMS, then Y. If less than all issues are covered, then N.
1	13	Quality of management systems	EMS - General	EMS Operational guidelines - Evidence of documented EMS structure and procedures covering day-to-day operations (either through process guidelines or completeness of monitoring hierarchy).	Company Docs	Y/N	If Y, 1 x I6	Outline of process and responsibilities, manuals, action plans, procedures

1	I4	Quality of management systems	EMS - General	Audit - Evidence of regular audit process for testing the credibility and completeness of the EMS.	Company Docs	Y/N	If Y, 1 x I6	Internal audits against the requirements of the system ,not limited to legal compliance auditing
1	15	Quality of management systems	EMS - General	EMS - Internal reporting and management review of the EMS - Evidence of a regular review at senior management / director level of efficacy and effectiveness of EMS	Company Docs	Y/N	If Y, 1 x I6	Internal reporting for management review and to drive corrective actions
1	16	EMS WEIGHTING	EMS - General	EMS Coverage [Weighting] - Extent of operational coverage EMS evidence in indicators I1-to-I5.	Company Docs	% (0- 100)	If (i), 0.5 If (ii), 1	TWO OPTIONS: (i) >0% - 49.9%, and (ii) 50% -100%
1	P1.1	PROXY FOR EMS INDICATORS - ISO14001	ISO14001	ISO14001 - Evidence of any sites (greater than zero) securing ISO14001 accreditation	Bloombe	Number		Any award here will result in the proxy award for ALL of I1 to I5 indicators at a minimum of all 5 indicators (I1 to I5) awarded. Any score above 0 will secure as a minimum score of 2.5 for indicators I1 to I5.
1	P1.2	PROXY FOR EMS INDICATORS - ISO14001	ISO14001	ISO14001 - Audited / certified sites as a percentage of all operational sites	Bloombe rg	% (0- 100)		External certification to an accepted standard such as ISO 14001 or EMAS is viewed as evidence that a high quality system has been implemented. Proxy award for ALL of I1 to I5 indicators * P1.3 weighting
1	P1.3	PROXY FOR EMS INDICATORS - ISO14001	ISO14001	ISO14001 - Audited / certified sites as a percentage of all operational sites	Company Docs	% (0- 100)	(i) = 0.5 (ii) = 1	External certification to an accepted standard such as ISO 14001 or EMAS is viewed as evidence that a high-quality system has been implemented. Proxy award for ALL of I1 to 15 indicators * P1.3 weighting

2	I7	Quality of management systems	Product Stewardship	Product - Environment - The company covers product / service stewardship issues.	Company Docs	Y/N	Y = 1 $N = 0$	Evidence of the company having either: an environmental policy that covers its product or service provision, or demonstrates the performing of environmental life-cycle analysis within its product design.
2	18	Engagement channel	Stakeholder Engagement - General	Stakeholder Engagement / Involvement - Evidence of the company having established engagement channels with stakeholders affected by operational activity	Company Docs	Y/N	Y = 1, N = 0	
2	19	Supply Chain Audit	Supplier Audit	Supplier Audits - Evidence company either (i) conducts audits of suppliers, or (ii) requires suppliers are audited externally by environmental auditors		Y/N	Y = 1, N = 0	If either I9.1 or I9.2 are a Y, then this is a Y
	19.1	Supply Chain Audit	Supplier Audit	General evidence of Companies monitoring environmental management in Supply Chain	Bloombe rg	Y/N		
	19.2	Supply Chain Audit	Supplier Audit	Company conducts Supplier EMS Audits	Company Docs	Y/N		
3	B1	Biodiversity Commitments	Biodiversity	Biodiversity Policy - Evidence that the company has a biodiversity policy covering its operations		Y/N	Y = 1, N = 0	If either B1.1 or B1.2 are a Y, then this is a Y

	B1.1	Biodiversity Commitments	Biodiversity	Existence of a Biodiversity Policy	Company Docs	Y/N		
	B1.2	Quality of management systems	Other Initiatives	Has Biodiversity Policy	Bloombe rg / Company Docs	Y/N		Indicates whether the company has implemented any initiatives to ensure the protection of biodiversity.
3	B2	Biodiversity Commitments	Biodiversity	Biodiversity Action Plan - Evidence that the company has incorporated a BAP into its regular operational EMS processes.	Company Docs	Y/N	Y = 1, N = 0	
3	В3	Biodiversity Commitments	Biodiversity	Identification of Biodiversity as a key environmental issue that is subject to the same level of oversight as its core environmental impacts.	Company Docs	Y/N	Y = 1, N = 0	
3	B4			Evidence of standalone Biodiversity Action Plan covering all operations (at either site-level or at group level).		Y/N	Y = 1, N = 0	If either B4.1 or B4.2 are a Y, then this is a Y
	B4.1	Biodiversity Commitments	Biodiversity	Biodiversity Action Plans (BAP) - Site Level	Company Docs	Y/N		
	B4.2	Biodiversity Commitments	Biodiversity	Biodiversity Action Plans (BAP) - Group Level	Company Docs	Y/N		

3	B5	Biodiversity Commitments	Biodiversity	Voluntary Commitments to the Convention of Biological Diversity (CBD)	Company Docs	Y/N	Y = 1, $N = 0$	
		Communents		Convention of Biological Diversity (CBD)	Docs		14 – 0	

Extern ally- verifie d Certifi cation	No.	Section	Area	Individual Indicator	Source	Answer Type		Comments (Incl. reasoning for conversion to binary answer)
4	E1	Externally- recognised commitments	RI	Rainforest Alliance commitment / use	External Data	Y/N	Y = 1, N = 0	
4	E2.1	Externally- recognised commitments	RSPO	RSPO Member?	External Data	Y/N	Y = 1, $N = 0$	
4	E2.2	Externally- recognised commitments	RSPO	If RSPO Member, when joined?	External Data	Date		Duration indicator
4	E2.3	Externally- recognised commitments	RSPO	If RSPO Member, what type of member (Ordinary, Supply Chain Associate)	External Data	Free Text		

4	4	E4	Externally-	Other	Any Biodiversity-specific Cert	EIRIS	Y/N	Y = 1,	Any cert systems
			recognised		commitments			N = 0	
			commitments						

Appendix B – EMSR Index – Underlying Data

		SUI	B-GR	OUP	1: In	terna	ally-de	veloped	Commitment	ts									
Company Name	Country	I1	12	13	I 4	15	16	EMS Total	PROXY FACTOR	PROXY P1.1	PROXY 1.2	PROXY 1.3	Proxy Total	17	18	19	19.1	19.2	Total Internal
Ajinomoto Company	Japan	1	1	1	1	1	100	5	1	118	94	94	5	1	1	1	Y	N	8
Archer Daniels Midland	USA	1	1	0	1	0	100	3	0.5	0	0	1	2.5	1	1	1	N	Y	6
Aryzta	Switzerland	1	0	0	0	0	100	1	0	0	0	0	0	0	0	1	Y	Y	2
Associated British Foods	UK	1	1	1	1	1	100	5	0.5	0	0	18.4	2.5	1	1	1	Y	N	8
Barry Callebaut	Switzerland	1	0	0	1	1	100	3	0	0	0	0	0	0	0	0	N	N	3
Bega Cheese	Australia	1	0	1	0	0	100	2	0	0	0	0	0	1	0	0	N	N	3
Bellamy's Australia	Australia	1	0	0	0	0	0	0.5	0	0	0	0	0	1	1	0	N	N	2.5
Calbee	Japan	1	1	1	1	1	100	5	0	0	0	0	0	0	0	1	Y	N	6
Campbell Soup	USA	1	1	1	1	1	100	5	0	0	0	0	0	1	1	1	Y	Y	8
China Mengniu Dairy	Hong Kong	1	0	0	0	0	99	1	0.5	0	0	1	2.5	0	0	1	N	Y	3.5
C Lindt & Spruengli	Switzerland	1	0	0	0	0	25	0.5	0.5	2	0	25	2.5	1	0	1	Y	Y	4.5
CJ CheilJedang	South Korea	1	0	1	0	0	47	1	0	0	0	0	0	0	0	1	N	Y	2
Conagra Foods	USA	1	0	0	1	0	100	2	0	0	0	0	0	1	1	1	Y	N	5
Cranswick	UK	1	1	1	1	1	82	5	1	11	0	80	5	0	1	1	N	Y	7
Dairy Crest Group	UK	0	0	0	0	0	100	0	0	0	0	0	0	1	1	0	N	N	2
Danone	France	1	1	1	1	1	100	5	1	89	50	50	5	1	1	1	Y	Y	8
Ezaki Glico	Japan	1	1	1	1	1	96	5	1	0	0	91	5	1	0	1	Y	N	7
Freedom Foods Group	Australia	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	N	N	0
General Mills	USA	1	1	1	0	1	100	4	0	0	0	0	0	1	1	1	Y	Y	7
Glanbia	Ireland	1	0	0	0	0	100	1	0.5	0	0	5	2.5	1	0	0	N	N	3.5
Greencore Group	UK	1	0	0	0	0	100	1	0	0	0	0	0	0	0	0	N	N	1
Gruma	Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	N	0
Grupo Bimbo	Mexico	1	1	1	1	0	100	4	0	0	0	0	0	0	0	1	Y	Y	5

		SUB	GROUI	2: Biod	liversit	y							SUB	GROUI	? 3: External Cert	ification	
Company Name	Country	B1	B1.1	B1.2	B2	В3	B4	B4.1	B4.2	В5	Total Bio	Total ALL	E1	E2.1	E2.2	E2.3	E4
Ajinomoto Company	Japan	1	Y	0	1	0	1	Y	N	1	4	12	N	Y	01/08/2012	Ordinary	Y
Archer Daniels Midland	USA	0	N	0	0	0	0	N	N	0	0	6	N	Y	01/03/2007	Ordinary	Y
Aryzta	Switzerland	0	N	0	0	0	0	N	N	0	0	2	N	Y	02/02/2012	Ordinary	Y
Associated British Foods	UK	0	N	0	0	0	0	N	N	0	0	8	N	Y	01/10/2010	Ordinary	Y
Barry Callebaut	Switzerland	0	N	0	0	0	0	N	N	0	0	3	Y	Y	01/06/2010	Ordinary	Y
Bega Cheese	Australia	0	N	0	0	0	0	N	N	0	0	3	N	N	-	-	N
Bellamy's Australia	Australia	0	N	0	0	0	0	N	N	0	0	2.5	N	N	-	-	Y
Calbee	Japan	0	N	0	0	0	0	N	N	0	0	6	N	N	-	-	N
Campbell Soup	USA	0	N	0	0	0	1	Y	N	0	1	9	N	N	-	-	Y
China Mengniu Dairy	Hong Kong	0	N	0	0	0	0	N	N	0	0	3.5	N	N	-	-	N
C Lindt & Spruengli	Switzerland	0	N	0	0	0	0	N	N	0	0	4.5	N	Y	29/10/2008	-	Y
CJ CheilJedang	South Korea	0	N	0	0	0	0	N	N	0	0	2	N	N	-	-	N
Conagra Foods	USA	0	N	0	0	0	0	N	N	0	0	5	N	Y	01/05/2006	Ordinary	N
Cranswick	UK	0	N	0	0	0	0	N	N	0	0	7	N	N	-	-	N
Dairy Crest Group	UK	0	N	0	0	0	1	Y	N	0	1	3	N	Y	01/04/2010	Ordinary	Y
Danone	France	1	Y	0	1	0	1	Y	Y	0	3	11	Y	Y	01/06/2011	Ordinary	N
Ezaki Glico	Japan	0	N	0	0	0	0	N	N	0	0	7	N	N	-	-	N
Freedom Foods Group	Australia	0	N	0	0	0	0	N	N	0	0	0	N	N	-	-	N
General Mills	USA	0	N	0	0	0	0	N	N	0	0	7	Y	Y	01/02/2012	Ordinary	Y
Glanbia	Ireland	0	N	0	0	0	0	N	N	0	0	3.5	N	Y	01/10/2014	Ordinary	N
Greencore Group	UK	0	N	0	0	0	0	N	N	0	0	1	N	Y	01/03/2011	Ordinary	Y
Gruma	Mexico	0	N	0	0	0	0	N	N	0	0	0	N	Y	10/11/2012	Ordinary	N
Grupo Bimbo	Mexico	0	N	0	0	0	1	Y	N	0	1	6	N	N	-	-	Y

Crupo Herdez Mexico 1 1 1 1 1 1 10 100 4 0 0 0 0 0 0 0 0										s	Commitment	eloped (ally-dev	terna	1: In	.OUP	3-GR	SUI		
House Foods Group Japan 1 1 1 1 1 100 5 1 11 0 70 5 1 0 1 Y N JBS	Total Internal	19.2	19.1	19	18	17							16	15	I 4	13	12	11	Country	Company Name
Nestlé Switzerland Signature Signa	5	N	Y	1	0	0	0	0	0	0	0	4	100	0	1	1	1	1	Mexico	Grupo Herdez
Kellogg USA 1 0 1 1 0 100 3 0.5 0 0 1 2.5 1	7	N	Y	1	0	1	5	70	0	11	1	5	100	1	1	1	1	1	Japan	House Foods Group
Kewpie Japan 1 1 1 1 1 1 1 1 1 0 2.5 1 35 0 55.6 5 1 0 0 N N Kikkoman Japan 1<	6	N	Y	1	1	1	2.5	3	0	0	0.5	3	100	0	0	1	1	1	Brazil	JBS
Kikkoman Japan 1 2 0.5 0.5 0 0 0 0 1 0 1 N Y Metiji Holdings Japan 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6	N	Y	1	1	1	2.5	1	0	0	0.5	3	100	0	1	1	0	1	USA	Kellogg
Kraft Heinz USA 1 0 1 N Y Meiji Holdings Japan 1 <td< td=""><td>6</td><td>N</td><td>N</td><td>0</td><td>0</td><td>1</td><td>5</td><td>55.6</td><td>0</td><td>35</td><td>1</td><td>2.5</td><td>0</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>Japan</td><td>Kewpie</td></td<>	6	N	N	0	0	1	5	55.6	0	35	1	2.5	0	1	1	1	1	1	Japan	Kewpie
Lotte Confectionery South Korea 1 0 0 0 1 0.5 0.5 0 0 1 2.5 1 0 1 N Y Meiji Holdings Japan 1 1 1 1 1 1 20.6 2.5 0.5 0 0 20.6 2.5 1 0 1 Y N Mondelez International USA 1 0 0 0 1 0 0 0 0 0 1 1 1 1 Y N Nestlé Switzerland 1 </td <td>7</td> <td>N</td> <td>Y</td> <td>1</td> <td>0</td> <td>1</td> <td>5</td> <td>54.7</td> <td>0</td> <td>0</td> <td>1</td> <td>5</td> <td>100</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>Japan</td> <td>Kikkoman</td>	7	N	Y	1	0	1	5	54.7	0	0	1	5	100	1	1	1	1	1	Japan	Kikkoman
Meiji Holdings Japan 1 1 1 1 1 1 20.6 2.5 0.5 0 0 20.6 2.5 1 0 1 Y N Mondelez International USA 1 0 0 0 0 0 0 0 0 1 1 1 Y N Nestlé Switzerland 1 <th< td=""><td>0.5</td><td>N</td><td>N</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0.5</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>USA</td><td>Kraft Heinz</td></th<>	0.5	N	N	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	1	USA	Kraft Heinz
Mondelez International USA 1 0 0 0 1 0 0 0 0 0 0 1 <td>4.5</td> <td>Y</td> <td>N</td> <td>1</td> <td>0</td> <td>1</td> <td>2.5</td> <td>1</td> <td>0</td> <td>0</td> <td>0.5</td> <td>0.5</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>South Korea</td> <td>Lotte Confectionery</td>	4.5	Y	N	1	0	1	2.5	1	0	0	0.5	0.5	1	0	0	0	0	1	South Korea	Lotte Confectionery
Nestlé Switzerland 1	4.5	N	Y	1	0	1	2.5	20.6	0	0	0.5	2.5	20.6	1	1	1	1	1	Japan	Meiji Holdings
NH Foods Japan 1 1 1 1 1 1 27 2.5 0.5 24 5.12 27 2.5 1 1 0 N N Nichirei Japan 1	4	N	Y	1	1	1	0	0	0	0	0	1	100	0	0	0	0	1	USA	Mondelez International
Nichirei Japan 1 1 1 1 1 100 5 1 11 0 55 5 1 1 1 Y N Nissin Foods Holdings Japan 1 1 1 1 0 0 2 1 28 0 83 5 1 0 1 Y N	8	Y	Y	1	1	1	5	92	92	621	1	5	100	1	1	1	1	1	Switzerland	Nestlé
Nissin Foods Holdings Japan 1 1 1 1 0 2 1 28 0 83 5 1 0 1 Y N	4.5	N	N	0	1	1	2.5	27	5.12	24	0.5	2.5	27	1	1	1	1	1	Japan	NH Foods
	8	N	Y	1	1	1	5	55	0	11	1	5	100	1	1	1	1	1	Japan	Nichirei
Nongshim South Korea 1 0 0 0 1 05 1 0 0 897 5 1 0 0 N N	7	N	Y	1	0	1	5	83	0	28	1	2	0	0	1	1	1	1	Japan	Nissin Foods Holdings
Nongshim South Kolea 1 0 0 0 1 0.5 1 0 0 69.7 5 1 0 0 N N	6	N	N	0	0	1	5	89.7	0	0	1	0.5	1	0	0	0	0	1	South Korea	Nongshim
Olam International Singapore 1 0 1 1 1 99 4 0 0 0 0 0 1 1 1 Y N	7	N	Y	1	1	1	0	0	0	0	0	4	99	1	1	1	0	1	Singapore	Olam International
Osem Investments Israel 1 1 1 1 100 5 1 0 0 85 5 0 0 N N	5	N	N	0	0	0	5	85	0	0	1	5	100	1	1	1	1	1	Israel	Osem Investments
Parmalat Italy 0 0 0 0 100 0	0	N	N	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	Italy	Parmalat
Patties Foods Australia 0	0	N	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Australia	Patties Foods

100

100

100

100

Strauss Group

Tate & Lyle

Suedzucker MO

The Hershey Company

Israel

UK

USA

Germany

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		SUB	GROU	P 2: Bio	odivers	sity							SUE	GROU	JP 3: External	Certification	
Company Name	Country	В1	B1.1	B1.2	B2	В3	B4	B4.1	B4.2	В5	Total Bio	Total ALL	E1	E2.1	E2.2	E2.3	E4
Grupo Herdez	Mexico	0	N	0	0	0	0	N	N	0	0	5	N	N	-	-	N
House Foods Group	Japan	0	N	0	0	0	0	N	N	0	0	7	N	N	-	-	N
JBS	Brazil	0	N	0	0	0	0	N	N	0	0	6	Y	N	-	-	Y
Kellogg	USA	0	N	0	0	0	0	N	N	0	0	6	N	Y	01/07/2008	-	Y
Kewpie	Japan	0	N	0	0	0	0	N	N	0	0	6	N	N	-	-	N
Kikkoman	Japan	0	N	0	0	0	0	N	N	0	0	7	N	N	-	-	N
Kraft Heinz	USA	0	N	0	0	0	0	N	N	0	0	0.5	N	Y	07/01/2007	Ordinary	N
Lotte Confectionery	South Korea	0	N	0	0	0	0	N	N	0	0	4.5	Y	Y	27/05/2015	Ordinary	N
Meiji Holdings	Japan	0	N	0	0	0	0	N	N	0	0	4.5	N	Y	17/03/2016	Ordinary	N
Mondelez International	USA	0	N	0	0	0	0	N	N	0	0	4	Y	Y	01/08/2011	Ordinary	Y
Nestlé	Switzerland	1	Y	0	1	0	1	Y	Y	1	4	12	Y	Y	01/11/2009	Ordinary	Y
NH Foods	Japan	0	N	0	0	0	0	N	N	0	0	4.5	N	N	-	-	N
Nichirei	Japan	0	N	0	0	0	0	N	N	0	0	8	N	N	-	-	N
Nissin Foods Holdings	Japan	0	N	0	0	0	0	N	N	0	0	7	N	Y	14/10/2013	-	N
Nongshim	South Korea	0	N	0	0	0	0	N	N	0	0	6	N	Y	24/08/2014	Ordinary	N
Olam International	Singapore	1	Y	0	1	1	0	N	N	0	3	10	Y	Y	10/02/2011	Ordinary	Y
Osem Investments	Israel	0	N	0	0	0	0	N	N	0	0	5	N	N	-	-	N
Parmalat	Italy	0	N	0	0	0	0	N	N	0	0	0	N	N	-	-	N
Patties Foods	Australia	0	N	0	0	0	0	N	N	0	0	0	Y	Y	12/12/2013	Ordinary	N
Strauss Group	Israel	0	N	0	0	0	0	N	N	0	0	8	N	N	-	-	N
Suedzucker MO	Germany	0	N	0	0	0	0	N	N	0	0	2.5	N	N	-	-	N
Tate & Lyle	UK	0	N	0	0	0	0	N	N	0	0	7	N	Y	01/11/2012	Supply Chain Associate	N
The Hershey Company	USA	0	N	0	0	0	0	N	N	0	0	7	Y	Y	21/04/2011	Ordinary	Y

		SUI	B-GR	OUP	1: Ir	ıtern	ally-de	veloped	Commitmen	ts									
Company Name	Country	I1	12	13	I 4	15	16	EMS Total	PROXY FACTOR	PROXY P1.1	PROXY 1.2	PROXY 1.3	Proxy Total	17	18	19	19.1	19.2	Total Internal
The J.M. Smucker Company	USA	1	0	0	0	0	100	1	0	0	0	0	0	1	0	1	Y	N	3
Tingyi Holding	Hong Kong	1	0	0	0	0	1	0.5	0	0	0	0	0	0	0	0	N	N	0.5
Toyo Suisan Kaisha	Japan	1	1	1	1	1	85	5	0.5	13	0	50	2.5	0	0	0	N	N	5
Tyson Foods	USA	1	1	1	1	1	100	5	0	0	0	0	0	1	1	1	Y	N	8
Unilever	UK	1	1	1	1	1	100	5	1	0	0	60	5	1	1	1	Y	Y	8
Want Want China Holdings	Hong Kong	1	0	0	0	0	90	1	0	0	0	0	0	0	0	0	N	N	1
WH Group	Hong Kong	1	0	0	0	0	1	0.5	0.5	0	0	1	2.5	0	0	0	N	N	2.5
Wilmar International	Singapore	1	0	1	0	0	100	2	0	0	0	0	0	0	1	1	Y	N	4
Yakult Honsha	Japan	1	1	1	1	1	66	5	1	11	0	66	5	1	1	1	Y	N	8
Yamazaki Baking	Japan	1	1	1	1	1	70	5	0.5	0	0	1	2.5	1	0	0	N	N	6

		SUB	GROUI	2: Biod	liversit	y							SUB	GROUI	P 3: External Certi	ification	
Company Name	Country	B1	B1.1	B1.2	B2	В3	B4	B4.1	B4.2	В5	Total Bio	Total ALL	E1	E2.1	E2.2	E2.3	E4
The J.M. Smucker Company	USA	0	N	0	0	0	0	N	N	0	0	3	Y	Y	01/07/2012	Ordinary	Y
Tingyi Holding	Hong Kong	0	N	0	0	0	0	N	N	0	0	0.5	N	N	-	-	N
Toyo Suisan Kaisha	Japan	0	N	0	0	0	0	N	N	0	0	5	N	N	-	-	N
Tyson Foods	USA	0	N	0	0	0	0	N	N	0	0	8	N	N	-	-	N
Unilever	UK	1	Y	0	1	0	1	Y	Y	1	4	12	Y	Y	01/05/2004	Ordinary	Y
Want Want China Holdings	Hong Kong	0	N	0	0	0	0	N	N	0	0	1	N	N	-	-	N
WH Group	Hong Kong	0	N	0	0	0	0	N	N	0	0	2.5	N	N	-	-	N
Wilmar International	Singapore	0	N	0	0	0	1	Y	N	0	1	5	N	Y	15/08/2005	Ordinary	Y
Yakult Honsha	Japan	0	N	0	0	0	0	N	N	0	0	8	N	N	-	-	N
Yamazaki Baking	Japan	0	N	0	0	0	0	N	N	0	0	6	N	N	-	-	N

Appendix C – Regression Analysis Data and SPSS Outputs

1. Data Input Table

MarketCap (GBP Millions)	UKEur	Totalsubsidiaries	Developing	TotalOverall	Rainforest	RSPO	AnyOtherCert
8443.07	0	13	10	12	0	1	1
14835.74	0	31	19	6	0	1	1
2507.02	1	24	5	2	0	1	1
27019.84	1	41	23	8	0	1	1
3664.67	1	35	18	3	1	1	1
428.4	0	1	0	3	0	0	0
480.47	0	4	3	2.5	0	0	1
3223.49	0	8	7	6	0	0	0
13130.61	0	27	12	9	0	0	1
4413.44	0	5	4	3.5	0	0	0
9839.35	1	20	5	4.5	0	1	1
2765.71	0	24	17	2	0	0	0
12352.7	0	12	6	5	0	1	0
1048.31	1	3	0	7	0	0	0
841.71	1	1	0	3	0	1	1
28713.14	1	56	28	11	1	1	0
2072.26	0	3	2	7	0	0	0
319.4	0	3	0	0	0	0	0
23872.81	0	62	36	7	1	1	1
3776.54	1	23	8	3.5	0	1	0
1418.95	1	3	0	1	0	1	1

4572.91	0	13	7	0	0	1	0
9424.86	0	21	17	6	0	0	1
678	0	1	1	5	0	0	0
1168.86	0	7	6	7	0	0	0
5844.93	0	12	8	6	1	0	1
17556.21	0	49	27	6	0	1	1
2051.29	0	4	4	6	0	0	0
4158.19	0	6	6	7	0	0	0
61247.15	0	4	1	0.5	0	1	0
2062.71	0	21	11	4.5	1	1	0
7148.4	0	6	6	4.5	0	1	0
41935.99	0	91	51	4	1	1	1
146544.64	1	121	80	12	1	1	1
2664.5	0	7	5	4.5	0	0	0
1399.3	0	5	4	8	0	0	0
3399.67	0	10	9	7	0	1	0
1408.02	0	7	4	6	0	1	0
2234.17	0	58	44	10	1	1	1
1530.39	1	6	1	5	0	0	0
3145.04	1	25	16	0	0	0	0
5250	0	1	0	0	1	1	0
991.37	1	17	4	8	0	0	0
2108.15	1	39	12	2.5	0	0	0
2598	1	56	28	7	0	1	0
12921.38	0	14	10	7	1	1	1
10146.39	0	8	5	3	1	1	1
27940.63	0	4	4	0.5	0	0	0
2392.12	0	3	2	5	0	0	0
17325.62	0	36	23	8	0	0	0

65287.06	1	89	60	12	1	1	1
46591.7	0	13	7	1	0	0	0
49342.05	0	4	2	2.5	0	0	0
13721.03	0	25	17	5	0	1	1
4913.43	0	8	8	8	0	0	0
2634.58	0	8	6	6	0	0	0

Linear Regression Model – SPSS Output

Model Summary^b

			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	Durbin-Watson
1	.524 ^a	.275	.261	2.6898	1.739

a. Predictors: (Constant), Developing

b. Dependent Variable: TOTAL OVERALL

Coefficients^a

		Unstandardize	ed Coefficients	Standardized Coefficients		
Mode	el	В	Std. Error	Beta	t	Sig.
1	(Constant)	3.890	.460		8.458	.000
	Developing	.104	.023	.524	4.525	.000

a. Dependent Variable: TOTAL OVERALL

Logistic Regression Model Summary - SPSS Output

Step	-2 Log	Cox & Snell R	Nagelkerke R
	likelihood	Square	Square
1	64.783 ^a	.189	.253

Logistic Regression Model Summary - SPSS Output

			Predicted				
		RA/RSPO/Other		Percentage			
Observed		No(0)	Yes (1)	Correct			
RA/RSPO/Other	No (0)	19	5	79.2			
	Yes (1)	8	24	75.0			
Overall Percentage	,			76.8			

Appendix D – Findings of Previous Biodiversity Policy Assessment (Monks, 2013)

• Biodiversity Risk Distribution

A preliminary analysis highlights the distribution of biodiversity risk in the FTSE All-World Development (FTES AWD) Index, based on the sector classifications outlined earlier. Table 1 shows the distribution of Companies listed in the FTSE AWD index relative to their Biodiversity impact sector.

Sector Classification	No. of Companies	%
High Impact	500	25%
Medium Impact	310	16%
Low Impact	1170	59%
Total	1980	

Biodiversity Impact Distribution (FTSE AWD)

All analysis that follows will be focussed on companies in these sectors. One in every four major companies in the FTSE AWD has a direct effect on biodiversity, with an additional 16% operating in sectors which have an indirect impact on biodiversity.

• Overall Biodiversity Assessments

Table 2 provides us with an overview of the quality of Company responses to Biodiversity impacts in their sector.

	Poor		Basic		Moderat	e	Good	
Sector Classification	No.	%	No.	%	No.	%	No.	%
High Impact	187	37%	154	31%	124	25%	35	7%

Medium Impact	195	63%	67	22%	38	12%	10	3%
All	382	47%	221	27%	162	20%	45	6%

Biodiversity Assessments (FTSE AWD)

Aggregating companies from both high and medium impact sectors, only 6% of companies have been assessed as having a 'good' biodiversity assessment, with just under half (47%) having a 'poor' biodiversity assessment.

• Biodiversity Assessments - UN Global Compact

	UN GLOBAL COMPACT				
Sector Classification	Not Participating	Participating			
High Impact	406	94			
Medium Impact	275	35			
All	681	129			

Overall UN Global Compact Participation

Table 3 above shows the low general participation in the UN Global Compact by major public-listed global companies. Here we see that only 16% of Companies in sectors in High and Medium impacts on biodiversity have made a voluntary commitment to upholding the UNGC principles.

In terms of a 'quality' contrast of the biodiversity assessments of UNGC participators and non-participators, there is a significant difference. Table 4 shows an assessment breakdown of UNGC participating Companies. 14% of participating companies have a 'good' assessment for biodiversity, with only 16% having a 'poor' assessment for biodiversity.

Sector Classification	Poor	Basic	Moderate	Good	
High Impact	12	17	49	16	
Medium Impact	9	10	14	2	
All	21	27	63	18	129
	16%	21%	49%	14%	

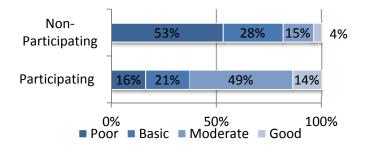
Biodiversity Assessments - UNGC Participators only

Table 5 shows the same analysis for non-participating companies, and contrasts starkly. 4% of companies have a 'good' assessment, with 53% having a 'poor' biodiversity assessment.

Sector Classification	Poor	Basic	Moderate	Good	
High Impact	175	137	75	19	
Medium Impact	186	57	24	8	
All	361	194	99	27	681
	53%	28%	15%	4%	

Biodiversity Assessments - UNGC Non-Participators only

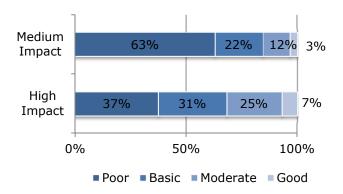
Fig 1 provides a graphical comparison of the overall assessment distribution between participating and non-participating companies.



Biodiversity Assessments – UN Global Compact

• Sector Comparison - High-Impact / Medium-Impact

Separating out the level of response to the issue for companies in high or medium impact sectors, we see differing biodiversity response levels between companies in high impact sectors and those with medium impacts. Fig.2 shows that high-impact sector companies fare better than medium sector companies in their assessments. At the best-performing end of the assessment spectrum both groups of companies tend to perform poorly, with 7% of high-impact companies having a 'good' assessment compared to 3% by medium-impact sectors.



Biodiversity Assessments (All FTSE AWD)

High-impact companies generally perform significantly better than medium-impact sectors. Only 37% of high-impact companies are assessed as having 'no policy' for managing biodiversity impact, whereas 63% of medium impact companies have such an assessment. 25% of high-impact companies are assessed as having 'moderate' assessment for managing biodiversity impact, against 12% of medium impact companies. Finally, 31% of high-impact companies are assessed as having a 'basic' assessment for managing biodiversity impact, compared to 22% of medium impact companies. Our analysis shows that high-impact companies have in place more sophisticated mechanisms to tackle their biodiversity-related risks, indicating a material understanding of this impact.

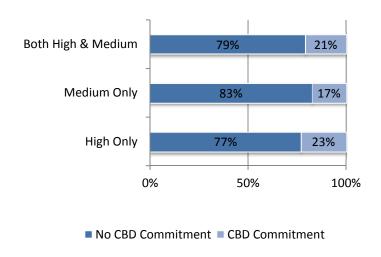
• Company voluntary commitments to CBD

Companies have been assessed for their specific commitment to upholding the principles of the UN Convention on Biological Diversity (CBD), as shown in table 6 below:

	CBD Cor	nmitment
Sector Classification	Yes	No
High Impact	115	385
Medium Impact	54	256
All	169	641

Voluntary Commitments to CBD Principles

This shows that voluntary commitments are slow on the up-take, with 21% of all high and medium impact companies adopting such a commitment. In terms of proportions, there is no difference between companies in high and medium impact sectors.



CBD Commitments (All FTSE AWD)

The CBD is a non-binding agreement at present, and at the international level, companies are not required to commit to supporting CBD principles, except on

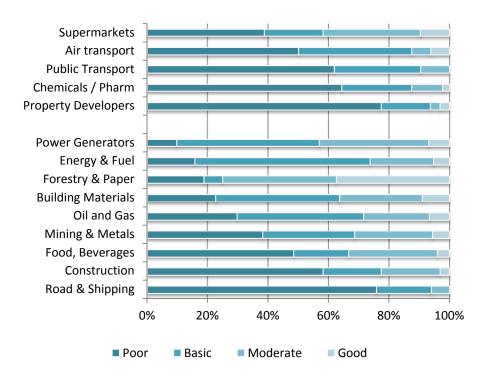
an entirely voluntary basis. With the lack of binding national or international policies or legislation on biodiversity, the key drivers of corporate improvement on biodiversity have been primarily through voluntary corporate initiatives. These initiatives tend to be on a sector-by-sector basis, such as through commitments to the sustainable sourcing of natural resources.

• Analysis: Sector bias? - Which sectors are performing best/worst?

			Overall Biodiv	ersity Assessment	
Environmental Sector	Impact	Poor	Basic	Moderate	Good
Air transport	Medium	8	6	1	1
Building Materials	High	5	9	6	2
Chemicals / Pharma	Medium	108	39	17	4
Construction	High	36	12	12	2
Energy & Fuel	High	3	11	4	1
Food, Beverages	High	48	18	29	4
Forestry & Paper	High	3	1	6	6
Mining & Metals	High	34	27	23	5
Oil and Gas	High	22	31	16	5
Power Generators	High	7	34	26	5
Property Developers	Medium	48	10	2	2
Public Transport	Medium	13	6	2	0
Road & Shipping	High	25	6	2	0
Supermarkets	Medium	12	6	10	3
		372	216	156	40

Overall Biodiversity Assessments – Sector Comparison

As Fig.4 shows (below), medium-impact sectors perform worse than companies in high-impact sectors.



Overall Biodiversity Assessments – Sector Comparison

 To what extent are companies voluntarily committing to certified systems?

Results show that 23% of all High and Medium impact companies have made commitments to engaging with supply chain stakeholders who have themselves committed to only using sustainability-related supply chain standards (such as FSC and MSC).

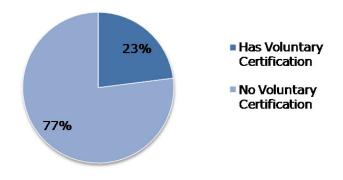


Fig. 5 - Voluntary Commitments (FTSE AWD)

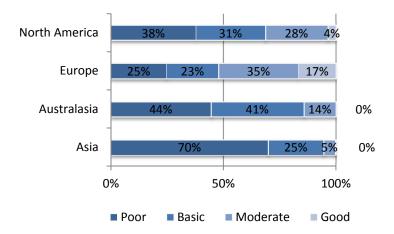
• Analysis: Regional differences? Is there a regional bias, in terms of response to biodiversity?

A supplementary analysis was made on how different regions compare in their biodiversity responses.

		Biodiversity Assessment					
Region	Poor	Poor Basic Moderate Good					
Asia	218	77	16	1	312		
Australasia	28	26	9	0	63		
Europe	53	50	76	36	375		
North America	83	68	61	8	220		
Total	382	221	162	45			

Biodiversity Assessments - Regions

Table 8 analysis of the FTSE AWD shows that Europe out-performs all other regions. European companies fare best in terms of assessment, with 17% of companies showing a 'good' biodiversity assessment, 35% having a 'moderate' assessment, 23% with a 'basic' policy and 25% producing a 'no policy assessment'. Asian companies perform poorly with a majority of weakest assessments. The analysis shows that no Asian-based companies have a 'good' biodiversity policy, and 70% showing no evidence of a biodiversity risk assessment. North American companies are between these two groups, with 4% showing a 'good' assessment, and 38% showing no biodiversity assessment. This is all represented in Fig 6 (below):



Biodiversity Assessments - Regions

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Appendix E – Semi-structured Interview – Company questions

- 1. How are the stakeholder representatives in developing countries selected for appropriateness? What is the process?
- 2. To what extent are laggard companies in your sector participating in standards motivated from a reputational risk perspective due to the involvement of best-practice leaders (such as COMPANY NAME), rather than being a participation decision emerging from their own engagement channels?
- 3. In the context of competing demands of economic, operational and societal stakeholders, where in your priorities are accommodating the concerns of societal stakeholders in the supply chain and community stakeholders located in developing countries (including NGOs), in the overall company strategy?
 - Firstly, suppliers? Then NGOs as community representatives?
- 4. In terms of legitimacy and the notion of a social license to operate, how does COMPANY NAME conceptualise this as being achievable through the activities of the company?
 - Is something created through the supply chain, or is it generated at the enduser?
- 5. How does committing to an externally-recognised standard contribute to this process, compared to your own pre-existing engagement channels?
- 6. To what extent will you consult with your suppliers prior to committing to a standard?
- 7. How far into the process will you consult with your supply chain to see whether this is a suitable or this is a credible, or a meaningfully implementable standard at the supply level? In situations where you have your own comprehensive policies in place regarding particular product sourcing, what is the motivation to commit to an externally-recognised standard?

Are you are committing to standards with a view to making the standards more robust, or do you find that there is limited opportunity for that when you are rolling out the standard?

RSPO and Rainforest Alliance-specific Questions for companies

8. RSPO is an example where it has seen the need to create a more granular version of its own standards, in the form of RSPO Next.

- To what extent was this [COMPANY NAME] plus other better practice companies pushing to create 'separation', or a resistance being pulled down by the non-best practices, of having companies committing and then perhaps not really going beyond the high-worded policies?
- 9. How routinely do you review whether it is actually worth remaining in a particular standard, because maybe you're not getting the amount of differentiation, or it's too costly, or you are being pulled down by the activities of others?

Do you routinely review this?

Does the review consider the positive network or transformational benefits across an entire sector?

- 10. (If there is a reviewing process) To what extent does that review process consider those that are affected at the local level, in terms of whether there is a benefit at the local level, despite there being the cost to the company? Can it be the case as a leading company that it is better to remain in the standard for the benefit of these community and supply chain-level stakeholders, despite there (potentially) being a negative cost to the company?
- 11. Specifically relating to the Rainforest Alliance (RA) and the Sustainable Agriculture Network (SAN) standards, can standards such as RA/SAN effectively act as a proxy for needing a policy in a particular area? Particularly, to what extent can you be confident the standards are sufficiently robust in terms of how they deal with everybody from suppliers and third-parties that are associated with those suppliers, and as a proxy for having an engagement programme in that product/area?
- 12. With certain sourced products, is the creation of a community network a benefit that you strive towards as a specific beneficial consequence?

 Or do tangible economic benefits to the community emerging from a fairer growing environment (such as benefits of living wage and better working conditions) constitute the community benefit?
- 13. How does the company reconcile situations where the governance decision-making of external certification standards become inconsistent with your own policies and create a conflict, specifically in the context of alerting investors to this circumstance?

Appendix F – Semi-structured Interview (2) – Standard Provider Questions

- 1. How are the stakeholder representatives in developing countries selected for appropriateness? What is the process?
- 2. How does the standard interrogate the way NGOs are used to engage with local communities with regards to the environmental impacts of palm oil sourcing?
- 3. Are the economic and commercial benefits of better practices at production level considered key sources of legitimacy for RSPO at community level?
- 4. How were local developing country considerations factored at the design stage? (design stage)?
- 5. How (and how regularly) are these considerations reviewed on an on-going basis? (review of effectiveness routine / regularity)
- 6. How do you work on increasing how the standard resonates with the various stakeholders? (Ask individually on communities, consumers, palm oil producers and suppliers, investors).
- 7. What are the overriding motivations for members to want to be involved in the standard? (Examples being mitigating operational risk, reputational risk, regulatory risk or other?)
- 8. How much do you believe that your standard resonates with consumers of palm oil products? (profile, awareness, as added value)
- 9. To what extent do member companies using RSPO participation as a proxy for having their own good sustainability engagement with communities / supply chain in developing countries?
- 10.In the absence of government involvement and enforcement, how do you incentivise members to develop better-practice enhancements in their production methods?
- 11. What are the main motivations for RSPO Next two-tier approach? (To what extent is this an example of best-practice members creating separation between themselves and laggard companies to preserve differentiation and insulate from criticism of the standard?)

Appendix G – Company Interview Coding

(i) Unilever Interview

Questions	Descriptive codes	Theme Group Tags (1)	Theme Group Tags (2)	Theme Group Tags (3)
Business Strategy - Interpreting Environmental / Biodiversity Risk	Company interpretation	Strategy - Interpreting risk		
	Engagement programme development	Engagement with NGOs or Communities	Engagement with suppliers	
	Analysing own operations	Strategy - Interpreting risk		
	Internal programme development	Internal policy / programme development		
	Geographical expansion	Internal policy / programme development		
	Integration of environmental risk into business strategy	Strategy - Interpreting risk		
	Engagement with external certification providers (Palm oil round-table)	Motivations for joining standards		
	Engagement with external certification providers (Rainforest Alliance)	Motivations for joining standards		
	Interpretation of how certification providers view risk	Strategy - Interpreting risk	Motivations for joining standards	
	NGO participation with RSPO	Motivations for joining standards	Engagement with NGOs or Communities	
	NGO participation with RA	Motivations for joining standards	Engagement with NGOs or Communities	
Motivation to join External certification standards	Laggard motivation	Motivations for joining standards		
	Geographical bias	Motivations for joining standards	Engagement with NGOs or Communities	

	Joining RSPO	Motivations for joining standards		
	Joining RA	Motivations for joining standards		
Managing stakeholder engagements	Stakeholder priorities	Sources of credibility / legitimacy	Engagement with NGOs or Communities	Engagement with suppliers
-	Managing supplier expectations	Engagement with suppliers		
	Supplier engagement mechanisms	Engagement with suppliers		
	Supplier engagement network	Engagement with suppliers		
Community representation	NGOs as community representatives	Engagement with NGOs or Communities	Sources of credibility / legitimacy	
	Working with NGOs	Engagement with NGOs or Communities	Internal policy / programme development	
	Having formal partnerships with NGOs	Engagement with NGOs or Communities	Internal policy / programme development	
	Strategic approach to NGO engagement	Strategy - Interpreting risk		
Conceptualising legitimacy	Consumers as source of legitimacy	Sources of credibility / legitimacy	Motivations for joining standards	
	Engaging with consumers	Sources of credibility / legitimacy	Engagement with consumers	
	Marketing campaigns	Sources of credibility / legitimacy	Engagement with consumers	
	Relationship with international NGOs	Sources of credibility / legitimacy	Engagement with NGOs or Communities	
	Relationship with local NGOs	Sources of credibility / legitimacy	Engagement with NGOs or Communities	Engagement with suppliers
Commitment to external standards vs Pre-existing communication channels	Role of standards in engagement	Motivations for joining standards	Policy / standard review mechanisms	
	Limitations of standards	Policy / standard review mechanisms	Sources of credibility / legitimacy	
	Lack of government involvement			

Consultation with suppliers over involvement in standards	Non-consultation with consumers	Engagement with consumers	Motivations for joining standards	
	Consumer attitudes	Engagement with consumers	Motivations for joining standards	
	Pressure on suppliers to participate in roundtables			
Conflict between standard participation and own policies	Intricate detail of standard implementation	Internal policy / programme development	Motivations for joining standards	
	Many standards in individual areas	Internal policy / programme development	Motivations for joining standards	
	Variable scope of standards	Internal policy / programme development	Motivations for joining standards	
	Defining sustainability	Strategy - Interpreting risk	Motivations for joining standards	
	Compatibility of standard definitions with own policy definitions	Internal policy / programme development	Motivations for joining standards	
	Performance / ambition levels within standards	Motivations for joining standards		
	Governance structures within standards	Engagement with NGOs or Communities	Motivations for joining standards	
	Implementation requirements of standard			
	Laggard motivation	Motivations for joining standards		
RSPO membership as a means of market transformation	Capacity for differentiation between members	Policy / standard review mechanisms	Motivations for joining standards	
	Regional differences in standard implementation	Motivations for joining standards		
	Attitudes towards RSPO - Farmers and suppliers	Policy / standard review mechanisms	Engagement with suppliers	Sources of credibility / legitimacy
	Issues with RSPO	Policy / standard review mechanisms	Engagement with suppliers	Sources of credibility / legitimacy
	Differentiation within a standard	Engagement with consumers	Engagement with suppliers	Motivations for joining standards

Review of standard Regularity of review process Policy / standard review mechanisms	
participation mechanisms	
Routine nature of review Policy / standard review mechanisms	
Product specificity of each review Policy / standard review mechanisms Engagement with supplied	rs
Economic benefits of ongoing membership Policy / standard review mechanisms Motivations for joining st	tandards
Reputational risk of ongoing membership Policy / standard review mechanisms Strategy - Interpreting risk mechanisms	k
Brand benefit elements of ongoing membership Policy / standard review mechanisms Engagement with consum	ers Engagement with suppliers
Consultation with supply chain and communities regarding standard membership Issues quantifying benefits to communities Motivations for joining standards Communities Engagement with NGOs of Communities	or
Maintaining large scale supply Motivations for joining standards requirements	
Trade-off between supply and communities Engagement with NGOs or Communities Engagement with NGOs or Communities	rs
Costs of membership to standards Motivations for joining standards Policy / standard review mechanisms	
Standards as a proxy for having own policies / won policies Benchmarking of standards against own policies / development Internal policy / programme development	
Compatibility of standards to own policies Internal policy / programme development	
Positive effects of committing to standards as proxy Motivations for joining standards Sources of credibility / leg	gitimacy
Involvement of own engagement programmes Internal policy / programme development Engagement with consum	ners Engagement with suppliers
Regional capacity of standards vs own capacity Motivations for joining standards own capacity	
Standards developing understanding Motivations for joining standards Internal policy / programm	me

	of issues		development	
	Collaborative relationships between companies and standards	Internal policy / programme development	Policy / standard review mechanisms	
	Proximity of standards network to supply chain	Motivations for joining standards	Engagement with suppliers	
Community network benefits from standard	Defining community benefits from standard commitments / collaboration	Engagement with NGOs or Communities	Motivations for joining standards	
	Economic benefits of standards as driver for promoting standards	Motivations for joining standards	Sources of credibility / legitimacy	
	Company training and engagement programmes	Internal policy / programme development	Engagement with NGOs or Communities	
	Standard training and engagement programmes	Motivations for joining standards	Engagement with NGOs or Communities	
	Educational benefits from standard commitments	Motivations for joining standards	Sources of credibility / legitimacy	
	Size of supplier as determinant of benefits	Motivations for joining standards	Engagement with suppliers	
	Location of producer	Motivations for joining standards	Engagement with suppliers	Sources of credibility / legitimacy
Laggards motivation to join standards	Benefits by association with best- practice companies	Motivations for joining standards	Sources of credibility / legitimacy	
	Attitudes of best-practice companies towards laggards	Motivations for joining standards		
	Market transformation	Motivations for joining standards		
	Extent of commitment requirements	Motivations for joining standards		
Reconciling difference between company governance systems and standards governance structures	Communication to stakeholders	Policy / standard review mechanisms	Engagement with NGOs or Communities	Engagement with suppliers
	Trade-off between economic and ESG benefits from standard	Motivations for joining standards		

	membership			
	Relationships between company and suppliers	Motivations for joining standards	Engagement with suppliers	
Interpretation / view of differing governance structures at standards	Existing engagement channels with suppliers	Engagement with suppliers		
	Presence of company on round tables	Engagement with NGOs or Communities	Engagement with consumers	Sources of credibility / legitimacy
	Existing relationships with NGOs and trade round tables	Engagement with NGOs or Communities	Engagement with consumers	
	Difference between RSPO and RA	Motivations for joining standards	Sources of credibility / legitimacy	

(ii) Danone Interview

Questions	Descriptive codes	Theme Group Tags (1)	Theme Group Tags (2)	Theme Group Tags (3)
Business Strategy - Interpreting Environmental / Biodiversity Risk	Risk assessment process via supply chain	Strategy - Interpreting risk	Policy / standard review mechanisms	
	Identification of social and environmental factors	Strategy - Interpreting risk	Internal policy / programme development	
	Internal processes / context	Strategy - Interpreting risk	Policy / standard review mechanisms	Policy / standard review mechanisms
	Economic / value benefits of risk management	Strategy - Interpreting risk		
Motivation to join External certification standards	Building on pre-existing industry collaborative efforts	Motivations for joining standards	Internal policy / programme development	
	Strengthening current standards through collaboration	Motivations for joining standards	Internal policy / programme development	Engagement with NGOs or Communities
	Participation in working/roundtable groups	Motivations for joining standards	Engagement with NGOs or Communities	Engagement with suppliers
	Motivations for demanding higher standards within RSPO	Motivations for joining standards	Engagement with NGOs or Communities	

	Bi-lateral initiatives	Motivations for joining standards	Engagement with NGOs or Communities	
Consultation with supply chain and communities regarding standard membership	Working with NGOs	Engagement with NGOs or Communities	Internal policy / programme development	
	Having formal partnerships with NGOs	Engagement with NGOs or Communities	Internal policy / programme development	
	Review of own supply chains & mapping	Internal policy / programme development	Engagement with suppliers	
	Internal review mechanisms	Policy / standard review mechanisms	Motivations for joining standards	Engagement with suppliers
	Expert consultation mechanisms	Internal policy / programme development	Engagement with NGOs or Communities	
	Understanding local contexts	Policy / standard review mechanisms	Motivations for joining standards	Engagement with NGOs or Communities
Conceptualising legitimacy	Communities as sources of legitimacy	Sources of credibility / legitimacy	Engagement with NGOs or Communities	
	Community involvement in risk materiality assessments	Sources of credibility / legitimacy	Engagement with NGOs or Communities	Strategy - Interpreting risk
	Identifying relevant stakeholders	Sources of credibility / legitimacy	Internal policy / programme development	
	Consultation with communities at implementation stage	Sources of credibility / legitimacy	Internal policy / programme development	Engagement with NGOs or Communities
	Large suppliers compared to smallholders	Sources of credibility / legitimacy	Engagement with suppliers	
	Processes for NGO consultation	Sources of credibility / legitimacy	Engagement with NGOs or Communities	Internal policy / programme development
Conflict between standard participation and own policies	Using standard as means of determining own supplier targets	Internal policy / programme development	Motivations for joining standards	Engagement with suppliers
	Many standards in individual areas	Internal policy / programme development	Motivations for joining standards	
	Standards as basic versions of own	Internal policy / programme	Policy / standard review	

	policies	development	mechanisms	
	Ongoing review of effectiveness of	Policy / standard review	Internal policy / programme	
	standard	mechanisms	development	
	Review process to appropriateness of	Policy / standard review		
	standard	mechanisms		
	Regional approaches to stakeholders	Policy / standard review	Engagement with NGOs or	Engagement with
		mechanisms	Communities	suppliers
Review of standard	Mechanisms for reviewing standards	Policy / standard review		
participation	iviechanishis for reviewing standards	mechanisms		
	Involvement of external stakeholders	Policy / standard review	Engagement with NGOs or	Engagement with
	in review process	mechanisms	Communities	suppliers
	Policy formulation process	Policy / standard review mechanisms	Internal policy / programme development	
	Involvement of external stakeholders	Policy / standard review	Engagement with NGOs or	Engagement with
	in policy development	mechanisms	Communities	consumers
	Involvement of suppliers in review	Policy / standard review	Internal policy / programme	
	process	mechanisms	development	
Standards as a proxy for	Involvement of own engagement	Internal policy / programme	Engagement with consumers	Engagement with
having own policies / monitoring mechanisms	programmes	development	Engagement with consumers	suppliers
momoring mechanisms	Risk-mapping	Internal policy / programme development		
	Identification of mitigation actions	Internal policy / programme development		
	Compatibility of standards to own policies	Internal policy / programme development		
	Involvement of own engagement programmes (2)	Internal policy / programme development	Engagement with consumers	Engagement with suppliers
Reconciling difference between company governance systems and standards governance structures	Mechanism for reviewing standard compatibility	Policy / standard review mechanisms	Internal policy / programme development	

Stakeholder perception of	Sources of legitimacy / credibility	Sources of credibility / legitimacy	Motivations for joining standards	
standards				
	Consultation with consumers	Engagement with consumers	Motivations for joining standards	
	Impact of customers on decisions	Engagement with consumers	Motivations for joining standards	

(iii) Nestlé Interview

Questions	Descriptive codes	Theme Group Tags (1)	Theme Group Tags (2)	Theme Group Tags (3)
Business Strategy - Interpreting Environmental / Biodiversity Risk	Company interpretation	Strategy - Interpreting risk		
	Own operation requirements	Strategy - Interpreting risk	Internal policy / programme development	
Stakeholders in policy design	NGOs as community representatives	Internal policy / programme development	Engagement with NGOs or Communities	
	Working with NGOs	Internal policy / programme development	Engagement with NGOs or Communities	
	Having formal partnerships with NGOs	Internal policy / programme development	Engagement with NGOs or Communities	
	Review of own supply chains & mapping	Internal policy / programme development	Engagement with suppliers	
	Engagement with suppliers in policy development	Internal policy / programme development	Engagement with suppliers	
	Policy formulation process	Internal policy / programme development		
Community representation	NGOs as community representatives	Engagement with NGOs or Communities		
	Mechanisms for reviewing standards	Engagement with NGOs or Communities	Policy / standard review mechanisms	
	Involvement of external stakeholders in policy development	Engagement with NGOs or Communities	Internal policy / programme development	Engagement with consumers

	Having formal partnerships with NGOs	Engagement with NGOs or Communities	Internal policy / programme development	
	Mechanisms for reviewing standards	Engagement with NGOs or Communities	Policy / standard review mechanisms	
	Policy formulation process	Engagement with NGOs or Communities	Policy / standard review mechanisms	Sources of credibility / legitimacy
Motivation to join External certification standards	Building on pre-existing industry collaborative efforts	Motivations for joining standards	Engagement with NGOs or Communities	Engagement with suppliers
	Participation in working/roundtable groups	Motivations for joining standards	Engagement with NGOs or Communities	Engagement with suppliers
	Using standard as means of determining own supplier targets	Internal policy / programme development	Motivations for joining standards	Engagement with suppliers
	Bi-lateral initiatives	Motivations for joining standards	Engagement with NGOs or Communities	
	Consultation with consumers	Engagement with consumers	Motivations for joining standards	
	Impact of customers on decisions	Engagement with consumers	Motivations for joining standards	
	21 11			
Conceptualising legitimacy	Consumers as source of legitimacy	Sources of credibility / legitimacy	Engagement with consumers	
	Engaging with consumers	Sources of credibility / legitimacy	Engagement with suppliers	
	Ongoing review of effectiveness of standard	Sources of credibility / legitimacy	Policy / standard review mechanisms	
	Mechanisms for reviewing standards	Sources of credibility / legitimacy	Policy / standard review mechanisms	
	Mechanisms for reviewing policies	Sources of credibility / legitimacy	Internal policy / programme development	
	Difference between RSPO and RA	Sources of credibility / legitimacy	Policy / standard review mechanisms	
	Issues with RSPO	Sources of credibility / legitimacy	Policy / standard review mechanisms	
Consultation with supply chain and communities regarding standard membership	Review of own supply chains & mapping	Internal policy / programme development	Engagement with suppliers	

	Internal review mechanisms	Policy / standard review mechanisms	Motivations for joining standards	Engagement with suppliers
	Consultation with communities at implementation stage	Motivations for joining standards	Engagement with NGOs or Communities	Internal policy / programme development
Review of standard participation	Mechanisms for reviewing standards	Policy / standard review mechanisms		
	Mechanisms for reviewing policies	Policy / standard review mechanisms	Internal policy / programme development	
	Involvement of external stakeholders in policy development	Policy / standard review mechanisms	Internal policy / programme development	Engagement with NGOs or Communities
	Involvement of suppliers in review process	Policy / standard review mechanisms	Engagement with suppliers	
	Economic benefits of ongoing membership	Policy / standard review mechanisms	Motivations for joining standards	Strategy - Interpreting risk
	Large suppliers compared to smallholders	Policy / standard review mechanisms	Sources of credibility / legitimacy	Engagement with suppliers
RSPO membership as a means of market transformation	Capacity for differentiation between members	Policy / standard review mechanisms	Motivations for joining standards	
	Attitudes towards RSPO - Farmers and suppliers	Policy / standard review mechanisms	Engagement with suppliers	Sources of credibility / legitimacy
	Issues with RSPO	Policy / standard review mechanisms	Engagement with suppliers	Sources of credibility / legitimacy
	Differentiation within a standard	Engagement with consumers	Engagement with suppliers	Motivations for joining standards
Standards as a proxy for having own policies / monitoring mechanisms	Attitudes towards RA - Farmers and suppliers	Engagement with suppliers	Engagement with NGOs or Communities	
	Source of legitimacy	Sources of credibility / legitimacy		
	Difference between RSPO and RA	Sources of credibility / legitimacy	Motivations for joining standards	
	Bi-lateral initiatives	Engagement with NGOs or Communities	Engagement with suppliers	
	Having formal partnerships with	Engagement with NGOs or		

	NGOs	Communities		
	NGOs as community representatives	Engagement with NGOs or Communities		
Mechanisms for reviewing standard participation	Steering Committee - Role in reviewing	Policy / standard review mechanisms		
	RSPO as source of credibility	Sources of credibility / legitimacy		
	Value of RSPO to smallholders	Motivations for joining standards	Engagement with suppliers	
	Value of RSPO to large growers	Motivations for joining standards	Engagement with suppliers	
Experiences with the RSPO (views on RSPO)	Criticisms of RSPO	Sources of credibility / legitimacy	Engagement with NGOs or Communities	
	View on participating in standards	Motivations for joining standards		
Experiences with RA/SAN	Collaboration with RA - Nespresso	Motivations for joining standards		
	Effective engagement with RA	Engagement with NGOs or Communities		
	Relationships with suppliers	Engagement with suppliers		

Appendix H – Standard Providers - Interview Coding

(i) RSPO Interview

Questions	Descriptive codes	Theme Group Tags (1)	Theme Group Tags (2)	Theme Group Tags (3)
Motivation to join External certification standards	Reputational risk motivation			
	Stakeholder 'engagement' motivation	Sources of credibility / legitimacy		
	Company interpretation of risk	Motivations for joining their standard (and interpreting risk)		
	Working with NGOs	Engagement with stakeholders		
Representing stakeholder interests at standard design phase	Selection of representative stakeholders	Programme creation process	Engagement with stakeholders	
	Smallholder representation issue	Sources of credibility / legitimacy		
	Community involvement in design process	Programme creation process	Engagement with stakeholders	
Standards as proxies for community engagement channels	Global NGOs as proxies for local stakeholder representation	Standard review/development mechanisms		
	Inclusiveness in complaints mechanism	Programme creation process	Engagement with stakeholders	
	Development of community-specific projects/collaborations	Sources of credibility / legitimacy	Engagement with stakeholders	
	Size issue - Growth and failure of P2P approach	Programme creation process	Engagement with stakeholders	
	Beyond certification - Advocacy role of RSPO	Programme creation process	Engagement with stakeholders	
Benefits to members Distinction between large and small growers		Motivations for joining their standard (and interpreting risk)		

	Distinctions within smallholder definition	Motivations for joining their standard (and interpreting risk)		
	Clearer benefits to larger growers	Motivations for joining their standard (and	Engagement with	
		interpreting risk)	stakeholders	
	Intermediary outreach to smaller growers	Engagement with stakeholders	Sources of credibility / legitimacy	
	Network / advocacy value of RSPO	Engagement with stakeholders	Sources of credibility / legitimacy	
	Difficulty communicating RSPO benefits to consumers	Motivations for joining their standard (and interpreting risk)		
	Sustainable palm oil as a difficult concept for consumers	Engagement with stakeholders		
	Good PO v Bad PO - Communication	Engagement with stakeholders		
	Inclusive dialogue - Media sources	Engagement with stakeholders		
Credibility problems, POIG and RSPO	Prescriptive rules vs holistic engagement process of RSPO Next	Standard review/development mechanisms		
	Going beyond certification with stakeholders	Standard review/development mechanisms	Sources of credibility / legitimacy	
	Developing the standard	Standard review/development mechanisms	Engagement with stakeholders	
	Engaging with stakeholders over developments	Standard review/development mechanisms	Engagement with stakeholders	
	Moving beyond RSPO as a Reputational Risk 'shield'	Standard review/development mechanisms	Motivations for joining their standard (and interpreting risk)	
Working with governments	Regional issues	Engagement with stakeholders		
	Variations and jurisdictional differences	Engagement with stakeholders	Sources of credibility / legitimacy	
	Motivational issues for laggards	Engagement with stakeholders	Motivations for joining their standard (and interpreting risk)	
	Deforestation issues and the role of RSPO	Sources of credibility / legitimacy		

RSPO Business Model development	Previously a B2B model	Standard review/development mechanisms	review/development mechanisms	
	New jurisdictional certification approach	ž		
	Working with smallholders in areas of poor governance			
Laggards v Leaders	Motivations of laggards	Motivations for joining their standard (and interpreting risk)		
	RSPO as proxy for having own policies Motivations for joining their standard (and interpreting risk)			
	Problematical approach encouraging RSPO as a proxy	Motivations for joining their standard (and interpreting risk)		
Two-tier approach to change	Market driving the need for tiers within RSPO	Standard review/development mechanisms		
	Differentiation within the standard	Standard review/development mechanisms		

(ii) Rainforest Alliance / SAN Interview

Questions Descriptive codes		Theme Group Tags (1)	Theme Group Tags (2)	Theme Group Tags
				(3)
Motivation to join External		Motivations for joining their standard (and		
certification standards	Reputational risk motivation	interpreting risk)		
	Stakeholder 'engagement' motivation	Engagement with stakeholders		
		Motivations for joining their standard (and		
		interpreting risk)		
		Motivations for joining their standard (and		
	Using RA as transparency tool	interpreting risk)		
	Company using RA as reputational Motivations for joining their standard (and			
	risk tool	interpreting risk)		
	Development of this approach by		Sources of credibility /	
	better companies	Standard review/development mechanisms	legitimacy	
	RA as a sustainability 'claim' tool	m' tool Motivations for joining their standard (and		

		interpreting risk)		
RA resonance with consumers	Consumers positivity towards RA as a brand Difficulty identifying 'premium' value	Engagement with stakeholders	Motivations for joining their standard (and interpreting risk)	
	to customers	Engagement with stakeholders		
RA resonance with other stakeholders	Reinforcement of brand value re. sustainability	Motivations for joining their standard (and interpreting risk)		
	Variance in resonance with farmers	Sources of credibility / legitimacy		
	High resonance with large / medium farms	Sources of credibility / legitimacy		
	Less resonance with small growers	Motivations for joining their standard (and interpreting risk)		
	Depends on level of organisation at smaller end			
	RA is buyer-driven tool			
SAN connection with grass- roots members/farmers	Engagement with smallholders is considerable at design and implementation phase	Engagement with stakeholders	Sources of credibility / legitimacy	
	Flexibility within implementation process	Programme creation process		
	Regional variations	Programme creation process		
	Major engagement emphasis	Engagement with stakeholders	Sources of credibility / legitimacy	
Governance mechanisms as representatives	High representation of developing countries	Engagement with stakeholders		
	Less reliance on large NGOs	Engagement with stakeholders		
	Close links to largely-smallholder members	Engagement with stakeholders		

Implementation and review	Learning opportunities within			
process	development process	Standard review/development mechanisms		
			Engagement with	
	Local adaptation variations	Standard review/development mechanisms	stakeholders	
Development of SAN				
approach	Implementation of levels	Standard review/development mechanisms		
		_	Engagement with	
	Encourage a continuous journey	Standard review/development mechanisms	stakeholders	
	Recognition of efforts	Standard review/development mechanisms		
		Motivations for joining their standard (and		
	Race to the top'	interpreting risk)		

Appendix I – Ethical Review Form

LONDON MET RESEARCH ETHICS REVIEW FORM

For Research Students and Staff

Postgraduate research students (MPhil, PhD and Professional Doctorate): This form should be completed by all research students in full consultation with their supervisor. All research students must complete a research ethics review form before commencing the research or collecting any data and no later than six months after enrolment.

Staff: This form should be completed by the member of staff responsible for the research project (i.e. Principal Investigator and/or grant-holder) in full consultation with any coinvestigators, research students and research staff before commencing the research or collecting any data.

London Met's Research Ethics Policy and Procedures and Code of Good Research Practice, along with links to research ethics online courses and guidance materials, can be found on the Research & Postgraduate Office Research Ethics webpage:

http://www.londonmet.ac.uk/research/current-students/research-ethics/

London Met's Research Framework can be found here:

http://www.londonmet.ac.uk/research/current-students/research-framework/

Researcher development sessions can be found here:

http://www.londonmet.ac.uk/research/current-students/researcher-development-programme/

This form requires the completion of the following three sections:

SECTION A: APPLICANT DETAILS

SECTION B: THE PROJECT - ETHICAL ISSUES

SECTION C: THE PROJECT - RISKS AND BENEFITS

SECTION A: APPLICANT DETAILS	

A1	Background information

Research project title:

Stakeholder involvement in the selection of biodiversity - focussed voluntary Corporate Social Responsibility (CSR) standards within the food / agri-business industry.

Date of submission for ethics approval: TBC

Proposed start date for project: 01/01/2015

Proposed end date for project: 01/04/2016

Ethics ID # (to be completed by RERP chair): 51/15

A2 | Applicant details, if for a research student project

Name: Christopher Monks

London Met Email address: Unknown (chris.monks@gmail.com)

A3 Principal Researcher/Lead Supervisor

Member of staff at London Metropolitan University who is responsible for the proposed research project either as Principal Investigator/grant-holder or, in the case of postgraduate research student projects, as Lead Supervisor

Name: Dr Eugenia Markova

Job title: Senior Lecturer, The Faculty of Business & Law

London Met Email address: e.markova@londonmet.ac.uk

SECTION B: THE PROJECT - ETHICAL ISSUES

B1 | The Research Proposal

Please attach a brief summary of the research project including:

- Background/rationale
- Research questions/aims/objectives
- Research methodology
- Review of key literature in this field & conceptual framework for study
- References

If you plan to recruit participants, be sure to include information how potential participants in the study will be identified, approached and recruited; how informed consent will be obtained; and what measures will be put in place to ensure

confidentiality of personal data.

B2 CM: The following is a summary of the research questions, aims and objectives, as well as a summary of the research framework as derived from the literature review. The attached document includes the latest draft of the introduction, literature review and methodology sections. The methodology section includes further details relating to the sample set of companies that are to be included in the research, and also covers

issues including dealing with confidential information.

The research framework aims to test the credibility and legitimacy of Corporate Social Responsibility (CSR) - focused on voluntary standards within the food / agri-business industry. The main research question is asking whether food manufacturing companies are effectively integrating stakeholder group engagement into the selection process of their biodiversity-related certification standards and commitments.

The literature review identifies a gap in the existing research relating to level of stakeholder inclusivity within CSR-related standards. It has been recognised (Gilbert 2010) that academic research on the production stage of voluntary standards would assist in challenging claims by these standards to have been based on a comprehensive multi-stakeholder development processes, involving a wholly-representative set of business and non-business stakeholders specific to the companies that have applied them.

B4

B3

The basic CSR definition by Carroll (1979) relates to companies recognising that corporate activity has a responsibility to wider society beyond obeying the law, with managers recognising their responsibilities beyond maximizing profits to company owners and / or shareholders. The instrumental form of stakeholder theory (Donaldson, 1995) concerns the capturing of positive economic consequences from engagement with the many different stakeholder groups, and using this as justification for investing capital into the implementation and management of stakeholder-focused processes and practices. This interpretation of CSR and stakeholder theory approach is considered most relevant and

B5

applicable to our line of inquiry.

When discussed in terms of using CSR strategically, as a 'means to an end' for achieving high-quality engagement, companies run the risk of selecting and implementing inadequate or inappropriate standards for protecting and representing the needs of societal stakeholder groups. The literature review identifies an issue where companies adhering to given CSR-related standards are used as a replacement for engagement, rather than the selection of standards emerging from a pre-established engagement process, and ultimately using certification alone as a business proxy for adequate stakeholder engagement.

Combined with this, the literature review identifies that environmental sustainability remains a major issue within the food manufacturing industry, despite the proliferation of CSR-related voluntary standards within the sector. The issue of food justice being of significance in that it questions the efficacy and effectiveness of biodiversity and ecosystem services-specific standards to including affected stakeholders at operational level, and as a result an increased level of legitimacy within affected stakeholder groups. Sustainability certification standards are particularly prevalent within the food sector, however evidence by Oxfam questions whether accountability standards are achieving positive effects within the most vulnerable stakeholders within food manufacturing supply chains. In particular, the Oxfam report asserts that the food and agri-business sector companies have 'low legitimacy in the supply chain' (Bailey, 2011: p.15).

The literature review identifies two key biodiversity-related CSR standards that are relevant to the food industry, the FSC and the MSC, in relation to stakeholder engagement. The food and agriculture sector, a particularly sensitive business sector where conflicting global stakeholder legitimacy claims in product supply chains exist, has observed a proliferation of voluntary CSR-focused corporate standards in the last 15 to 20 years, covering all aspects of the food industry including sustainable sourcing, management systems and supply chain labour and, environmental standards, to name but a few.

In order to test the credibility and legitimacy of CSR - focused voluntary standards within the food / agri-business industry, this research intends to case- study the participation of wider stakeholders in the development and ongoing implementation of standards (where standards have been designed on a bespoke basis by companies), and also consider the purpose for applying specific pre-established sustainability standards by food / agri-business companies.

I have selected the use of the case study theory as the most appropriate method to apply. There are a number of different forms of case study that can be used, depending on the type of data and phenomenon that is being analysed. For the purposes of this research, the collective case study approach is considered appropriate. Multiple case studies are conducted, i.e. the same case study is applied for a number of different companies in the various and distinct operational contexts. It is an important facet of this analysis that we use this approach to profile the companies in question in terms of their specific geographical context, and to understand this context as a way of informing the interview stage of the data collection. The nature of our enquiry, namely using a combination of quantitative and qualitative methods utilising primary and secondary data, followed by in-depth interviews, makes the case study approach most suitable for the requirements of this research.

Questions to be explored in the case study are:

- How does the company's strategic organisation affect / alter the company's dialogue process with stakeholders, when seeking to develop / adopt CR standards?
- How does the company decide which biodiversity-related standards to adopt?
- Who does the Company consult in this process? Which stakeholder groups in each location has been included in the implementation of the standard?

In addition, the study aims to ascertain in particular whether a 'rich interests' bias has been created in the formulation and / or selection stage for CSR standards that these food manufacturing companies have

applied to their operations. We consider whether this undermines the credibility of these voluntary CSR standards in the eyes of key stakeholders that are directly affected stakeholders such as in developing countries, where the majority of the supply chain sourcing for the global agri-food industry occurs.

Research Ethics

Please outline any ethical issues that might arise from this study and how they are to be addressed.

NB All research projects have ethical considerations. Please complete this section as fully as possible using the following pointers for guidance. Please include any additional information that you think would be helpful.

- Does the project involve potentially deceiving participants? **No**
- Will you be requiring the disclosure of confidential or private information? Yes
- Is the project likely to lead to the disclosure of illegal activity or incriminating information about participants? No
- Does the project require a Criminal Records Bureau check for the researcher?
 No
- Is the project likely to expose participants to distress of any nature? **No**
- Will participants be rewarded for their involvement? No
- Are there any potential conflicts of interest in this project? **No**
- Are there any other potential concerns? No

If you answered yes to any of the points above, please explain.

As part of the interview stage of the research, information will be sought about the internal procedures, decision-making processes and management structures of the company, some of which may not be publicly-available.

Ethical issues are a major consideration as it is not my intention to mislead or gain information dishonestly thereby undermining the validity of this research. In particular, there may be the possibility of contacts within food manufacturing companies to be discussing business processes and inner workings that may be considered to be sensitive information, and thus would be considered confidential. 'Confidentiality' in any piece of ethical research is a commitment to any participant or informant, and potentially the provider of any primary source of information informing the study, that their participation will be respected, and that the researcher will ensure that they remain secure and safe.

An element of 'bracketing' is required on my part in order to remain unbiased and open minded with questioning techniques employed which will allow data to 'emerge' from interviews rather than being 'forced' (Dickson et al, 2012). I am aware of the potential for pre-conceptions to cloud the study due to the critical nature of NGO reports that have been cited in the literature review, in particular relating to the Oxfam 'Food Justice' reports that are particularly critical of food manufacturing companies (Oxfam, 2012).

An awareness of confirmation bias is also essential and care will be taken to include negative cases or alternative explanations in the study. Overall, the intention of the study is to produce a clear narrative which approaches and explores "the complexities and contradictions of real life" (Flyvberg, 2006:237) experienced by those involved in selecting and implementing CSR-related, and in particular biodiversity-related, certification standards.

Does the proposed research project involve:

 The analysis of existing data, artefacts or performances that are not already in the public domain (i.e. that are published, freely available or available by subscription)? Yes

As part of the interview stage of the research, information will be sought about the internal procedures, decision-making processes and management structures of the company, some of which may not be publicly-available.

- The production and/or analysis of physical data (including computer code, physical entities and/or chemical materials) that might involve potential risks to humans, the researcher(s) or the University? **No**
- The direct or indirect collection of new data from humans or animals? **No**
- Sharing of data with other organisations? **No**
- Export of data outside the EU? No

If you answered yes to any of the points above, please explain.

Will the proposed research be conducted in any country outside the UK? Yes

Within the group of potential company case studies that we are proposing, a number of the companies are located outside of the UK, including some based in the European Union (non-UK) and in North America. The global nature of the research is such that data and information will be drawn and sought from these non-UK based companies.

If so, are there independent research ethics regulations and procedures that either:

- Do not recognise research ethics review approval from UK-based research ethics services? No and/or
- Require more detailed applications for research ethics review than would ordinarily be conducted by the University's Research Ethics Review Panels and/or other UK-based research ethics services? No

If you answered yes to any of the points above, please explain.

Does the proposed research involve:

- The collection and/or analysis of body tissues or fluids from humans or animals? No
- The administration of any drug, food substance, placebo or invasive procedure to humans or animals? No
- Any participants lacking capacity (as defined by the UK Mental Capacity Act 2005)? No
- Relationships with any external statutory-, voluntary-, or commercial-sector organisation(s) that require(s) research ethics approval to be obtained from an external research ethics committee or the UK National Research Ethics Service (this includes research involving staff, clients, premises, facilities and data from the UK National Health Service (NHS), Social Care organisations and some other statutory public bodies within the UK)? No

If you answered yes to any of the points above, please contact your faculty's RERP chair for further guidance.

SECTION C: THE PROJECT - RISKS AND BENEFITS

C1 | Risk Assessment

Please outline:

- the risks posed by this project to both researcher and research participants
- the ways in which you intend to mitigate these risks
- the benefits of this project to the applicant, participants and any others

As per information supplied in Section B, as part of the interview stage of this case study research, information will be sought about the internal procedures, decision-making processes and management structures of the company, some of which may not be publicly-available.

Companies that have been identified as potential targets for study are all global public listed companies on major global stock exchanges, and participation will be sought on a voluntary basis only, and any information which is submitted to the study under the condition of confidentially will be treated as such. It is anticipated that market-sensitive details such as operational procedures specific to the company, and details of third-

parties such as named third-party participants in stakeholder-related consultations, may come under the provision that such information is treated under the condition of confidentiality. Where any such requests are made by companies that are contacted and case studied as part of the research, these requests will be honoured and steps will be taken to ensure that all such information is not identifiable in the research findings. It is my view that this business management research proposal is very low risk in terms of its potential to create ethics issues.

Please ensure that you have completed Sections A, B, and C and attached a Research Proposal before submitting to your Faculty Research Ethics Review Panel (RERP)

Please sign this form and submit it as an email attachment to the Chair of your faculty's Research Ethics Review Panel (RERP) and cc <u>all</u> of the staff and students who will be involved in the proposed research.

http://www.londonmet.ac.uk/research/current-students/research-ethics/

Research ethics approval can be granted for a maximum of 4 years or for the duration of the proposed research, whichever is shorter, on the condition that:

- The researcher must inform their faculty's Research Ethics Review Panel (RERP) of any changes to the proposed research that may alter the answers given to the questions in this form or any related research ethics applications
- The researcher must apply for an extension to their ethics approval if the research project continues beyond 4 years.

Declaration

I confirm that I have read London Met's Research Ethics Policy and Procedures and Code of Good Research Practice and have consulted relevant guidance on ethics in research.

Researcher signature:	Mr Chris Monks
Date:17/12/2014	
Feedback from Ethics Review	, Panel

	Approved	Feedback where further work required
Section A	Yes	
Section B	Yes	
Section C	Yes	

Date of approval	5th January 2015
NB: The Researcher should be notified of decision within <u>two</u> weeks of the submission of the application. A copy should be sent to the Research and Postgraduate Office.	
Signature of RERP Roger Bennett chair	