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Sustainable Seed Supply Chain Management

A case study on Syngenta´s Indian hybrid vegetable seed supply chain

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I am well aware of the fact that writing an MBA thesis and being in the favourable position to do so with direct access to a MNC that provided me with business related information regarding its sustainable supply chain management practices, put me in a situation that not only made the subject of my research rather interesting to work on, but allowed me to gain corporate insights that are not accessible to all of us.

In this sense, I would like to thank:

GV, as the promoter at Syngenta Intl., and

SY, as the principal informant,

for the time and know-how they have invested in me.

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This MBA thesis is dedicated to my comrade and beloved wife

Ylva Stiller

Without her diehard optimism and support during the last 3 years, I would never, never ever have managed to finish this MBA program and this thesis simply would not exist.

Abstract (German)

Das schweizerische Agrochemie Unternehmen Syngenta sah sich mit Vorwürfen der Kinderarbeit in ihrer indischen Bt-Baumwolle Lieferantenkette (LK) konfrontiert. Ausgiebige Medienberichterstattung und der Druck von NGOs konnten somit zu eventuellen Reputationsverlusten und einer geschwächten Marke führen. Nach mehreren Konsultationen mit Anspruchsgruppen über die Arbeitsbedingungen in Indiens Landwirtschaft stellte Syngenta fest, dass eine Übereinstimmung der Unternehmensaktivitäten mit sozial-gesellschaftlichen Vorschriften ein integraler Bestandteil des *sustainable going-to-market business model* sein muss, und keine isolierte Aktivität. In 2006 transferierte die Syngenta die von ihr mit FLA und weiteren inter-/ nationalen NGOs/ CSOs initiierte PPP in die indische LK für hybrides Saatgut (ISC). Die ISC wählte man aufgrund der Risiken bei der Einhaltung der Arbeitsrechte, die auf kulturell tief verankerten Verhaltensweisen der Lieferanten beruhen. Aus Diskussionen zum integrativen Nachhaltigkeitsansatzes für die ISC geht folgende Forschungsfrage hervor: *How sustainable supply chain management strengthens Syngenta's position as the preferred customer in its Indian seed supply chain partnerships?*

Die gewählte Forschungsmethode ist die holistische Einzelfallstudienmethode. Die Arbeit ist deskriptiv und hat ausserdem zum Ziel, das „Pagell & Wu (2009) SSCM Modell" zu ergänzen/ erweitern, welches angewandt wurde um die SSCM-Praktiken zu identifizieren und zu beschreiben. Dabei beschränkt man sich auf zwei *new behavioural* Elemente: *reconceptualising the SC* und *supply base continuity* des Modells.

Die Resultate der Fallstudie deuten darauf hin, dass die Elemente alle SSCM-Praktiken umfasst, welche die Syngenta einsetzt, um ihre Käufer-Lieferanten Beziehungen zu stärken. Dadurch werden kulturelle Verhaltensweisen, die bspw. nicht kompatibel mit den ILO-Konventionen sind, verändert. Diese Arbeit identifiziert und beschreibt SSCM-Aktivitäten, wie z.B. partnerschaftliches Verhalten mit nicht-traditionellen LK-Mitgliedern, das Befähigen von Agenten als *social change-agents*, Decommoditisierung, das Abbauen von Risiken für Lieferanten, Transparenz, und Rückverfolgbarkeit in Kombination mit dem Befähigen von Lieferanten und deren Umfeld im Zuge der umzusetzenden Abhilfemassnahmen.

Syngenta praktiziert einen proaktiven, integrativen Lösungsansatz, welcher u.a. die oben erwähnten SSCM-Praktiken umfasst, und diese mit finanziellen Anreizen für mehrschichtige, wirtschaftlich realisierbare Partnerschaften mit *strategic commodity-suppliers* kombiniert. Syngenta legt somit den Grundstein für ein erfolgreiches, umfassendes SSCM, welches darauf abzielt, die Lebensqualität aller involvierten Parteien zu erhöhen und kann zu guter Letzt ihre ISC-Aktivitäten besser aus einer unternehmerischen SSCM-Perspektive einschätzen.

Abstract

The Swiss agrichemical corporation Syngenta was confronted with child labour allegations in its Indian Bt-cotton supply chain. As that, it was concerned that extensive media attention in the Swiss press and NGO pressure would lead to reputational loss and feared a weaker brand. After several stakeholder consultations on working conditions in the Indian agricultural sector, Syngenta realised that social compliance must become integral part of a sustainable going-to-market business model, and not an isolated add-on. In 2006, Syngenta transferred the initiated PPP with FLA, national/ local NGOs and CSOs, and governmental agencies to its Indian hybrid vegetable seed supply chain (ISC) that was identified to have labour right compliance risks deeply rooted in cultural habits.

Emanating from discussions regarding the integral sustainability approach, this thesis asks the question *how* sustainable supply chain management (SSCM) strengthens Syngenta's position as the preferred customer in its Indian seed supply chain partnerships.

The chosen research method is single holistic case study research. This thesis is descriptive case study with the purpose to extend/ refine Pagell & Wu's (2009) prescriptive SSCM model that was applied to identify and describe Syngenta's SSCM practices for improving working conditions. The thesis is limited to the two *new behavioural* elements *reconceptualising the SC* and *supply base continuity*. The results suggest that the model includes all evident elements that Syngenta considers relevant to strengthen its buyer-supplier relationships and allow its suppliers, their farm labour, and the community level to benefit from corporate SSCM activities. This thesis identifies and describes SSCM practices, such as partnering with non-traditional SC members and capacitating intermediates as social change-agents, or decommoditisation of an SC, reducing supplier risks, transparency, and traceability in combination with capacitating suppliers and seed growing communities for remedial action.

Syngenta's answer to become the preferred customer of leverageable seed suppliers is a pro-active, inclusive approach that integrates amongst others the aforementioned practices and combines them with financial incentives to create multi-layered, economic viable strategic commodity partnerships. Syngenta capacitates its suppliers, intermediates, and the communal level, esp. women, to increase the sustainability performance of the ISC. As that, it ameliorates culturally enrooted habits that are incongruent with ILO conventions. Syngenta applies and modifies various state-of-the-art SSCM practices in its ISC to lay the cornerstones for successful inclusive, collaborative SSCM action and thereby focuses on increasing quality of life of all involved parties. Syngenta can now better classify its ISC activities from a corporate SSCM away from a compliance driven perspective.

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List of abbreviations

a.o.	and others
abbr.	abbreviation
add.	additional
APAC	Asia Pacific
app.	approximately
a.s.a.	as soon as
ASI	Association of the Seed Industry
a.s.o.	and so on
BMU	Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit
BRICS	Brazil, Russia, India, China, South-Africa (grouping acronym)
Bt	*Bacillus thuringiensis*
BU	Business Unit
CAP	Corrective Action Plan
CC	Coding Colour
CEO	Chief Executive Officer
cf.	*Latin:* confer *(English: compare)*
CLEG	Child Labour Eradication Group
CoC	Code of Conduct
CP	Crop Protection (BU Syngenta)
CSM	Centre for Sustainability Management
CSO	Civil Society Organisation
C(S)R	Corporate (Social) Responsibility
DJI	Dow Jones Indexes
DJSI	Dow Jones Sustainability Index
DIHR	Danish Institute for Human Rights
e.g.	*Latin:* exempli gratia *(English: for example)*
esp.	especially
et al.	*Latin:* et ali *(English: and others)*
etc.	*Latin:* etcetera *(English: and so on)*
EvB	Erklärung von Bern
f. /ff.	further page/s
fig.	figure
F2F	Face-to-Face
FLA	Fair Labor Association

FTE	Full Time Employee
HR	Human Rights
HSE	Health Safety and Environment
Ibid.	*Latin:* ibidem *(English: the same)*
i.e.	*Latin:* id est *(English: that is)*
IEM	Independent External Monitoring
IIECL	International Initiative on Exploitative Child Labor
ILO	International Labour Organisation
incl.	including
Intl.	International
I.o.w.	In other words
ICN	India Committee of the Netherlands
IRFT	International Resources for Fairer Trade
ISC	Indian hybrid vegetable seed supply chain
IT	Information Technologies
IUF	International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Association
Lat.	Latin
LCA	Life-Cycle Assessment
Ltd.	Limited
MBA	Master of Business Administration
Mio.	Million(s)
MNC	Multi-national Corporation
MNE	Multi-national Enterprise
n.d.	no date
NGO	Non-governmental Organisation
No.	Number
NPO	Not-for-profit Organisation
P.	Page/ Pagell
p.a.	*Latin:* per annum *(English: per year)*
pp.	pages
PPE	Personal Protective Equipment
PPP	Public, Private for-profit and not for-profit sector Partnership
Prof.	Professor
P&W	Pagell & Wu
RCI	Responsible Competitiveness Index
SAM	Sustainable Asset Management

SFSA	Syngenta Foundation for Sustainable Agriculture
SO	Seed organiser
(S)SC	(Sustainable) Supply Chain(s)
(S)SCM	(Sustainable) Supply Chain Management
SSF	Seed supply-farmer
SYN	Syngenta (Seeds India)
SYNN	Abb. for Syngenta Intl. on Swiss Stock Exchange
SYT	Abb. for Syngenta Intl. on New York Stock Exchange
Tab.	Table
UNDPI	United Nations Department of Public Information
UNHRC	United Nations Human Rights Council
US	United States
vs.	versus
WBCSD	World Business Council for Sustainable Development
WCED	World Commission on Environment and Development

1 INTRODUCTION

1.1 Syngenta

Syngenta (SYN) Intl. is a Swiss agrichemical corporation listed on the Swiss Stock Exchange (SYNN) and New York Stock Exchange (SYT) headquartered in Basle. SYN Intl. is a ten years young agrichemical corporation structured in three business units[1] (BU): Crop Protection (herbicides, insecticides and fungicides), Seeds (field crops and vegetables), and Lawn & Garden (flowers, turf and ornamentals). In 2010, sales amounted to app. $11.6 billions (2009: $10.9 billions) (Syngenta 2011e, 3; Syngenta 2010c). In 2010, SYN employed 26180 FTE (2009: 25925 FTE) in over 90 countries (Syngenta 2011a, 51). The BU SYN Seeds sells seeds for growing corn, soybeans, sunflowers, sugar beet, other diverse field crops, and oilseeds as well as vegetables and flowers (Syngenta 2010b, 45) to end-users with sales amounting to $2.81 billions in 2010 (2009: $2.56 billions) (Syngenta 2011e, 11). Within the BU Seeds, corporate activities and responsibilities are partitioned in regions and/ or countries.

1.2 Background

In the light of the then emerging human rights discussion in early 2002-2003 and the sustainable development discussion in general, SYN Seeds India[2] was confronted with the rather complex phenomenon of child labour in its Bt-cotton and later in its hybrid vegetable seed supply chain in India. In 2003, Venkateshwarlu (2003) published a report on child labour in Bt-cotton in India in which he brought forward the allegation that SYN Intl. would employ 6000 children in the state of Andra Pradesh and thereby contravening several ILO conventions, such as Convention no. 138 on child labour. The report received extensive media attention by the Swiss press (*cf.* Anonymous 2003, 2; FLA 2006b, 3; Swissinfo 2003) who made the allegations public. Consequently, SYN Intl. as the focal corporation was pressed to solve this rather condemnable state of affairs within its supply chain (SC) by relevant stakeholders who held SYN Intl. morally responsible. Although the child labour phenomenon cannot be classified as a violation of a law caused by SYN Intl. own (current & sold) operations, its activities directly and indirectly affect the seed production practices of its seed supply-farmers[3]. These 1st-tier suppliers are legally independent commercial growers who deliver directly to SYN and hire 2nd-tier farm labour and/ or employ unpaid (underage) family and community/ village members. At the time the child labour allegations became public, SYN Intl. was already informed about the situation Venkateshwarlu (2003) came across and from

[1] SYN launched its new strategy in early February 2011, integrating the 3 BUs.

[2] *SYN Seeds India* is shortened to *SYN*. *SYN Seeds* or *SYN Intl.* appear in full.

[3] *Seed supply-farmers* are shortened to *suppliers.* Other suppliers' names appear in full.

2002 onward had initiated measures to deal with the challenges within its cottonseed affairs. SYN Intl.'s *ad hoc* reaction was the implementation of a clause in its seed supply contracts that forbade the use of child labour in the production process, simultaneously knowing that the mechanisms to control and implement the measure were not in place (FLA 2006b, 10; Swissinfo 2003).

A possible solution

In his report, Venkateshwarlu offers a solution to corporations to overcome most of these issues; a fairer pricing policy would be key to eliminating child labour. In his opinion, low profit margins press farmers to reduce labour cost and hire cheaper labour, i.e. children (2003, 17f.). Other arguments favouring child labour in seed growing are children's more appropriate body height, their discipline (easier to control), and their adeptness to sensitive emasculation/ pollination work ("nimble fingers argument") («1», 3)[4]. When organising labour for a rather labour intense growing process such as growing seeds the farmer/ grower has the possibility to employ his own and/ or hired children or more expensive adults (own family and/ or hired). Women represent up to 90 percent of the adult workforce for weeding and hybridisation («9», 0:28; FLA 2006b, 8), whereas children will work on their parents' farms, because it is part of their lives (EM, 29ff.)[5]. Farmers need a secure labour force and therefore most likely favour long-term contracts (i.e. a season, the production process, which lasts up to four months) with its workforce and pay advances and loans to their workers to keep them bound to the farmland (FLA 2006b, 9).

A more comprehensive approach needed

Despite the efforts of the Indian government to improve social and environmental conditions for its citizens during the last few decades[6], and because of the transnational nature of many problems along with ineffective and/ or absent labour and human rights laws (*cf.* Kinley 2009) SYN Intl. needs an internal monitoring system with a stringent voluntary Code of Conduct (CoC) to be due diligent with. SYN needs this mechanism to minimise social risks from labour right violations (FLA 2006b, 3f.; «6», 4). After a range of stakeholder meetings in Mumbai, Hyderabad and Delhi, SYN Intl. engaged not only with Venkateshwarlu but also the not-for-profit organisation (NPO) Fair Labor Association (FLA) to partner in a voluntary pilot project with an innovative public, private for-profit and not-for-profit sector partnership (PPP) approach. Since SYN Intl.'s attempt to initiate a sector-wide industry collective action plan had failed because of lacking consensus between all members along its own and competing SCs, SYN engaged in a PPP for its own Indian Bt-cottonseed SC. SYN chose FLA since comprehensive knowledge in the field of labour and HSE standards (monitoring) to manage a SC's social risk and performance management is mostly limited to the apparel industry

[4] The author listed internal documents in a separate reference list, and marked them differently (*cf.* Chapter 14).

[5] The author refers to the interview transcripts with the interviewees' abbr. See table 5 for further details.

[6] India, a BRICS country, scored a low 70th place in the 2007 RCI ranking, which is an indicator for the extent nations embed social and environmental business practices at the heart of their economies (*cf.* AccountAbility 2007, 145).

where FLA has extensive experience. The implemented *modus operandi* is an integrative, collaborative approach that includes among other local non-governmental organisations (NGO), suppliers, local authorities, and FLA (affiliates). The International Initiative on Exploitative Child Labor (IIECL) conducted two independent studies in 2004 to test the feasibility of the FLA monitoring system and to identify risks of violating FLA standards (including child labour) and define appropriate measures to be compliant with the FLA code (FLA 2006b, 5).

It became clear though, that child labour was (and still is) part of a much larger socio-economic problem rising out of contextual factors such as India's rural poverty, absence of social security systems and poor educational infrastructures. I.o.w. SYN realised when focusing solely on ameliorating child labour on its contracted farms through traditional compliance mechanisms, the efforts would have limited results, because the actual root causes that lead to these condemnable symptoms and are deeply embedded in unsolved societal behaviours (FLA 2008d; FLA 2006a). In 2002, approximately 75 percent (883 Mio.) of the poor in developing countries lived in rural areas and mostly depended on agriculture for their livelihoods. In India that particular year, small land holdings of two hectares or less constituted approximately 85 percent of the country's total operational holdings (SFSA 2010b; World Bank 2008). It should be mentioned, that at the beginning of 2006 SYN Intl. sold its global cotton-seed business that comprised operations and assets in India, Brazil, Europe, and certain cotton germplasm[7] in the US to its competitor Delta and Pine Land Company (FLA 2008e, 6; Seedquest 2006). Thereupon SYN's sensitised management decided to transfer the PPP initiative to its Indian hybrid vegetable seed supply chain[8] (FLA 2006a, 7; FLA 2008e, 6).

[7] I.e. a seed collection of genetic resources.

[8] Indian hybrid vegetable seed supply chain is shortened to Indian supply chain (ISC). Other SCs names appear in full.

1.3 The Indian hybrid vegetable seed supply chain of Syngenta

Contracting suppliers for a growth season is the general established way to manage seed contracts. SYN uses contracts to set the minimum required standards for its 1st-tier suppliers who supply directly to SYN (*cf.* Lamming 1993, 186ff.). In India, SYN contracts a heterogeneous group of independent commercial, but mostly small hold farmers (*fig.* 1) with varying sizes of farmland. Their lots are sometimes as small as a quarter of an acre (FLA 2006b, 5), and situated in some of India's most productive agricultural regions (Gujarat, Maharashtra, Karnataka). These areas have excellent agronomic conditions for growing vegetables. Besides the majority of the suppliers that own little farmland, commercial field crop farmers with bigger farms can produce seeds for SYN and other buyers as a parallel activity to their main business (GV, 269ff.; SY, 335ff.).

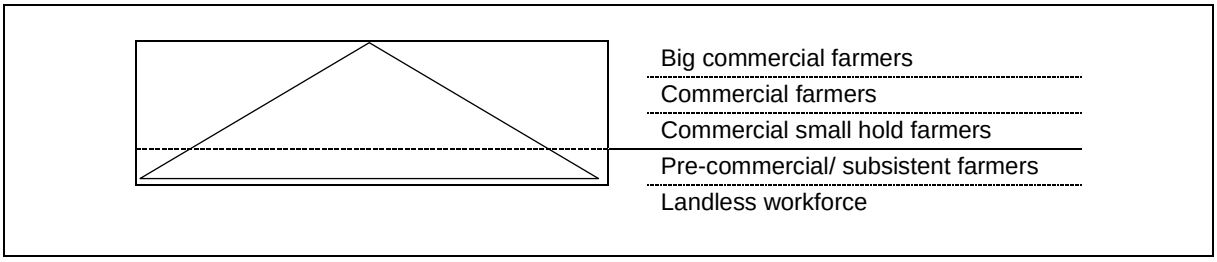

Figure 1. Relative nos. and farmer types that partner with SYN. Adapted from SFSA (2010a, 6).

SYN regularly contracts half of an entire farmland community/ village, whereas its competitors may contract the other half. As such, small hold farmers that multiply SYN's foundation seeds and thereby maintain a certain standard are confronted with neighbour(s) who e.g. grow seeds for national corporations with no or low quality or social minimum requirements (KA, 194; MR, 292ff.). In 2010 SYN contracted and internally monitored 12393 (2009: 8169; 2008: 2312) suppliers in its ISC (Syngenta 2010a, 53). Even though the insertion of an additional level in a SC makes collaborative activities with suppliers (such as monitoring and control efforts) at the lower end of the production process more difficult (Park-Poaps & Rees 2009, 305), the need for intermediates in the ISC constitutes in the large amount of suppliers. As such, SYN delegates the actual contracting in its ISC to intermediates, so-called seed organisers, who work as commissionaires/ intermediates for SYN. These independent intermediates are linked to the suppliers from a local and socio-cultural perspective; they are opinion leaders and important influencers who work in confined geographies (KA, 131ff.). They handle 10 to 200 seed farmers (KA, 133; EM, 64) and forward the contractual conditions to suppliers of their choice, leaving SYN out of the selection process. The content of the contracts is open only for limited negotiation, and includes aspects such as type and quantity of seeds, price of the parent seeds, procurement price paid to farmers, service commission paid to seed organiser (FLA 2006a, 8), and, more recently, requirements regarding upholding labour/ HSE standards. The contracted suppliers ought to have the capacity and capability of multiplying high quality seeds in accordance with SYN specific high (quality) standards.

These suppliers do not buy SYN quality seeds to grow e.g. cash crops for the food processing industry.

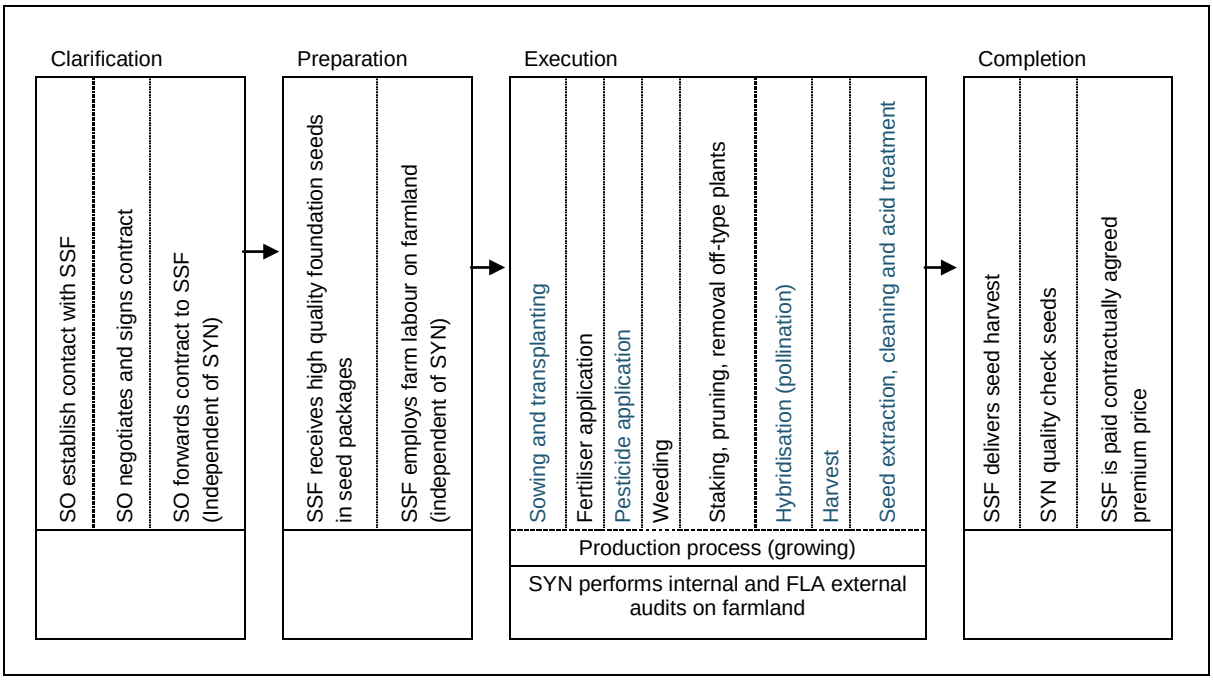

Figure 2. Steps and players for contract completion in the ISC. Own illustration.

Instead, SYN hands out foundation seeds to the suppliers for multiplication purpose, whereupon SYN buys the suppliers' harvested and cleansed seeds at a previously agreed premium price. SYN transports these seeds e.g. to the Netherlands for further processing/ refining before they are sold to the actual end-user, i.e. commercial farmers (EM, 343). The actual end-users of the hybrid seeds grow e.g. okra, hot and sweet peppers, eggplants, beans, (water) melons, sweet and baby corn and tomatoes (FLA 2006a, 7). The suppliers are responsible for the production process incl. the hiring of farm labour, whereas they grow the parent plants mostly in open fields, and to a certain extent with the help of poly-tunnels (FLA 2006b, 7). To guarantee the supply of high-quality seeds after contract completion, SYN needs a certain level of coordination and control by means of on-site farmland quality and HSE audits. In *fig.* 2 the blue-coloured production process steps are of particular high compliance risks to SYN's SC activities. They relate to health and safety, child and bonded or forced labour, excessive hours of work (FLA 2006b, 2, 11) as well as wages.

2 PROBLEM DEFINITION

SYN is confronted with pressures from its stakeholders to address economic as well as social/ societal challenges in its buyer-supplier relationship that not only address its 1st-tier relationships with its suppliers, but also extend beyond 2nd-tiers. Similar to progressive specialisation through outsourcing (*cf.* Daboub & Calton 2002) SYN's seed production process is fragmented[9]. Thereupon SYN searches for innovative integrative approaches that help structure its activities to improve sustainability performance along its SC. According to A. van Heerden, President and CEO FLA, "[o]n farms it is all there. Human rights, environmental issues and labour rights, they all meet on that farm [...]" («9», 2:07ff.). In the light of an ever increasing demand for food and high-yield seeds on international markets, the question rises how SYN can convince relatively poor entrepreneurial suppliers, who could produce seeds on arms-length contractual terms for competing (inter-)national seed buyers with no or low minimum quality and ethical requirements, to invest in a more sustainable production process? Differently put, *the question was raised how SYN can manage its buyer-supplier relationship to become its suppliers' favoured partner for multiplying hybrid vegetable seeds sustainably?* Additionally, suppliers that are able to uphold SYN's sustainability demands are considered to be subject to competitive offerings, whereas those that cannot frequently lack the resources (know-how and finances) to upgrade their working conditions to an acceptable level (*cf.* Fichter & Sydow 2002). Contextual factors like the current farm labour shortage in similar Indian SCs, such as commercial farming of high-yield/ cash crops, lead to situations in which farmable land is of necessity converted (EM, 331ff.; MR, 175ff.). According to Mr GV, a continuation of SYN's compliance efforts is of the greatest importance to improve workplace standards, but he also emphasises "that the farmers who currently work with SYN want to continue doing so, as there are growth opportunities for them" (FLA 2008c, 10). He believes providing incentives for compliance is a better approach over punishment or disincentives. Accordingly, "it is more important to strive for cooperation in workplace standards amongst the workers, farmers and other stakeholders to achieve the desired goals" (ibid.).

[9] Arndt and Kierzkowski (2001) use the term *fragmentation* to describe the physical separation of different parts of a production process. Fragmentation allows production in different countries.

3 RESEARCH QUESTION

Emanating from the introduction and problem definition in the previous chapters, the following research question of this thesis is:

How does sustainable supply chain management strengthen Syngenta's position as the preferred customer in its Indian seed supply chain partnerships?

To answer this question, the author will identify and describe SYN's ISC practices that contribute to a sustainable supply chain (SSC) and stronger ties with its suppliers against the ISC's context. The author derives the notion to perceive suppliers as customers from the fact that SYN Intl. stipulated a strategic goal to become the preferred partner of choice for all its relevant stakeholders.

In what follows, chapter four informs on the research design; the process steps as recommended by Yin (2009) and Stuart et al. (2002) for case study research provide the structure of this thesis. When developing theory, in chapter five the author presents Pagell & Wu's (2009) prescriptive model for sustainable supply chain management (SSCM) that is ought to support corporations in creating truly sustainable SCs. The application of this SSCM model on SYN's ISC will clarify *how* SYN expects to strengthen its buyer-supplier "customer" relationships. As such, the case study will test the robustness of the SSCM model and provide indications for extending/ redefining the model. In chapter six the author discusses how he collected data, whereas chapter seven is reserved for the analytical steps. Chapter eight summarises the outcomes of the structured qualitative content analysis (Mayring 2010, 98f.), where after in chapter nine the author interprets the outcomes in the light of current theory. Chapter ten contains the author's conclusion. Chapter eleven focuses on quality tests that strengthen rigour of case study research, whereas the final chapter twelve concentrates on limitations of the case study results and case study research in general.

4 RESEARCH DESIGN

The research question and the current state of knowledge define whether case-based research is the correct approach (Stuart et al. 2002, 423). Since case studies are the preferred methodology to answer why, what and *how* questions with having a fair understanding of the phenomenon's nature and complexity and when investigating a contemporary social phenomenon's (unknown) variables while being studied in its natural environment in depth (Meredith 1998; Voss et al. 2002; Yin 2009, 17ff.), the method of choice is a case study. Since SYN's activities are embedded in a specific context, and "context is intrinsic to the phenomenon in the qualitative approach" (Golicic et al. 2005, 22), the author considers the context. This is particularly the case, when boundaries between the phenomenon and its context are blurry.

Here, the differentiation between a history and case study as akin designs becomes prevalent. Where histories deal with evidence from the dead past, case studies on the contrary include methods to examine living sources of evidence, such as expert interviews or observation (Yin 2009, 11). Furthermore, case study research differentiates itself from other designs because researchers face a technically distinctive situation in which there "will be many more variables of interest than data points" (Yin 2009, 18). The author will outline methods to manage this situation, such as triangulation through multiple sources of evidence or developing preliminary theoretical considerations for guidance during data collection and analysis, throughout this thesis.

4.1 Scope

For the MBA/ Master thesis the CSM expects the student to gather job related knowledge from a field of sustainability management that was deepened with scientific methods. This should allow the author to apply the used concepts and instruments appropriately (CSM n.d. 1). In SSCM, a widely accepted and supported theory does not exist (*cf.* Seuring & Müller 2008; Pagell & Wu 2009), yet. This results in a lack of prescriptive models that may explain how corporations manage their SSCs. Pagell & Wu (2009, 37) bring it to the point when they conclude that "every [reviewed] study posits a different task/ behavior/ investment as being key to being sustainable" and therefore "no coherent set of practices in [SSCM] has emerged" as of today. The author uses elements of Pagell & Wu's (2009) proposed SSCM model to identify and describe SSCM practices that show how SYN expects to strengthen its buyer-supplier relationship. Although Pagell & Wu (2009, 37) and also Seuring & Müller (2008, 1700) advise researchers to investigate longer parts of the SC, this case study centralises at the buyer-supplier relationship. Nevertheless, this case study accounts for an extension of the SC, because it goes beyond the 1st-tier and includes the seed farmers' community, too. By zooming in on the buyer-supplier relationship, managerial practices within this particular sourcing part of SYN's SC are under scrutiny. Here, the focus is on improving working conditions in the outsourced seed production process; the author leaves functions

such as distribution and transportation of materials and goods out of the focus. Even though internal integration, internal implementation (mechanisms) and internal orientation toward sustainability values and practices are key precursors for creating SSCs (Pagell & Wu 2009; Mamic 2005), this case study focuses on identifying SYN's current SSCM practices that gear toward improving interfirm partnerships.

4.2 Research purpose

The purpose of this case study is *theory extension/ refinement*, because the author wants to find out how selected elements of Pagell & Wu's (2009) prescriptive SSCM framework apply to the case and thereby tests the model's robustness. By doing so, the author structures his empirical findings in light of current theory (*cf.* Handfield & Melnyk 1998) to find an answer to the research question.

4.3 Research type (case)

The adopted research type is *descriptive* case research, because the chosen case will present a complete description of a phenomenon in its case specific context (Seuring 2008, 130) or in Yin's words: it will "[…] describe an intervention and the real-life context in which it occurred" (Yin 2009, 20). The author wants to understand how SYN intends to strengthen the buyer-supplier partnerships through SSCM practices. I.o.w. this case study wants to find out *what* (descriptive) happens – as opposed to *why* (explanatory) something happens.

4.4 Level and unit of analysis

The *level* of analysis is SYN's ISC, whereas the *unit* of analysis is SYN' buyer-supplier relationship. The level of analysis is a single SC, because preliminary informal talks with SYN management revealed that SYN manages its ISC rather differently in comparison with other SCs, and it has a pilot character. Although the FLA project plays a major role in SYN's efforts to improve working conditions, the project/ program as such is not the unit of analysis, because a program is less concrete than a partnership (*cf.* Yin 2009, 33), and this case study does not want to investigate the program as such. Moreover, when developing theory (*cf.* chapter 5) it becomes clear that the FLA expects a corporation to engage in remedial action, preferably though capacity building, but how to actually engage is not defined within their framework (FLA 2006b, 4).

4.5 Holistic single case study

Since the unit of analysis is restricted to one and the goal of the author is to understand how SYN's activities in a specific business context strengthens the buyer-supplier relationships, the author's preferred design is a *holistic single case study* (Handfield & Melnyk 1998; Stuart et al. 2002, 422; Yin 2009, 46ff.). The case is compliant with Yin´s second rationale for *single case* research design; the *case represents an extreme respectively a unique case* (Yin 2009,

47)[10]. SYN's ISC is a unique case, because SYN was the first agrichemical corporation worldwide that engaged in a PPP to apply the FLA monitoring methodology to the agricultural sector (away from the apparel and footwear sector) to improve social/ societal working conditions in its SC (FLA 2006b, 3). The author expects that SYN is excelling in this particular area when making the SC sustainable (*cf*. Pagell & Wu 2009, 40f.), and is aware that "trusting all one's goods to one ship" you cannot control, entails risks.

The *holistic approach* is preferred above the alternative embedded[11] design, because the research question focuses on one unit of analysis and the underlying theoretical considerations are of a holistic nature (Yin 2009, 50). A potential risk for a holistic single case design is that during the investigation the original unit of analysis might become the context of a study, and not the target (Yin 2009, 52). Unsurprisingly, when trying to differentiate between unit and context in a real-life situation the author envisages occurring difficulties. This can happen when e.g. the orientation over time might shift to a newly identified subunit, and he leaves the original unit out of focus. Another problem, next to having limited possibilities and high dependability on few key-informants to get access to data, is the lacking possibility for direct replication. As a result, analytical conclusions drawn from a single case study will be less powerful than with multiple-case design (Yin 2009).

4.6 Research process

The research process is based upon Yin's (2009) methodologically linear but iterative process and Stuart's et al. (2002, 420) fairly identical five-stage research process model. Yin's (2009) process starts with planning and preparing the case study. The real case research consists of collecting, analysing and interpreting the data, and ends in a final step in which the results are being checked on several quality aspects before they are being shared (*fig.* 3). The portrayed self-explanatory process steps represent the overall structure of this thesis although the author had to re-arrange some of its linear steps.

[10] Other rationales are i) critical case, ii) representative/ typical case, iii) revelatory case and iv) longitudinal case (*cf*. Yin 2009, 47ff.).

[11] In embedded case design within a single case, researchers pay attention to one or more subunits (Yin 2009, 50).

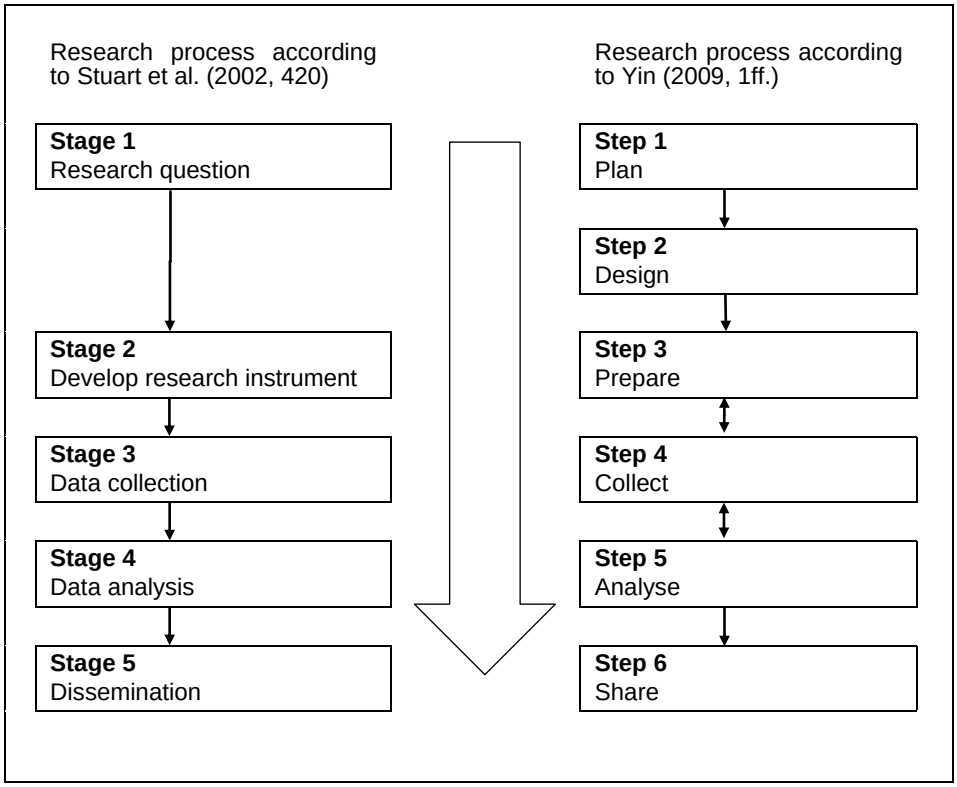

Figure 3. Two research processes. Adapted from Stuart et al. (2002) (left) and Yin (2009) (right). Own illustration.

The previous chapters account for step one. The current chapter on research design together with chapter five in which the theoretical constructs are being built, and the last two chapters (dissemination & limitations) on dissemination account for step two (*cf.* Yin 2009, 24ff.). Chapter seven accounts for the preparatory step although a separate study protocol was not developed, but is integrated in this thesis, instead. The theoretical considerations are used for targeted data collection (step four) and the thereupon-following analysis (step five) before the results and the conclusion can be disseminated (step six). As such for this case study, the author discusses relevant characteristics of each single step in the respective chapters of this thesis.

5 DEVELOP THEORY

5.1 Identifying and defining a conceptual framework

Miles & Huberman (1994), Mayring (2010) and Yin (2009) suggest constructing a conceptual framework to endorse preliminary theoretical considerations in the first steps of their qualitative research structures. In spite of being incognisable in the Stuart et al. (2002, 420) model, all publications mentioned recommend to identify relevant theory, necessary to explain the main things that were to be studied - key factors, variables or constructs - in a preliminary literature review (Voss et al. 2002, 199; Yin 2009). I.o.w. theoretical orientation in the preliminary phase of data collection is the main vehicle for generalising the case study's results in a later stage. Case study research does not deal with sample units as commonly used in statistical generalisation but uses analytical generalisation, instead. The analytical generalisation draws conclusions from a data collection by using a previously developed theory as a template with which the author compares the empirical results. The author notes that theoretical considerations in this setting are a means to an end and not an end in itself. It is used to sharpen the research question, since failing to define a clear theoretical focus before starting the process can potentially downgrade case study research to a way of data-dredging (Handfield & Melnyk 1998; Yin 2009). Golicic et al. (2005, 21) note that use of relevant literature is not apparent as a separate stage in the qualitative approach, but is embedded in various stages.

In the following subchapters the author will first pivot to the concepts of sustainability and sustainable supply chain management, where after he presents Pagell & Wu's (2009) model for assessing SSCM, the foundational model of this case study. SSCM practices identified by Pagell & Wu, and the author considers relevant to this case study, are deepened. In line with their findings, corporations that want to become truly sustainable not only need to look for new and/ or disruptive SSCM practices, but also must focus on incremental SSCM practices, such as refinements in traceability practices. This allows the author to identify characteristics of SCM practices already described in literature, but newly pursue supply base continuity instead of self-interested goals (*cf.* Pagell & Wu 2009, 51ff.).

5.2 Sustainability development and sustainability management

The World Commission on Environment and Development (WCED) defined sustainable development as a development "to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987). This holistic normative (ethical) concept emphasises the interlinkages of economic, social and environmental challenges in their corresponding sustainability dimensions and intends to reduce humanity's impact on the earth, while simultaneously increasing quality of life for all people (e.g. UNDPI 1993, 10). Kopfmüller et al. (2001, 49ff.) introduced the institutional dimension of sustainability that not only includes organisations as such, but conventions, (ethical) values and norms that shape (sustainable) organisational conditions and provide for the environ-

ment in which all actors can participate in the sustainability discourse. Nevertheless, if participation, integration, and empowerment are seen as objectives and not as norms, this cross-sectional dimension is integrated into the social dimension of sustainability (Michelsen 2008, 59). Its anthropocentric approach, the ascribed global avidness, and the connected concepts of inter- and intragenerational justice are further constitutive elements of the sustainability concept (ibid. 71f.). The intergenerational perspective focuses on humanity's responsibility for future generations, whereas the intragenerational perspective focuses on the responsibility toward todays living generation, especially those living in poor nations (ibid. 33). Coming from the normative level, the implementation of the concepts needs to be managed on the so-called instrumental level, which will be in the focus of this case study. Although sustainability originates from a political discourse, corporations are key actors for the implementation, due to the impacts of their activities', their role in society (produce goods and services through resource consumption), and their global reach.

Sustainability management organises processes and structures to effect a sustainable corporate development and strives for a positive contribution to the sustainable development of the economy and society. Corporate sustainability management addresses integrative management practices to control the ecological, social, and environmental impacts of a corporation (Schaltegger & Petersen 2007, XXII). It is cross-functional and cross-company, i.e. spanning all corporate functions as well as the entire value chain. The sustainable corporation is not an isolated element, but participator and shaper of its value chain as well as the external environment its activities are embedded in. A long-term interest of sustainability management is the reduction of structural internal and external barriers that limit the implementation of environmental and social solutions to enable sustainable growth (e.g. Schneidewind 1998). Being really sustainable suggests that a corporation must perform equally well on all three dimensions of sustainability management and thereby limit its impacts on environmental and social systems while remaining competitive in the economic dimension. Accordingly, it is rather impossible to become really sustainable and therefore the author understands sustainability management as a road that describes a corporation's efforts on its way to become more sustainable with the aspiration to become truly sustainable. Coming from a stakeholder perspective, stakes in a corporation change over time and differ from stakeholder to stakeholder. Taking into account that resources are limited and a corporation cannot coevally fulfil all stakes/ concerns, sustainability is to be seen as a dynamic concept (in time) that is open to various interpretations, and not as a set of clearly defined goals. Consequently, to meet the concerns put forward by various internal and external stakeholders, cooperation is indispensable in a corporation's sustainability management (Schaltegger & Petersen 2007, 21).

5.3 Sustainable supply chain management

Economic globalisation not only opened the door to increase international trade and foreign investments, it also increased a corporation's accessibility to suppliers of raw materials and preliminary products in developing and emerging nations that mostly produce at lower cost than competing suppliers in industrialised nations (e.g. Kinley 2009; Park & Dickson 2008).

Trends such as outsourcing and subcontracting made the SC more profitable, but resulted in a loss of control over the production process (Vurro et al. 2010, 609). Especially for wage and labour intensive sectors of the industrialised world, relocation of the production to reduce production cost or open new markets became a crucial and feasible option (Fichter & Sydow 2002, 358). These opportunities intensified corporate efforts to effectively and efficiently manage increasingly complex but profitable SCs. Nevertheless, alienating ties between a focal corporation and its invisible independent SC partners that are frequently buried deep within the SC in combination with the weak enforcement of international regulatory environmental and social mechanisms ends in an increasing number of corporations that see themselves confronted with environmental and social challenges put forward by a multitude of stakeholders that were previously/ traditionally not part of their SCs (Kinley 2009, 150). These challenges, if not managed properly, make up potential risks (incl. reputational & economic risks) to highly visible and scrutinised focal corporations. According to Handfield & Nichols (1999, 2), a focal corporation must organise its SCs and provide access to the end-user or be visible to the end customer through its brands. A SC incorporates all activities that are associated with the flow and transformation of goods and services from raw material extraction through to the customer, i.e. end-user, of the products or services (Handfield & Nichols 1999, 2).

Handfield & Nichols (1999, 2) see supply chain management (SCM) as the integration of these SC activities by improving SC relationships, with the aim to attain an enduring competitive advantage. Goldbach (2003, 48f.) also identified the coordination of relationships as key to managing the flows along the value chain successfully. Schaltegger & Petersen (2008, 51) conclude that the aim of SCM is the production of goods and services that fulfil the needs of the product end-user to ensure economic competitiveness by integrating all partners' needs along the value-chain, and as such put cooperation for competitive advantage within SC relationships to the forefront. In the flexible application of the concept, Schaltegger et al. (2002, 108) see a possibility to integrate social, environmental, and economic aspects in a more comprehensive SSCM. Seuring & Müller (2008) link the sustainability concept with SCM, and provide a definition of SSCM. In their opinion, SSCM entails "the management of material, information and capital flows as well as cooperation among companies along the supply chain while taking goals from all three dimensions of sustainable development, i.e., economic, environmental and social, into account which are derived from customer and stakeholder requirements" (Seuring & Müller 2008, 1700). Pagell & Wu provide a similar definition of SSCM, but notice that in order to be truly sustainable a SC would "at worst do no net harm to natural or social systems while still producing a profit over an extended period of time" (Pagell & Wu 2009, 38); and as such could theoretically "continue to do business forever" (Pagell et al. 2010, 58). Compared with traditional SCM, Seuring & Müller (2008, 1705f.; Seuring 2009, 29f.) identified three distinctive features of SSCM:

- "[SSCM] has to take into account a wider range of issues and, therefore, look at a longer part of the supply chain" (ibid.).
  This case study focuses in detail on the buyer-supplier relationship between SYN and its suppliers, but takes a longer part of the ISC into account than needed for economic reasons. SYN realised that sustainable partnerships for stable seed supply cannot be dealt with in isolation from the suppliers' societal environment;
- "[SSCM] deals with a wider set of performance objectives, thereby taking into account the environmental and social dimension of sustainability" (ibid).
  SYN's efforts to improve the working conditions in the ISC include labour and health and safety issues (focussing on the social dimension);
- "There is a much increased need for cooperation among partnering companies in [SSCM]" (ibid.)
  The buyer-supplier partnership is the central focus of this case study.

To summarise, when referring to a SSC in essence the reference is to a sustainable outcome for a particular SC, whereas SSCM refers to managerial behaviour and/ or decisions that should enhance sustainability in the SC (Pagell & Wu 2009, 38).

5.4 A model to investigate SYN's SSCM practices

To assess SSCM practices based upon a theoretical construct, SSCM literature has little more to offer than studies that cover more than one task, behaviour, or investment in one particular part of the SC (Pagell & Wu 2009, 37). Pagell & Wu (2009, 37,39) notice that scholars frequently fail to take in the social dimension in SSCM sufficiently. Matos & Hall (2007) found that the social dimension is the key emerging challenge in SSCs, because it "involve[s] a wide range of stakeholders with disparate goals, demands, and opinions" (Hall & Matos 2010, 128), which amounts to stakeholder ambiguity. Different interpretations of the same situation occur, calling for cooperative problem-solving approaches that can account for the inclusion of all involved parties' demands. Even though these aforementioned studies provide precious insights in (S)SCM practices, to date they not only fail to satisfactorily take in longer parts of the SC and the social dimension, but also in essence tend to limit themselves to previously identified SC practices. Few tried to build a more complete SSCM theory through e.g. systematic literature reviews (*cf.* Seuring & Müller 2008; Gold et al. 2010a,b); most extended their traditional SCM research with one sustainability dimension. As a result, "no coherent set of sustainable supply chain management practices has emerged" (Pagell & Wu 2009, 37). In their study, Pagell & Wu (2009, 37) identified corporate SSCM practices with unique characteristics that to their knowledge had not sufficiently been described and/ or linked to sustainability in previous SCM literature, before. In fact, Pagell et al. (2010, 67) believe that these unique practices alter the relationship between a focal corporation and its suppliers fundamentally, as that relation specific knowledge is generated that otherwise is considered inefficient or ineffective. They also note that corporations want to create an advantage that not only founds in short to mid-term monetary profits, but also increasingly consider long-term environmental *and* social performance of their SC. As a result, Pagell & Wu (2009, 38) provide a model to assess SSCM practices that should support corporations in

creating SCs that are truly sustainable. In their study, they found evidence for SSCM practices that found in equal parts in best practices in SCM as well as completely new behaviours (Pagell & Wu 2009, 51). Their research differs from most previous studies as that they investigated ten corporate SCs that were selected because the respective focal corporations were expected to excel in sustainable behaviour in certain areas of their SCs. Although their sampling strategy was designed to capture common patterns for generalisation, they searched for what leaders in SSCM practices along their entire SCs do differently, incl. practices that affect the social dimension of sustainability (ibid. 38, 43, 53). They wondered, whether the identified features can provide evidence for behavioural patterns that make up a theoretical and testable model to support managers building SSCs (ibid. 38). As such, this model is predisposed to look for and describe the uncommon that builds upon unknown and known behavioural practices in SSCM. This case study, in which the author identifies and describes SSCM practices as summed up under the *new behaviours'* two subchapters *reconceptualising* and *supply base continuity* (*fig.* 4) by using the example of SYN's ISC where working conditions on the supply side are improved, may benefit from such an approach. According to Mamic (2005, 91), the supply side is an insufficiently investigated area.

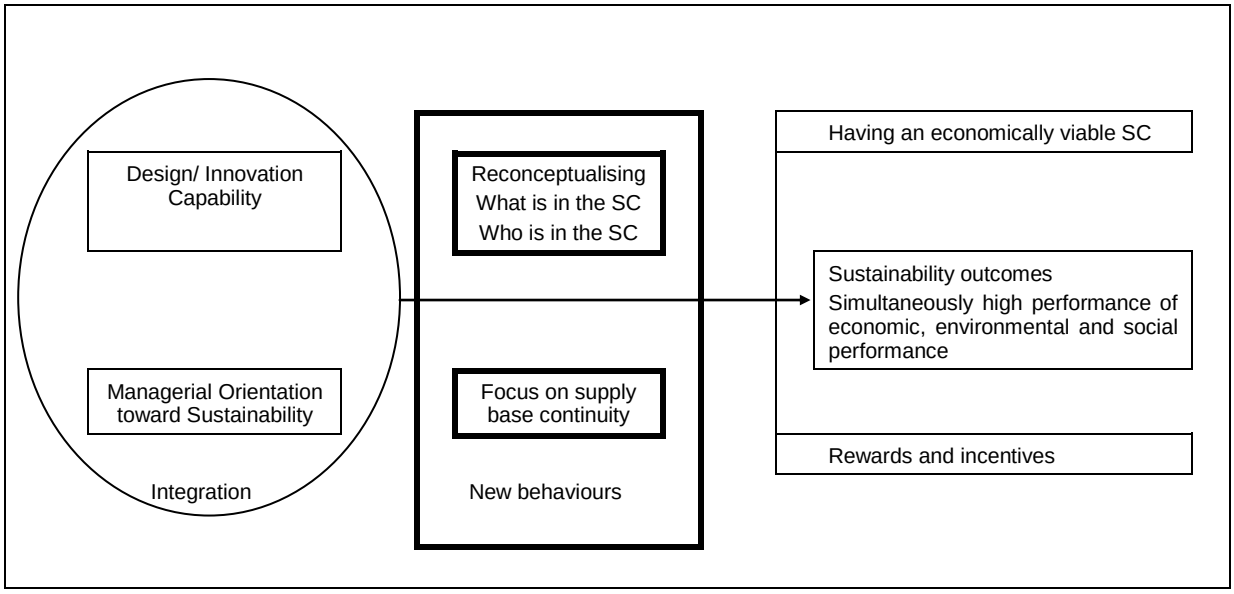

Figure 4. Prescriptive SSCM model. Adapted from Pagell & Wu (2009, 52).

In short, in the model *innovation* and the *systematic orientation toward sustainability* as *integrative* activities lead to a *reconceptualization of the SC* as well as a *focus on supply base continuity* as *new behaviours* that on their turn should result in *sustainability outcomes*, as that performance on economic, environmental and social indicators is coevally high. Thereby it is presupposed that the corporation is *economically viable*[12] and *rewards and incentives systems* are designed and in place to increase sustainability of the SC. The previous subchapters discussed sustainability and SSCM in a rather general way. In the model, the ability

[12] Financial information in the annual reports (SYN 2011a;e) or SYN (2010e, 53) show an average sales growth rate of 9% (2005/ 2009) and an EBITDA of 13% (2005/ 2009) and as such can be considered economically viable.

to be innovative and a managerial orientation toward sustainability are precursors to SSCM. Innovative capability is needed when e.g. incremental innovation withholds a corporation to reconceptualise a non-sustainable SC toward becoming sustainable and competitive. In their model, Pagell & Wu (2009, 51) suggest that the corporate business model and sustainability elements must be aligned to orient decision-making on all relevant hierarchical levels; shared values can serve as guidance. This is considered a critical first step before a corporation can start changing its external environment, not only for credibility or for consistency reasons. It also suggests that especially top-management should be pro-active and committed (Pagell & Wu 2009, 51). In SYN's case, there are strong indications that sustainability is already an integrative and relevant part of the organisational structure (*cf.* Syngenta 2011c; Syngenta 2011a, 34) and its operations (FLA 2006b, 5,7). SYN integrated the sustainability concept in its vision: *bring plant potential to life.* This vision is backed by the newly released strategy (Syngenta 2011a, 34) that is aligned with its strategic imperatives (Syngenta 2010d; Syngenta 2011f), which include innovation, engagement, business ethics, and HSE. SYN Intl.'s CoC (Syngenta 2011b) was adapted to the FLA Workplace CoC (*cf.* FLA 2011) in 2008 (SY, 570-579; «2»). The CR-Policy and Commitments (Syngenta 2009; Syngenta 2011d) are valid and its Seed Production Policy («10») states that SYN wants to partner with its suppliers, and train them in and uphold labour rights. In cooperation with the Danish Institute for Human Rights (DIHR) a Human Rights Management Primer («4») was developed and FLA sensitised and trained SYN's employees in labour rights in SCM (SY, 582-592). As a limitation to this case study, this part of the model is therefore not within the focus (*fig.* 5 shaded blue-grey rectangle on the left hand side), but is taken for granted.

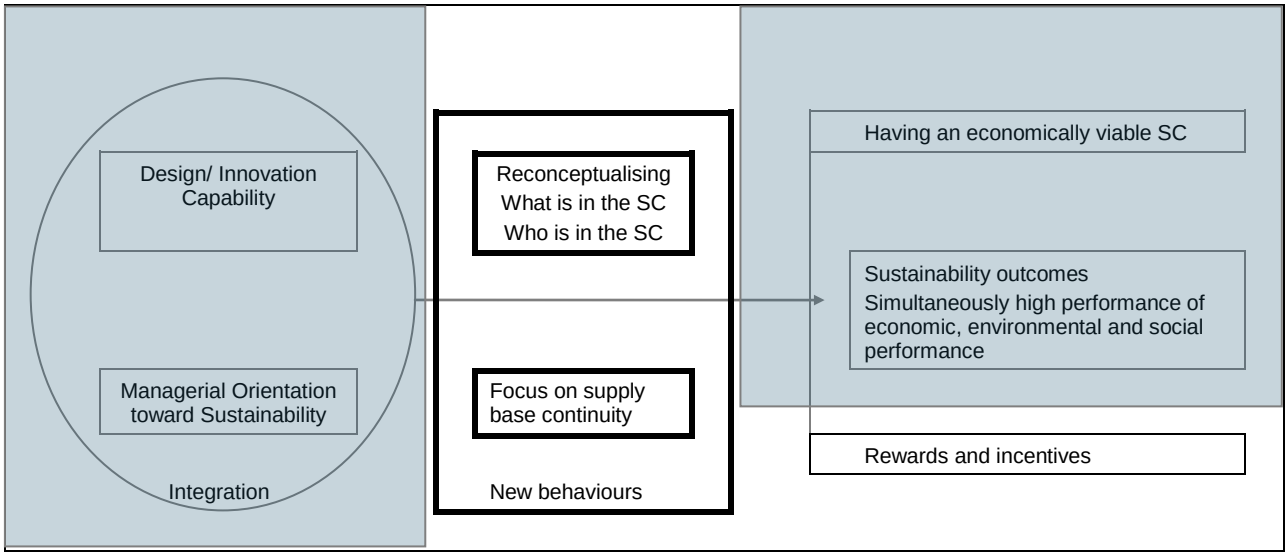

Figure 5. Setting limitations to prescriptive SSCM model. Adapted from Pagell & Wu (2009, 52), own illustration.

Nevertheless, the model supports the importance of these integrative steps, because they will lead to two *unique sets of activities* (Pagell & Wu 2009, 52) or *new behaviours*. *Firstly*, it leads to a *reconceptualization* of the SC. Next to re-conceptualising what the SC can do more sustainably, previously non-traditional SC members such as civil society organisations (CSOs) will be leveraged because of their competences and resources rather than being

seen as adversaries. *Secondly*, the corporation wants to establish *supply base continuity*. Pagell et al. (2010, 62f.) define supply base continuity as to ensure that all members of the chain not only stay in business but also that they can do this in a manner that allows them to thrive, reinvest, innovate, and grow. These activities result in a strong focus on the improvement of communication and information flows along the SC members (Pagell & Wu 2009, 52). Specific SSCM practices that strengthen supply base continuity will be discussed from chapter 5.4.2 onward. The author takes the anticipated *sustainability outcomes* in this model for granted, since it is not the aim of the case study to measure the sustainability of the outcomes (*fig.* 5 shaded blue-grey rectangle on the right hand side). Not only leaves the author the environmental dimension virtually untouched, social (except clearly benchmarked social compliance issues regarding e.g. no child labour) and societal outcomes in particular are rather hard to measure (*cf.* BMU 2007, 25,42,45). Nevertheless, it should be clear that every action must have a target to justify and measure its efficiency and effectiveness. As remarked previously, *rewards and incentives* are also identified as a pre-requirement for sustainability outcomes in the model. According to Milgrom & Roberts (1992), cooperative behaviour can be fostered through an appropriate design of the incentive structure. Considering the vast selection and arrangements of extrinsic and intrinsic financial and non-financial incentives and rewards (*cf.* BMU 2007, 55) that can be used as instruments for instilling sustainable cooperative practices in internal as well as external stakeholders (incl. suppliers), if empirical data provide evidence for such activities the ones used in this case study will be mentioned.

5.4.1 Reconceptualising who is in the SC

When Pagell & Wu (2009, 39) discuss the new behaviour *reconceptualising the SC* they were essentially able to differentiate between two basic practices[13]:

- Reconceptualising what the chain does;
- Reconceptualising who is in the chain.

The first bullet point refers to redesigning and "greening" technical flows of material, information and capital through closed loop/ LCA thinking or additional services. Several documents, such as the SAM application forms[14] («8»), the brochure *supplying sustainably* (*cf.* CropLife 2008), or the statement that for "Syngenta, the responsible and ethical management of all our products - from discovery through to use and ultimate disposal or discontinuation - is a top priority" (Syngenta 2010a, 34) support the model on this topic. Nevertheless, it is not within the scope of this case study. Instead, *who* is in the chain is rather central to this case study (*fig.* 5), since SYN was confronted with stakeholder concerns that traditionally cannot be found within its ISC and forces SYN to reconceptualise how to manage new non-

[13] Pagell & Wu (2009, 50) discuss having considered three distinctive activities. Their study provided too little evidence for separating closed loop thinking from "what the chain does" as a basic form, yet.

[14] SYN is part of the DJSI on a global (DJSI World) and regional (DJSI STOXX) level. Therefore, SYN must provide inform on sustainability performance criteria to SAM, who partner with DJI and STOXX Ltd. (SAM 2010).

traditional stakeholders such as NGOs, community members and competitors (Pagell et al. 2009, 39) and their ambiguous expectations. With the help of *stakeholder theory* (*cf.* Freeman 1984) and Harrison's et al. (2010) arguments to *manage for stakeholders* it will be reasoned why *reconceptualising who is in the SC* is considered a key element for SSCM. Finally, yet importantly, the last subchapter focuses on *cooperation styles*.

5.4.1.1 Stakeholder theory

Amongst others, Seuring & Müller (2008, 1703) acknowledge the necessity of pressure and/ or incentives for a focal corporation to actually engage in SSCM. They identified frequently mentioned actors who can put pressure on or provide incentives to a corporation to engage in SSCM: government, customers, and stakeholders in general (Seuring & Müller 2008, 1703). These findings are in line with Freeman's (1984) stakeholder approach in which he first described the relevance of stakeholders and their stakes for a corporation. According to Freeman "[a] stakeholder in an organization is any group or individual who can affect, or is affected by, the achievement of the organization's objectives" (Freeman 1984, 46). This relationship between a corporation and its stakeholders implies an interdependence in which both try to influence each other; affect is a notion of control (Das & Teng 1998, 493). The traditional view recognizes three stakeholder groups: investors, employees and customers, whereas modern views recognize a broader set of stakeholders, such as suppliers, competitors, media, CSOs, government agencies, and local communities as primary stakeholders for CSR[15] (Freeman & Reed 1983; Park-Poaps & Rees 2009, 306; WBCSD 2002). Nevertheless, narrowing down of the stakeholder theory is necessary to effectively and efficiently differentiate between legitimate claims or stakeholder interests that potentially can disrupt operations from unsubstantiated claims of potential stakeholder groups that withhold a corporation from being economically and sustainably viable, because latter are not closely tied to a corporation's goals and objectives. Because contexts of sustainability issues vary widely and corporations come with limited resources, nuances in relevance of a particular stakeholder group within the corporation's network must vary. From the perspective of a focal corporation, varying levels of perceived importance, relative power, and the respective situation (in time) defines a stakeholder group's relevance (Hill & Thomas 1992, Mitchell et al. 1997). Seuring & Müller (2008, 1703ff.) revealed that the most frequently mentioned pressure put forward to corporations in the field of SSCM were legal demands/regulation followed by customer demands and responses to stakeholders of which environmental and social pressure groups formed a subgroup. Incentives to engage with these pressures were creating competitive advantage and fear for reputational loss. E.g., the pressure from NGOs and media on labour issues made focal/ lead corporations and its SC highly visible (*cf.* Lund-Thomsen & Nadvi 2010, 3). Concerned of reputational loss through forfeiting brand identity, brand value and brand risks, a gradual increase in solutions based stakeholder engagement was observed (ibid.). Corporations move from a defensive position to an active or even pro-active

[15] In this case study, CSR is considered synonymous to corporate sustainability.

position when engaging with their stakeholders on critical issues. Pagell & Wu (2009, 50) come to a similar conclusion after finding that collaboration with stakeholders that normally are ignored or treated as adversaries is necessary to make the SC more sustainable.

5.4.1.2 Stakeholder theory and networks

Trying to explain the increasing complexity of stakeholder interaction and ambiguity, Rowley (1997) introduced a network perspective. The focal corporation is at the centre of a network that acts as a complex system for exchanging goods, services, information, a.s.o. The network perspective allows information to freely circulate between a MNC like SYN, its suppliers, and seed organisers rather than moving in a uni-directional manner. This supports Bovel & Martha (2000) who noticed that interactions between corporations in a SC are rarely as sequential as suggested. Fichter & Sydow (2002, 363) consider networks for cooperation superior to market and hierarchical styles (*cf.* chapter 5.4.1.3) for two particular reasons: First, inter-organisational cooperation encourages partners to develop shared views and norms (rules of signification and rules of legitimation). This allows partners to discuss minimum requirements for the working conditions, and how the implementation can maximise the mutual benefits to all of the network participants. Second, inter-organisational networks allow a resource relationship or the pooling of resources that is otherwise only possible in a hierarchical form of SC coordination. This construct might be particularly interesting to e.g. suppliers with limited resources, who get an incentive to upgrade their working conditions by using the network resources that are managed by an intervening network hub corporation. They note that "not all nodes (buyer-supplier)[16] and their corresponding links (relationships) which are part of the sourcing structure can be considered to be part of a network [...]" (Fichter & Sydow 2002, 369), thereby referring to two-tier connections (with subcontractors). Two- or more tier relationships tend to be arms-length and are not likely to constitute cooperative inter-organisational relationships based upon mutual trust and commitment. They also notice that the use of intermediaries to manage the SC increases the level of in-transparency and accompanying market-like relationships. Accordingly, corporations should instruct their intermediates to buy from socially responsible suppliers and build a network-type of relationship (ibid.).

5.4.1.3 Cooperation styles

When trying to describe a buyer-supplier relationship, an abundance of labels exists. Where the fewest disagree on the two extremities *market* and *hierarchy;* descriptions for the stages in-between vary considerably (*fig.* 6). Gereffi et al. (2005, 84, 86f.) provide a product-oriented categorisation that may help to describe a shifting relationship between a focal corporation and its suppliers from market-like to collaboration. The market-type of cooperation is characterised by least cooperative action whereas hierarchy implies full control of the production process because it is situated in-house.

[16] The author does not consider a relatively new research string that considers triads and not dyads as the smallest unit of a supply network (*cf.* Choi & Wu 2009).

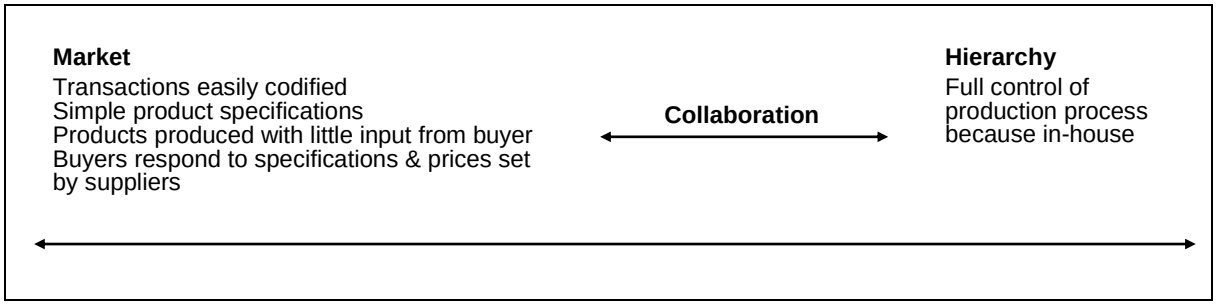

Figure 6. Extreme levels of cooperation. Adapted from Gereffi et al. 2005, own illustration.

The author excludes hierarchy as the most extreme form of collaboration from this case study, because it addresses an intrafirm and not an interfirm relationship. The suppliers' independence makes contractual control important, because hierarchical (strict sense) nor ownership control is possible (Das & Teng 1998, 498). In market-like cooperation, the transaction is easily codified (no specific knowledge needed) and the suppliers do not need the input of the buyer; the buyer is more likely to respond to specifications and prices that are set by the suppliers. This characterisation was adapted for social compliance efforts in socially responsible SCM by Frenkel & Scott (2002). They note that existing relationships between a focal or hub corporation and its various supply relationships will vary from market-like compliance to collaborative (Frenkel & Scott 2002, 33f.). *Market-like compliance* is characterised by a corporation's domination, because it has a strong power position. The corporation communicates the importance of the practice's importance to its suppliers and is responsible for its top-down implementation. As a result, the compliance-ties in the supplier-buyer dyad share characteristics with arms-length contracting (market). *Collaboration* is characterised by partnerships, but does not necessarily have power equality between suppliers and the buyer (ibid. 33). Collaborative-ties resemble obligatory contracting, because corporations not only consider the market price, but also quality, and ethical values and norms. According to Frenkel & Scott (2002, 32), in interfirm contracting terms collaborative-ties are frequently referred to as selective, high-trust, diffuse, and enduring relationships[17]. Park & Dickson (2008, 42) specified the term *partnership* for fair labour management as corporation's "on-going collaborative relationship with its suppliers for fair labor management throughout the supply chain." They summarised the following behavioural characteristics of such a partnership:

- information sharing and frequent communication;
- joint decision-making and conflict resolution;
- compatible goals and activities;
- integration of work processes and cooperative attitudes;
- commitment to long-term relationships and reward of the relationship; and
- value-based decision making (Park & Dickson 2008, 44).

That corporations prefer collaborative ties on the one hand may be a result from their strategic considerations and interests such as limited access to qualified suppliers as sources of

[17] Variously referred to as obligational, relational or embedded ties (Frenkel & Scott 2002, 33).

supply (Frenkel & Scott 2002, 33); on the other hand, lacking or available resources and competences on the suppliers' side for CoC implementation will strain the relationship. Lim & Phillips (2008, 143) are convinced that CSR/ sustainability concerns of a global buyer can trigger a transformation in its global value chains from the competitive, arms-length market structure to a collaborative partnership. If so, suppliers must have a more layered and economically secure relationship with the buyer. This deeper, stable relationship does not only lead to social compliance, but, eventually, to suppliers developing an independent ethical commitment to CSR.

5.4.1.4 Managing for stakeholders

In this case, stakeholder management could switch into *management for stakeholders*, as that corporations allocate more value and/ or decision-making influence across their primary respectively relevant stakeholders (*cf.* Freeman et al. 2007) "than would be necessary to simply retain their wilful participation in the firm's productive activities" (Harrison et al. 2010, 58). Corporations practice this behaviour intentionally through allocating more value to stakeholders than the traditional market might otherwise require, e.g. when a corporation like SYN invests in its suppliers' and their workers' health and safety. This approach differs from traditional stakeholder management that seeks to maximise value for shareholders (*cf.* Friedman 1962) as that corporations frequently seek to minimise the value allocated to fulfil its other stakeholders' minimal requirements. Managing for stakeholders as such, can be seen as a strategy for realising sustainability objectives within the SC. It would justify investing in stakeholder groups such as commodity-like suppliers that normal market practices from an efficiency perspective would not allow. Managing for stakeholders is the opposite from the marketplace conform 'arms-length' approach. In the arms-length perspective stakeholders are interchangeable economic actors that can be exchanged without or with little transaction cost. In an arms-length approach SYN would have the possibility to exert its power, the primary criterion with regard to influence over both corporate decisions and value distribution, and would face e.g. its suppliers or community representatives in such a way as that every decision must be in the best interest of the corporation's owners (Harrison et al. 2010, 61). In contrast, a corporation that manages for stakeholders seeks to identify and understand how corporate actions/ impacts affect its relevant stakeholders. Thereby, the corporation seeks to act in a way to demonstrate that it understands and respects how these stakeholders are affected (Harrison et al. 2010, 62). Pagell & Wu (2009) and Pagell et al. (2010, 65) implicitly refer to this behaviour when corporations seek to reconceptualise its SC and engage in activities for supply base continuity. Corporations that normally have the power and opportunity to leverage (price) their products do refrain from this behaviour and try to establish strategic partnerships. As such, focal corporations "willingly give power and the associated benefits" (Pagell et al. 2010, 65) to their suppliers that traditionally are not worth the value invested. Stakeholder theory argues that both sides can benefit from a win-win situation in which a corporation meets the needs of its relevant stakeholders. To understand the needs of its relevant stakeholders a deeper level of cooperation and communication than required in arms-length contractual arrangements seems evident.

5.4.2 Supply base continuity

Supply base continuity (*fig.* 5,7) or *common prosperity* as Pagell et al. (2010, 63) call it as well, implicitly wants a focal corporation's suppliers, the suppliers' employees and the community the suppliers are active in to benefit from corporate SSCM activities and thrive. There cannot be supply base continuity when the suppliers' workforce is impoverished and/ or the community's environment is degraded by e.g. pollution. As a result, continuity practices place a high value on suppliers' environmental and social outcomes, and this extends beyond 1st-tier relationships. Relevant suppliers are treated as partners, as that interaction is collaborative and the focus is on value creation (Pagell et al. 2010, 63). In return, continuity benefits the focal corporation because it guarantees a stable, capable supply base (Pagell & Wu 2009, 49).

Focus on supply base continuity	
Decommoditisation	
Supplier development (traditional)	
Supplier development (improve other chains)	
Reducing supplier risk	
Transparency* (of the chain activities)	
Traceability*	*(cf. chapter 5.4.3)

Figure 7. Practices for supply base continuity (Pagell & Wu 2009; Pagell et al. 2010, 64). Own illustration.

In what follows, the five new behaviours that enhance supply base continuity identified by Pagell et al. (2010, 63f.) (*fig.* 7) are described:

- Decommoditisation (within chain) i.e. away from price (*cf.* chapter 5.4.2.1).

  The focal corporation explicitly moves commodity-like suppliers and/ or entire commodity chains (many substitutes and competition mainly on price) out of a commodity trap by partnering as if a rare strategic input is supplied, by e.g.:

  - Providing long-term contracts;
  - Setting prices above market price for commodity goods.

- Supplier development (traditional)

  Suppliers are trained to be better suppliers for the focal corporation. Benefits accumulate on both sides, but predominately on the supply side.

- Supplier development (improve other chains)

  Suppliers are trained to be better suppliers and afford for other organisations in other (competing) SCs.

- Reducing supplier risk

  The focal corporation mitigates some or all risks associated in making suppliers' products and/ or processes more sustainable. It reduces risk for suppliers as that the buyer is bearing some or all of the risks through:

  - Limiting supply base;
  - Guaranteeing certain level of demand;
  - Financial support.
- Transparency (of the chain activities)

  Transparency for continuity is defined as that all chain members provide full accounting of flows of money to origins (Pagell et al. 2010, 64; Pagell & Wu 2009, 49), and in the sweatshop discussion to ensure workers' fair treatment (Pagell & Wu 2009, 53).

According to Pagell et al. (2010, 65), these individual practices will not create a revolution by themselves; combining these practices to pursue supply base continuity might do the trick. Clearly, supplier development or tracing the focal corporation's inputs back to its origins are known SCM practices, but the mental shift within the focal corporation from self-interested toward continuity goals make them a novelty. Because information on decommoditisation is very limited in SSCM literature, the following subchapters will deepen this practise with the help of sourcing portfolio theory. Since other practices such as supplier development or supplier risk reduction can have many practical faces, but all share in the continuity for the entire SC, the author will not further highlight them.

5.4.2.1 Decommoditisation

Before the author presents Pagell's et al. (2010) *new view* on purchasing commodity-like goods, this chapter briefly reviews Kraljic's (1983) traditional purchasing portfolio theory. Kraljic (ibid. 110) calls for strategic sourcing practices because of two factors:

- The *importance of purchasing,* characterised by the value added of a product line, the percentage of raw materials in percentage of total cost, or impact on profitability.
- The *complexity of the supply market,* gauged by supply scarcity, pace of technology through e.g. complexity, oligopoly conditions, a.s.o..

These two variables should enable the corporation to define strategies to position and exploit a focal corporation's power-position toward its relevant suppliers wisely to eventually reduce supply-related risks to an acceptable level. Kraljic (ibid. 112) classifies purchased items into four categories on the base of high/ low profit impact and high/ low supply risk (*fig.* 8). Two categories are of importance to this case study, since the importance of purchasing seeds is *high* (KP, 94); they are the core value-generating product for SYN. Accordingly, when the importance of purchasing is high and the complexity of the supply market is high, Kraljic (ibid. 111) sees a necessity to engage in supply management, whereas a low(er) complexity of the market calls for material management.

Importance of purchasing			
	High	Leverage items: Materials management	Strategic items: Supply management
	Low	Non-critical items: Purchasing management	Bottleneck items: Sourcing management
		Low	**High**

Complexity of supply market

Figure 8. Purchasing portfolio model. Adapted from Kraljic (1983, 111).

The recommended accompanying purchasing styles vary between relational (strategic items) and pricing (leverage items). The relational or collaborative partnership style generates higher cost for the corporation, because it invests in multi-layered supplier relationships, whereas the pricing style is limited to financial arms-length market transactions.

Table 1. Two out of four stages of purchasing sophistication. Adapted from Kraljic (1983, 111).

	Material management	**Supply management**
Procurement focus	Leverage items	Strategic items
Key performance criteria	Cost/ price Material flow management	Long-term availability
Typical sources	Multiple suppliers (chiefly local)	Established global suppliers
Time horizon	Varied (typically 12 - 24 months)	Up to ten years
Items purchased	Mix of commodities Specified materials	Scarce High value materials
Supply	Abundant	Natural scarcity
Decision authority	Mainly decentralised	Centralised

Strategic items are in comparison scarce and their long-term availability needs to be assured for, preferably through selective relationships with a limited amount of suppliers (often one) (table 1) “with whom the buyer has a close, trusting, long-term relationship” (Pagell et al. 2010, 59). The time horizon of contractual agreements is as such typically longer than with commodity-like suppliers and the purchasing decision authority is centralised. The focal corporation should consider the total cost of the product in supplier selection, not only the price. Leveraging/ pricing practices focus on short-term contracts with price and product and/ or process quality criteria as the primary selection criterions when selecting from a rather homogenous supply base (*cf.* Pagell et al. 2010, 59); seed growers in India are abundant (Venkateshwarlu 2003). Kraljic (1983, 113f.) identified three categories of strategic thrust within a buyer-supplier relationship. Where the focal corporation is not in a dominant power-position, it should develop sophisticated *diversification* or *balancing* strategies to ascertain its position. He recommends a reasonably aggressive (*exploit*) strategy, if the corporation “plays a dominating market role and suppliers’ strength is rated medium or low” (ibid.). The slight supply risk allows a focal corporation to achieve a positive profit contribution trough favourable pricing and contracting agreements. Corporations can spread the volume of total supply over several suppliers, exploit price advantages, and reduce inventory levels. To summarise, Kraljic (1983, 114) recommends corporations that bargain from a position of strength should use pressure (power) to get preferential conditions, whereas a weak bargaining position implies the use of inducements such as long-term contract obligations or higher prices.

Gelderman & Van Weele (2003, 212,214) consider moving suppliers from a favourable leveraging position toward a more costly strategic partnership as highly exceptional. They did not observe corporations moving suppliers from a strategic to a market partnership, except when a focal corporation cannot cooperate with a supplier and as a result will have to look for other potential partners. In their opinion a cooperative strategy in which the supplier is willing and capable to contribute to the competitive advantage of the firm is only feasible for technologically advanced suppliers.

New view on commodity sourcing (decommoditisation)

Pagell et al. (2010, 58) define sustainable sourcing as the management of all aspects of the upstream stage of the SC to maximise social, economic, and environmental performance. As such, it should include ethical souring defined as compliance with ethical-moral norms with regard to legal compliance as well as economic viability (*cf.* Zentes et al. 2009, 269). While Kraljic's (1983) portfolio categories are supply risk and profit risk, Pagell et al. (2010, 67) categorise on supply risk and sustainability risk (risk to the chain's economic, environmental, and/ or social performance) (*fig.* 9).

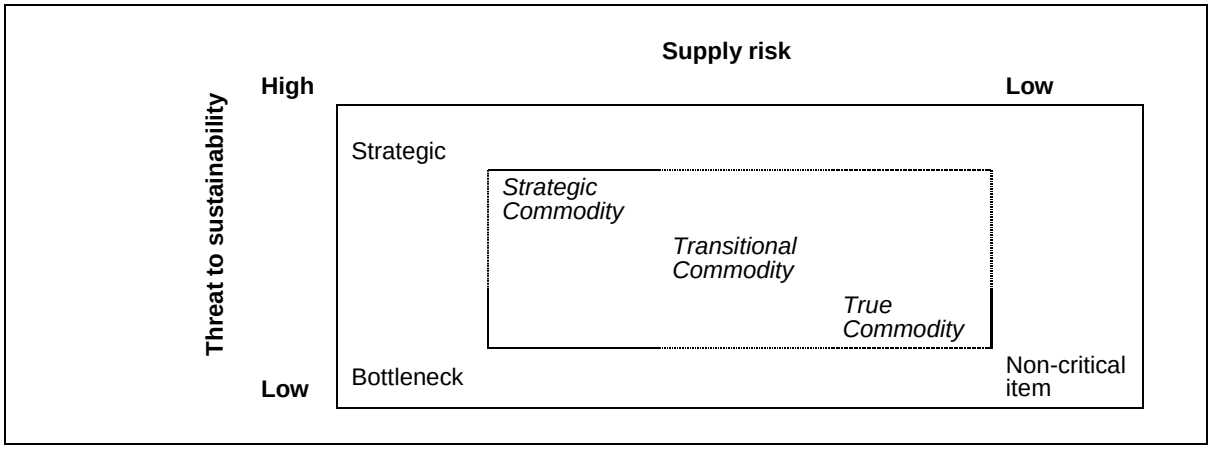

Figure 9. The sustainable purchasing portfolio matrix. Adapted from Pagell et al. (2010, 68).

New in their hybrid portfolio matrix is that managers should no longer consider financially related risk only, but integrate social and environmental risks from e.g. breaches on labour rights (Pagell et al. 2010, 68). They note that this perception explains the shift from arms-length market purchasing/ contracting toward common prosperity (ibid. 67). Furthermore, as suggested by Gelderman & Van Weele (2003, 207) it allows managers to move suppliers throughout the matrix fields from high to low risk and vice versa in time. The conditions and characteristics of Kraljic's (1983) non-critical, bottleneck, and strategic items remain almost the same; a corporation no longer selects on financial, but also on environmental and social performance criteria. Most importantly though, Kraljic's (1983) leveraging category ceases to exist; Pagell et al. (2010, 68f.) newly suggest three leveraging categories:

- Strategic commodity

  These commodities "reflect critical commodities that transcend normal market conditions" (Pagell et al. 2010, 69). It is believed, that over time the resource or supplier will become a valued resource and able to provide superior sustainability performance on multiple dimensions. Long-term sustainable performance contributes to common prosperity and as such creates value beyond financial interest. Therefore it will be necessary to invest in a transitional or true commodity (supplier) that has the potential to perform well on at least two sustainability dimensions. Gelderman & Van Weele (2003, 214) believe that developing a strategic partnership is highly exceptional, esp. when willing to invest in technically least advanced suppliers.

- Transitional commodity

  For these commodities supplier risk is temporarily high because information asymmetries (uncertainty) on the market exist and the focal corporation must invest in asset specificity until the information asymmetries are levelled out. In the transition stage (toward true or strategic commodity) they are treated as strategic partners, while running the risk that the investment turns out to become expensive or risky a.s.a. the items move toward a true commodity that should be leveraged.

- True commodity

  These commodities are closest to Kraljic's (1983) commodity leveraging category because risks are and remain low. New is the fact that replacement of short-term contractors is not solely based on financial aspects but on environmental or social performance, too.

5.4.3 Pending best practices for continuity

Having discussed, amongst others, the disruptive practice *decommoditisation,* which were linked to supply base continuity, the focus turns toward SCM practices that Pagell & Wu (2009, 50f.) classify as traditional best practices. As described in SCM literature they mainly benefit the focal corporation's self-centred interests, and make the SC *more sustainable* instead of *truly sustainable* (Pagell & Wu 2009, 38f., 50). E.g. *traceability* typically included a focal corporation "requiring that suppliers provide evidence that working conditions were acceptable" (ibid. 44) to reduce its risk; traceability is concerned with how things are made.

Table 2. Examples of traditional best practices and best practices for continuity. Own illustration.

SCM best practices with financial self-interest		**SSCM best practices for continuity**
Traceability Reducing focal corporation's risk	→	**Traceability** Reduce risk & improve information sharing in SC
Transparency External communication	→	**Transparency** Full accounting of flows of money to origins & Ensuring individual workers are treated fairly

Though, Pagell & Wu's (2009, 50) findings revealed that in certain SCs refinements in the tracing methods led to improved information sharing throughout and a better understanding of the entire SC, which led to a focus on common prosperity in the entire chain (table 2), and could be considered a novelty. Similarly, *transparency* for continuity cannot be limited to externally communicating about the SC, but was extended to enhancing transparency of financial flows within a SC and share this information for the good of all (Pagell & Wu 2009, 49). The author also expects to find practices that originate in known best practices, such as social compliance/ traceability, transparency, or supplier development, but in line with Pagell & Wu (2009) also expects that the specific characteristics of these practices can only be explained when discussing them in the light of continuity, and as that will turn out being novel. E.g. impossible to overlook, corporations principally engage in social compliance/ traceability through standardisation to reduce corporate risk and reputational self-interest.

Table 3. Traditional best practice becomes practice for supply base continuity? Own illustration.

SCM best practices with financial self-interest		SSCM best practices for continuity
Transparency External communication	→	**Transparency** Full accounting of flows of money to origins & Ensuring individual workers are treated fairly
Traceability Reducing focal corporation's risk	? →	**Traceability** Reduce risk & improve information sharing & **Ameliorate root causes**

Nonetheless, if it should not only reduce corporate risk, but simultaneously ameliorates root causes of socially unacceptable working practices in a SC through e.g. assisting suppliers in remedial action, or capacitating and empowering communities, and thereby systematically includes all affected stakeholders for lasting sustainable solutions, it contributes to continuity (table 3). Pagell & Wu (2009, 54) conclude that sustainable corporations have a deep social dimension, and that "supply base continuity, material traceability and price transparency demonstrate a concern for the long-term well-being and social equity of every member of the supply chain." Because social compliance mechanisms/ standards play a focal role when corporations try to improve the social conditions in their SC, they deserve some preliminary theoretical considerations.

5.4.3.1 Codes of Conduct

In the inter-organisational research string on the implementation of social management systems or standards (*cf.* Park-Poaps & Rees 2009; Roberts 2003, 169), the voluntarily willingness to *respect* human rights (*cf.* UNHRC 2008; UNHRC 2009) initiated a corporate-driven approach to define, implement and control global labour standards through the use of CoC (Fichter & Sydow 2002, 358). Corporations used them to manage complex and physically remote CSR issues to guarantee that the sourced products meet environmental and social standards (Roberts 2003, 159). In general, a corporate CoC is a written statement of principles or policies that express a commitment to a particular corporate conduct (Diller, 1999) and thereby serves as guiding principle and/ or as a signal for ethical behaviour (Van Tulder et al. 2009, 399). Beske et al. (2008, 67) notice the current lack of available social standards within (sustainable) SC literature, resulting in corporations developing own internal CoC that allow them to individually formulate the CoC's content to the corporation's specific needs (Beske et al. 2008, 70). This way they suffice a corporation's strategic need for coordination and control of its corporate and its suppliers' activities in various nations and constituencies (*cf.* Mamic 2005, 87f.). Unsurprisingly, this intransparency regarding e.g. content and implementation (stringency) raises questions regarding e.g. the legitimacy of the various standards toward various stakeholders (Müller et al. 2008) or their effectiveness on ethical performance. The need for external CoC grows as soon as a corporation off-shores certain tasks to its affiliates or out-sources certain tasks to e.g. independent suppliers in emerging countries (Van Tulder et al. 2009, 399). According to Wick (2005, 27), CoCs are "commitments voluntarily made by companies, associations or other entities which put forth standards and princi-

ples for the conduct of business activities in the marketplace." Even though the standards are voluntary, they are ought to be more or less binding because of its acceptance by governments and NGOs using them as a pressure/ political instrument (Wick 2005, 28) and in competition with other companies (Beske et al. 2008, 66).

5.4.3.2 Framework for CoC implementation

Mamic (2005, 82) provides a framework (*fig.* 10) that describes an integrated managerial process/ approach to assess how corporations traditionally set, communicate, implement, and evaluate progress in attaining social performance objectives.

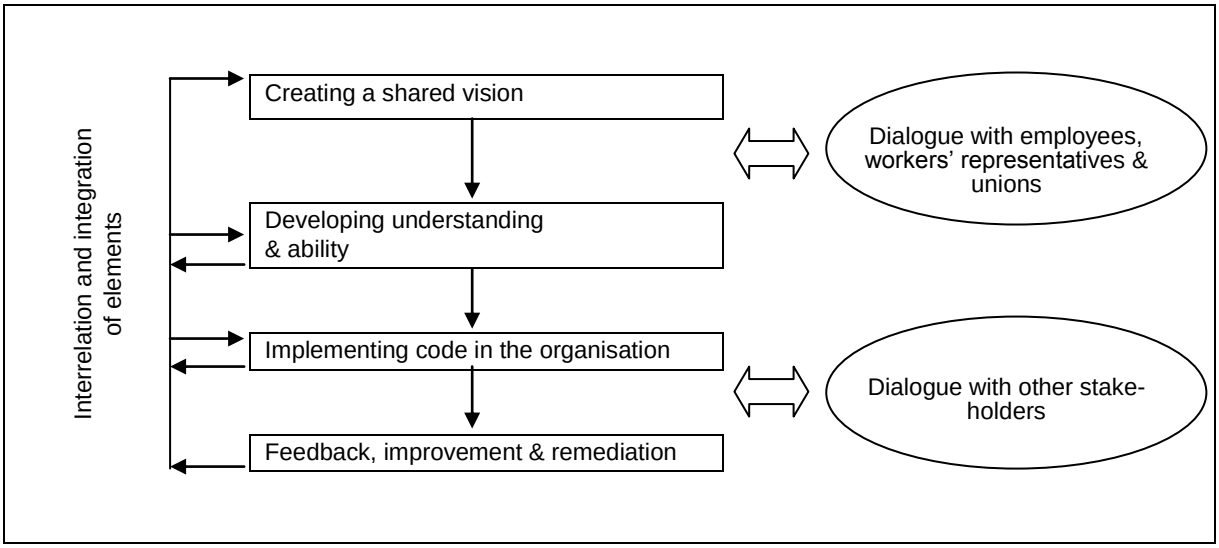

Figure 10. Framework for CoC implementation. Adapted from Mamic (2005, 83), own illustration.

Social compliance relies on a strong communicable vision and values that are spread throughout the entire SC. Mind-sets must be sensitised; repetition of the new values to the suppliers must be consistent and continuous to be successful (Mamic 2005, 88). Multiple layers of communication (*cf.* Pagell & Wu 2009, 46) and training are key to successfully changing (normative) principles into action at the suppliers. Nevertheless, implementation is often ad hoc and limited to what is contractually mandated of the suppliers (Mamic 2005, 91), Park-Poaps & Rees (2010, 308f.) point out a lack of cooperative planning and implementation. Park & Dickson (2008, 50f.) find that they frequently communicate the labour topics, but fail to provide assistance to and engage with the suppliers. Oxfam (2010, 9) states that workers are not aware of their rights. Processes that allow internal and/ or external monitoring, communication for feedback and remediation need to be in place. Depending on the scope and depth of feedback, it can inform about the actual status or be the basis for more extensive corrective action plans (CAP) to assist suppliers in remedial action. CAPs include specific recommendations on what and how suppliers need to change their practices within a certain time frame (Mamic 2005, 97). This should result in improved supplier performance, better relations with the suppliers and an increased morale for CoC implementation (ibid, 98) to eventually reduce focal corporations' risk. Similar to Pagell & Wu (2009) discussing SSCM practices for continuity, a crosscutting theme is the sharing of information. Maintaining inclusive and on-going stakeholder dialogues with NGOs, CSOs, suppliers, and workers decides

whether implementation and adherence will be successful. The greater the inclusiveness, the more effective the practices will be (Mamic 2005, 89).

5.4.3.3 FLA compliance system

Corporations that partner with FLA must commit to uphold the FLA Workplace CoC that is based upon the ILO standards (FLA 2006b, 4). Code-codification is a multi-stakeholder approach in which academia, CSOs a.o. participate (*cf.* Mamic 2005; FLA 2008f)[18]. As a result, the content of the FLA CoC is not subject to corporate interpretations, and remains open to amelioration (Müller et al. 2009, 515). The external FLA CoC is a voluntary, certifiable behavioural standard that addresses working conditions issues in a SC. It is a labour-related behavioural CoC that includes "clear instructions for actions in the internal companies' processes, defining precisely what a company is allowed and forbidden to do" (Müller et al. 2009, 512). In this sense, the FLA CoC is an organisational control mechanism that is designed to determine and influence what a supplier and the focal corporation will do to achieve an adequate level of control (Das & Teng 1998, 493). To improve the chance for successful implementation, FLA requires the focal corporation to officially appoint a responsible manager who is trained in and responsible for the implementation of the FLA CoC mechanisms into its own corporation and along the entire SC. This person is also responsible for developing sustainable solutions through CAPs in a multi-stakeholder approach. This makes it less unlikely that corporations will adhere to the FLA CoC as that it suffices to "keep criticasters away" (Van Tulder et al. 2009, 400). Although a CoC is frequently perceived as and limited to a document with some values and norms, the FLA CoC entails compliance mechanisms that typically focus on the apparel and footwear industry, serving buyer-driven chains. In this sector voluntary and multi-stakeholder codes and monitoring are the major force for social improvement (Park & Dickson 2008, 43). The FLA CoC entails values and norms as well as monitoring, remediation, reporting, and certification (through external auditing) systems. In comparison to basic standards, certifiable standards demonstrate a system of pre-settings with their compliance that needs to be certified by a third party (*cf.* Müller et al. 2009). Despite its sector focus, FLA's compliance system is valid for compliance work on farms (FLA 2008e, 3; FLA 2008f).

Collaborative action in form of a multi-stakeholder approach

Besides its members (focal corporations) and their suppliers, FLA pools (inter) national and local CSOs, affected authorities, and communities to participate in constructive stakeholder dialogues. Thereby it is not assumed that pre-set labour conditions reflect the actual working conditions on e.g. the farmland. Instead, the focus is on the identification and remediation of root causes of persistent and serious noncompliance issues to allow a systematic approach. Corporations that are eager to become fully compliant with the FLA code in the short-term often default to unsustainable quick fixes at the supply side; prioritising and isolating non-

[18] The method is an integrated approach to sustainable compliance that is ought to pool constituent resources and increase collaboration. For an accreditation by FLA, the corporation must undergo a 2-3 year implementation period.

compliance issues is more effective compliance (FLA 2008a). This approach varies considerably from corporate driven processes, in which the audited suppliers are not actively involved.

Monitoring, transparency, and public reporting to ensure adoption of the Code

Corporations that join FLA create internal systems for monitoring workplace conditions and maintaining code-standards. They participate in a rigorous system of independent external monitoring (IEM), and public reporting on the conditions in their SCs. Therefore the corporations submit lists of their SCs to FLA, who orders independent and unannounced audits by FLA affiliates to evaluate code implementation. To ensure transparency, FLA publishes the results of the IEM audits on its website as tracking charts. The corporations are responsible for internal and external implementation, FLA accredited auditors audit the implementation and functioning of the corporation's processes and mechanisms. Müller et al. (2009, 515f.) judged FLA's laborious gradational accreditation process as a major trade-off. Mamic (2005, 86f.) justifies this trade-off as a mature approach when gradually covering several thousands of suppliers and thereby considers case specific circumstances.

Ensure remediation through development & implementation of corrective action plans (CAP)

A CAP is the central instrument to improve working conditions, because the focal corporation has to develop them with and assist suppliers in remedial action. Perhaps key is the fact that local stakeholders play an integral role in identifying key compliance issues, provide remedial and capacity building services, and assess progress made by suppliers (FLA 2008a). Müller et al. (2009, 518) conclude that the inclusion of regional stakeholders into the certification process "seems more theoretically intended than practically permuted."

6 DATA COLLECTION

Yin (2009, 102) identified six primary sources respectively techniques that can be used to collect data during case research. In the present case study documentation, archival records, and interviews were used and combined to converge multiple sources of evidence (*cf.* Yin 2009, 116) and therefore will be explained in more detail (*see also:* table 4). The author did not use direct observation, participant observation, and physical artefacts (that can be collected during site visits). He did not consider field research visits to (production) sites or actual participation in the events in the ISC in the research design, due to the limited timeframe and financial resources. The principle informant at SYN was acting manager Y. Stiller, senior manager CR. The author is aware that one person might implicate a certain bias. To overcome this pitfall the author searches for other sources and contrary evidence (Yin 2009, 107).

Table 4. Three sources of evidence: strengths and weaknesses. Adapted from Yin (2009, 102), own illustration.

Source of evidence	Strengths	Weaknesses
Documentation	• Stable - repeated review • Unobtrusive - exist prior to case study • Exact - names etc. • Broad coverage - extended time span	• Retrievability • Biased selectivity • Reporting bias - reflects author bias • Possibly limited access
Archival Records	• [Same as documentation] • Precise and quantitative	• [Same as documentation] • Privacy might inhibit access
Interviews	• Targeted - focuses on case study topic • Insightful - perceived causal inferences	• Bias due to poor questions • Response bias • Incomplete recollection • Reflexivity

6.1 Documentation

In this case study, the author used documents to corroborate and augment information from other sources (*cf.* Yin 2009, 103) such as FLA. Verification includes the provision of additional information (e.g. spelling of names a.s.o.), clues for further investigation, or more generally as a source for convergence of evidence (ibid. 117). The strengths of documents, such as their unobtrusiveness or broad coverage outweigh their weaknesses, as long as the risks for bias are systematically reduced. The author is aware of the problems, such as limited accessibility or reporting bias when using internal documents; relevant data extracted from these documents are disclosed and made transparent in appendix 2 paraphrasing complete. The analysis of the internal documents follows the same analytical steps as described in chapter seven like all other documents. For differentiation sake, the author did not list them in

the formal list of references, but on a separate page. When the author refers to these documents, he inserts a reference *mark* (e.g. «1») in the text. Documents were taken in as information sources and a differentiation between retrospectiveness and current time would be artificial. SYN's efforts to improve the ISC started in 2004; historical were used next to to-date data. The author is aware of the fact that historical data can be fragmentary and biased because of post-rationalisation caused by interpreting data at differing times (*cf.* Leonard-Barton 1990; Voss et al. 2002, 202), but risk for bias is reduced wherever possible through e.g. convergence and triangulation efforts (*see also:* chapter 11).

6.2 Archival records

Archival records represent a special kind of documentation whose long-term value justifies its permanent retention. In this case study, archival records on the demographic and economic conditions of the Indian market in particular are used to understand and highlight certain case specific contextual factors. In general they play a minor role and as such the consequences of using quantified data that may have been produced under questionable conditions as well as their possible inaccuracy (Yin 2009, 105f.) are ignored.

6.3 Interviews

The use of expert interviews as a method for data collection is justified as soon as several themes that are given by the research question will be discussed and rather specific data regarding theoretically underpinned constructs are to be collected (Gläser & Laudel 2010, 11; Mayring 2010, 33; Pagell & Wu 2009, 42). Focused interviews were used to gather data that are hardly accessible through document analysis, because a preliminary investigation indicated that latter mostly do not exist, yet. Interviews can be differentiated by interview technique or interview partner. The chosen interview type is expert interviews. An expert in this case is a source of knowledge to give information in the context of the research question. In this thesis, an expert interview is a technique to make this knowledge accessible to allow the reconstruction of social situations or processes (Gläser & Laudel 2010, 12f.) without limiting the interviewees' scope for raising own issues of interest. Interviewees can be interviewed in their role as *informants* or as *respondents*. In this case study, several managers were interviewed in semi-structured one-to-one expert interviews (with interview guides) as informants, since they are sensitised and responsible for overall implementation and/ or success. By answering four questions as proposed by Gorden (1975, 196f*. cited in: Gläser & Laudel 2010, 117)* the interviewees (*cf.* table 5) were selected:

1. Who has the relevant information?
2. Who is most likely to provide the required data?
3. Who is most likely to share the required data?
4. Who is available for an interview?

The author had to base the identification and selection process for the interview partners on an organisation chart that he discussed with the principle informant at SYN headquarter in Basle late October 2010. The names were verified 14th. February 2011. Due to privacy/ safety considerations and organisational restructurings early 2011, SYN did not provide an organogram. In the selection process the author thereby depended highly on the inputs from its principle informant. Key was to identify persons that were responsible for SC practices on different levels of SYN's ISC.

Table 5. Interviewees including name, text mark, function, affiliation, as well as type, date, and place of interview. Own illustration.

Name	**Mark**	**Function**	**Affiliate**	**Type of Interview**	**Date/ Place Interview**
<*anonymised*>	(GV)	<*anonymised*>	SYN	F2F, Tape-record	3/18/11 Basle
<*anonymised*>	(SY)	<*anonymised*>	SYN	F2F, Tape-record	3/28/11 Basle
<*anonymised*>	(KA)	<*anonymised*>	SYN	F2F, Tape-record	3/01/11 Basle
<*anonymised*>	(EM)	<*anonymised*>	SYN	F2F, Tape-record	3/04/11 Basle
<*anonymised*>	(KP)	<*anonymised*>	SYN	Phone, Tape-record Written response	3/02/11 4/11/11
<*anonymised*>	(MR)	<*anonymised*>	FLA	Phone, Tape-record	3/04/11

Because of this sampling technique, the interview partners were not picked on criteria mattering representativeness, but on their managerial expertise and their function. It was imperative that they were familiar with and had a managerial and/ or project responsibility in the ISC. As such, the inclusion of an external FLA employee is justified. Preliminary discussions with the principal informant revealed that the FLA project is at the heart of the sustainability activities in the ISC. Familiarity with concepts and theories that needed to be discussed, such as sustainability or decommoditisation, was not explicitly considered. Participation in the interviews was voluntary, whereas the author invited and informed the participants by email about the interview and its goals (*cf.* Gläser & Laudel 2010, 159). The subtle pressure that was exerted from the principle informant should be considered, since she helped setting up the interviews and had access to the time-planners and assistants to the potential interviewees. In two cases, she acted as an intermediate before sending out the official electronic invitations to all participants. The manager located in India and the external FLA employee located in Geneva were interviewed via telephone. Phone interviews are frequently seen as problematic, because the interviewer must journalise and simultaneously interview the participant (ibid. 153f., 157f.). The author was able to account for this problem, because the phone was equipped with a hands-free function that allowed the tape-recording of the inter-

view[19] and the previously prepared interview guide was sent upfront electronically. Although the author had prepared interview guides that should match the informants' backgrounds and allow a point-to-point querying for data, all interviews except the phone call with India were rather open and only guided by the previously defined categories. Previously announced and agreed visits to SYN's headquarters in Basle were conducted for the sole purpose to interview SYN employees face-to-face. Questions that rose from the interview records were followed-up through e-mails and in one case by a second face-to-face interview. The author tape-recorded all interviews that closely follow the transcription rules (*cf.* appendix 1) as advocated by Kuckartz et al. (2008, 27ff.), because the aim was to structure and summarise extracted content. As such, the transcription follows a system that aims to bring the content of the spoken word to paper and does not pay attention to phonetics or various possible meanings of the (un)spoken word. The author left out timely or other interruptions (*cf.* Mayring 2002, 89ff.). By rule, the author asked all interviewees to review the transcripts for their approval. Where necessary, the author corrected uncertainties such as correct writing of internal abbreviations and/ or technical terms. Except the external FLA member, who wanted to receive a copy of this final document, all interviewees approved and no further modifications were made to the transcripts after this control loop.

[19] The phone interview with KP was most challenging. The line had to be re-established several times and fragments of the tape-recorded interview were found missing. KP added additional information and modifications of information in written form to the electronically provided transcript before approval.

7 DATA ANALYSIS

7.1 Content analysis

This case study like many others follows a qualitative, relatively open, descriptive, and interpretative approach. To avoid arbitrariness when analysing data, the author uses content analysis, or according to Mayring (2010, 13) better characterised as *categories guided text analysis*. Mayring (2010, 48) defines qualitative content analysis as a method for systematic interpretation of data that combines qualitative text analysis with quantitative structuring elements, such as rules and steps, to systematise and verify it. Accordingly, qualitative content analysis should:

- analyse fixated communication within its context;
- proceed systematically and rule guided;
- construct and justify the use of a set of categories;
- follow a theory guided analysis;
- be tested with validity and reliability (quality) criteria (ibid. 48ff.)

Mayring (2010, 65) differentiates between three basic techniques. The author decided to use the *structuring technique*[20] as his focal technique, because he firstly wants to filter and structure, and secondly summarise the gathered material with a theoretically deducted set of categories to allow a systematised and rule-controlled assessment.

7.2 Structured qualitative content analysis

Mayring (2010, 94) offers four specific structuring techniques[21]. The author decided to use the *content structuring* technique *(cf.* Mayring 2010, 98f.), also known as *structured qualitative content analysis.* This specific technique combines two basic techniques. Firstly, it filters and structures the material with a previously developed set of categories. Secondly, it summarises the culled contents, aspects and/ or themes per category (ibid. 98). The research question addresses SYN's SSCM practices that improve the relationship between SYN and its suppliers. As discussed previously, elements of Pagell & Wu's (2009) model provide for the theoretically deducted set of categories that filter and structure the material. In the next steps, the author paraphrases the extracted material before it can be summarised per category. Thereupon the author takes the categorical summaries to interpret the results and concludes with answering the research question.

[20] Other analytical techniques used in content analysis are *explication* and *summarising* (*cf.* Mayring 2010, 65ff).

[21] The four techniques: i) *formal*, ii) *content*, iii) *type casted*, and iv) *scaled* structuring (*cf.* Mayring 2010, 94).

Mayring (2010, 99) suggests an operational sequencing model, which steps the author predominately followed (*fig.* 11). The author will discuss the separate steps in the following subchapters.

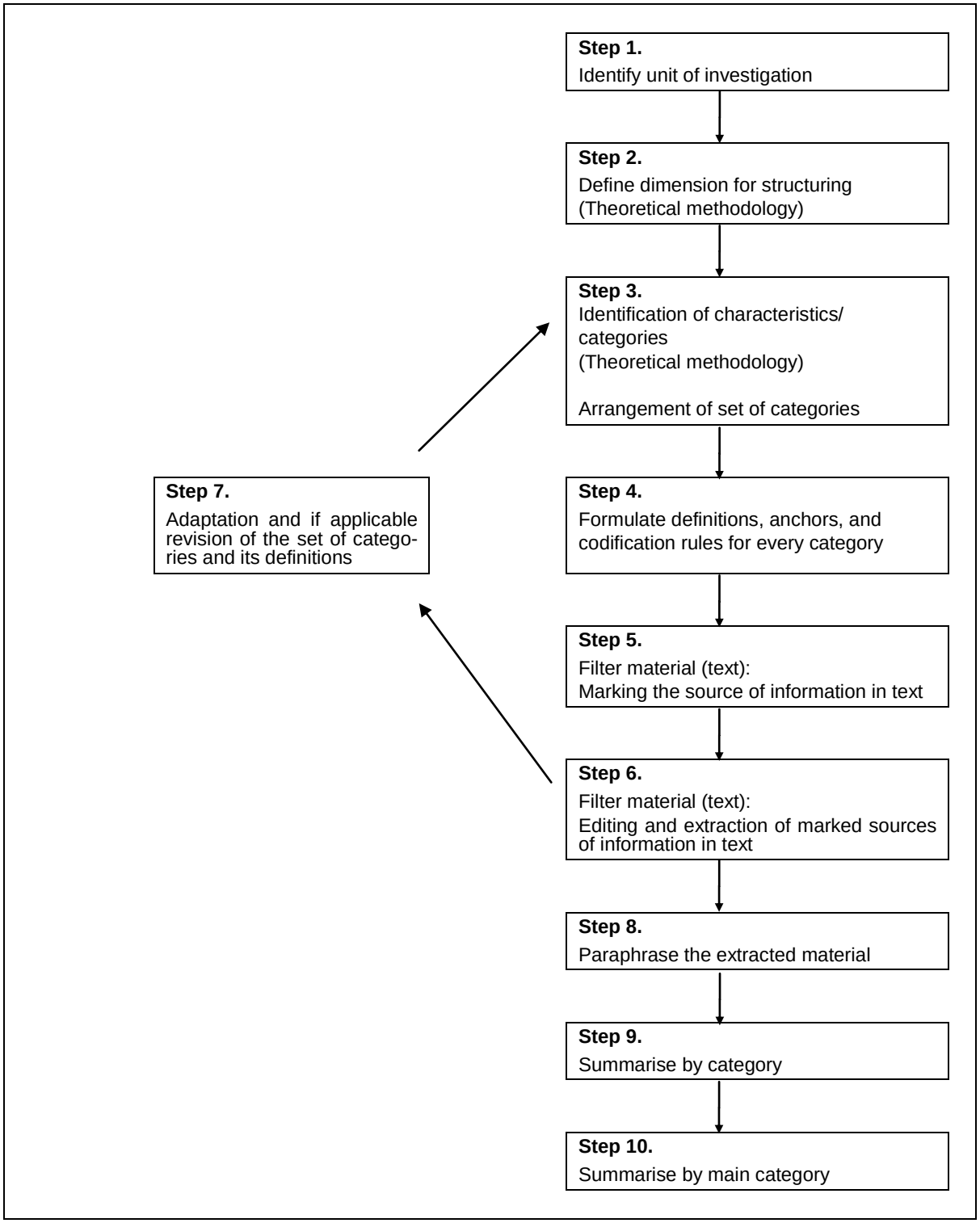

Figure 11. Structured qualitative content analysis. Adapted from Mayring (2010, 93, 99).

The material that is subject to research for the structured qualitative content analysis consists of the transcripts of the six expert interviews, the previously mentioned internal documents, and two published FLA project-reports, i.e. FLA (2006b) and FLA (2008e). Latter reports pro-

vide information on the SYN-FLA social compliance project. (Refer to chapter six point three (6.3) regarding the sampling technique for the interviews).

7.2.1 Unit of investigation

According to Mayring (2010, 59), in a first step, three elements of the unit of analysis[22] must be defined:

- *Coding unit*, i.e. the minimum text parts of the material that can be part of the analysis and of a category.

  In this analysis, it is a sentence that relates to a category.

- *Context unit*, i.e. the maximum size of the material that can be part of a category.

  In this analysis, it is all sources of information/ data that relate to a category.

- *Unit of analysis*, i.e. in which succession the text parts are interpreted.

  In this analysis, it follows the chronology of the interviews.

7.2.2 Set of categories

The arrangement of the set of categories (steps 2 - 4) builds on a deductive approach. Pagell & Wu's (2009) model provided the foundation for the deducted categories; one category represents one SSCM practice. Table 6 provides an example of a category including its definition, an anchor that illustrates an exemplary place of finding in the transcripts, the general coding rule as well as the coding colour that was used to highlight the place of finding in the transcripts and documents. Please, refer to table 8 for the entire set of categories.

Table 6. Example of a category incl. definition, anchor, codification rule, and coding colour (CC). Own illustration.

Category/ Practice	**Definition**	**Anchor**	**Coding rule**	**CC**
Reward and incentive system	Reward and incentive systems are linked to sustainability	"incentive system, including social and ethical elements. It is a 5 percent premium, and that is significant to the seed growers. That premium comes on top of the quality premium" (KA 406/408).	Include a text part if it refers to this category	
…	…	…	…	…

[22] This *unit of analysis* does not correspond with the *unit of analysis* as defined in the research design (*cf.* chapter 4)

7.2.3 Filter material

The filtering of the material per interview in chronological order was done in two steps:

- In the first step, every interview transcript and document was colour coded in sequence with the set of categories. Every category has its unique colour.
- In the second step, the places of finding in the material were transferred to the set of categories.

The author did not start with the coding of text until all six interviews were transcribed to limit researcher's bias (*cf.* Miles & Huberman 1994).

Because the author could allocate various arguments to different categories depending on the contextual line of discussion, during the coding of the transcripts the context of the communication needed to be considered. Exemplary, table 7 presents the coding rule that was defined to assign a text part that can be allocated to more than one category to one specific category depending on its contextual setting.

Table 7. Example new coding rule for arguable text parts during coding of text marks. Own illustration.

Category/ Practice	**Text part (place of finding)**	**Coding rule**
Traceability	An internal monitoring system to track social (in)compliance in the ISC was set up in collaboration between SYN and FLA.	Arguments are assigned to the category in line with the discussion and the context it is used in.
…	…	…

7.2.4 Revising set of categories

After a first test-run during which two transcripts (KA, KP) were filtered (steps 5-6 in *fig.* 11), it was obvious that a revision of the set of categories was necessary (step 7). The original set of categories, which the author deducted from Pagell & Wu (2009) and Pagell et al. (2010, 64), was extended by one new category. Furthermore, three original definitions of the used categories were redefined/ modified inductively (*cf.* table 8).

Firstly, the *intermediates* that are part of the ISC play a far more crucial role than preliminary anticipated. Essentially, SYN does not limit its attention to its intermediates, but trains and instructs them to become social change-makers that transfer SYN's CSR values into the farmlands and communities. According to Fichter & Sydow (2002, 369), intermediates traditionally hinder focal corporations to engage in long-term partnerships, or simply order their intermediates to contract already sustainable suppliers. To account for SYN's novel way to collaborate with intermediates for SC continuity, a new category for *reconceptualising the SC* was created. Intermediates are traditional SC members and as such cannot be subsumed under the category "non-traditional SC members".

Secondly, although all SSCM practices need to improve the continuity of the SC, in line with Pagell & Wu (2009, 49), a separate category *continuity* was retained to code text marks that address sustainability in general and not of one single SSCM practice. The author extended

Pagell & Wu's (ibid.) definition of *continuity* to better capture the sustainability concept and Harrison's et al. (2010) managing for suppliers.

Thirdly, a novel way of practicing *traceability* for SC continuity was identified, which is closely linked to non-traditional supplier development in the agricultural sector. It includes remedial action to ameliorate socio-cultural barriers that hinder social compliance on the suppliers' communal level. Remedial action is part of the category traceability, whereas the actual engagement with the community is accounted for in non-traditional supplier development. This separation makes sense because SYN essentially engages with the community level to make their suppliers better suppliers. In table 8, the changes to the original set of categories after the first filtering are highlighted in blue.

Table 8. Complete set of used categories, incl. definition and anchor. Own illustration.

Category	**Definition**	**Anchors / examples**
Non-traditional SC members	Collaborate with entities like NGOs and CSOs that would either be ignored or treated as adversaries. Partners seen as sources of knowledge sharing.	"It is a typical reciprocal partnership. […] we all learn from each other" (KP, 21).
Intermediates	Collaborate with intermediates (seed organisers) to improve the sustainability in the SC.	"The ethical things we have to educate and train them on […] people that […] have this day-to-day contact. […] the dimensions […] are just too big to do this in-house, […] you need to have that local connection, to make it functional" (GV, 178/184).
Continuity	Explicitly mention continuation in sense of supply base continuity/ common prosperity. The corporation seeks to identify and understand how corporate actions/ impacts affect its suppliers. The corporation acts in a way that demonstrates that it understands and respects how its suppliers are affected.	"SYN wants that changing behaviours and labour standards bring well-being to the suppliers and their families" (KA, 9f.). "cultural specifics and social structures and sensitivities that need to be taken into account for the farmer to be willing to make these changes" (SY, 542/543).
Decommoditisation	Buying commodities on something besides price. Corporation explicitly treats a supplier and/ or entire chain that provides a commodity as if it supplied a rare/ strategic input. Corporation provides long-term contracts and pays above market prices instead of arms-length market contracts. Corporation willingly gives power and the associated benefits to commodity-like suppliers.	"[…] when we develop them and their production skills they are free to change contract" (SY, 258/259). "[…] this upfront investment […] is with the intention of creating long-term relationships, independent of contracting time" (SY, 292/294).
Supplier development (traditional)	Training suppliers to be better suppliers for the focal corporation to meet the corporation's demands. Benefits accrue to both the buyer and the supplier, but predominately on the supplier side.	"[…] engagement […] to get the growers along the learning curve and to start delivering and to start improving their productivity" (KA, 24/25).
Supplier development (other chains)	Corporation helps suppliers (through e.g. training and education) to improve with the main intention to improve other chains. Benefits directly accrue to supplier and perhaps competitors. Community empowerment to strengthen the skills, competencies, and abilities of suppliers' and their community members.	"The value creation within our system can be used to actually extend the income base for the family by doing other types of enterprises" (SY, 339/342). "Syngenta me & mine is quite an innovative and creative way […] to engage with the farming family but also the community to share those values" (SY, 631/632).
Reducing supplier risk	Helping suppliers to mitigate some or all of the risk associated in making suppliers' products and/ or processes more sustainable. Help is not limited to financial support, but also includes diversification and/ or guaranteeing certain level of demand.	"[…] the most important one, is the capacity raising […] the ethical elements are part of that, but the agronomic skill improvement is vital" (GV, 254/266). "[…] at least broker a micro-credit or a credit opportunity" (GV, 250/251).
Transparency	SC members provide full accounting of flows of money to origins. Ensuring and communicating individual workers are treated fairly.	"[...] very comprehensive and detailed listing of the prices they pay and that the pricing system does not push farmers to employ child labour" (MR, 289f.).

Traceability	Ability to track where something comes from and the materials that are in to source to minimise risk from how things are made. Sharing of information among chain members about materials and methods (toxins, child labor, a.s.o.) to optimize noneconomic chain performance and minimize risk. Traceability is used to ameliorate root causes in SC trough CAPs/ remedial action.	"[…] implement the standards, and then they will be monitored and audited. If there is something that is incompliant, there will be a remediation plan and […] follow-up audits and monitoring to see that they are implementing the remediation plan" (SY, 105/108). "if the root causes are within the community […] where your power of contract doesn't reach, then you need to fight the root causes in another way" (GV, 38/40).
Reward & Incentive system	Reward and incentive systems are linked to sustainability	"[…] incentive system, including social and ethical elements. It is a 5 percent premium […] That premium comes on top of the quality premium" (KA 406/408).

7.2.5 Paraphrasing extracted material

The author (colour) coded and paraphrased (*cf.* appendix 2) the filtered and structured material per category. Although paraphrasing essentially means deliberately rewording someone else's written or spoken expressions to achieve greater clarity (*cf.* Apple Inc., 2009), closeness to the original text/ expression was accounted for to avoid unintentional interpretations during these steps. The paraphrasing also includes a recapitulatory element. Thereafter, the author sorted the paraphrased text parts by content/ theme within a category. This was necessary to structure the categorical summaries, since a SSCM practice such as *reducing supplier risk* might include several ways of doing so. In the last step before being able to efficiently summarise the results of the analysis, the author deleted the double counts as well as superfluous/ empty lines that did not provide any new insights. The last two steps are not accounted for in an amended document, because these were done in a scratchpad-like manner. The author presents the summaries per category (steps 9-10 in *fig.* 11) in the next chapter. To do so, the author refined and extended Pagell & Wu's (2009) original set of categories to allocate the identified SSCM practices in this case study to mainly the middle part *new behaviours* of the SSCM model. Therefore, the author retained their (Pagell & Wu 2009) differentiation between *more* vs. *truly* sustainable SCM practices, and the two main categories *reconceptualising the SC* and *supply base continuity*.

8 SUMMARISING RESULTS

8.1 Summaries of results per category

Table 9 provides a quick overview on which SSCM practices were identified in the ISC. Most were in line with Pagell & WU's (2009) and Pagell et al. (2010) findings. Some were extended and one category (intermediates) was newly identified.

Table 9. Identified SSCM practices in ISC. Own illustration.

Category/ practise	Practiced in ISC	Comment
Non-traditional SC members	Yes	In line with P&W 2009
Intermediates	Yes	Newly identified
Continuity	Yes	In line with P&W 2009 Refined for add. clarification
Decommoditisation	Yes	In line with P&W 2009; P. et al. 2010
Supplier development (traditional)	Yes	In line with P&W 2009
Supplier development (other chains)	Yes	In line with P&W 2009, Extended with communal dimension
Reducing supplier risk	Yes	In line with P&W 2009
Transparency	Yes	In line with P&W 2009
Traceability	Yes	In line with P&W 2009, Extended with new approach
Reward & incentive system	Yes	In line with P&W 2009 Extended to suppliers

The author presents the outcomes of the analysis in the following subchapters in more detail for each category.

8.1.1 Summarising non-traditional SC members

Table 10. Summary collaboration with non-traditional SC members in ISC. Own illustration.

Non-traditional SC members
SYN collaborates for critical issues that cannot be handled single-handedly
SYN collaborates to share knowledge and benefits; the collaborations are reciprocal
SYN collaborates with FLA and other NGOs/ CSOs in a PPP for social compliance in ISC
SYN uses multi-stakeholder consultation for remedial action
SYN collaborates with local NGOs and CSOs for its community engagement activities

SYN collaborates with non-traditional SC members as soon as it classifies issues at hand as critical, i.e. concern SYN's core values, and cannot handle these issues single-handedly. Before SYN decided how to address improving the working conditions in its ISC, it initiated multi-stakeholder consultations with NGOs, governmental officials, and others who had an interest in ameliorating labour right violations in agriculture in India. Here, everybody had the

right and opportunity to present their views when discussing solutions for remedial action that focus on root cause amelioration. SYN considers its stakeholders as knowledge sharing partners and regularly seeks their inputs when discussing remedial action for ameliorating labour rights violations. However, every relationship is context specific, and, as that, differs from other relationships.

SYN invited FLA to partner in a PPP to improve social compliance. The basic mutual objective was partnering for social compliance and acting against child labour, and driving the social benefits for the suppliers forward. SYN not solely consults and associates with FLA to build internal capacities and get assistance for building internal social compliance mechanisms, but also to implement remedial action through multi-stakeholder consultation. Before SYN started building a functioning internal monitoring system, SYN and FLA invested considerable resources in understanding how SYN's ISC functions, and what kind of compliance risks confront SYN. SYN needs FLA's expertise in social compliance from other SCs. FLA provides the mirror to reflect and challenge SYN's assumptions on its SCM practices, which proves to be vital to the partnership when e.g. jointly discussing and defining labour policies, benchmarks, and metrics. SYN and FLA administer a reciprocal, mutually positive partnership, which is so strong that SYN considers the partnership as an integrated part of its mainstream activities to improve working conditions on the farmlands. Who decides to partner with FLA, adopts an inclusive stakeholder negotiation approach that integrates all involved stakeholders when defining corrective action plans (CAPs). Before SYN started the FLA engagement, the suppliers didn't know SYN. Intermediates traditionally kept the contacts to themselves, but the suppliers got interested in partnering with SYN together with FLA, once the conditions were clearly communicated in the contracts and transferred into the suppliers' communities through awareness rising activities. The collaboration with FLA as an independent third party, who can offer an objective view by interacting with all stakeholders without representing SYN is essential to identify the root causes and broker the relationships within the ISC. Remedial action will only be successful if all affected stakeholders can agree on the corrective measures. Two learnings from the FLA partnership are *how* to partner and *how* to build trust.

SYN collaborates with local and international NGOs like International Resources for Fairer Trade (IRFT) for its community driven engagement and education programmes that are part of remedial action (communal capacity building or ethical auditing). SYN collaborates with local CSOs like panchayats (village councils) or regulatory and school representatives to e.g. to improve child illiteracy through asking them for assistance to motivate and check on children attending school, or discussing and implementing CAPs that should include the communities. These partnerships are reciprocal, because both sides learn and benefit from the collaboration. Suppliers want to collaborate with SYN in this PPP, because suppliers notice that it follows the sincere intention to improve suppliers' livelihoods.

8.1.2 Summarising intermediates

Table 11. Summary collaboration with intermediates. Own illustration.

Intermediates
SYN collaborates with intermediates, because of territorial spread and size of supply-base
SYN collaborates with intermediates, because they are strong influencers in seed growing communities
SYN collaborates with intermediates, because SYN uses them as its extended arm and wiring medium
SYN trains and educates its intermediates in ethical compliance to become social change-makers

In 2010, SYN contracted 12395 suppliers for hybrid vegetable seeds (Syngenta 2011a, 53) in the ISC. These suppliers spread over a wide territory, but mostly situate in the agriculturally productive states Gujarat, Karnataka, and Maharashtra. SYN does not have the in-house manpower and bandwidth to manage these contractual relationships on an individual basis. Therefore, SYN inserted an intermediate level to get a pyramid structure. The intermediates are lead growers or (key) seed organisers, frequently represented by village headman or professional agents that have strong socio-cultural and geographical ties with the 10 to 200 suppliers for whom they organise the contracts. These ties come natural and as such offer SYN to sign contracts with larger parts of a village/ community at once. For SYN these intermediates are strong and pivotal wiring mediums that allow SYN to change previously contractual relationships in partnerships. The intermediates are highly trusted opinion leaders and strong influencers in the communities, and as such play a key role when willing to change old practices and behaviours in new sustainable ones. Because it is difficult to impose any standard on all ISC members, incl. two to three supply-tiers down the chain, SYN has collaborative partnerships with its intermediates. As such, SYN sees them as its extended arm or semi in-house. SYN's expansion drives the intermediates; growth latter want to participate in and benefit from. These agronomically skilled, independent intermediates deliberately engage in long-term partnerships. They receive training and education on SYN's seed production, HSE, and ethical/ labour standards. They secure its adherence in the farms through day-to-day contacts during contract fulfilment. When SYN identifies incompliances with social standards, the concerned intermediate is included in remedial action (CAPs). SYN engages with its intermediates to improve quality and HSE standards for its suppliers and latter workforce. SYN's investments to capacitate its intermediates as social change agents are pivotal. The intermediates do the influencing and wiring; SYN provides the means to the growers and communities for sustainable change.

8.1.3 Summarising continuity

Table 12. Summary continuity. Own illustration.

Continuity
Improving working conditions in the ISC should benefit the suppliers, their families and communities
The benefits must go beyond compliance and contractual conditions; they should provide additional added value to suppliers and their families
Supplier and community benefits must be sustainable and long-term by ameliorating socio-culturally grounded root causes through development and fair pricing/ wages
SYN wants its suppliers to have freedom of choice/ self-determination

SYN wants that improved practices and labour standards bring well-being to the suppliers and their families. In order to bring about long-term change, SYN adopts a holistic approach. It considers the development of an entire seed growing community, not only its contracted farmers. Therefore, SYN collaborates with its suppliers, their families, and the local socio-cultural and ecological environment in which they operate, to do a better job. By integrating their needs and the community itself, the operation becomes sustainable. For SYN sustainability means that people voluntarily participate and SYN is able to improve the situation based upon metrics it put in place. I.o.w. it can only become truly sustainable when the values are carried and lived by the people who implement and execute; the benefits go beyond compliance and offer additional added value to the farmer and its family. Key to giving farmers a future is giving them the freedom of choice; giving them the choice of developing, sending their children to school, having money to re-invest in the farm or in infrastructure.

Suppliers recognise that SYN is serious about and concerned with the social conditions of its suppliers and their communities. SYN has become a respected partner with a good reputation. Suppliers want to work with a company that has a strong (social) brand, has good practices, is fair, and helps them to improve their livelihoods. SYN uses multi-stakeholder dialogues to understand pressing issues and ameliorate their root causes. Because of improved seed production standards and social conditions, the communal living standards of partnering seed producing communities are demonstrably higher. FLA attests that SYN's suppliers see SYN as their own corporation; they deliver their seeds to themselves, someone they trust. Growers feel that SYN partners for their benefits, their well-being, and not for SYN’s benefit solely. The suppliers think SYN really cares about them. SYN improves the farmers' livelihoods by fair pricing, and capacitating its suppliers and their communities, which have long-term impacts. SYN is in the situation where farmers who are willing to contract cannot be taken on due to limited capacity, which has led to complaints at FLA. SYN is convinced that it is getting the balance right between being a business and having a social accountability.

8.1.4 Summarising decommoditisation

Table 13. Summary decommoditisation. Own illustration.

Decommoditisation
SYN decommoditises, because it wants more reliable, skilled suppliers for long-term partnerships
SYN decommoditises by encouraging its suppliers to become strategic commodity suppliers
SYN decommoditises through contractual conditions that keep suppliers out of captivity and poverty trap
SYN decommoditises through offering suppliers agronomic training and education (capacitating)
SYN decommoditises through a fair pricing model
SYN decommoditises, because its wants to improve the sustainability of its ISC

The importance of purchasing goods is high, whereas market complexity is low, because suppliers that produce seeds are abundant. In spite of supplier abundance and the possibility to leverage, SYN does not treat them as commodity suppliers. The days of surplus markets with true commodities are gone; commodity suppliers can no longer be leveraged[23]. SYN justifies its overinvestments in traditionally arms-length contracted farmers, because SYN expects to partner with reliable suppliers, who continuously increase seed quality and yield, and their sustainability performance. SYN's seed production standards are above-average high, covering both seed quality and labour rights/ HSE quality aspects. Overinvestments in capacitating commodity-like suppliers to climb the learning curve are necessary and not marginal; exchanging suppliers involves the additional risk of loss of quality control. Taking in new suppliers as commodities would be possible, but only if all would be trained to the highest level. After SYN has invested corporate resources in new suppliers they no longer are commodity-like suppliers, but should become strategic commodity suppliers. These investments are short-term disadvantages, but will pay off in the long-term once suppliers have adapted to growing SYN's seed varieties, partner to improve seed growing practices, and renew their contracts. SYN estimates risk that affects the sustainability of seed production medium to high. Investments for reliable suppliers are dwarfed by the cost connected to labour rights violations in the ISC (reputational loss).

SYN offers suppliers an attractive value proposition with its contracts. Contracts are only made for one growing season to avoid tying the suppliers to SYN. Growers are not captivated and free to contract with others, even parallel to contracting with SYN. With contracting periods of only one growing season, SYN risks losing its capacitating investments to competing offers, whereas SYN's seed procurement depends on skilled suppliers that multiply high-quality seeds for the end-user market. An incentive scheme makes the added value of social compliant services tangible. SYN pays a competitive above market price that may include a 5 percent premium when socially compliant. Suppliers attest that SYN is the best paymaster among the seed corporations. To SYN, the fundamentals of the contract need to be attrac-

[23] Several times the interviewees mentioned the argument that labour is running short in supply in India and as such becomes an increasingly scarce resource that sooner or later will affect seed growing and other farming practices for the better.

tive, but eventually not suffice to retain highly skilled suppliers. Next to financial incentives, SYN provides a value-package that builds on collaborative partnerships. SYN wants to become the preferred customer of its suppliers; to be an attractive partner who is not there to exploit, but is the preferred contract provider. SYN can achieve this through sharing value and making a contribution to the suppliers' lives and livelihoods. SYN's strong reputation through community engagement in its seed growing communities adds extra value to the suppliers' contracts next to the attractive remuneration offers, which results in a dedicated and loyal supply base. Contracted farmers are well-off, they can re-invest in their farms, become resource efficient, cut cost, and have money to improve household economies. SYN let go of top-down control mechanisms; it reverses its traditional dominant power position in favour of the supply side. SYN wants its suppliers to have a sense of ownership, provide the opportunity to decide how family and farm should develop.

8.1.5 Summarising supplier development (traditional)

Table 14. Summary traditional supplier development. Own illustration.

Supplier development (traditional)
SYN capacitates seed growers to adhere to SYN's quality standards
Suppliers receive state-of-the-art agronomic and technical training and education to climb a learning curve
Suppliers receive continuous training and education to produce superior yields
SYN integrates sustainability aspects in education and training on agronomy and seed production-process
SYN provides its suppliers with the necessary equipment to improve sustainability of production process

SYN needs suppliers that have superior seed growing skills to multiply seeds in adherence to SYN's quality standards (100 percent germination rate). Before SYN contracts farmers as suppliers, they receive agronomic and technological training and education to climb a learning curve. SYN continuously invests in its contracted suppliers' skills to help, direct, and assist them while adopting sophisticated seed growing practices to produce superior yields. SYN's contact and interaction with the suppliers is rather intense, because SYN supervises and audits (3-4 times during peak season and high risk process steps) the technical and social (incl. labour rights and HSE) growing practices during the entire 3 to 4 months lasting seed production-cycle. Training in this highly controllable environment allows direct and continuous investments in supplier development, when the suppliers choose to prolong their partnerships and sign new contracts for successive growing seasons. As such, they steadily improve their seed production skills and indirectly, through the application of these skills, their livelihoods. During the last 5 years, the training and education included planning workshops at the beginning of a growing season in which social awareness training and capacity enhancement to make the seed production process sustainable are integrated. Aspects include product stewardship training (safe chemical use and storing, first aid, sanitation, pest control) and starting with the FLA partnership, training on human and labour right elements that are all part of SYN's CoC. Next to capacity enhancement, SYN has provided 5000 PPE sets for safe spraying or storage of chemicals, which improved safe handling of chemicals. SYN benefits from these investments because of the seeds' superior quality and long-term partnerships that make procurement planning easier and improve brand image. The suppli-

ers benefit because they become highly skilled growers and can apply new, specialised practices and technologies before these are scaled up for competing normal crop farmers.

8.1.6 Summarising supplier development (other chains)

Table 15. Summary non-traditional supplier development. Own illustration.

Supplier development (other chains)
SYN develops highly skilled suppliers whose agronomic skills can be offered to other and farm attached SCs, because skills are imparted
SYN encourages its suppliers to work with other SCs (e.g. high-yield cropping), and run own agronomic services parallel to seed production for SYN
SYN develops suppliers, their families, communities, and the ISC through community engagement
Syngenta me & mine community engagement is part of remedial action (traceability). An incentive scheme and supplier development alone will not ameliorate root causes
Syngenta me & mine includes stakeholder consultation, awareness rising, and capacity building elements
Syngenta me & mine is community driven and creates a sense of ownership
Syngenta me & mine focuses on women, since they are key to changing behaviours in rural communities
Syngenta me & mine focuses on children to strengthen communal awareness for child education

Developing suppliers for activities in other SCs

While SYN capacitates its suppliers to produce high-quality vegetable seeds, latter can use their seed farming skills in other SCs and for different farming activities, too. Suppliers can offer their services to other seed corporations for similar or other seed variants or enter the produce SC to farm high-yield crops for the market. The line between traditional and supplier development for other chains is a fine one, because of the indirect long-term benefits that accrue a.s.a. the suppliers use their imparted skills when e.g. building net houses or seedling nurseries to improve their commercial cropping activities. Farmers are entrepreneurs, who want to improve their household economies. They try to diversify through e.g. running farm attached or adjacent businesses, such as local retail stores, processing or warehousing for other communal growers, and offering agronomical services. A.s.a. SYN is a major player in the market it provides additional (extension) services that governmental agencies should provide for and assists farming communities in general. In India, SYN offers agronomical advice and capacitates also to non-contracting farmers. These services and newly learned skills could easily be transferred to other agricultural SCs.

Capacitating seed growing communities

SYN adopts an inclusive and holistic approach to develop sustainable seed growing practices in rural, communal structures. Single-handed interaction on a buyer-supplier level has limited results, because suppliers are unmistakably intertwined with their communities; SYN's contracts have little impact on the community level. Besides incentive schemes and capacitating suppliers, rising awareness in and capacitating communities is key to ameliorate culturally embedded root causes. As a result, SYN launched a countrywide *Syngenta me & mine* community engagement program as part of an overall remediation plan to create a sense of ownership. It includes the engagement with several stakeholder groups on various levels and functions of a seed growing community, awareness rising programs, and capacity

building elements for the mentality shift (sharing sustainable values). SYN places its social compliance activities in a suppliers' community interest, makes it community driven, and goes far beyond its own operational interest to develop seed growing communities, even for other SCs. It educates on child education and labour rights, reinforces good safety practices on and around the farms that come with advanced farming and seed growing practices, and offers free training on safe chemical handling, first aid, and sanitation. Since the ISC includes small (0.1/ 0.2 hectares) open field farming, multiplying sustainability practices goes beyond traditional supplier development. It includes the community level, the suppliers' family and workforce, and neighbouring farmers.

Empowering women

Syngenta me & mine engages on the community level and identified women as key mobilisers for sustainable change. They often drive change within the families and communities. The women take up the entrepreneurial role and look for additional incomes for the family. SYN's women mobilisers are trained to reach out for the women that make up app. 80/ 90 percent of the workforce. They approach women to disseminate the message and transfer SYN's code values into the communities. SYN mobilises and empowers community women, because it is impossible to separate the living from the working environment. Because of the high illiteracy rates in rural communities, SYN does this with simple communication tools like fans, banners, and game based tools like the *snake and ladder* board game or role-plays in village town halls or on the main square. SYN's women mobilisers also significantly improved the participation rate of women of farmworkers and labourers in awareness and motivation meetings. Here, they came to know their rights and responsibilities for HSE, wages and labour rights as well as rightful benefits.

Education & child labour

Syngenta me & mine works closely with local governments to promote child education and not risk the children's chances for an education by working on farms during peak season. SYN actively participates through corporate volunteering (labour) to provide the schools with a more attractive appearance and invests in local schools through donating learning material and computers to motivate the community members to send their children to school. SYN sensitises teachers to check on attendance, encourages them to work with parents to find manageable solutions (a balance between work and school tasks), and celebrates awareness rising days like teacher's day. SYN initiated school contests in which all best performing children of participating farming communities receive a reward. Non-traditional community engagement does not affect SYN operations directly, but improves social and labour conditions on and around the farms. It made ISC farmers and farm labourers realise the importance of child education.

8.1.7 Summarising reducing supplier risk

Table 16. Summary reducing supplier risk. Own illustration.

Reducing supplier risk
SYN reduces risk through its legally binding contracts that are valid for one growing season and include sustainability clauses
SYN always pays the previously agreed price and premiums for the guaranteed uptake of its multiplied seeds on time
SYN works on a fair wage concept that includes minimum wage and discretionary money elements
SYN supplier/ community engagement improves social compliance performance and avoids blacklisting
SYN provides technical equipment and training for seed production process
SYN buys locally; locality and closeness to supplier are basis of the business model

SYN reduces supplier risk in several ways. *Firstly*, this is done through a legally binding contract that includes the following aspects:

- SYN always pays its debts;
- SYN pays on time;
- SYN assures and provides the foundation seeds, which reduces upfront-investments. Seed growing from e.g. chillies, tomatoes or okra is a capital intense activity;
- SYN always buys harvested seeds back at a previously agreed price, which provides the suppliers with a calculable, risk-free income. Most ISC suppliers are only minor players; this model is not dependent on fluctuating and volatile commodity market prices. The guaranteed uptake allows suppliers to calculate their sales and required inputs, which brings cost efficiencies;
- SYN grants two premiums for both quality (5 percent) and social (5 percent) compliance with SYN's standards; the latter overcompensates for increased labour cost connected to the exclusion of child labour, regulated remuneration, paid overtime, etc.;
- Contracts include clauses regarding SYN's CoC growers and workers can appeal to;
- Suppliers only contract with SYN for one growing season, and SYN does not mandate exclusive contracting during a growing season. Suppliers are not kept captive and spread their risk by e.g. running agronomic services parallel to seed growing.

Especially the two 5 percent premiums for quality and social compliance allow the suppliers to re-invest in their production systems to increase efficiencies and reduce cost. When suppliers have money to re-invest in their farms, the cost reductions through resource efficiencies are bigger than the up-front investments. As a rule, SYN does not provide loans, but brokers micro credits or credit opportunities where needed. The contract is used as a security deposit.

*Secondl*y, SYN is working on introducing a fair wage concept in its ISC to provide its suppliers' farm labourers a fair income. This fair wage should be in line with FLA code elements and have an element of discretionary money. Realistically seen, a minimum wage throughout the SC would be the maximum reachable, but the Indian labour market conditions (labour shortage makes labour more expensive) are favouring farm labourers. *Thirdly*, the FLA social

compliance project does not allow SYN to simply blacklist incompliant growers; SYN offers remedial action. *Fourthly,* SYN provides its suppliers with technical equipment (e.g. poly-tunnels to reduce weather induced risk), access to cleansing chemicals and active ingredients that can be financed, and agronomic weather information to improve the seed growing process. The latter allows e.g. efficiencies in spraying, fertilising, and irrigation. *Last but not least*, SYN buys directly from the suppliers; locality and closeness between suppliers and SYN are the basis of the business model. The intermediates handle the contracts on a commission base, but SYN controls the seed production process and accompanying services.

8.1.8 Summarising transparency

Table 17. Summary transparency. Own illustration.

Transparency
SYN initiates stakeholder consultations on *who is* in and *who benefits* from the ISC
SYN is transparent on its own margins setting, but does not source information from other SC members
FLA discloses progress reports and tracking charts on social conditions in ISC
SYN's social compliance system made the ISC more transparent (structure and clarity)
A transparent ISC improves the social conditions of all ISC members

After selling its Bt-cotton business, SYN attested its social compliance commitment to ensure that no human and labour rights are violated. SYN believes to make a big difference to growers and agriculture in general. To fight root causes, debates regarding *who is* in the value chain and *who benefits* take place. In a stakeholder consultation on root causes in India's agricultural sector, SYN disclosed how it sets the margins for its pricing model throughout the ISC. SYN discussed the principles and elements with SC members to show that SYN's pricing model and margins do not push its suppliers to employ cheaper child labour. Despite SYN's openness, it does not source financial information from other ISC members.

SYN is an FLA member, but FLA remains fully independent and has full access to SYN's suppliers and practices through social monitoring and audits as well as multi-stakeholder remedial action. SYN provides FLA with lists of all contracted farms to enable external monitoring. SYN has no control over FLA's external monitoring process or the disclosure of the results. SYN has to disclose all its practices to FLA affiliates and other external partners to enable access to the suppliers and their tiers for remedial action and community engagement programs. FLA publishes its audit outcomes online in the public domain as tracking charts next to annual progress reports. As such, interfirm transparency within the ISC makes SYN's practices transparent to externals. The transparency efforts in the ISC resulted in a functioning internal and external monitoring system that should eradicate labour rights violations, clear-cut communicable ethical production terms in the contracts, and clarity on the conditions (social and quality parameters) for payments and incentives.

8.1.9 Summarising traceability

Table 18. Summary traceability. Own illustration.

Traceability
SYN has an internal social monitoring system that is accustomed to ISC peculiarities
SYN integrates social monitoring activities in existing quality control audits on the farmlands
SYN staff is trained and educated in agronomic and ethical standards
FLA externally monitors, audits and verifies SYN's social compliance mechanisms
SYN includes a remedial step in its management system to eradicate non-compliance with its standards and ameliorate the root causes for sustainability
Remedial action systematically integrates stakeholder consultation, root cause analysis and CAPs that are followed up by supplier re-audits
Remedial action includes community engagement (*cf.* non-traditional supplier development) to make efforts lasting and sustainable

According to FLA, the first thing a corporation must do to become socially compliant is tracing; tracing back the product`s origins along the SC and the production process. However, to be truly sustainable, the ultimate goal must be to fix the root causes that create labour right violations. The causes - and not the symptoms - of poor working conditions are the target. SYN adopts FLA's 3.0 social compliance method, which includes a remedial step.

Internal monitoring

SYN continuously improves its internal social monitoring system to identify yet unnoticeable incompliances with the FLA CoC that had been integrated in SYN's CoC. This monitoring system records working conditions throughout the growing season on the farms. Wherever possible, SYN integrates its social compliance activities/ messages in existing quality monitoring systems and contact points, such as pre-season meetings or routinized business contacts. SYN trains its internal auditors in agronomic and social issues and parameters for supplier performance audits. They visit the suppliers during the growing season (3 - 4 months) 3 to 4 times for (un)announced inspections/ audits on farmlands. SYN analyses the results with additional social parameters like safety, wages, and working conditions when analysing agronomic quality and quantity data. Efficient social monitoring needs to follow the seed production steps that depend on weather conditions. Efficient auditing hits high-risk periods/ steps and is therefore hard to plan.

External monitoring

FLA does independent verification and monitoring based on SYN's farm lists. The 3.0 method needed modifications, since FLA developed the original 3.0 external monitoring for the footwear and clothing industries. FLA modified the following elements:

- The maximum amount of venues/ p.a. for external auditing was lowered in stages. The original min. 5 percent audited farms p.a. was adjusted to 3.5 percent p.a. < 5000 farms, and 10000 > 2 percent < 20000 farms;
- Bundles of farms instead of one single venue are audited;

- Audit sessions include farm audits as well as SYN's social compliance mechanisms;
- FLA updated the qualification requirements (agricultural sector) for FLA monitors;
- Benchmarks for social compliance were modified through stakeholder consultations.

Remedial action

Social compliance that should have sustainable long-term effects cannot be reduced to traceability, namely to trace down who supplies SYN (un)ethically. Monitoring and auditing is the easiest part, but the FLA 3.0 method makes SYN to progressively engage in remedial action/ CAPs, which demand substantial effort and resources in time. SYN's inclusive approach involves community engagement, to fight root causes where the power of its contracts cannot not reach. The 3.0 method is an engaging and not a policing model, because it systematically integrates multi-stakeholder consultation for advice and support during root cause analysis and remedial action that focuses on the concerned supplier (level) and the community level. Inclusive multi-stakeholder consultation and pre-season workshops with organisers and growers allow SYN to consider suppliers' cultural and contextual backgrounds and needs. For SYN, remedial action is not setting (dis)incentives; remediation should improve suppliers' conditions through capacitating practices. In India, SYN includes the farmers' community level when defining remedial action. FLA helps SYN to engage with suppliers, intermediates and community representatives for remedial action; FLA moderates the multi-stakeholder consultations to define manageable and fair solutions for all parties involved.

SYN commissioned risk assessments to identify and understand compliance risk issues in the various production steps, which SYN audits during peak seasons. It found that the root causes are culturally embedded behaviours. They are connected to farming communities' interactions and agricultural (esp. small scale farming) labour market specifics. To influence such behaviours, the focus during remedial action is on production practices and procurement pricing, since these uphold root causes. Fixing culturally embedded root causes takes time. Because monitoring and remediation is part of the contract, suppliers know that in case of incompliance a CAP is negotiated that is followed up by re-audits to ensure progress.

8.1.10 Summarising reward and incentive system

Table 19. Summary rewards and incentives. Own illustration.

Reward and incentive system
SYN implemented an incentive scheme that rewards social compliance in the ISC
5 percent premium is paid to suppliers on top of a quality premium when individual scores are compliant with quality and sustainability benchmarks
Internal and external audits (quality and social) are used for the scoring/ point system

SYN incentivises social compliance with a wage/ price component to change the way its suppliers produce seeds and/ or remunerate their labourers. Financial incentives that reward compliance with SYN's quality and ethical standards are preferred above disincentives, because SYN wants improvements through remedial action and capacity building, and not threaten its suppliers with reprimands when being incompliant. It is a carrot & stick model

that rewards compliance with both quality and social benchmarks with 5 percent premiums. SYN adds the social 5 percent premium on top of the quality premium and pays when suppliers or organisers comply with the best practices benchmark that SYN uses to measure performance during the season in a point system. Data sources for the point system are the regulated internal and external social compliance audits. Should suppliers repeatedly fail to comply with best practices and do not improve through remedial action, SYN blacklists them. Incentive schemes attract/ motivate suppliers to change operations, but intrinsic incentives such as capacitating efforts uphold the partnerships.

9 INTERPRETATION OF THE RESULTS

The author used Pagell & Wu's (2009) model to identify and describe SSCM practices that make SYN the preferred customer for its suppliers. With a bird's-eye-view, the data show that the model includes all evident elements that SYN considers relevant to strengthen its relationships through SSCM practices. Although the case study did not look into the *integrative* and *outcome* elements, the results indicate that sustainability is an integral part of SYN's management systems. Before interpreting the results regarding the *new behavioural* elements in the light of current theory, the author notes that *rewards and incentives* play a decisive role after all.

9.1 Reconceptualising the SC

The results suggest that SYN collaborates with *non-traditional ISC members* and treats them as knowledge sharing partners. Although collective, publicly announced voluntary undertakings on sector level for social problems (CoC) are still rare and have limited effect because the benchmarks normally centralise on the lowest possible denominator (*cf.* Schaltegger & Petersen 2008, 99), collaboration in a PPP for CoC implementation is state-of-the-art stakeholder engagement. SYN approached FLA because of its competences and realistic view on *how* to improve working conditions several tiers down the ISC. The PPP enables SYN to access external expertise to better understand and manage its ISC, and not restrict itself to compliance mechanisms that have limitations for continuous improvements (*cf*. Jørgensen et al. 2003) and sustainability outcomes (*cf.* FLA 2008a). The analysis revealed that SYN was concerned that high-visibility of its ISC through negative NGO pressure and media attention led to reputational loss (*cf.* Lund-Thomsen & Nadvi, 2010, 3; Seuring & Müller 2008, 1703ff.). As a response, SYN took on this pro-active, comprehensive and integrative approach, and decided to pool its resources to improve working conditions in its interorganisational strategic supplier network (*cf.* Fichter & Sydow 2002, 363f.). The author notes that Fichter & Sydow (2002, 364) already foresaw the downturn of hierarchical modes such as Humphrey & Schmitz' (2002) quasi-hierarchical SC (resembles captive/locked-in chains), in which a focal corporation significantly controls the production process at transactionally dependent SMEs through a high degree of monitoring and control.

The results show that *intermediates* play a decisive role. Pagell & Wu (2009, 52) argue that their model includes sector or industry specific contingencies that might limit individual SSCM practices. *Collaboration with intermediates* by capacitating them to become semi in-house social change-agents is not part of the model, but the empirical findings attest that this practice can be considered a novelty for *reconceptualising who is in the SC*. The interviewed external FLA employee confirms that focal corporations normally care about their agents, and not their suppliers (MR, 13ff.). Fragmented SCs with outsourced production process elements involve risks that magnify a.s.a. the amount of involved links/ ties increases (*cf.* Park-Poaps & Rees 2009, 306). The findings clearly state *why* SYN needs a

pyramid structure in its ISC. Fichter & Sydow (2002, 369) remind us that not all nodes and corresponding links can be part of a network; 2nd- and 3rd-tiers are likely to be arms-length and an intermediate level only greatens the distance between buyer and supplier. A decrease in overall transparency is the result. Controversially, SYN's intermediates do not seem to create a market-like distance between SYN and its suppliers, and increase intransparency. They develop shared views and norms (*cf.* Fichter & Sydow 2002, 363), or assist when agreeing on how mutual benefits through remedial action can be achieved in the network. Roberts' (2003) SC analysis for successful CoC implementation might shed some light on this controversy. Her findings indicate that, besides a highly visible focal corporation (*cf.* Lund-Thomsen & Navdi 2010, 3), the number of links between the network member that demands compliance and the stage of the supply network under scrutiny plays a decisive role. The fewer links, the more likely compliance efforts will be successful (Roberts 2003, 168). Contrary to a famous brand confectionary's cocoa SC[24], the number of links in the ISC is low (one). Suppliers' contracts are managed by SYN's intermediates, but SYN has a continuous contact with its suppliers through e.g. audits on the farmland and capacitating purposes. SYN's reputational vulnerability and its dominance over network participants in this single link are high (ibid.); the collaboration with its intermediates allows SYN to operate directly at the source to minimise risk and improve the sustainability of the ISC. The findings indicate that SYN needs its intermediates to bridge the gap (buyer-supplier) as culturally adapted, influencing wiring mediums. SYN factually upgrades their function to *social change-agents*, by capacitating them in SYN's ethical standards. Collaborating with intermediates seems to improve information sharing and communication as all other truly SSCM practices (Pagell & Wu 2009, 52).

Since Pagell & Wu (2009) provide surprisingly little literature to support their model when discussing *reconceptualisation of the SC*, this thesis briefly reviewed stakeholder management literature and discussed a new view to Freeman's (1984) original stakeholder theory. Harrison et al. (2010) advanced Freeman's (1984) theory, and introduced *management for stakeholders.* As discussed earlier, corporations allocate more value and/ or decision-making influence across their primary/ relevant stakeholders (*cf.* Freeman et al. 2007) "than would be necessary to simply retain their wilful participation in the firm's productive activities" (Harrison et al. 2010, 58). The previous discussion indicates that this applies to SYN's collaboration with its suppliers; Pagell et al. refer indirectly to it, when they argue that focal corporations "willingly give power and the associated benefits" (Pagell et al. 2010, 65) to suppliers that traditionally are not worth the value invested when discussing decommoditisation. Since SYN also allows co-determination in its community engagement programs for several NGOs and CSOs, and makes its intermediates *partners in crime* for social compliance, someone might successfully argue that these partnerships go far beyond what normally is

[24] Nestlé's cocoa SC includes several links of whole/ retail, warehousing, trading, transport and manufacturing between buyer and raw material supplier (*cf.* Roberts 2003, 167).

required; SYN *manages for stakeholders*[25]. Future research should investigate all theory's elements for refining the model.

9.2 Supply base continuity

Pagell & Wu's (2009) model includes new behaviours for *supply base continuity* in which they address and summarise truly SSCM practices that have not previously been connected to SSCM. The applied set of categories for this case study includes their category *continuity*. Pagell & Wu (ibid.) rightly see this behaviour as the overarching motivation to engage in true SSCM and integrate it in the bundle on supply base continuity. This way they differentiate traditional from truly sustainable SCM practices. Although discussed under supply base continuity, all investigated practices in this thesis listen to common prosperity that Pagell & Wu (ibid.) use synonymous to sustainability. The results clearly indicate that all identified practices ensure that suppliers not only stay in business, but also do so in a manner that should allow them to thrive, reinvest, innovate, and grow (Pagell et al. 2010, 62f.). However, SYN engages with a clear link to its business-model and profit orientation. According to A. van Heerden, President and CEO of FLA, "[f]or a company like Syngenta, social responsibility comes with the business model, because if the rural communities that you are working with are not flourishing, they are not going to be long-term sustainable business partners" («9», 2:22ff.). Several cases affirmed that suppliers regard SYN as a fair partner whom they confide in to improve their livelihoods. SYN's holistic, inclusive approach should improve quality of life of *all* people, a crucial element of sustainability (UNDPI 1993, 10). Working with and understanding the needs of its suppliers, their families and the community not only serves SYN, but it also helps securing current and future farmers' staff of life.

A category somewhat difficult to handle was *reducing supplier risk*. Pagell & Wu (2009) and Pagell et al. (2010, 63f.) sum up several measures. When examining them more closely, a separate category on supplier risk reduction may not become so convincing anymore. In SYN's case, those measures are part of more inclusive practices that go with partnerships, or decommoditising the ISC. Even Pagell et al. (2010, 63) are not really consistent themselves, when they allocate a certain level of demand, above market prices with set prices, and access to supplier development to risk reduction, whereas Pagell & Wu (2009, 48f.) allocate above market prices, and access to development to decommoditisation. Nevertheless, when not taking this differentiation too narrow, SYN reduces supplier risk in line with Pagell & Wu (2009) and Pagell et al. (2010). SYN mainly reduces suppliers' risk through trivial sounding, but far from commonly practised contractual arrangements. The elaborate combination of providing parent seeds up-front, continuously capacitating suppliers, and buying the harvested seeds at a previously agreed above-market price that may include a quality *and* a social compliance premium is something new, though. As that, SYN reduces suppliers'

[25] Harrison et al. (2010) link this concept to improving competitive advantage. Someone might argue that collaborating with FLA does not focus on competitiveness, but their definition leaves room for interpretation, since it is not fully clear what the definition of a legitimate stakeholder is, since they limit it to corporations' operations **or objectives** (ibid. 58, 60).

risk, improves quality and performance, decommoditises its ISC, and ensures that suppliers can reinvest in their production processes, their future. Closeness, i.e. buying at the source (*cf*. Pagell et al. 2011, 63), eliminates unnecessary links in the SC to reduce risk and cost (*cf.* Roberts 2003).

Pagell et al. (2010) use the information from the here-applied SSCM model (Pagell & Wu 2009) to build theory for the newly discovered SSCM practice *decommoditisation*. They reconceptualise Kraljic's (1983) purchasing portfolio. The results indicate that SYN knowingly and willingly decommoditises its ISC that has similarities with a commodity chain. Similarities, since the suppliers are strictly seen not raw material suppliers. They provide the means (labour) to multiply parent seeds. Because the *importance of purchasing* labour is high and the *complexity of the labour market* is low, Kraljic (1983, 113f.) advices corporations to leverage their dominant power position and exploit the suppliers for cost optimisation. Instead, SYN pays above market prices in combination with the compliance premiums to set the extrinsic incentives to be compliant with SYN's standards. Simultaneously, SYN capacitates unskilled farmers (with a good piece of arable land) to climb the learning curve, but runs the risk to loose this investment. According to Park-Poaps & Rees (2009, 308), contracts can be an instrument that holds contractors hostage for compliance. SYN does not captivate its suppliers trough contracting, but builds collaborative long-term partnerships with leverageable suppliers, instead. One case was particularly clear on this point: "a good reliable grower, who adheres to our standards, who adheres to our values, is not a commodity" (EM, 235f.). He concluded that once "[h]aving invested, it is no longer a commodity" (EM, 238). Furthermore, the results suggest that SYN treats suppliers as *strategic commodity* suppliers (*cf*. Pagell et al. 2010, 68f.); supply risk is high and risk to sustainability is medium to high (KP, 102ff.). Once SYN's capacitating and advisory efforts made them highly skilled labour, they reflect a critical commodity that transcends normal market conditions (*cf.* Pagell et al. 2010, 69). They should not only provide superior performance on quality, but on sustainability parameters, too. Focal corporations that invest in the development of a strategic partner, who according to Kraljic (1983, 111) represents a supplier of leverageable items, are very rare (Gelderman & Van Weele 2003, 212ff.). SYN seems to be practising exactly this behaviour and as such moves its supplier in the portfolio matrix from a transitional to a strategic commodity supplier (*cf.* Pagell et al. 2010, 68f.). Finally, Pagell & Wu (2009, 54) question the likeliness of corporations paying above market prices to commodity suppliers a.s.a. all corporations are forced to become truly sustainable. Not willing to scrutinise this scenario's questionable occurrence, the results indicate that SYN is aware of the temporary nature and limitations of a competitive edge (*cf.* Thüsing 2000, 95; Zadek & McGillivray 2008, 72) that is secured through financial incentives, only. Since SYN wants to be the preferred customer of its suppliers, it not only offers them financial incentives, but also improves their quality of life through ameliorating the root causes of the social injustice *they* face on their farms through capacitation and long-term partnerships.

SYN can only limitedly differentiate between Pagell & Wu's (2009) categories *supplier development* for the own (*traditional*) and *other chains*. SYN capacitates its suppliers in agronomy and technical skills to allow them produce superior yields against one of the high-

est quality standards in the seed market. To the author, a non-agronomist, an expected 100 percent germination rate seems hard to top. Capacitating suppliers is a continuous effort, takes place in a highly controllable environment, and is in SYN's utmost interest, because it needs to retain quality control of the seed production process. Nevertheless, these skills are imparted, and are used in other SCs that have no connection to seed growing or SYN. SYN encourages entrepreneurial spirits, as that rural communities should build on their own capacities; reliance on a focal corporation's resources must sink (*cf.* Greenall & Rovere 1999, 5).

Since Pagell & Wu's (2009) model does not include capacitating communities as a newly identified approach to improve the sustainability of a SC (*cf.* Greenall & Rovere 1999, 5; Mena et al. 2010, 172ff.), the category *supplier development for other chains* was extended with a communal dimension. Amongst others, the UNHRC (2008), Oxfam (2010), and FLA (2008a,d) argue that corporations need a pro-active stance when combatting labour rights violations. Mena et al. (2010, 173) join in, when they argue that simply forbidding the employment of children via contractual agreements or a CoC won't work for companies that operate in communities where these habits are culturally embedded. They argue that next to combatting child labour in an SC, the focus must be on community empowerment to drive change. Two essential elements of empowerment are meaningful participation and capacity enhancement (Mena et al. 2010, 173). SYN's vision to provide suppliers a freedom of choice («9», 2:39ff.; SY, 424ff.) through community buy-in/ ownership (*cf.* Greenall & Rovere 1999, 5) goes into Mena et al. (2010, 173) definition of meaningful participation, since they "[..] should have a voice, an opportunity to express their preferences, and be involved in the planning of their development." SYN's remedial action includes the incompliant supplier, its community, and NGOs/ CSOs that instigate passable solutions to all affected parties. Similar to SYN's activities to capacitate communities, to Mena et al. (ibid.) capacity enhancement includes capacitation and providing job opportunities for community members. They (Mena et al. 2010, 172ff.) discuss a women empowerment program to change societal mind-sets for e.g. school education and communities' overall well-being. SYN capacitates rural communities for lasting shifts in mind-sets on societal issues that endanger compliance with labour rights on SYN's contracted farmlands (e.g. *Syngenta me & mine*). As part of remedial action, it focuses on child labour. SYN recognised similar to Mena et al. (2010, 173f.) the critical role women play in rural/ agricultural communities to drive societal change to empower them and their families. SYN's engagement is not only pro-active, includes a continuous, inclusive stakeholder dialogue, and a systems approach (*cf.* Mena et al. 2010, 176), it is also clearly business related and not timely limited.

Pagell & Wu (2009, 50) define traditional *traceability* efforts as that they should limit the reputational risk for the focal corporation from supplied materials or malicious producing processes. However, if tracing additionally increases a focal corporation's understanding of the SC processes and thereby improves sustainability of the entire SC, it is a novelty. Since Pagell & Wu (2009) do not provide any further reference to traceability, this thesis dedicated a few chapters to CoC literature. Traceability or compliance is subject to extensive research and has made big leaps forward a.s.a. corporations started integrating more comprehensive

compliance mechanisms in their management systems (*cf.* Mamic 2005, Wick 2005). As that, FLA integrates a multi-stakeholder approach in its compliance system that must be backed by collaborative remedial action (FLA 2008a, b, d, f) when advising focal corporations and suppliers in code (values) implementation. Park-Poaps & Rees (2009, 308f.) point out that a frequently identified problem, when enforcing a contract that includes social criteria, is the lack of cooperative and collaborative planning and implementation for proper tracing and amelioration. Jørgensen et al. (2003) found that the actual content of a CoC was not communicated with the affected parties, whereas Yu (2009, 525f.) found that workers can have a very low level of knowledge about the codes' content and rarely participate in the codes' implementation process. Yu (ibid. 526) also found that minimum labour standards are abused in countries like China with no free NGOs/ CSOs to uphold what is called welfare capitalism, i.e. rationalisation of employment for CSR. In Yu's (2009) case study an oppressive regime provided a difficult context. Rural community/ village-habits that organise farm labour by borrowing financially uncompensated labour for commercial activities to its community members must be dealt with in SYN tracing mechanisms, too. Pagell & Wu's (2009, 50) novel traceability discussion is limited to unknown measures that eventually improve the information flow. This case study's traceability for true SSCM includes an elaborate combination of SSCM practices that have a direct effect on the SC conditions. Since SYN adopts the FLA compliance mechanism, it may not surprise that many of the identified SSCM practices closely relate to measures for social compliance. They should not only increase transparency of the ISC, the goal is to eradicate the root causes of phenomena such as child employment or hazardous use of chemicals by remedial action. Only if Pagell & Wu's (ibid.) definition about traceability for SSCM implicitly includes information processing *and* solution mechanisms, their definition can be considered up to date. Remedial action is nothing new, but few corporations include stakeholder consultation to advise their suppliers and capacitate societies (and not only the suppliers) to improve the societal conditions of a corporate SC (*cf.* Jørgensen et al. 2003; Mamic 2005, 97). Not even the FLA, often seen as the inventor of this inclusive approach, forces its members to capacitate communities. One case was clear about the problem: "companies have limited resources to put through corrective action" (MR, 55f.). The differentiation between and link with other practices, such as supplier development, transparency, and incentives and rewards becomes prevalent.

Pagell et al. (2009, 53) note that *transparency* for SSCM can be seen as making the SC labour abuse free when it comes to sweatshops. The results of this case study strengthen this notion and extend it to the agricultural sector, since SYN uses traceability to make the ISC more transparent. The FLA partnership forces SYN to disclose its ISC practices and work on ameliorating socially embedded root causes. FLA publishes all audit outcomes in the public domain; Müller et al. (2009, 518) judged the FLA system in this regard as "the most developed standard. It contains annual reports, describing the achievement of its particular points and the so-called tracking charts." Mena et al. (2010, 183) already noted hat inclusion of a constant stakeholder dialogue is needed for empowerment; stakeholder engagement also makes the ISC more transparent. SYN works closely together with e.g. IRFT and local governments for remedial action and ethical monitoring («11»). Müller et al. (2009,

515) comment that the inclusion of "[r]egional stakeholders [...] seems more theoretically intended than practically permuted", which clearly does not count for this case. The results show that SYN relies on its local partnerships. Although the results reveal that a margin setting discussion took place, SYN does not source this information from other SC members. SYN only partly adopts Pagell & Wu's (2009, 49) newly identified transparency practice when it comes to margins discussion.

As previously noted, the results show that *incentives and rewards* turned out to have a decisive role after all. SYN needs them to motivate suppliers to change their social habits and customs. In two cases it was argued, that an incentive system is a must have to change cultural habits. Pagell & Wu (2009, 40) refer to Daily & Huang's (2001) work when they propose that rewards and incentives on a personal level support changing behaviours, because people in organisations tend to focus on w*hat is being measured, is being done.* They want to increase their personal gains (*cf.* BMU 2007, 55). The case study results suggest that the SSCM model should include external stakeholders, such as suppliers, too. Premiums not only incentivise compliant behaviour, it may make the difference between having food to survive until the next contract completion or having discretionary money. Granting a premium on top of a quality premium for compliance with fair sustainability benchmarks not only motivates the suppliers to improve their performance for the contracting period, but also offers them the possibility to re-invest. Incentivising makes the carrot sweeter than the stick and fosters partnerships; continuous capacitation to improve performance enables them to re-sign contracts with SYN. Clearly, setting extrinsic rewards has limitations, since it might crowd out intrinsic motivation (ibid. 56). In this case, someone might argue that this is for the time being close to zero. Nevertheless, SYN installed the *Syngenta me & mine* program to capacitate their suppliers and communities to make change lasting and sustainable.

10 CONCLUSION

How does sustainable supply chain management strengthen Syngenta's position as the preferred customer in its Indian seed supply chain partnerships?

The case study results as summarised and interpreted in afore chapters, show quite a positive picture of SYN's SSCM activities in its ISC that are used to intensify its buyer-supplier partnerships. One reason for the positive outcome is the fact that the applied research design in combination with the SSCM model (Pagell & Wu 2009) allows to ask for *what* SSCM practices SYN adopts and not the efficiency and effectiveness thereof. The results show that SYN applies Pagell & Wu's (2009) truly sustainable SSCM practices, and elaborately combines, modifies, and extends them in a inclusive, collective approach to ISC specific needs. Future research might be able generalise the proposed extensions. Pagell et al. (2010, 65) argue that SSCM for a truly sustainable SC combines several practices; one single practice will not increase continuity for the supply base. This case study's findings attest their supposition, and this practice comprises the answer to the research question. The results reveal that traditional SCM practices would not have done the trick. SYN needs an inclusive, comprehensive approach not only to reduce its social compliance risk, but also ameliorate culturally embedded unsustainable habits. Zutshi et al. (2008, 57) bring it to the point when they argue, "[o]rganisations need to realistically understand the drivers behind [labour right violations] and the solutions to address the problem." They suggest that corporations should standardise, collaborate, and communicate for amelioration (ibid. 58; *cf.* FLA2008d). The results show that SYN adopts all three on its journey to make the ISC sustainable. This should not surprise, because similar to Pagell & Wu's (2009, 52) discussed SSCM practices Zutshi et al. (2008) recommendation will lead to improved information and communication flows, and increased collaboration. SYN's need to establish partnerships reflects in its balanced attempts to strengthen its ties and collaborate for improved sustainability performance. It prefers incentives above disincentives (blacklisting) and advising above policing, because threatening suppliers, who have no real sustainable alternatives before they start partnering with SYN fear the loss of income, i.e. equal to staying locked in the poverty trap (*cf*. FLA 2006b, 5). Sethi (2003) found that contractors can perform non-compliant, because corporations completely misunderstood the contractors' capacities. They twitted on the focal corporation, because they had not the means to change their situation (here: production process). Simultaneously, SYN is convinced that incentives alone will not improve the sustainability of the ISC and make suppliers voluntarily choose SYN as their preferred customer for sustainable seed multiplication. Besides investments in financially crucial buyer-supplier relationships, "[e]mpowerment of local communities, [...] can make it easier for companies to implement ethical business principles in the supply chain" (Mena et al. 2010, 173), but remedial action must be manageable for all involved parties and changing values and habits needs its time (*cf.* FLA 2008d; Mena at al. 2010, 173f.). SYN does this by clearing the way for strategic commodity partnerships with its suppliers. Frenkel & Scott's (2002) collaborative-ties seem to

describe the level of interaction best, with a clear variation in power structure. SYN clearly dominates the relationship, but does not utilise this power disturbance in its own favour. Instead, it pushes its suppliers along the learning curve. Another possibility to describe the intensity of the relationships would be Spence & Bourlakis (2009, 295), who constructed a model that was adapted from Spekman et al. (1998) and Duffy & Fearne (2004). Spence & Bourlakis (2009, 295) differentiate with ascending intensity between open market, co-operation, co-ordination, and collaboration (ibid.). Considering the results, SYN aims to collaborate with full and frank exchange of information and mutual support. Two interviewees mentioned that SYN generally expects feedback from suppliers. Another interviewee replied that the ISC is not highly technifying in comparison to other SCs (EM, 137f.), and as such the possibilities are limited. It should be clear though, that the context differs dramatically from modern SCs such as the automotive industry, and SYN is on the giving side until a supplier has sufficiently climbed the learning curve. IT sharing (Mamic 2005, 93f.) and SC integration play, if at all, on a completely different level as to optimise information and communication flows. Co-operation defined as a reciprocal partnership, in which information is exchanged (even rudimentary) and sensitivity for the other partner exists, might describe the relationship in its current form best (ibid.). Park & Dickson's (2008, 44) partnership characteristics for fair labour management seem to apply, although the intensity may vary from their assumptions, because they argue for a limited amount of individual partnerships in the textiles sector.

Not willing to open Pandora's box, because the case study's goal was not to investigate *why* certain SSCM practices were adapted and implemented to make SYN the preferred customer, several interviewees affirmed that "[..] sustained commitment from [SYN] has enhanced [its] image and reputation in the farming community, with industry and other stakeholders. Also, because of [SYN's] fair business practices, transparency, and commitment towards society, Syngenta has become the first choice for the seed producing farmers." («3», 2). Several times it was affirmed that the growers' and their community express pride in working with SYN, because *Syngenta's me & mine* community engagement program unites corporate interests with caring and sharing for the welfare of all ISC members (*cf.* Zutshi et al. 2008, 45). SYN wants to create win-win situations (*cf.* Seuring & Müller 2008, 1704) that support SYN in becoming the supplier of choice («3», 2). Palmisano (2006 in*: Strand 2009, 183*) is convinced that trustworthy relationships are fundamental to collaborating with local communities. These relationships are based upon interfirm shared values through new forms of partnerships. E.g. *Syngenta's me & mine* program promotes ownership that must "come from the heart… a farmer/ grower should say it's my choice and it's for my good and the good of my family & community" («3», 2). More layered and economically secure partnerships with leverageable suppliers in developing countries (*cf.* Strand 2007, 179) not only serve SYN's ISC goals, suppliers will eventually develop their own independent social commitment (*cf.* Lim & Phillips 208, 143).

The author can conclude that SYN integrates various state-of-the-art SSCM practices in its ISC that lay the cornerstones for successful inclusive, collaborative SSCM action and thereby focuses on increasing quality of life of all parties involved. As that, this thesis allows SYN to better classify its ISC activities from a corporate SSCM perspective and not solely

from a compliance perspective. The results indicate that social compliance is integral part of its business model not only for legal compliance purpose, but also because it adds value to the corporation and its buyer-supplier relationships sustainably, and therefore makes business sense.

11 DISSEMINATION OR QUALITY OVERALL PROCESS

The quality of the research design and case study in general must be assessed. Therefore, the author integrated four commonly used and acknowledged tests (Yin 2009, 40ff.) in different stages of the case study. Before discussing the four tests in more detail, table 20 provides a brief overview regarding tactics used, and in which phase of research these tactics occurred.

Table 20. Four quality tests, incl. tactics and phase of research. Adopted from Yin (2009, 41), own illustration.

Test	Case study tactic	Phase of research
Construct validity	Multiple sources of evidence/ triangulation	Data collection
	Chain of evidence	Data collection
	Review of draft report	Composition
Internal validity	Not applicable	Data analysis[26]
External validity	Theoretical considerations in single case studies	Research design
Reliability	Case study protocol	Data collection
	Develop case study database	Data collection

11.1 Construct validity

Construct validity refers to measures taken to identify correct operational measures for the concepts being studied. In this case study, used tactics to facilitate construct validity are triangulation, the establishment of a chain of evidence and key informants having reviewed the final draft version of this thesis.

11.1.1 Triangulation

Triangulation is a technique that refers to using multiple sources of data to facilitate validation in the resulting data that were collected during a case study (Yin 2009). Denzin (1984) differentiates between four kinds of triangulation:

Researcher triangulation

Researcher triangulation refers to how many researchers were involved in the case study. One researcher accomplished this MBA thesis. In more complex and extensive case study research several research teams do participate in single or multi-case studies to limit bias.

[26] Not applicable to descriptive and exploratory studies, because it seeks to establish causal relationships in case study research (cf. Yin 2009, 41ff.,136ff.).

Theoretical triangulation

Theoretical triangulation refers to the possibility to have more than one theoretical position when interpreting the collected data. In descriptive case studies the use of more than one theoretical position (derived from rivalling theories) is not applied.

Data triangulation

Data triangulation is facilitated when the author collects facts/data from multiple sources, but aims at corroborating the same fact or phenomenon (Yin 2009, 117). Convergence of evidence (ibid.) was accounted for by using various sources to harden one argument, wherever possible. For questionable statements of interviewees, other sources were used whenever possible. E.g. FLA documents and internal documents were used to converge the argument. This case study relies mainly on interviews; retrievability of documents (and archival records) was limited.

Methodological triangulation

Methodological triangulation is facilitated as soon as more than one method to gather data are being used (McCutcheon & Meredith 1993, Yin 2009). Denzin (1984) described two different kinds of methodological triangulation. Between-method triangulation refers to the use of contrasting methods to research one issue/ phenomenon. In this case study two different types (documentation and qualitative expert interviews) were used. Within-method triangulation refers to the use of a variety of the same method. In expert interviews the within-method triangulation was facilitated, because multiple sources were used on the same phenomenon (Voss et al. 2002, 206).

11.1.2 Chain of evidence

The facilitation of a *chain of evidence* increases the reliability of the information (Yin 2009, 122f.). This thesis links the research question with the research design; citations from collected and analysed sources were specified to their source of origins that were used in this thesis to answer the research question. A separately created database contains the collected documents, whereas the paraphrased citations/ text marks, esp. those derived form the expert interviews are summed up in appendix 2. The author clearly references publicly (un)available information to the original source; used citations can be traced back to the original source, too.

11.1.3 Review

Mr Gold received an early electronic draft version (date: 04/03/11) for general input on the scientific requirements for the final version of this thesis as part of his function. Because this thesis was performed with the help of SYN Intl. Mr GV was offered the final draft version to approve with public sharing of this thesis and adherence to ethical standards. Former is a pre-requisite by the CSM (*cf.* CSM n.d. 5); latter is of utmost importance to protect the privacy and confidentiality of those involved in the research and to protect them from any possible harm.

11.2 External validity

External validity refers to measure taken to define the domain to which a study's findings can be generalised. Theoretical orientation when developing the case study's research design is the main vehicle for generalising the case study results (Yin 2009, 40) to some broader theory. Consequently, case study research does not deal with sample units, as commonly used in statistical generalisation, but with analytical generalisation, instead. Analytical generalisation uses a previously developed theory/ model as a kind of template with which the empirical results can be compared with to possibly generalise case study results. The underlying replication logic is to cumulate knowledge across tests in which a theory is being tested by replicating the case study's findings in following tests. The case study applied and was able to test the robustness of Pagell & Wu's (2009) prescriptive SSCM model, and provided indications for refinements that future research may find generalizable.

11.3 Reliability

Reliability refers to measures taken to demonstrate that case study's operations can be replied, with the same results and therefore focuses on minimising possible errors or biases. Contrary to *external validity*, in this test other persons must be able to perform the same case study over again, and not test the findings by means of another case study. The appropriate instrument to perform a case study is the study protocol (Stuart et al. 2002, 424; Voss et al. 2002; Yin 2009, 79ff.), because it not only guides the author during the study, but also allows him to document a *trail of evidence* (construct validity) that allows researchers to redo the case study with the same results (reliability). According to Yin (2009, 79), the study protocol "contains the instrument but also contains the procedures and general rules to be followed in using the protocol." It is more than an interview guide or instrument (addressing other recipients). Even though a study protocol is essential when doing multiple-case study, its perks are obvious for single case studies. The author does not provide a separate study protocol for this case study, because the required analytical process steps and background information (*cf.* Yin 2009, 80ff.) are documented in this thesis, its appendices, and a electronic data base. Only the author is involved in this case study.

12 LIMITATIONS TO CASE STUDY RESEARCH AND OUTCOMES

12.1 Lack of rigour

Seuring (2008) used content analysis to analyse peer reviewed journal publications from two research fields that formed his sample. One of Seuring's (ibid.) conclusions closely relates to Yin's (2009, 14) critique in which the latter accuses researchers of being sloppy or failing to follow systematic procedures. Seuring (2008, 134) bewails the rather poor and unsystematic documentation of the research process in the investigated peer reviewed journal publications, which are an important channel to publish research results to the scientific community. He concludes when failing to properly document the research process, the value of case study based research cannot be appreciated, and does similarly not enable researchers to draw stronger conclusions on the individual pieces of research (Seuring 2008, 134). This thesis has adopted and reported on several techniques that strengthen the rigour of case study research.

12.2 Limited basis for scientific generalisation

"[C]ase studies […] are generalizable to theoretical propositions and not to populations or universes" (Yin 2009, 15). As a result, when doing a case study, its goal is to expand and generalise theories, also known as analytic generalisation, and not to number frequencies, which is commonly known as statistical generalisation. To test a theory with enumerating frequencies, future research might focus on generalisation of this case study's results with quantitative methods using a representative sample. Although this case study represents another *unique case* (Yin 2009, 47), and does not correspond with Pagell & Wu's (2009, 20f., 54) appeal to test their SSCM model on more typical and not already sustainable leaders, the robustness of the model was tested satisfactorily with a clear limitation to *new behaviours*. The results provide an informative basis for the *new behavioural* elements that were subject of the case study's investigation. The openness of the model allowed the author to adapt it to case specifics, but was still guided by the general elements. This case proposes one novel SSCM practice and two practice-extensions that might prove generalizable, and as that, extend the SSCM model. The results confirm the model's adequacy for investigating SSCM practices for collaboration with suppliers in SYN's Indian hybrid seed vegetable (agricultural) supply chain.

12.3 Unique single case study

The unit of analysis encompasses one of SYN's SCs that are built around one highly specialised production process step in one particular country. The results base upon one unit of analysis, investigated one section of an entire SC, is a unique case, and therefore does not take activities within other sections of the entire SC into consideration. It also has limited us-

ability for generalisation (*cf.* Seuring & Müller 2008; Pagell & Wu 2009). The author agrees that future research should consider more, and more typical cases (*cf.* Yin 2009; Pagell & Wu 2009, 54). In order to facilitate external validity, a larger sample must test until now empirically gathered information, and draw generalisations from the results. The author notes that technological requirements for producing seeds, in general, vary little from those for growing crops; seed multiplication is done nearby commercial farming. In India the variation from the norm is substantial, because most seed growers solely multiply seeds on limited land. A generalisation of the results to the industry level is not possible.

12.4 One-side of the partnership

Although the research design's *unit of analysis* is the buyer-supplier partnership, this case study focused on SYN's side of the relationship and did only partly take up the supply side. Considering both sides of the partnership would have lead to a more differentiated analysis and conclusion when describing and interpreting single SSCM practices. The inclusion of a FLA employee as an interviewee (MR) for the structured qualitative content analysis allowed only fractional insights of how suppliers perceive SYN's SSCM practices. Although SYN is a FLA member, the author considers her statements veridical information. After all, even the EvB, a Swiss NGO that is one of SYN's fiercest criticisers, relied on the FLA in their analysis of SYN's 2007 CR report (*cf.* EvB 2008, 14).

12.5 Researcher's paradigm

Several scholars (*cf.* Golicic et al. 2005, 18; Seuring & Müller 2008, 1706) conclude that a reference to research methods that stem from the researcher's paradigm, and therefore guides its (biased) action, is frequently missing in scientific papers. This not only implies that the methodology that was applied is unknown, the results of the study are likely to be highly biased because of the researcher's disciplinary paradigms. This results in a bias when e.g. building categories and thereby pre-selecting and steering the outcomes, since critical variables might have been left out. The chapters that develop theory (*cf*. chapter 5) should account for this commonly criticised deficit. Another related problem in data collection is that interviewees had various backgrounds and responsibilities over a region such as APAC or several BUs and SCs, including the BUs Seeds and CP. Some of the interviewees' replies and findings came from a more generalised perspective; a clear attribution to the ISC was not always possible.

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List of internal documents used

Name internal document	Mark
Anonymous (n.d.) Child labor allegations concerning Syngenta Seeds India: Report from Meetings Mumbai, Hyderabad and Delhi (16-21 June) and recommendations	«1»
Anonymous. (n.d.): Comparison of Syngenta and the Fair Labor Association Code of Conduct and operational benchmarks. Document title: Codes of Conduct and Benchmarks	«2»
Anonymous (n.d.): Syngenta Awards 2010 entry form ID 0468: Seeds of pride. Building ethical supply chain & adding value to the growers quality of life. Prepared for Syngenta Awards 2010	«3»
DIHR (2008): Human rights management primer. Internal document produced for Syngenta Intl.	«4»
GV (2009): Applying FLA methodology to improve labor standards in seed supply. Presentation prepared for FLA meeting October 2009	«5»
KP (n.d.): Syngenta – FLA Project: Social compliance in seed production. Internal document. Presentation prepared for an internal workshop	«6»
Syngenta (2010a): hello: Magazine for the employees of Syngenta in Switzerland, fourth edition, December 2010.	«7»
Syngenta (2010b): SAM Research Corporate Sustainability Assessment Questionnaire: DJSI Sustainability Assessment 2010 Syngenta AG	«8»
Syngenta (n.d.): Rural_Communities. Video-sequence with Davor Pisk and FLA (L. van Heerden) prepared by Syngenta.	«9»
Syngenta (n.d.): Seed production policy	«10»
Syngenta (n.d.): VTS_01_1.VOB. Movie prepared for Internet on the participation between Syngenta and IRFT to build capacity	«11»

List of appendices

Appendix 1. Transcription rules

- The audio file is to be transcribed in full.
- Use literary language.
- **But, content comes first.**
- No reference has to be made to phonetics (IPA) a.s.o.
- Exclude superfluous and/or evitable repetitions and inconsistencies from the transcript.
- Correct minor grammatical errors and insert punctuation marks to improve the text flow.
- Timely breaks (silence) and other interruptions such as noises (e.g. laughter, phone ringing) don't have to be accounted for[27].
- Strongly averted words and loudly or softly spoken words will not be highlighted[28].
- Uncertainties are marked with "[?]".
- Interruptions are marked with … The continuation of the text starts without capitals.
- *Example:*
- *Q: Lorem ipsum …*
- *A: Lorem ipsum?*
- *Q: … lorem ipsum.*
- When the interviewer speaks, he is marked "Q:" (abbreviation for "question"), and starts on a new line.
- When the interviewee speaks, he/she is marked "A:" (abbreviation for "answer"), and starts on a new line.
- All provided information that allows the identification of the interviewee must be made anonymous.
- Use 1.15 spacing, font *times new roman,* font-size 12, justify, for formatting text.

[27] Not before the third interview it was revealed that the recorder was set to „voice activation" and therefore automatically cut out the time breaks (silences).

[28] The author refrains from a transcription code. Whether the words or sentences are spoken loudly or softly or with stress, does not influence the content of the written word as such. Moreover, almost all interviewees were non-native English speakers.

Appendix 2. Paraphrasing complete (all categories)

Case	Line	Nos	Collaborating with non-traditional SC-members
KA	115/117	1	The suppliers want a partnership with SYN of which the FLA is part, because the suppliers see that the FLA and SYN follow the same sincere intentions to improve the suppliers' livelihoods.
KA	121/124	2	The FLA invested in understanding how SYN's ISC functions and what the specifics problems are. SYN and the FLA implemented FLA's suggestions for improvements together.
KA	136/137	3	The FLA provides it own skilled and sensitised people that work and cooperate with SYN's seed-organisers in the ISC.
KA	228/229	4	SYN deliberately engaged with the FLA and selected the FLA as a partner to tackle the child-labour issue in its ISC.
KA	231/233	5	Despite FLA's expert know-how in the footwear-industry, the first few years of the cooperation was about the FLA to learn and understand the specifics of the agricultural sector and agricultural SCs.
KA	236/239	6	The basic mutual objective of the partnership, partnering against child-labour as well as driving the social benefits for the suppliers forward, was clear to both from the very beginning and as such makes it a successful partnership.
KA	241/242	7	The basic objective of the partnership is ensuring social compliance on the farms in the ISC.
KP1	5/7	8	NGOs and other non-traditional stakeholders are seen as knowledge sharing partners.
KP1	9/10	9	When issues are serious and concern SYN's core values, SYN engages with non-traditional SC-members.
KP1	12/14	10	SYN collaborates with local non-traditional SC-members when a single corporation cannot handle critical issues.
KP1	16/18	11	SYN wants to collaborate to improve working conditions in its ISC through CAPs.
KP1	21/23	12	SYN collaborates in reciprocal partnerships with e.g. IRFT a national FLA-accredited NGO for ethical monitoring because the expected outcomes are mutual learnings.
KP1	34	13	SYN associated with and consulted the FLA to improve moral conditions in in the field in its ISC.
KP1	50/53	14	SYN's partnership with the FLA is the first one in India's seed-market to improve social compliance in seed-production.
KP1	73/74	15	Internal and external stakeholders are invited to discuss remedial action.
KP1	152/159	16	SYN cooperates with local governments to improve the illiteracy rates amongst children by sending children to school.
KP2	19/20	17	SYN considers the FLA partnership as an integrated part of its mainstream activities to improve the ISC.
EM	4/6	18	Child-labour is something that SYN cannot tolerate in its ISC and therefore collaborates with the FLA to solve the problem.
EM	14/15	19	SYN engagement with non-traditional SC-members resulted in activities that go

			beyond financial interests.
EM	23/28	20	FLA and SYN engage in a mutually positive partnership for social compliance activities. FLA is counsellor and provides SYN a mirror to reflect on its ISC practices.
EM	28/34	21	FLA helps SYN to get forward when discussing labour policies and benchmarks.
EM	38/41	22	SYN and FLA formulated the benchmarks and standards for social compliance in SYN's ISC.
EM	205/206	23	SYN and FLA formulated the benchmarks and metrics for assessing social compliance in SYN's ISC.
EM	213/216	24	FLA and SYN are in a partnership in which the social compliance standards are defined in joint efforts.
MR	20/22	25	The FLA started to cooperate with corporations to build capacities in the corporations for social compliance activities.
MR	27/31	26	The FLA collaborates with SYN, because SYN asked for assistance on alleged child-labour in its SC. SYN wanted to assess its existing and build a functioning social compliance system.
MR	92/93	27	FLA assisted SYN to set up their internal monitoring system in India.
MR	128/135	28	FLA builds a collective front with SYN's suppliers to communicate, discuss and in a later stage implement SYN's and the FLA's social compliance goals. The suppliers didn't know the FLA and SYN, but were interested in the partnership once the message was transferred through awareness rising activities.
MR	286/288	29	SYN engages with critical stakeholders in a multi-stakeholder dialogue, where everybody has the right and opportunity to present their views when discussing solutions for remedial action that focuses on the root causes.
GV1	17/22	30	Before SYN decided how to go forward in its ISC, SYN engaged in stakeholder consultations with NGOs, governmental officials and everyone who had an interest in child labour amelioration.
GV1	49/50	31	SYN collaborates with local and international NGOs for its community engagement and education programme.
GV1	58	32	SYN collaborates with NGOs for its community driven engagement and education programme.
GV1	281/287	33	SYN and FLA partnership leads to a better understanding of community needs by seeing societies' interests as part of an entity and not and engagement with local stakeholders.
GV1	317/323	34	SYN collaborates with FLA for social compliance traceability programme.
GV2	33	35	SYN needed FLA as a partner to get the community engagement programme for change up and running.
SY	2/3	36	SYN engages with FLA and other NGOs to improve working conditions in the SC.
SY	63/66	37	The collaboration with FLA as an independent third party was essential to SYN in order to identify the root causes and broker the relationships within the ISC.
SY	68/72	38	FLA could offer an objective view by interacting with all stakeholders in the ISC without representing the company. FLA also challenged SYN assumptions, which proved to be vital to the relationship.

SY	522/525	39	FLA helps SYN detect incompliances that might go undetected by SYN staff - only when incompliance is identified, the root causes can be investigated and solved.
SY	528/531	40	FLA is unique in their remediation approach through inclusive stakeholder negotiations - one of the reasons why the collaboration between SYN & FLA has been successful. The FLA framework has proven to be best practice and other organizations are following suit.
SY	537	41	The remediation process will only be successful if all stakeholders affected agree the corrective measures.
SY	627/629	42	Every relationship is different, and often context specific, the learnings that can be taken from the SYN & FLA collaboration is How to partner and How to build trust.
«6»	p.22	43	SYN should intensify its partnering efforts with village councils (panchayats).
«11»		44	SYN approached IRFT to help in capacity building and ethical monitoring in SYN and its suppliers.
«3»	144/147	45	Issues of health and safety, social issues like child labour in seed supply chain can be addressed more effectively if company involves all the key stakeholders in the process and work together. Regular consultations with key stakeholders and seeking their inputs are very important for successfully addressing of these issues.
FLA 2006b	p.3	46	SYN approached the FLA to help them develop an effective internal monitoring system.
FLA 2006b	p.3	47	SYN initiated a series of stakeholder dialogues with NGOs and other representatives of the industry to discuss the main compliance issues and remedial strategies.
FLA 2006b	p.3	48	The significance of stakeholder dialogues was confirmed by the range of stakeholders involved and the willingness of the companies to discuss sensitive issues such as prices and wages.
FLA 2006b	p.3	49	In a stakeholder dialogue SYN seeks input for designing and delivering remedial strategies. To change the way seeds are farmed, those strategies will need coordinated action by companies, NGOs and government agencies at the workplace and in the community.
FLA 2006b	p.4	50	FLA and SYN agreed to collaborate on a pilot project.
FLA 2006b	p.4	51	FLA and SYN staff design an internal monitoring process and jointly develop a monitoring methodology appropriate for the agricultural sector.
FLA 2006b	p.6	52	FLA and the Swiss Foundation Philias facilitated a series of stakeholder dialogues with SYN, other companies in the industry and NGOs. The ILO, the Indian Government, the ICN, Amnesty International, and the IUF among others attended the first meeting.
FLA 2006b	p.6	53	SYN approached the ASI to take up the issue of CSR in general and child labor in particular. As a result on the sectoral level was the establishment of the CLEG
FLA 2006b	p.13	54	SYN and FLA are working with the accredited third-party monitor IRFT based in Mumbai, to develop a methodology and independent external monitoring tool.

Case	Line	Nos	Collaboration with intermediates
KA	124/125	1	The wiring medium, i.e. the one that establishes the contact between supplier and buyer, are the seed-organisers.
KA	125/130	2	The seed-organisers are needed for an efficient implementation because of the large amount of seed-suppliers.
KA	131/134	3	The seed-organisers organises up to 200 farmers. They are socially and locally bound to the growers and as such respected opinion-leaders and the biggest influencers in those confined agricultural regions where SYN wants to hire the services of seed-growing communities.
KA	135/136	4	Seed-organisers and SYN collaborate for an efficient implementation of social compliance.
KA	166/170	5	A seed-organiser is attracted to the growth of SYN's ISC; he wants to participate and benefit from this growth.
KA	178	6	Growth drives the seed-organiser.
KA	190/197	7	SYN collaborates with the seed-organisers because of their power as opinion-leaders and big influencers to push the message to uphold SYN's quality and social standards. Therefore, SYN collaborates with good seed-organisers to change the views of all those thousands of seed-suppliers and adapt them to SYN's vision and plans.
KA	200/207	8	Because SYN understood that its message and vision must convince the seed-organiser, SYN invests more in the relationships with its seed-organiser, because these are more intense than the ones with its seed-suppliers. Once the seed-organiser is convinced, the seed-farmers will follow.
KA	211	9	The seed-organiser is a very strong and important wiring-medium.
KA	218/219	10	The seed-organiser has to do the influencing of the seed-suppliers, by communicating SYN's vision and strategy.
KP1	41/45	11	SYN's relationship with its seed-organisers changed, because the interaction or communication on CSR-activities in field supply farms has increased.
KP1	71/73	12	Seed-organisers are integrated in discussions and defining actions that regard CAPs.
EM	43/49	13	Because SYN engages with two to three supplier-tiers down the chain it is difficult to impose standards on them. Therefore SYN collaborates with seed-organisers in the ISC.
EM	47/54	14	SYN engages with seed-organisers to improve health and quality standards and practices that the suppliers need to adhere to in the ISC.
EM	59/65	15	Managing 13000 suppliers on an individual basis is not practicable for SYN, because SYN does not have the manpower and bandwidth. SYN looks for regionally bound lead growers like a village headman or professional seed-organisers, who manage 10 to 30 individual growers.
MR	13/15	16	When there are agents or intermediates in a footwear or clothing SC, focal corporations usually only care about their agents.
GV1	162/185	17	SYN needs its intermediate seed-organisers because of the large amount of suppliers and the territorial spread, which SYN cannot handle in-house and as such needs the pyramid in the system. The independent agronomically skilled intermediates are SYN semi-in-house extended arm. They have long-term contracts and

			receive ethical training and education from SYN. They secure day-to-day contact with SYN suppliers with whom they are locally and culturally connected.
GV1	218/220	18	SYN intermediates cultivate the contacts with the suppliers, which helps SYN sign contracts with larger parts of a seed-producing village.
SY	8/23	19	The seed-organizers are absolutely pivotal in reaching the large number of seed-suppliers. They are often the interface between SYN and the supplier and an important multiplier of information and play a key role when changing behaviours in the ISC.
SY	28/32	20	Seed-organizers are often opinion leaders, enjoy trust and have an authoritive role in the grower communities - all the more reason for SYN to make sure that they are part of the whole process.
SY	39/41	21	The seed-organizers have direct contact with the suppliers - offering a natural channel to start building up the relationship between SYN & supplier.
SY	44/48	22	Seed-organizers play an important role in reaching the thousands of suppliers - their knowledge of the context is invaluable for SYN.
FLA 2006b	p.8	23	SYN operates through third party seed-organisers who work with seed farmers. The contract between Syngenta and the seed organisers sets production targets for each organizer.
Case	**Line**	**Nos**	**Continuity**
KA	9/10	1	SYN's partnerships with its suppliers include working with their families and the environment in which they operate to do a better job.
KA	28/30	2	SYN does social compliance activities to improve the suppliers' livelihoods. Integrating them in all compliance activities is important to show them what can be expected from both sides. This builds and strengthens the bond between SYN and its suppliers.
KA	117/120	3	SYN wants to change the farmers' livelihood for the better. The suppliers' that partner with SYN have a much higher standard of living that an average crop grower, because they are more skilled.
KA	155/159	4	SYN wants to understand what its suppliers' concerns and their pressing issues are. Because we have helped, worked with and invested in them they will stay loyal to us.
KA	171/173	5	Suppliers want to work with a company with a strong (social) brand that has good practices and is extremely fair and helps them to improve their livelihoods, including their immediate surroundings and community.
KA	184/186	6	Corporations that create a very strong perception of CSR with its suppliers' are successful.
KP	54/57	7	SYN's suppliers are proud that SYN engages with their villages in social activities to improve the social conditions in the seed production fields.
KP	60/62	8	Because SYN is serious about and concerned with the social conditions of its suppliers and their communities, SYN is a respected partner with a good identity.
KP	142/144	9	SYN's suppliers see SYN as their own, and as such deliver their seeds to "themselves" and such someone they trust.

EM	80/86	10	Because SYN pays well, the living standards of communities that partner with SYN are demonstrably higher.
EM	177/179	11	Suppliers are pleased to work with SYN because of SYN social engagement.
EM	183/185	12	SYN is getting the balance between being a business and having a social accountability right.
EM	221/223	13	When willing to implement a standard, SYN has to take the local culture into consideration.
MR	137/138	14	Growers feel that SYN does collaborate with them in social compliance for their benefits and not for SYN.
MR	143/146	15	The growers and the FLA are convinced that SYN does improve working conditions through social compliance because they care about their suppliers' well being.
MR	152/157	16	Suppliers that were not contracted by SYN frequently complained by the FLA why they were not taken into the SC. FLA sees that SYN has only limited capacity to collaborate.
MR	161/163	17	Farmers want to work with SYN because they engage with the farmers.
MR	170	18	The suppliers really think SYN cares about them.
GV1	110/113	19	SYN caring for its suppliers goes beyond contractual arrangements, because SYN engages with non-compliant suppliers and does not look away.
GV1	286/290	20	By integrating the needs and the community itself, the operation becomes sustainable. For SYN sustainability is that people really want to follow and SYN is able to improve the situation based upon metrics that are put in place.
GV2	17/26	21	SYN needs the incentive und remedial system to make sure that the suppliers feel that SYN cares about their conditions in SYN ISC. SYN shows that it is prepared to pay for improved social performance.
SY	150/151	22	SYN offers a premium price for compliance with quality and social standards, but also builds additional value for the farmers by engaging to improve their livelihoods for their families.
SY	169/177	23	Labour issues have social root causes, FLA helped SYN understand these and how to engage with suppliers to find best solutions.
SY	249/253	24	Suppliers recognize that SYN offers extension services that governments used to do, but are not doing any more. This has helped to make SYN ISC management a success and SYN are now faced with more suppliers who want to contract with them than the can take on.
SY	256/258	25	SYNs suppliers feel that they are being listened to; that they can air their questions and that SYN tries to find solutions that works for the suppliers, giving the opportunity to develop.
SY	319/324	26	In order to bring about long-term change there needs to be a more holistic view - taking in the economic development of the whole community and not only the contracted farmer.
SY	445/447	28	Key to giving farmers a future is giving them the freedom of choice: giving the farmer the choice of developing, or sending their children to school or having money to re-invest in the farm or having money to invest in infrastructure.

SY	541/546	29	Cultural specifics, social structures and sensitivities need to be taken into account when prescribing behavioural change. A solution that sounds like a straightforward way of changing something to us might not be compatible with the local culture and value system.
SY	555/565	30	Something is only truly sustainable when the values are carried and lived by the people who implement and execute. When the added value goes beyond compliance alone and offers some added value for the farmer and family.
SY	657/658	31	SYN wants that changing behaviours and labour standards bring well-being to the suppliers and their families.
Case	**Line**	**Nos**	**Decommoditisation**
KA	4/9	1	SYN moved away from market-like cooperation into a collaborative partnership. This is a new thing for SYN and requires sustained engagement.
KA	15/18	2	Because seed growing for SYN cannot be done by any farmer and the production process needs a lot of care, SYN wants to build long-term relationships.
KA	20/23	3	Because producing high quality seeds from the provided germplasm, SYN invests in its suppliers and therefore wants as few suppliers get in and out of the ISC. As such, SYN does not see them as commodity suppliers.
KA	25/26	4	SYN wants long-term relationships with its suppliers because they need to invest in their production skills.
KA	44/45	5	The extremely sophisticated seed-production practices make SYN's suppliers highly skilled growers that have a technological advantage on normal crop-growers.
KA	73	6	The investment in suppliers' production skills brings them out of a captive position.
KA	78/83	7	SYN does not want to lose the seed-farmers that climbed the learning curve, because they are adapted to growing SYN's germplasm and frequently engage with SYN for further improvements of its seed-growing practices.
KA	139/151	8	SYN's investments in traditionally arm-length contracted farmers are justified, because SYN expects long-term performance increases when partnering with its suppliers. It partners because it wants to create a strong brand/reputation in the community and thereby follows a differentiation strategy.
KA	175/176	9	SYN wants it suppliers to understand that SYN is not there to exploit them, but engage in long-term business partnerships, instead.
KA	181/182	10	Suppliers get a fair price that is driven by and above market conditions.
KA	244/251	11	SYN could have stopped investing in improving working conditions after selling its Bt-cotton business, but objectives like a dedicated and loyal supply base make such investments in its ISC suppliers justifiable.
KP1	94/104	12	The importance of purchasing goods is high, market complexity is low because there are enough seed suppliers and corporations that produce seeds. Risks that affect the sustainability of seed-production are medium to high.
KP1	121/122	13	An overinvestment in suppliers is justified, because SYN is dedicated to long-term sustainability and enhancing its public image.
EM	108/111	14	To get the best performance, SYN needs the best growers on the best land. SYN wants to form partnerships to get loyal and long-term relationships with them.

EM	156/163	15	SYN suppliers in the ISC are not captive. The actually benefit from SYN partnership and are free to leave the ISC, but the alternatives in these rural communities are limited.
EM	164/165	16	SYN doesn't see their ISC as commodity chain.
EM	171/177	17	There are thousands of potential suppliers SYN could contract with, but to encourage them working with SYN the suppliers need to be recompensed in a way that it doesn't promote abuse and is better than alternative offers.
EM	179/183	18	SYN does not want to leverage suppliers just because there is an abundance of them.
EM	235/240	19	SYN invests in suppliers to adhere to SYN standards. Once invested the supplier is no longer a commodity provider, and becomes a strategic partner that moves within the sourcing portfolio matrix.
EM	241/245	20	SYN invests in its suppliers to improve they quality of the product, a higher yield and financial performance as well as social performance.
EM	246/250	21	SYN expects better reliability. Investing in partners that are socially compliant reduce risk.
EM	255/256	22	SYN knows that investing in its suppliers is a short-term disadvantage, but it pays off in the long-term.
EM	304/317	23	SYN wants to pay its suppliers a fair premium price for its socially compliant seed growing services and make it financially attractive to them to stay in the ISC by including current market (price) conditions of alternative SC activities like high value crops.
MR	162/163	24	Suppliers say that SYN is the best paymaster, i.e. pays the best price, among the seed-companies.
MR	175/179	25	SYN strategically partners with its suppliers for the business benefit, because in India labour is running short in supply. If SYN does not work in a partnership model, the suppliers will eventually leave SYN and look for other options. The suppliers again feel that they are treated with care by SYN.
VG1	89/94	26	SYN does not need to captivate its suppliers because the contract offers them a quite attractive value proposition.
VG1	96/98	27	Being a good partner and corporate citizen, makes it easier for SYN to sign contracts and build long-term relationships.
VG1	105/110	28	A strong reputation through community engagement and a contract with attractive remuneration offers makes suppliers come back and partner with SYN.
VG1	130/144	29	The cost of educating and training suppliers to adhere to SYN exceptionally high growing standards is not marginal. Taking in new suppliers as "commodities" would be possible, but only if they all would be trained to the highest level.
VG1	145/49	30	Exchanging suppliers involves cost because of risking the loss of quality control. Weighing quality loss against social parameters to get an ethical SC is difficult.
VG1	149/153	31	SYN does not see suppliers as commodity suppliers because the days of surplus markets are gone and therefore cannot be leveraged.
VG1	233/238	32	Suppliers are free to contract with other seed-corporations and take the SYN standard with them. Therefore the fundamentals of the contract need to be attractive. SYN provides a whole package to secure the suppliers partnership as a customer of SYN.

VG1	351/353	33	The price for seeds is fair and competitive because it integrates market conditions.
SY	38/39	34	Seed-suppliers are happy to contract with SYN because they are treated as partners gaining access to critical resources
SY	94/96	35	SYN sees these suppliers as strategic suppliers and wants to build long-term relationships with them
SY	109/125	36	SYN only contracts with suppliers for one growing season at the time, to avoid binding the supplier for a longer period of time. Suppliers are offered a new contract each growing season; it is up to SYN to remain an attractive partner in order to retain the quality suppliers.
SY	130/134	37	For SYN to remain attractive to the supplier and build long-term relationships, it is important to educate and make the added value of social compliance tangible to the supplier early on, due to the short contracting period.
SY	234/238	38	An attractive pricing model alone will not retain high quality suppliers in the long run, for this a relationship built on collaboration and trust is needed.
SY	243/251	39	SYN wants to become the preferred customer for the suppliers - to be an attractive partner and so ensure that the suppliers keep contracting with SYN year after year. This can only be achieved through sharing value and being seen as making an important contribution to the supplier's life and livelihood.
SY	258/260	40	For each growing season, the suppliers are free to contract with whomever they want.
SY	269/273	41	SYN quality standards are high, covering both tangible seed quality aspects and social quality aspects. To enable suppliers to reach these standards, "overinvestments" in terms of education etc. are justified.
SY	282/283	42	SYN engages with the suppliers to build capabilities and build long-term relationships with these high quality suppliers.
SY	287/294	43	The premium price model is an upfront investment to attract suppliers in order to build long-term relationships independent of the contracting time.
SY	300/303	44	With contracting periods of only one growing season, SYN risks loosing highly qualified, trained suppliers to competing offers. But, in order to gain trust and build a long-term relationship you have to let go of the control.
SY	305/307	45	The investment in educating suppliers and risking to loose them to other buying organization is dwarfed by the cost connected to having labour rights violations in the supply chain
SY	412/419	46	SYN is dependent on highly skilled suppliers to multiply its high-quality seeds, reversing the traditional roles of the supply chain partners. SYN needs to remain attractive to retain the supply base to ensure continuous level of quality in its supply chain.
SY	448/451	47	Suppliers need to gain a sense of ownership, that they have an impact on how their family and farm should develop. Collaboration is one important step towards this.
SY	458/461	48	SYN contracted farmers are well off and in the position to re-invest in their farms, become more resource efficient, cutting costs and have more money to improve the household economy.
Case	**Line**	**Nos**	**Traditional supplier development**

KA	18/20	1	A supplier is educated and trained to climb a learning curve for growing seeds. SYN supervises the seed-production process for quality control.
KA	23/25	2	To make suppliers deliver high quality seeds and improve their productivity, SYN invests to make the supplier climb the learning curve.
KA	40/42	3	SYN's suppliers become highly skilled growers and as such can pick up new specialised activities and technologies first.
KA	54/61	4	SYN helps, directs and assists its suppliers to pick up on sophisticated growing practices that found on best practices and technologies to produce superior yields. The contact and interaction with the suppliers is rather intense and includes planning-workshops at the beginning of a growing season.
KA	75/78	5	SYN continuously invests in its suppliers training and education to adopt the newest growing practices.
KA	177/178	6	SYN invests in its suppliers via best practice growing practices to improve their seed-production and livelihoods.
KA	289/292	7	SYN's suppliers become highly skilled growers and as such can pick up new specialised activities and technologies first, before these technologies can be scaled up for e.g. commercial crop farmers.
KP1	130/134	8	SYN provides supplier-training to improve the seed production process and capacity enhancement that makes the process more sustainable. Typical product stewardship training (safe chemical use) but also to change the mental attitudes regarding social aspects that are part of SYN's CoC.
KP1	145/146	9	SYN benefits from supplier development because of long-term relationships and improved brand image
KP1	148/150	10	SYN's suppliers benefit from supplier development, because SYN is more aware of supplier's social (child-labour) and HSE issues, and invests in lowering illiteracy rates and sending children to school, or informing suppliers about their legal rights.
KP2	44/45	11	SYN guides its suppliers in technical aspects during seed production process.
EM	71/73	12	SYN educated its suppliers during the last 4 to 5 years to adopt SYN standards in the suppliers working practices.
EM	113/120	13	Good and medium growers receive agronomic and technological education as well as the technology to improve seed production for SYN.
MR	141/143	14	SYN does awareness training for safe use of chemicals and improving technical seed growing skills for better farm management.
MR	165/166	15	SYN helps its suppliers regarding what they have to do at the farm.
MR	227/230	16	SYN traditionally educates its suppliers on pest control, and technical/ agronomical skills to improve the quality of the harvested seeds.
MR	232/233	17	SYN directly benefits from traditional supplier development because the quality of the seeds improves.
MR	238/239	18	Before the social compliance program, supplier development was limited to crop protection, e.g. safe use of chemicals.
GV1	190/194	19	SYN can train and educate its suppliers in its standards more directly than farmers that are trained in SYN training centres.

GV1	200/203	20	SYN trains its suppliers in a highly controllable environment.
GV1	263/266	21	SYN trains its suppliers to make them adhere to SYN quality standards, and as such has an immediate interest in training them.
SY	126/130	22	Educating suppliers to grow SYN seed to high quality is a long-term engagement.
SY	152/153	23	Training covers not only agronomical practices but also safe use and stewardship of products or first aid in the field.
SY	159/163	24	Stewardship training when it comes to handling chemicals covers safe use and secure storing. Particularly secure storage, such as keeping chemical locked up in a box away from children and the kitchen. Training also cover efficient farming practices, sanitation and health information.
SY	240/243	25	SYN educate their suppliers to adhere to stringent quality standards, including social standards.
SY	280/283	26	SYN educate their suppliers in agronomy and farming practices.
«6»	p.29	27	SYN integrates social messages in traditional pre-season growers training
«6»	p.31	28	SYN provides equipment to suppliers for safe chemical storage during training.
«6»	p.32	29	First aid training is integrated in seed production training.
«6»	p.34	30	SYN trains its suppliers in safe chemical handling.
«3»	82/83	31	SYN distributed 5000 sets of personnel protective equipment to the growers for taking care during the pesticide spray.
«3»	96/97	32	The growers and workers realized the importance of PPE (Personnel protective equipment) during chemical spray and now usages has increased from 5 to 90 %.
Case	**Line**	**Nos**	**Non-traditional supplier development**
KA	84/88	1	The skills SYN educated and trained its suppliers on cannot easily be transferred to competing SCs, but in general are transferable.
KA	207/211	2	Any activity on the community level through e.g. seed-organisers or SYN, such as improving literacy or better product stewardship practices in- and directly benefit the growers
KA	283/295	3	In the agricultural sector corporations like SYN are the biggest source of information and technology. SYN's seed-organisers are needed to spread and sustain SYN's latest technologies, that are used by its seed-suppliers, to all farmers of a community that want more sophisticated growing practices on their farmland.
KP1	154/157	4	Community engagement allows the education of farmers farm labour (2nd tier) to make them aware of their legal (minimum) rights.
KP1	160/161	5	Supplier communities benefit from community engagement because SYN works closely with local governments and donates learning material to schools and celebrates awareness rising days like teacher's day.
EM	86/99	6	SYN supports key seed growing communities with its me & mine educational awareness rising and capacity building programme. It e.g. educates the communities on child education and reinforces good safety practices that come with advanced farming and seed growing practices, but also provides the equipment to

			do so.
EM	120/128	7	Helping a grower with teaching him agricultural techniques, helps him to grow his own food so that he, his family and the community with which he is intertwined will benefit and not SYN. Being interrelated with the community is a perk to SYN developing its suppliers, because it is not only them who benefit but an entire community.
EM	270/274	8	Because SYN transfers its values to its suppliers, it helps them and their community grow and develop and the benefits are shared amongst all.
EM	369/377	9	As soon as SYN is a major player in the market, SYN provides additional (extension) services that were previously provided by governmental agencies and help farming communities in general and not only SYN SC.
MR	135/136	10	The FLA did awareness rising programmes at supplier level to change their views on current working conditions in the field.
MR	230/235	11	"Traditional" supplier development becomes non-traditional when it allows an indirect long-term benefit when suppliers use their skills to work with other companies on e.g. commercial crops or improve their own commercial cropping activities through e.g. building net houses or seedling "nurseries" since agronomic skills are imparted.
MR	241/246	12	SYN engages with and invests in local schools through donations of books and a computer to motivate the seed-growing community members to send their children to school. This untraditional awareness rising engagement does not affect SYN ISC directly, but improves social and labour conditions on and around the farm.
GV1	43/49	13	Besides financial incentives, a community engagement and education program is necessary to improve the ISC because this allows SYN to identify and improve working conditions in the ISC.
GV1	51/65	14	The program includes engaging and educational awareness and capacity building elements to cause a shift in mentalities in the communities. Therefore SYN needs to put the compliance activities in suppliers' community interests and make it community driven and as such goes beyond SYN operational interests.
GV1	73/86	15	SYN engages with schools to make them more attractive to children, by donating computers and teaching material, which is not related to SYN ISC activities. SYN sensitises teacher to check on attendance and work with parents to find solutions. Women are mobilised for health and safety issues on the farm, which is their living, SYN does this with simple game based tools in its me & mine program.
GV1	209/222	16	Because SYN ISC includes small (0.1/ 0.2 hectares) open field farming, SYN HSE training goes beyond direct supplier development and includes the community level such as SYN suppliers' neighbouring farmers. SYN farmers educate their neighbours as well.
GV1	268/275	17	Although SYN trains its suppliers to provide high-quality seeds, the suppliers become better farmers with skills that can be used in other SCs for different farming activities as well.
SY	36/38	18	SYN offers extensions services to its suppliers in terms of agronomical advice and education, which easily could be adapted to other agricultural supply chains.
SY	134/135	19	Education around social compliance, such as labour standards and child-labour, benefits the whole grower family but also the community.
SY	152/159	20	SYN Me & Mine focuses on training benefitting the whole family, one example is training around sanitation and connected health benefits.
SY	163/167	21	SYN Me & Mine promotes that children should go to school and not risk their

			chance for an education by working on the farm during peak seasons.
SY	179/191	22	To change deeply rooted behaviours there is a need to engage with a wider set of stakeholders than the suppliers alone. Women are identified as a key enabler for change, within the family but also within the community. SYN often source from several supplier in one village, here it is important to engage with the whole village to bring about change. To truly bring long-term change you need to have a more holistic approach.
SY	205/208	23	You need to involve the whole community when you are trying to tackle societal issues such as child-labour.
SY	212/221	24	Community engagement can cover education, capacity building or just involvement. Depending on the topic and setting different tools are used to communicate the messages, e.g. town hall meetings where farmers of the village and their families are gathered to discuss a certain topic, or role-plays to demonstrate the benefit of proper sanitation and hygiene practices has on family life. The tools are used in a way that people can relate to, ask questions and feel comfortable with.
SY	225/234	25	The dialogue with the farmers and their families is what is essential to come to terms with root causes. Tools to facilitate the dialogue have proven useful, i.e. the board game snake and ladders facilitates the dialogue on work place safety and social standards messages. The women receive hand fans with safety messages in local language etc.
SY	325/326	26	The SYN seed-suppliers are highly skilled - there are possibilities to engage outside our seed supply chain with farm-attached businesses
SY	335/339	27	Farmers are entrepreneurs; this can be captured to improve the household economy. Possible development potentials for suppliers is to diversify and open farmer adjacent business/services, such as a local retail store, processing or warehousing for the farmers in the village.
SY	339/342	27	The value creation generated as a supplier to SYN can be used to extend the income base for the family by doing other types of enterprises. This is an approach SYN is looking into, that has more long-term impact.
SY	351/355	28	SYN's suppliers could easily transition their acquired knowledge to another supply chain, either by offering the same services to another seed company or to enter the produce supply chain as famers.
SY	361/365	29	The SYN suppliers are quite technologically advanced and have a lot of business skills that perhaps other farmers wouldn't possess, they could go into high value crops, they can move into producing flowers or producing something that is much more high value where they would have a better supply and demand situation. They could also go into agronomical services.
SY	630/657	30	SYN Me & Mine is looking for new ways to engage with communities and has identified women as key mobilisers for change - many times it is the farmer's wife that takes up the entrepreneurial role and look for an additional income for the family. Women are often also the drivers for change in the family and the community, that is why it is so important to include women in the community engagement
SY	659/660	31	Women empowerment is key to bring about change
«7»	p.5	32	Female mobilisers reach out to women who make up 80% of farm workforce to promote the FLA code elements.
«7»	p.5	33	Protective equipment and training was provided to suppliers' workforce.
«7»	p.5	34	Local schools were donated computers.
«7»	p.5	35	13000 suppliers and over 40000 workers were assisted in the me & mine program

			to improve their lives.
«6»	p.6	36	One of the key activities of me & mine is meetings with grower communities and women to reach grower families and offer training on safe chemical handling, first aid awareness and code awareness.
«6»	p. 35/41	37	SYN develops communication tools like fans, banners, and a board game to transfer the Code values into the communities.
«6»	p.15	38	SYN me & mine wants to create the sense of ownership among SYN internal and external stakeholders along its ISC.
«6»	p.26	39	SYN celebrates teacher, independence, children and republic day to propagate the improvement of working conditions.
«6»	p.30	40	SYN does door-to-door campaigns to create awareness in labour standards at panchayats.
«6»	p.33	41	SYN sponsors awards/price for best performing children in farming communities.
«11»		42	Women are approached to disseminate the message regarding improvements of working conditions as a benefit to the family.
«3»	65/69	43	As part of overall remediation plan SYN launched a countrywide program called "SYN me & mine" in August 2009. Under this program the consensus from key internal stakeholders was secured to define tangible, recognizable, practical and respected commitment from the growers so that they have a sense of ownership.
«3»	75/77	44	Village schools are also involved, and the encouragement by teachers and village leaders motivates children to go to school. To motivate the children to go to School, Company has donated the computers to few schools.
«3»	93/96	45	Awareness training made farmers and farm labourerss realize the importance of child education. In addition, they came to know their rights and responsibilities for health and environmental safety, wages and benefits. This was resulted in bringing down the child labour issue significantly (from 20% to almost zero).
«3»	149/150	46	The engagement of women community mobilizers helped significantly improving the participation of women family workers and labourers in awareness and motivation meetings.
FLA 2006b	p.5	47	SYN started education and awareness raising programs amongst organizers and farmers, provided assistance to local schools and women's groups in the affected villages, and supported the development of child labor free farms run by women. Drama productions were mounted to spread the message at village level and educational posters and leaflets produced by the Association of Seed Industry were distributed.
Case	**Line**	**Nos**	**Reducing supplier risk**
KA	120/121	1	SYN's highly skilled suppliers can ask higher premium prices for their services from the market, if the choose so.
KA	151/155	2	SYN is known to pay its debt as a trusted partner. Although other seed companies offer 20 - 30% more for one growing season, the actual productivity lags behind.
KA	178/184	3	SYN reduces supplier risk and provides for a safe environment, because it provides its suppliers with a steady income, its crops are assured, and the company buys its uptake at a previously agreed price.

KP1	167/173	4	SYN reduces risk for its suppliers because there is always a legally binding contract that includes timelines for growing and delivering the seeds. It includes the actually agreed price, and some clauses on minimum wages and child-labour and other elements of SYN's CoC they can appeal to. Financial support is provided when long-term relationships need to be strengthened.
KP2	46	5	Company pays agreed price and SYN pays on time.
EM	78/80	6	SYN provides its suppliers with a stable and attractive income that makes them stay, and not consider other alternatives.
EM	147/152	7	SYN provides technical equipment like poly-tunnels, and supports financing cleaning chemicals or active ingredients and the training to use these products.
EM	293/295	8	SYN provides technical equipment that allows them to work in a "safe" environment.
EM	324/326	9	SYN makes it offer to grow seeds a competitive alternative to other farming activities.
EM	384/393	10	SYN reduces supplier risk as part of its symbiotic partnership on a case-by-case approach within predefined levels.
MR	108/117	11	Because of the FLA agreement regarding improving working conditions in the ISC, suppliers that are incompliant cannot be excluded from contracting before remediation has been implemented and all possibilities are exhausted. Disengagement with suppliers must follow a very progressive manner through CAPs.
MR	139/140	12	Supplier and SYN negotiate a price at the beginning of the growing season.
MR	162/166	13	SYN pays its debt on time. SYN organises loans to allow suppliers to grow more and better seeds. SYN provides access to training as well as chemicals and pesticides.
MR	234/237	14	SYN does not mandate its suppliers to exclusively produce for SYN. SYN does not mandate its suppliers to use SYN chemicals.
GV1	249/254	15	SYN brokers micro credits or credit opportunities where needed. The contract is used as a security deposit.
GV1	254/266	16	SYN trains its suppliers to become better seed-growers by improving their agronomic skills over time and as such help them reduce the risk for falling back in poverty.
GV1	278/281	17	SYN buys and operates as locally as possible. Locality is the basis of SYN business model.
GV1	353/369	18	SYN is working on introducing fair wage concept in its ISC to provide its suppliers farm labourers a fair income. This fair wage should be in line with FLA code elements and have an element of discretionary money. Realistically seen a minimum wage throughout the SC would be max to reach, but the labour market conditions are favouring farm labourers.
SY	144/150	19	The premium price offered to suppliers complying with SYN social standards compensate for the increased labour cost- connected to the exclusion of child labour or regulated remuneration, paid over time etc. The premium price also allows the supplier to re-invest in their production system - increasing efficiencies and reducing costs.
SY	288/291	20	Farmers, given a chance, will re-invest in their farm. It is their livelihood and by re-invest they are securing it. Paying a premium price allows the farmer to re-invest.

SY	355/361	21	The contract with the suppliers ensures that SYN will buy their harvest at an agreed price. This is reducing the financial risk for the supplier - compared to a farmer who is dependent to the supply and demand once his harvest is ready.
SY	373/411	22	Reducing risk can also be attributed to having the right tools to increase their harvest and so their income/ reduce the impacts of adverse weather etc. Poly-tunnels are an example of how you can reduce the weather-induced risk, by controlling moist and direct sunshine. Access to weather information also helps the grower to plan different actions, such as spraying crop protection, using fertilizers or irrigating etc. By only contracting for one season at the time the grower is not bound to SYN for a longer period and is free to change for the following growing season.
SY	419/420	23	Suppliers only contract with SYN for one growing season at the time, this limits the dependency of the supplier on SYN.
SY	447/448	24	Suppliers can spread their risks by opening a business parallel to seed multiplication.
SY	461/465	25	SYN suppliers can calculate their sales and so also the needed inputs for the next growing season, which has cost efficiencies. When you have money to re-invest in your farm, the cost reductions through resource efficiencies are bigger than the up-front investment.
SY	470/474	26	Offering a premium price with a certainty to buy their harvest gives the supplier the possibility to better plan their production. Of course SYN would suggest that they should re-invest in their farm, but as a matter of fact most farmers that know that they are dependent on this for their livelihood would re-invest in their farms. It's not something that they have to be told. It's many times the fact that they cannot, and that's why they don't have any progression or improvement of their productivity, because they simply do not have the money to re-invest.
Case	**Line**	**Nos**	**Transparency**
KA	239/240	1	The FLA was granted full access to its growers (lists) and practices.
KA	256/258	2	The engagement with the FLA was intensified and ramped up after the selling of the Bt-cotton business to ensure that the ISC is socially compliant and as such free of child-labour.
KA	269//271	3	The FLA social compliance engagement was intensified because it makes business sense and SYN believes that it makes a big difference to growers and agriculture in general.
KP2	39/46	4	SYN has made its contractual production terms and conditions clear-cut. Payments [and incentives] are made considering clearly defined quality and social quality parameters.
EM	68/74	5	SYN makes its requirements regarding what is expected and which rules apply transparent in its contracts.
MR	168/169	6	Since SYN communicates the social requirements toward its suppliers, their respect toward SYN increased.
MR	250/255	7	FLA places all tracking charts and project reports on the web. Since SYN provides farming lists to the FLA, which do not have to be published, the ISC is very transparent to FLA.
MR	258/265	8	SYN works directly with its suppliers at the source, which improves the transparency of the ISC.

MR	270/272	9	Discussing margins throughout the SC is not a requirement of the FLA compliance method but was done to discuss the root causes.
MR	281/283	10	To fight the root causes, debates regarding who is in the value chain and benefits most take place.
MR	288/292	11	SYN and other SC-members provide detailed, comprehensive information and listings of their pricing systems to prove that, contrary to national practices, their models do not push farmers to employ child labour.
GV1	323/328	12	SYN made its ISC activities more transparent because it had to bring everything in a format that made it understandable to partners like the FLA.
GV1	331/348	13	SYN initiated a margins discussion with SC members and other stakeholders in one of the stakeholder consultations on root causes in the agricultural sector in India. SYN informed the SC members on the principles and elements that are used to set the margins.
SY	484/499	14	Working with FLA ensures transparency of all SYN's dealings in the relationship, seeing as FLA makes all monitoring findings and reports in the public domain.
SY	503/516	15	FLA has been given, with all their members and all projects, a quite unique freedom to publish the information on their website, where the member companies have no impact on what they will publish, on what they find in their audits. SYN encourages the transparency with which FLA communicates about the partnership.
FLA 2006b	p.4	16	FLA publishes the status of the participating corporation's internal compliance programs and the independent external monitoring results.
FLA 2006b	p.6	17	NGOs argue that the prices paid to the farmers are too low to allow them to employ adult labor and implement adequate HSE-standards. SYN responded by providing a detailed break-down of costs in the SC. This was probably the first time that MNEs discussed the link between prices and working conditions with stakeholders.
FLA 2006b	p.14	18	FLA expects a continuing demand for transparency and accountability from companies in the agricultural sector. The development of a methodology for the monitoring of the supply chain of agricultural products therefore represents a milestone for SYN and for the whole industry.
FLA 2008e	p.3	19	FLA as part of its transparency initiative, publishes progress reports, research studies, monthly newsletters and monitoring reports with remediation plans on the public domain.
Case	**Line**	**Nos**	**Traceability**
KA	27/28	1	SYN involves its seed-suppliers in all social compliance activities to improve the sustainability of the ISC.
KA	61/63	2	Social compliance activities/messages are easily integrated in the contact points where suppliers are trained and instructed to improve growing practices.
KA	67/69	3	SYN engages with its suppliers on a daily business-basis, which makes it easy to integrate social compliance messages in its SC activities.
KA	92/98	4	During the growing season (3 - 4 months) SYN has 3 or 4 inspection visits on the farmland in which is checks the suppliers on social and quality compliance un- and/ or announced.

KA	110/111	5	The FLA does independent verification and monitoring on the basis of SYN's farm lists.
KA	137/138	6	Remediation (CAPs) is done in cooperative action.
KA	215/220	7	Day-to-day interaction ensures good process-control on quality and social compliance in the farm, but support and assistance are needed to implement it.
KP1	34/36	8	SYN wants to improve the moral conditions in its ISC through social compliance activities and as such bring the in line with SYN's CSR-policies.
KP1	68/75	9	SYN uses pre-season and multi-stakeholder consultations as an integrated part when discussing social issues and defining remedial action in its ISC.
KP1	112/118	10	SYN internally monitors and records working conditions during the growing season on the farms. SYN additionally analyses the audit results on parameters like safety, wages, and working conditions when doing agronomic quality and quantity analysis of the seeds.
KP1	150/151	11	Social compliance implementation in the field improves social conditions of the suppliers' community in general.
KP2	21/24	12	SYN's and FLA's monitoring are used to advise and support the suppliers in remedial action. This consists of participative "root cause" analysis and CAPs.
EM	194/201	13	A major strength of the ISC activities is that social aspects are integrated in normal quality control audits. The agronomists were next to seed agronomic performance trained in social parameters against which to audit.
EM	262/269	14	Social compliance is done to reduce financial and reputational risk by making sure that the quality and SYN suppliers meet the corporate social responsibility criteria.
EM	445	15	SYN includes the cultural differences when willing to improve working conditions. In India you need to include the farmers' village, because they work and live in their homes.
MR	31/32	16	For the FLA the first thing a corporation must do when willing to become socially compliant is tracing. Tracing back the product`s origins and can you monitor this?
MR	36/38	17	FLA's 3.0 method needed to be adapted to SYN because SYN is in agriculture and the FLA methodology was developed for the footwear and clothing industries
MR	53/56	18	Monitoring is the easiest part when willing to become socially compliant, remedial action or CAP is more difficult and corporate resources are limited.
MR	56/63	19	For remediation, a multi-stakeholder approach was implemented and a risk-assessment as well as ISC mapping were done to define and prioritise the root causes that needed to be ameliorated.
MR	65/69	20	The FLA adapted the maximum amount of venues that were to be examined for external auditing. The 5% p.a. was adjusted to 3.5% p.a. < 5000 farms, 10000 > 2% < 20000 farms.
MR	70/71	21	The FLA started externally auditing bundles of farms instead of one venue during a session.
MR	71/76	22	The FLA started externally auditing the supply chain as well as the management system during every auditing session.
MR	77/86	23	The FLA changed the qualifications of its external monitors to do farm audits, because the differing contextual circumstances.

MR	87/ 92	24	SYN and FLA redefined the benchmarks for the agricultural sector against which to measure compliance in stakeholder consultations.
MR	92/99	25	An internal monitoring system to track social (in)compliance in the ISC was set up in collaboration between SYN and FLA.
MR	97/99	26	The remediation process was set up as an engaging model and not as a policing model.
MR	117/119	27	To make corrective action successful, SYN needs to engage with its suppliers in a collaborative advisory approach.
MR	167/168	28	SYN received as feedback from its suppliers that the additional contractual social requirements are not burdensome.
MR	196/203	29	Efficient child labour monitoring needs to follow the steps of the production steps that are again dependent on weather conditions. Efficient auditing needs to hit the high-risk periods/steps and is therefore hard to plan.
MR	205/209	30	The internal monitoring needs permanent improvements to identify incompliances.
MR	209/214	31	When incompliances are identified, FLA wants SYN to engage with the suppliers to make them send the employed children to school and offer employment opportunities to the parents to level out the financial loss.
MR	215/216	32	Disengagement with incompliant suppliers must follow a very progressive manner through CAPs.
MR	272/273	33	FLA ultimate goal is to fix the root causes that cause child labour in SYN ISC.
MR	273/281	34	To solve the child labour issue in the ISC the focus during remediation needs to be on production practices and procurement pricing because they contribute to the root causes.
GV1	2/18	35	SYN does social compliance combined with root cause eradication. The root causes are social embedded behaviours of the societies SYN operates in, farming community interaction and labour market specifics of small-scale farm setting. Pricing of the seeds is a means for SYN but not the root cause as such.
GV1	22/26	36	To solve root causes through compliance SYN got an understanding of the labour market conditions and understood what value communities put on the issues that SYN wanted to eradicate.
GV1	26/34	37	To identify the highest compliance risk issues that relate to the root causes in SYN ISC's various productions steps as well as regional settings a risk assessment was commissioned to an external organisation.
GV1	34/40	38	After risk assessment SYN started with the monitoring process and in a second step with remediation programs. For remediation SYN needed assistance because SYN power of its contracts does not allow to fight root causes in a community.
GV1	65/70	39	Compliance is done to make the ISC ethically compliant and thereby reduce the risk for the corporation. Remedial action is needed because the contract cannot sort this out and a more inclusive approach that includes community is needed. SYN remedial action includes traditional supplier development elements but goes far beyond this.
GV1	114/120	40	To improve working conditions a management cycle needs to include a remedial step. This forces SYN to engage with its stakeholders. Remediation is not about setting (dis)incentives but engagement with stakeholders to improve a situation. Remediation starts there, where SYN starts helping and educating its suppliers.

GV1	295/301	41	With remedial action that takes in supplier needs to ameliorate root causes SYN fights the causes and not the symptoms of poor working conditions.
GV1	311/316	42	Social compliance cannot be reduced to traceability only but includes remedial action to race down who supplies SYN ethically.
GV1	376/398	43	SYN respects and considers communal traditions like the interlinkages of suppliers with their rural community, without which the suppliers will not survive. Changing community labour exchange elements is not managed by SYN, but might alter SYN compliance system.
GV1	411/413	44	SYN assesses social compliance internally.
GV1	418/422	45	SYN monitoring is subject to continuous improvements.
GV1	425/432	46	Risk assessment defined and prioritised high-risk issues for social compliance, which must be audited during peak seasons. But a internal monitoring system is only as good as its assessors, who need training on ethical aspects.
GV1	446/447	47	SYN social compliance system is more inclusive compared to one that just focuses on the economic side of the equation.
GV2	5/16	48	SYN social compliance system challenges its suppliers' seed growing and working conditions. SYN helps the suppliers with remedial action and shows them that SYN cares and does it for the suppliers' and not SYN interests only.
SY	52/58	49	FLA carried out a risk assessment of the SYN ISC to identify the key areas of concern, connected root causes and how to tackle them. Many of the root causes are founded in societal perceptions not likely to have a quick fix. One of the key steps for implementation was to build the social compliance elements into already existing quality monitoring systems.
SY	73/88	50	Remediation is a key part of the FLA program. All incompliances in the ISC found either by SYN or through the independent audits by FLA are subject to remediation negotiations between the supplier, SYN, FLA and other stakeholders. It is a matter of finding feasible solutions to improve the situation and to enable the particular supplier to be compliant. A collaborative approach is key to changing behaviours in a sustained fashion. Forcing a change will lead to dishonesty and failure.
SY	96/108	51	The monitoring and remediation process is part of the contract and is explained to the supplier. The supplier knows that in case of incompliance a remediation plan is negotiated, followed by re-audits to make sure that the supplier is progressing according to the agreement. This clarity builds trust and agreement.
SY	207	52	Societal issues will not be solved by focusing on one supplier in a village, a more holistic approach needs to be adapted to bring change in behaviours, including the whole family and other members of the community.
SY	499/502	53	The remediation process reduces the risk for being fooled/having suppliers lie to you. Suppliers trust you to help them mitigate incompliance.
SY	516/521	54	The FLA helps SYN to engage with suppliers an remediate where practices need to change. FLA helps SYN and the supplier to come up with solutions that are implementable.
SY	533/537	55	The remediation negotiations are based on multi-stakeholder dialogues to ensure that the decided actions are socially acceptable and manageable for the supplier.
SY	546/549	56	The social acceptance of the remediation is key to ensure that a wanted behaviour is upheld disconnected from the SYN or FLA monitoring.

SY	582/605	57	The SYN staff carrying out quality monitoring, incl. social compliance, on supplier farms needed to be equipped with the capabilities and sensitised to identify social/labour standard incompliances next to the more traditional seed quality aspects.
«5»	p.2	58	SYN methodology to improve labour standards in seed supply includes a stakeholder engagement and remedial step.
FLA 2006b	p.3	59	SYN develops an effective internal monitoring system and a structure for independent verification of this process with FLA.
FLA 2006b	p.3	60	The tracing method is optimised and extended to labour rights after two risk assessment.
FLA 2006b	p.3	61	The cooperation with SYN determined that all major components of the FLA-system (adopting the code, collecting information and addressing compliance issues) could be applied to compliance work on farms.
FLA 2006b	p.3	62	SYN and FLA collaborated to develop appropriate standards and benchmarks against which monitors could measure the level of compliance on the farms.
FLA 2006b	p.3	63	The compliance mechanism emphasises local stakeholder engagement in defining and addressing compliance issues.
FLA 2006b	p.4	64	The methodology is based on a multi-stakeholder process to identify, prioritize and remedy compliance risks, preferably through capacity building.
FLA 2006b	p.10	64	The internal monitoring plan consists of setting up management information systems to gather and analyse data from the farms, recruiting and training staff, establishing policies and standards and developing monitoring tools and methodologies to implement the program and put in place remedial plans.
FLA 2006b	p.10	65	Consultation with a wide range of stakeholders is an integral part
FLA 2006b	p.11/12	66	The following protocol is used: a) Identification of farms to be monitored; b) Monitoring visits combined with production visits; and c) Visits during the three activities which were identified as high risk (Post Planting, Hybridization and Harvesting, Acid Treatment).
FLA 2006b	p.12	67	SYN analyses data from all locations per crop (10 in total) on a seasonal basis and generates a report twice a year for the FLA.
FLA 2006b	p.13	68	A Crop Card that guides on social audits was integrated in SYN's existing quality control tool for field audits.
Case	**Line**	**Nos**	**Measurement**
KA	90/91	1	SYN has a point system to reward compliance.
KA	99/105	2	SYN's regular and systematised social compliance audits allow to calculate suppliers' social performance. Based on best practice, suppliers are rewarded or blacklisted after a few warnings.
KP	84/90	3	Cooperative attitudes are fostered through an incentive system that rewards social compliance in the ISC. Suppliers and organisers that comply with the best practices against which performance during the season was measured in a point system receive the incentive.

EM	74/77	4	When suppliers do not follow SYN standards, they will be excluded if they do not work on being compliant.
EM	190/194	5	When suppliers do not follow SYN standards, they will be excluded if they do not work on being compliant. Social parameters are as important as quality parameters.
EM	270/271	6	The incentive system does not accept incompliance.
RM	138/141	7	SYN uses an incentive scheme that rewards the suppliers with an additional bonus or incentive when they comply with social parameters.
GV1	41/43	8	SYN incentivises good behaviour through the wage component. This component includes a premium for ethical compliance.
GV1	402/409	9	SYN is the only corporation in the agricultural sector that has an carrot and stick incentive system that includes social and ethical elements and rewards social compliance with a 5% premium that comes on top of the quality premium.
GV1	412/415	10	It includes a challenge mechanism that not only rewards good performance but also reprimands SYN internal staff as soon as child-labour is discovered.
SY	59/61	11	There needs to be an incentive for suppliers to change their way they produce or the way they employ labourers, how they remunerate them or how the supplier manages their farm.
SY	90/94	12	Suppliers need incentives for being compliant rather than disincentives for when incompliant. There needs to be room for improvement and not having to be scared of reprimands if incompliant.
SY	135/144	13	There is a financial incentive to be compliant with the quality standards and a financial incentive to be socially compliant. The financial incentive is a good way to attract suppliers to work with SYN, however in the long run intrinsic incentives to keep suppliers are needed.
«7»	p. 4/5	14	SYN developed an incentive system to make suppliers adopt a labour standard code and offered training to those that fail to meet the code requirements.
«3»	72/73	15	to achieve higher levels of compliance on the seed production farms incentive schemes were launched for the highest complied farms.
FLA 2008e	p.5&6	16	SYN introduced an incentive scheme based on their compliance status. SYN monitored the farms three times in one production season. A bonus of up to 5 percent of the total procurement price, was given when there was no child labor.
FLA 2008e	p.5	17	A progressive disciplinary policy was introduced, wherein after repeated reminders and remediation, a grower would be blacklisted if found delinquent on child labor for two consecutive production seasons.

Appendix 3. Eidesstattliche Erklärung

Ich versichere an Eides statt durch meine eigene Unterschrift, dass ich die vorstehende Arbeit selbständig und ohne fremde Hilfe angefertigt und alle Stellen, die wörtlich annähernd wörtlich oder sinngemäß aus Veröffentlichungen genommen sind, als solche kenntlich gemacht habe. Die Versicherung bezieht sich auch auf in der Arbeit gelieferte Zeichnungen, Skizzen, bildliche Darstellungen und dergleichen.

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Datum:

Mittwoch, 8. Juni 2011

Unterschrift:

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