Central European University

Department of Environmental Sciences and Policy

M.Sc. in Environmental Sciences and Policy

Goal systems: An exploration of links between voluntary sustainability standards in agriculture and public sustainable development goals

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A thesis submitted to the Department of Environmental Sciences and Policy of Central European University in partial fulfillment of requirements of the Degree of Master of Science

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July, 2014

Budapest

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Jefferson Davis DE ANDRADE LESSA

CENTRAL EUROPEAN UNIVERSITY

ABSTRACT OF THESIS
submitted by: Jefferson Davis DE ANDRADE LESSA
for the degree of Master of Science and entitled:

Goal systems: An exploration of links between voluntary sustainability standards in agriculture and public sustainable development goals

Month and Year of submission: July, 2014.

This exploratory and qualitative research aims to add the theoretical framework of Goal Systems and Transition Management to the current discussion about the impact of agricultural voluntary sustainability standards (VSS), discussing both conceptual and practical possibilities and challenges in using sustainability goal systems as conceptual and practical tools to assist these VSS schemes in better understanding, assessing and strengthening their impacts on the environment and human well-being and in demonstrating their effectiveness in bringing about changes that support progress towards higher-level sustainable development goals (SDGs). Drawing upon the agricultural VSS community's perspective, the findings indicate that it would be possible for agricultural VSS systems to establish and integrate a more explicit goal system into their management and governance architectures. There are three main ways in which VSS are currently using elements of a goal system: through existing VSS verification processes; via implementation of the theory of change (TOC); and through use of comprehensive impact MRV systems. Agricultural VSS could seek alignment with SDGs through the establishment of goal systems, allowing them to contribute to and build on SDGs) and be a potential means of implementation of these higher-level sustainability goals. This work develops and improves a conceptual

framework for VSS goal systems that proves to be very useful to understand how agricultural VSS can go about setting an explicit system of sustainability goals, as well as how these VSS can use goal systems to realize their potential as a vehicle for the implementation of sustainable development goals.

Keywords: agricultural voluntary sustainability standards, ISEAL Alliance, goal system, sustainable development goals (SDGs), sustainability impacts, sustainable agriculture, sustainability governance, transition management.

Acknowledgements

I would like to express my deepest appreciation to my supervisor László Pintér, who accepted to take me on this adventure and has shown the attitude and substance of a supportive and knowledgeable mentor. His supervision has been unmatchable: without his constant help and ability to realize my concerns this thesis would not have been possible.

In addition, thank you to the Ph.D student Vivek Voora for his valuable contributions and feedbacks throughout the development of thesis proposal as well as during the initial steps of the research.

I would like to thank the interviewees Mr. Fabiano Silva, Mr. Daniele Giovanucci and Mr. Frank Eyhorn for the time and thoughts spent with me.

Additinoally, thank you to the participants of the ISEAL Alliance 2014 Global Sustainability Conference in London who provided this research with significant inputs.

Thank you Eszter Timar for the enriching proof-reading consultations that only improved the quality of my work.

I also want to acknowledge the CEU Department of Environmental Sciences and Policy for the continuous support and, especially, the decision to take me on board the MESP program. Thank you Alan, Irina and Kriszta for being there for us.

Many and many thanks go to my family who worked very hard to provide me with the support I needed to get here. Without them I could not even have had reached the qualifications to be at this master's program. Especial thank you to my mother Eneida and my aunt Edna. Obrigado minha família! Sem voces eu não estaria aqui.

I also want to express my especial gratitude to Bryan. He not only amazingly read so many of my papers, but especially motivated, supported and helped me to get here.

Thank you my dear classmates both from MESPOM and MESP who were always there to smile and make me company in Budapest. Especial thanks go to Jonathan for his unconditional friendship and company during the academic struggles.

I also have to thank Nesli for bringing the sunshine when life in Budapest seemed so gray.

Thank you my Hungarian friends Pufi, Zsuzsi and Dóri for hosting and supporting my staying in Hungary.

I would like to acknowledge Central European University for the master's program and financial resources to carry out my studies and this research.

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List of Abbreviations

IA – Impact Assessment
MoI – Means of Implementation of SDGs
MRV – Measuring, Reporting and Verifying
SDGs – Sustainable Development Goals
TM – Transition Management
TOC – Theory of Change
UN – United Nations
UNEP – United Nations Environment Programme
VSS – Voluntary Sustainability Standards
WTO – World Trade Organization

1. Introduction

This is an exploratory research on the governance and development of agricultural voluntary sustainability standards (VSS), discussing both conceptual and practical possibilities and challenges in using sustainability goal systems as conceptual and practical tools to assist these VSS schemes in better understanding, assessing and strengthening their impacts on the environment and human well-being and in demonstrating their effectiveness in bringing about changes that support progress towards higher-level (e.g., national or international) sustainable development goals (SDGs).

The background and importance of this research lies in the role of agricultural voluntary sustainability standards in helping to promote sustainable development and the need to understand better their contribution to sustainability. Agricultural VSS consist on principles, rules, norms or criteria that claim to support the implementation of agricultural practices that foster positive changes in land use and other social and environmental changes that promote sustainable development (Pinto and Prada 2008).

Recent publications (e.g. COSA 2013; Potts *et al*. 2014) show the interest of the VSS community in measuring, reporting and verifying the (MRV) impacts and influences of agricultural VSS systems. The interest in MRV in the context of VSS for agriculture mirrors the growing interest in the same in some other global environmental regimes, such as REDD (e.g., Herold and Skutsch 2009). The ISEAL Alliance, a pioneering membership association of sustainability standard-setters hosted the 2014 Global Sustainability Standards (GSS) Conference which discussed the importance of

society's trust that standards are delivering positive sustainability impacts and helping countries achieve broader sustainability policy objectives (ISEAL Alliance 2014a). The United Nations (UN) maintains the Forum on Sustainability Standards (UNFSS) to address the potential of VSS systems serving as a way of implementing sustainability goals of developing countries (Wenban-Smith 2013). A variety of UN declarations throughout the past 20 years have acknowledged that VSS can be suitable for supporting the implementation of sustainable development objectives (Wenban-Smith 2013). The current developments on post-2015 sustainable development goals (SDGs) discusses the role of agricultural VSS systems as one of the means of implementation of SDGs (SDSN 2013). Among other roles, agricultural VSS are considered to have the potential to encourage sustainability practices that are not only necessary to ensure achievement of goals for securing ecosystem services and biodiversityas well as for improveming of agricultural systems, but also to support realization of all other SDGs (SDSN 2013).

The number of VSS and their geographic coverage has increased across the globe as they are perceived as important economic mechanisms in building a green economy (Potts et al. 2014). Nevertheless, many aspects regarding the role and use of VSS is still uncertain and debatable mainly because of the difficulties in measuring, reporting and monitoring their impacts on the priority issues broadly associated with sustainable development (COSA 2013 and Potts et al. 2014). For example, much of the contribution is described by the literature simply as intervention activities – e.g., training – and compliance-based outcomes – e.g., implementation of soil management practices and introduction of waste management facilities – but not the extent or

degree of sustainability the agricultural VSS helped achieve, which is their main purpose in the first place.

There is also indication in the literature that there is a need for better understanding the sustainability contribution of agricultural VSS (e.g., Potts *et al.* 2014; Kalfagianni 2014; Elder *et al*. 2014; Daviron and Vagneron 2011; Giovannucci and Ponte 2005). Finally, if VSS indeed have the potential to help achieve sustainability goals as defined in broader public policies, policy-makers – and VSS managers - need to know better what this potential actually is and how to realize its potential. This leads to a fundamental question: how can impacts of agricultural VSS systems be, strengthened, assessed, better understood and demonstrated in relation to their effectiveness in bringing about changes to support sustainable development?

A possible way to assess the effectiveness of a sustainability initiative is by looking at its performance in progressing toward its desired sustainability goals. Demonstrating the performance of a VSS is a way of showing a clear contribution to sustainability as well as conveying its credibility. Establishing clear goals and targets can not only help measure and indicate achievements by clearly identifying a desirable outcome, but it can also assist in laying out a path from the present state to sustainability aspirations in the future.

Nevertheless, the current literature on agricultural VSS is largely quiet about the establishment of goals and their role in directing or evaluating their contribution to sustainability. However, other literature e.g., on sustainability strategies, management and policy discusses the use of goal systems and transition management techniques to direct and assess progress of private and public sustainability policies. Therefore, the contribution of this research is to add the theoretical framework of goal systems

and transition management to the current discussion about the impact of agricultural VSS systems, arguing that the setting of a goal system can help define a sustainability transition pathway for key issues covered by any given agricultural VSS, improve the usefulness of these standards, and establish a basis for demonstrating their possible contribution to the achievement of sub-global sustainable development goals. This leads to the hypothesis that agricultural VSS systems could consider establishing and integrating more explicit goal system into their management and governance architectures. A goal system would enable them to lay out a sustainability pathway as well as strengthen, assess, understand and demonstrate their impacts in relation to their contribution to sustainability.

Nevertheless, existing architecture of agricultural VSS need to be analyzed for understanding if and how they could (or already do) incorporate goal systems based on the transition management approach; allowing the understanding of whether the hypothesis could indeed be valid for agricultural VSS, and the drawing of further inferences from this hypothesis. Therefore, this is an exploratory research about governance and development of agricultural VSS.

Additionally, because this topic has not been previously explored and there are general, but essential governance and standards-setting questions about agricultural VSS and their relationship with goal systems, this thesis explores agricultural VSS from a general, but focused perspective to establish grounds for future research. Thus, the main objectives of this thesis are:

- Identify if and how goal system setting could happen within VSS systems, and how establishing such goals could improve their effectiveness in delivering impacts.

- Identify any evidence of goal system setting within existing agricultural VSS processes and governance systems.

- Analyze from the VSS community perspective whether and how VSS could contribute to and build on SDGs and be a potential MoI of these higher-level sustainability goals.

To reach these objectives, the thesis draws upon the analysis of findings that resulted from participating in the ISEAL Alliance GSS conference, conducting informal and structured interviews with selected members of the agricultural VSS community, and the analysis of documentation on standards-setting criteria.

This thesis is organized in 6 sections. Section 1 is this introduction. Section 2 consists of the literature review including an overview of agricultural VSS, their current challenges and the framework on goal systems and transition management. Section 3 details the research methods. Section 4 analyses, in three sub-sections, the content of the documentation on standards-setting criteria, findings of the participation on the ISEAL conference as well as of the informal interviews, and outcomes of the structured interviews with selected members of the agricultural VSS community. Section 5 weaves the outcomes of the three blocks of analyses into a conceptual discussion for refining the goal system framework, and section 6 concludes the work and makes recommendations for potential future research.

2. Literature review

This research has its foundations on the review of existing literature on agricultural VSS and their possible contributions to the promotion of sustainable development, and framework of management and policy development based on desired and tangible outcomes, termed here as transition management approach. The first section of the literature review gives a general overview of VSS, addressing the main concepts and technical aspects, ending with an overview of agricultural VSS. The second part focuses on VSS's role in promotion of sustainable development highlighting the main impacts and benefits as well as the challenges of VSS systems. Indicating how this research will develop from existing literature on agricultural VSS. The third and fourth sections discuss the theoretical framework of management and policy development based on desired and tangible outcomes, leading to the production of a preliminary hypothesis for this exploratory research.

2.1. Fundamentals of Voluntary Sustainability Standards (VSS)

Throughout the last three decades, society has sought to create many sustainability initiatives. Many of these initiatives came from the civil society and private sector in response to the lack of governmental response to the degradation of social and physical environments such as the voluntary sustainability standards (VSS) (Kalfagianni 2014; Daviron and Vagneron 2011). VSS also became known as non-state, market-driven (Gulbrandsen 2004; Cashore 2002) and private governance (Henson and Humphrey 2010; Henson 2007; Kalfagianni 2014; Daviron and Vagneron 2011) sustainability mechanisms. The literature also treats VSS as certification processes (Auld et al. 2008; Jacovine et al. 2006; Upton and Bass 1995) and uses different names such as eco-certification (Rueda and Lambin 2013), social-

environmental certification (Pinto and Prada 2008), tripartite standard regime (Hatanaka et al. 2012), corporate sustainability standard (Sheehy 2013), and simply sustainability standard (Kalfagianni 2014; Daviron and Vagneron 2011; Aras and Crowther 2012; Daniele Giovannucci 2005). In this research, the concept of VSS encompasses all of the above terminologies.

A standard is a set of documented rules, principles, norms or criteria functioning as guidelines for products, processes or production methods (WTO 2014) which users must comply with (Wenban-Smith 2013) in a way this conformity can be assessed. The World Trade Organization (WTO) highlights that compliance with standards is not mandatory, making a clear distinction between technical regulation, which is mandatory, and a standard, with which conformity is voluntary (WTO 2014). VSS include specifications of socio-economic and environmental characteristics for production or process systems, linking the concept of standard described by WTO (2014) to the three pillars of sustainable development (Daviron and Vagneron 2011). A VSS allows assessment of compliance (Giovannucci and Ponte 2005) and can be understood as a market tool that differentiates products and producers who have complied with the standards from those who have not (Upton and Bass 1995). Thus, VSS is a tool used to assure consumers, that is, signaling to the market, that certain processes and products are preferred because they respect social, environmental, and economic interests in a balanced way (Pinto and Prada, 2008).

VSS are created by private companies, NGOs or by multi-stakeholder partnerships, including the participation of the public sector in those partnerships (UNFSS 2010). The governance of the standard will vary according to process of creation as well as type of ownership, sector and standard. For example, the

collaboration of nongovernmental organizations, indigenous interest groups, forest managers and businessmen from a variety of countries successfully established the forest management VSS named “Forest Stewardship Council (FSC)” (Pattberg 2005; Gulbrandsen 2004). This multi-stakeholder approach is still part of FSC governance body (Pinto and Prada 2008) with international rule-making and rule-implementing roles.

Most VSS will have principles to state a desired outcome; the criteria or technical specification to specify what has to be met in order to achieve those principles; control points or indicators to assess if the criteria are being met; means of verification that allow confirmation that practices are being performed to meet the criteria; guidance for how to reach conformity with the standard; and general regulations (Potts *et al*. 2014; Hatanaka *et al*. 2012; UNFSS 2010). To assess compliance, VSS systems use verification, certification and accreditation processes (UNFSS 2010). Verification (also known as audit) is the confirmation through the collection of evidence that the VSS requirements are being fulfilled. There are first-party verifications, where the organization being evaluated can audit itself; second-party verifications, in which a second party person or body with interest in the organization, e.g. client or purchaser, is responsible for the audit; and third-party or independent verifications, where a person or body who is independent and has no interest in the organization being assessed is the auditor. Third-party verifications require accreditation of the auditing body and are often related to the certification process (UNFSS 2010).

Certification is the process in which a third party (certification body or certifier) verifies and assures that a product, process or service complies with the standards by

giving written certificate of conformity. The accredited certifier carries out an inspection or audit to assess the organization seeking certification. Certification bodies also undergo an assessment, i.e. accreditation, to ensure that they are performing the audit tasks accordingly (UNFSS 2010). Certification can also be issued to a group of small-scale producers. This process is called group certification. In this case, the group has to create a social (collective) contract detailing rules of the group, controlling and monitoring activities and managing system. The audits in this case are often conducted based on visits to randomly selected producing units and analysis of documentation showing evidence of conformity with the standard. The certification is often linked to a label or stamp, a physical or graphic indication that the product or service has complied with the VSS requirements and attained certification (UNFSS 2010; Pinto and Prada 2008).

Besides signaling the compliance to the markets, labels can also make different claims according to the standard claim and the criteria used. A label can claim there is a management system in place, achievement of performance targets, continuous improvement or that a percentage of product inputs achieved compliance with the VSS (UNFSS 2010). VSS systems also have different ways of making sustainability claims. Claims can be made on a specific product, service or process; made on the materials used in the product; directed to end consumers; or have a business-to-business approach to enhance sustainability within the supply-chain (Potts *et al*. 2014; Hatanaka *et al*. 2012; UNFSS 2010; Pinto and Prada 2008). Furthermore, VSS may be product- or commodity-specific (e.g. coffee VSS systems), a group of products (e.g. forest products) or special issues such as labor rights. VSS may also be of different

types or sectors (e.g. agriculture and tourism) (UNFSS 2010; Pinto and Prada 2008). The focus of this research will be on agricultural VSS.

2.2. The role of VSS in sustainable agriculture

Agriculture-based (i.e. crop and livestock production, fisheries and forestry) VSS originated in Europe as standards that initially had the purpose of ensuring food safety (Hatanaka *et al*. 2012; Pinto and Prada 2008). The global environmental crisis and the negative impact it has had on the production of goods have become well-known and widespread knowledge. This increasing awareness of the global environmental crisis influenced these standards to develop to include social and environmental issues and support sustainable agricultural practices (Hatanaka *et al*. 2012; Pinto and Prada 2008). Agricultural production not only has been affected by the global environmental crisis, but it also has its share of responsibility the causes of environmental degradation. As Potts *et al*. (2014) indicate, agriculture and forestry account for more than one-third of global emissions of greenhouse gases. Therefore, sustainable agricultural practices are vital to necessary transformation that will ensure sustainability of livelihoods, society and the environment (Potts *et al*. 2014).

Sustainable agriculture commonly refers to different aspects of economic viability of farm systems such positive cost-benefit structure and market-access; environmental conservation practices such as soil management, integrated pest control, efficient use of resources; and respect toward social needs and development e.g., provision of proper labor conditions and training, respect for the communities and local economy (UNFSS 2010). Existing and emerging agricultural VSS aim to address those aspects of sustainability (Giovannucci and Ponte 2005). Rueda and Lambin (2013) explain that agricultural VSS have the potential to foster biodiversity and

ecosystem services through development of complex agroecological systems. Furthermore, the authors conclude that an agricultural VSS can establish a connection between local agroecological systems and global markets in a way that ensures sustainability of livelihoods and land uses (Rueda and Lambin 2013).

Therefore, agricultural VSS comes into play as a significant tool to promote more sustainable agricultural practices, and society has acknowledged the potential and importance of those mechanisms to the extent that certified or verified production has a significant share of global market (Potts *et al*. 2014). The 16 VSS initiatives, covered in "The State of Sustainability Initiatives Review" (see Potts *et al*. 2014) are responsible for a production estimated to have a trade value of US$ 31.6 billion.

VSS systems are expanding in number, commodities and geographic location (Potts *et al*. 2014; Rueda and Lambin 2013; Daviron and Vagneron 2011). Recent publications (e.g. COSA 2013 and Potts *et al.* 2014) show the interest of the VSS community and society concerns in understanding the impacts and influence of VSS systems. Much of the literature has focused on measuring, assessing and describing impacts and benefits of VSS systems. Researchers have investigated and described many possible benefits and positive impacts that the implementation of VSS systems can produce or foster in regards to social, economic and environmental aspects.

Socially, the authors point out that some positive impacts caused by the implementation of VSS systems are access to better technical training and education (Rueda and Lambin 2013; Keppe *et al.* 2008; Lima *et al.* 2008a; Lima *et al.* 2008b; Jacometi *et al*. 2008; Pinheiro and Adissi 2007), better health and work safety (Rueda and Lambin 2013; Keppe *et al*. 2008; Lima *et al*. 2008a; Lima *et al*. 2008b; Jacometi *et al*. 2008), increased hiring rates (Keppe *et al*. 2008; Lima *et al*. 2008a; Lima *et al*.

2008b; Pinheiro and Adissi 2007), improvement of local networks (Rueda and Lambin 2013; Giovannucci and Ponte 2005); Keppe *et al*. 2008; Lima *et al*. 2008a; Pinheiro and Adissi 2007), and overall higher salaries (Keppe *et al*. 2008; Lima *et al*. 2008b; Jacometi *et al*. 2008).

Economically, compliance with VSS can reduce product vulnerability in the agricultural market by lowering economic barriers (Carvalho and Barbieri 2007), allowing market access (Potts *et al*. 2014; Rueda and Lambin 2013; Giovannucci and Ponte 2005; Keppe *et al*., 2008; Lima *et al.* 2008a; Lima *et al*. 2008b; Carvalho and Barbieri 2007), and opening new exportation routes (Jacometi *et al*. 2008). Some VSS may also allow producers to receive premium price (Elder *et al*. 2014; Rueda and Lambin 2013; Giovannucci and Ponte 2005).

As for the benefits and impacts on the natural environment, the studies highlight improvement in the conservation of flora and fauna (Rueda and Lambin 2013); Keppe *et al.* 2008; Lima *et al*. 2008a; Lima *et al.* 2008b) as well as water and soil resources (Rueda and Lambin 2013; Keppe *et al.* 2008; Lima *et al*. 2008a; Lima *et al.* 2008b; Jacometi *et al.* 2008; Pinheiro and Adissi 2007), better pesticide, herbicide and fertilizer management practices (Rueda and Lambin 2013; Keppe *et al*. 2008; Lima *et al*. 2008a; Lima *et al*. 2008b; Jacometi *et al*. 2008; Pinheiro and Adissi 2007), and improved waste management practices (Rueda and Lambin 2013; Keppe *et al*. 2008; Lima *et al*. 2008a; Lima *et al*. 2008b; Jacometi *et al*. 2008; Pinheiro and Adissi 2007).

Giovannucci and Ponte (2005) and Rueda and Lambin (2013) mention the spill-over effect that compliance with VSS can have in the surrounding communities, which means that knowledge about sustainable farming practices is transferred through local

social networks, improving farm systems that have not complied with a VSS system. Along the same idea, implementation of sustainable practices not only benefits the economy of the crop seeking compliance, but also economically benefit the other cultivations – and the farm system as a whole.

From a broader point of view, VSS are also approached as tools to help meet public sustainable development goals. The ISEAL Alliance 2014 Global Sustainability Standards Conference discussed the importance of society's trust that standards are delivering positive sustainability impacts and helping countries achieve sustainability policy objectives (ISEAL Alliance 2014a). The United Nations launched the Forum on Sustainability Standards (UNFSS) to address the potential of VSS systems serving as a way of implementing sustainability goals of developing countries (Wenban-Smith 2013). A variety of UN declarations throughout the past 20 years have acknowledged that VSS can be suitable for supporting implementation of sustainable development objectives (Wenban-Smith 2013).

Following the 2012 Rio Summit, the international community has been paying significant attention to sustainable development goals (SDGs) and targets as central elements of the post-2015 development agenda (SDSN 2013). Initially developed at the global level, SDGs and associated targets are to be adopted and applied later at the sub-global level through diverse means of implementation (MoI) (SDSN 2013). VSS systems, increasingly introduced in many economic sectors such as agriculture, have significant potential as a MoI (SDSN 2013). Among other roles, VSS are considered to have the potential to ensure sustainability practices that are not only necessary to ensure goals for securing ecosystem services and biodiversity, and

improvement of agricultural systems, but also to ensure that all other SDGs are achieved (SDSN 2013).

Furthermore, one of the key findings of The State of Sustainability Initiatives Review 2014 is that VSS can contribute to institutionalization of a green economy (Potts et al 2014). Green economy is defined by the UN Environmental Programme (UNEP) as "one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities" (UNEP 2011). Although VSS are market-based instruments, they offer the following non-market advantages for promotion of sustainability and contribution to a green economy: VSS integrate sustainability practices within the pricing mechanisms; through compliance firms can improve efficiency through allocation of sustainable practices; uptake of VSS can stimulate investment in sustainable production; firms can feel safer in investing in adoption of sustainable practices through implementation of VSS; VSS have the potential to integrate different stakeholders in the process of decision making allowing more applicability of VSS to local conditions (Potts et al. 2014).

There is certainty that VSS have the potential to contribute to investment in green production systems and contribute to the development of a green economy. According to Potts et al. (2014), the boundaries of this contribution are what remain uncertain. The VSS ability to promote sustainable development depends on their credibility and objectiveness in delivering truly sustainable impacts that support and connect to their sustainability claims. Potts et al. (2014) highlight that VSS have an array of possibilities and opportunities to help the transition to sustainability, but there is still need to understand better the VSS impacts and develop strategies to ensure

that VSS can effectively help meet public sustainable development goals (Potts et al. 2014).

2.3. VSS challenges

In fact, there are still many challenges in demonstrating the impacts of VSS. When assessing impacts, studies were mainly investigating changes that occurred with the certification based on comparisons with non-certified groups or according to descriptions of interviewed stakeholders. Additionally, much of the contribution is described by the literature simply as intervention activities – e.g. training – and compliance-based outcomes – e.g. implementation of soil management practices and introduction a waste management facilities –, but not really the impacts of the implementation of these practices. None of these studies were able to mention the extent or degree of sustainability the agricultural VSS achieved because the achieved changes are never measured against the VSS ultimate goal in sustainability issues. Consequently, these changes become blurry when assessing standards effectiveness toward their sustainability claim. Furthermore, the studies are often not able to identify whether the changes are caused by implementation of VSS systems, or related to other variables (Potts et al. 2014).

The literature reports that current methods to assess impacts are still problematic (Potts *et al*. 2014; Wenban-Smith 2013). For example, Rueda and Lambin (2013) and Lima *et al.* (2008a) identified that certain environmental impacts could have been a result of sustainable practices that were already in place. Additionally, the impacts are not measured against the VSS's claims of sustainability or desired sustainability outcomes to indicate the progress of the standards. Of course, the difficulty in assessing VSS sustainability impacts does not simply mean that there are

not positive impacts. There are just challenges in assessing and understanding these impacts (Potts *et al*. 2014; Wenban-Smith 2013).

The challenges for VSS do not only regard the impact assessment methods. The literature also highlights some other important issues the VSS community needs to address. Giovannucci and Ponte (2005) explain that VSS are not clear and effective in communicating their benefits. This is often the case of the limited ways in which VSS monitor and evaluate the delivery of benefits (Giovannucci and Ponte 2005).

The literature mentions that challenges can also refer to governance and distribution of benefits along the supply chains (Kalfagianni 2014; Daviron and Vagneron 2011; Elder *et al*. 2014; Aras and Crowther 2012; Giovannucci and Ponte 2005). For example, standard compliance can impose barriers and high costs or even exclude smallholder producers from sustainable supply chains. Some authors (Kalfagianni 2014; Daviron and Vagneron 2011; Elder *et al*. 2014; Aras and Crowther 2012) agree that it is not clear how equitable this distribution of benefits is. Kalfagianni (2014) even states that standards are intensifying some of the global agrifood inequalities such as the gap of sustainability benefits between the farmer and consumer, and that contradicts the idea of sustainability which, for Aras and Crowther (2012), should include equal distribution of benefits of sustainable measures. Moreover, Daviron and Vagneron (2011) note that very few studies report the VSS impacts on the distribution of benefits. This observation indicates that there is need to know where leverage points of VSS systems are to allow improvement and intervention; suggesting the need for better understanding of the impacts of VSS and their proposed pathway to promote sustainable development.

Furthermore, with the variety of claims and perspectives in sustainability (Potts *et al*. 2014; Aras and Crowther 2012) and the increasing number of standards (Potts *et al*. 2014), it becomes difficult to know what standards are doing in terms of promoting sustainability. Even the most widely accepted concept of sustainable development (i.e. the Brundtland Report's concept) allows much flexibility in the interpretations (Robert *et al*. 2005). These gaps within the concepts enable different programs, projects, companies and groups of interests to build their own concept of sustainability (Elder *et al*. 2014; Daviron and Vagneron 2011; Aras and Crowther 2012; Hatanaka *et al*. 2012; Giovannucci and Ponte 2005; Robert *et al*. 2005). This variety of interpretations brings complexity to assessing if VSS are achieving their claims as well as to what degree they are contributing to sustainable development.

Another important concern is the "*watering down"* effect on standards (Daviron and Vagneron 2011) which means that principles of sustainable development (Daviron and Vagneron 2011) or more strict standards (Giovannucci and Ponte 2005) are being diluted to create weak sustainability standards. This is mainly because different understandings, definitions and business interests on what sustainability should mean are leading to different level of strictness in standards (Elder *et al*. 2014; Daviron and Vagneron 2011; Giovannucci and Ponte 2005; Hatanaka *et al*. 2012; Aras and Crowther 2012). Consequently, standards claims become questionable, and more strict standards become susceptible to society's perspective and trust (Giovannucci and Ponte 2005).

Although there has been a great effort and interest in assessing the impacts of VSS systems in agriculture, the literature (e.g., Potts *et al.* 2014; Kalfagianni 2014; Elder *et al*. 2014; Daviron and Vagneron 2011; Giovannucci and Ponte 2005) agrees

there is still space for improvement and need for better understanding, for assessing and strengthening the impacts of agricultural VSS systems to overcome their challenges and for demonstrating their effectiveness in bringing about changes to support sustainable development. A possible way to assess effectiveness of a sustainability initiative is by looking at its position on the pathway to sustainability. However, Pintér *et al*. (2012) advise that prior to initiating an evaluation of sustainability progress, evaluators must know what "'sustainable development' looks like" (2012, 22). Robert *et al*. (2005), explaining the meaning of goals, say that sustainable development is defined in what seeks to achieve, that is, a goal. Thus, having a clear vision of sustainability through establishing sustainability goals will give direction to what achieving sustainability means and to what sustainable development is (Pintér *et al*. 2012).

Therefore, having a clear vision or set of goals and an established pathway to reach those goals, along with tools to demonstrate progress, becomes essential for VSS to improve and show credible, truly sustainable impacts. This is specifically the point this research aims to contribute with and add to the existing literature in agricultural VSS. None of the studies bring into the current discussion of agricultural VSS systems and their impacts this idea of management and policy development based on setting clear goals to establish a pathway of actions and allowing evaluation of progress.

In view of that, I will elaborate on this pressing topic by reaching out to transition management and goal systems literature to the fill in the identified gap of the existing literature in agricultural VSS; to provide a theoretical answer, or hypothesis, to the

research question; and to consolidate the theoretical framework to research analysis. Therefore, the next two sessions will bring this theoretical discussion.

2.4. Managing through goals and targets: Transition Management

For many years now, the world has been discussing and implementing ways to foster sustainable development. Many sustainability policies, strategies, mechanisms and institutions have been created and reviewed. The increasing focus on evidence-based policy has demanded knowledge regarding the progress on the pathway to sustainable development. Consequently, several initiatives have been developed to measure and assess progress of efforts toward sustainable development (Pintér *et al*. 2012). These advancements have highly influenced the way organizations have structured their strategies and management practices in what concerns sustainable development and, especially, planning, assessing and reporting sustainability performance (Pintér *et al*. 2012).

Many of these management practices are based on designing and assessing a policy or strategy by looking at the desired outcomes (Neuvonen *et al*. 2014; Köves *et al*. 2013; Modell and Grönlund 2007; Edvardsson 2004; Frantzeskaki *et al*. 2012). These management techniques received different names with some variation in how they are implemented. Yet, they all basically consist of the same general idea: establishing a desired result or a goal which will give basis to define a set of practices and measures; and assessing performance based on how much the organization has progressed in achieving those pre-established goals.

For instance, Modell and Grönlund (2007) treat this management practice as “outcome-based performance management”, and for them it means managing policy efforts and practices toward desirable outcomes in a way that effectiveness of the

management is measured by relating outcomes to pre-established objectives. Similarly, Edvardsson (2004) explains that management by objectives is a frequently used method to guide and assess environmental policies. Further, she highlights that a goal system adopted by the Swedish government allowed the country to lay out a pathway containing strategies with detailed direction and time scale to reach a desirable state of the environment. The author also highlights that this method is used in public and private, and at international, national and community levels.

Another methodology to this approach is “backcasting” which means looking back from the future to design the way back to the present (Neuvonen *et al*. 2014; Köves *et al*. 2013). In backcasting a vision of a desired future, where goals have been achieved, will give direction to establish a pathway and important steps to the present condition. Backcasting is based on the idea that a vision of a desired future will define how agents structure individual as well social actions and decisions (Köves *et al*. 2013). In contrast to forecasting, where future scenarios are constructed based on past and present data, backcasting is based on normative scenario-building to create the picture of what a desired future looks like (Köves *et al*. 2013; Neuvonen *et al*. 2014).

Neuvonen *et al*. (2014) use the backcasting approach to identify what lifestyle changes and what sustainable lifestyle possibilities could have the potential to power a transition toward low-carbon future scenarios. They conclude that backcasting is a worthwhile approach to describe how changes could happen to foster transition to sustainable societies. Köves *et al*. (2013) use backcasting as an experiment to build a sustainable employment scenario in Hungary, and draw policy recommendations to

reach the desired future. The authors find that methodological approaches based on desirable future can be effective to develop viable sustainability policies.

Furthermore some authors place these methods as part of an umbrella of methods and a theoretical framework that look at goals embedded in a vision of a desired future to develop and assess transition efforts. This umbrella is the “transition management (TM)” framework (Köves *et al*. 2013; Neuvonen *et al*. 2014). Achievement of sustainable development requires significant short and long-term changes in a societal system. The processes of changes are transitions. Transitions can occur in different levels: at global level to address issues such as climate change; and local national levels to encourage changes in sub-global systems such as agriculture. Scientists agree that radical transformation in current systems is necessary to reach a desirable scenario of sustainability. Much of today's efforts are focusing on how to manage this transition. One approach to manage these transformations is transition management (TM) (Köves *et al*. 2013).

TM methods have been used since the beginning of the 21st century by the Dutch government and has received attention in the literature (Frantzeskaki *et al*. 2012; Loorbach 2010; Köves *et al*. 2013; Neuvonen *et al*. 2014). Frantzeskaki *et al*. (2012) propose TM as a governance approach for a sustainable development pathway. These authors go further and explain that this governance approach is grounded on a “transition management cycle” consisting of a strategic phase where problems are structured and envisioning takes place; a tactical phase that includes development of the vision of sustainability and transition paths; an experimenting phase where testing of new policy tools and innovations can occur; and a reflexive

phase where monitoring, evaluation, learning and reporting happen to feed adjustments back into the cycle (Frantzeskaki *et al*. 2012; Loorbach 2010).

To summarize, all of these approaches highlight the importance of defining clear goals embedded in a vision of what sustainability, the desired future, might be. Yet, most importantly, these approaches appear as effective tools to build the vision of the desired sustainable outcome which, according to Pintér *et al*. (2012), is the first step toward assessing progress of sustainability initiatives. Therefore, these TM approaches directly address the main VSS challenges found in the literature. For example, in enabling the creation of a clear vision of the desirable sustainability future, that is the goal of a sustainability initiative, these approaches could provide a solution to many of the problems of vagueness and conflicts of VSS sustainability claims as discussed by the literature (Elder *et al*. 2014; Daviron and Vagneron 2011; Aras and Crowther 2012; Hatanaka *et al*. 2012; Giovannucci and Ponte 2005; Robert *et al*. 2005).

For example, Edvardsson (2004) explains that there was a close connection between the Swedish environmental goals and their statement or ideal of sustainable development. This ideal contains five fundamental principles which, although are somewhat vague according to Edvardsson, led to the establishment of the Swedish system of goals. Therefore, it is relevant to notice that the management by objectives led to the creation of a clear statement of the policy's concept of sustainable development which was essential for creating a pathway to sustainability in Sweden.

These TM approaches also address the core of this research's question. Through establishment of goals, a TM method would potentially allow agricultural VSS systems to assess, or be assessed, by their progress in achieving their claim of

sustainability, which would be represented by their goals. Similarly, comparing the impacts of VSS systems against clearly established goals would allow VSS to understand, assess, strengthen and demonstrate better their sustainability impacts. Moreover, by looking at the desired future, VSS systems could draw their path of contribution to sustainable development, giving them a direction to structure and adopt truly sustainable efforts.

Another important way that agriculture VSS can benefit from TM approaches, and which needs to be emphasized here, is the learning process for integrating a set of goals and targets into their organizational and institutional structure. As previously discussed, agriculture VSS have a strong potential as a MoI (means of implementation of sustainable development goals) (SDSN 2013). In order to realize that potential, VSS systems will need to consider how goals and targets fit their governance and management structure, underlying agricultural practices and how they contribute to impacts. Therefore, managing through goals and targets which is supported by the TM approach to governance will allow VSS systems to build the basis to be a strong and effective tool to aid achieve public sustainable development goals.

2.5. Goal Systems: what are they?

In order to identify the ways goals and targets setting could happen within the VSS systems, and how establishing those could improve the VSS systems, one must look at what goals and targets are, what kind of technical elements they consist of, and what are the processes and dynamics of creating and instituting them. This is what this section of the literature review will discuss.

Environmental goals and targets are often adopted to guide and drive practices toward improvement of ecological aspects of sustainability (Edvardsson 2007). Goals

are detailed desired outcomes that an individual, organization or community wants to achieve. Edvardsson (2007) explains that environmental goals can describe a reduction or elimination of an environmental problem or a desirable state for the natural and cultural environment. Therefore, sustainability goals will describe a desirable vision and outcomes of the different social, economic and environmental aspects of sustainable development. Targets, or sub-goals, detail the social, economic and environmental measures to be implemented within a time scale to achieve the sustainability goals. Targets can also provide guidelines to define the practices that need to be conducted to achieve the goals (Edvardsson 2007).

Another element that relates to goals and targets, and has been often used for sustainability assessment and measurement, is indicators (Pintér *et al*. 2012; Modell and Grönlund 2007). An indicator is a measurable variable to indicate the state of an effort towards reaching a goal (Duinker 2001). Agricultural VSS systems also have indicators. However, they are mostly related to a control point to assess if the producer is meeting specific criteria (UNFSS 2010). Therefore, indicators in VSS systems can be used as part of the verification process or to identify VSS broader goals. Duinker (2001) also notes that indicators are also directly influenced by values. Values are social, economic and environmental elements that express importance of a sustainable practice for society. Duinker (2001), discussing sustainable forest management, says that values are things that make sustainable forestry important such as carbon sequestration and water regulation. Thus, values support and represent the vision of sustainability (Robert *et al*. 2005)

In linking the concepts above to VSS fundamentals in section 2.1, one may grasp that there are similarities and relationships among the elements of a system of

goals and those of a VSS system. This relationship can be confusing. For example, one may argue that a VSS already has a set of goals, targets and indicators in place since those could be represented by their principles, criteria and control points respectively. Thus, a relationship among the elements of a goal system and those of a VSS system need to be clarified to understand better how or whether a VSS system can institute a system of goals and targets.

Duinker (2001) explores the terminologies and relationships of goals, values, objectives (here considered as targets) and indicators. This literature review further elaborates from Duinker's model of relationship among those elements to develop a framework that includes the elements of a VSS system, as illustrated in figure 1, to describe how goals, values, targets and indicators relate to the elements of VSS described earlier in section 2.1. The arrows in figure 1 indicate the relationship between the given elements. Duinker implies that the element "values" is the bridge that connects elements of a VSS system (see section 2.1 for these elements) and a goal system. Adding to that, values represent the vision of sustainability (Robert et al. 2005), thus they are taken from the VSS principles (UNFSS 2010). Consequently, if values are satisfied, the VSS' vision of sustainability is realized (see relationship between "values and "principles" in figure 1). Each criterion will be created based on a group of values (Duinker 2001) to express the conditions that need to be met to achieve the principles (UNFSS 2010). Each goal will reflect a value, and the value will be satisfied if the go is achieved (Duinker 2001). The goal is achieved when all the targets are reached. The indicators will measure if and to what extent targets are being met, and they are directly related to the values (Duinker 2001). These indicators can also receive information from the control points of VSS verification processes. Finally,

since targets have an influence in the development of sustainable practices (Edvardsson 2007), targets would optimally have a single-way connection with a criterion as shown in figure 1.

The literature treats goals as being part of a system, a goal system (Edvardsson 2007; Edvardsson and Hansson 2005). Goals are set in a system that includes different processes, elements and their interlinkages. Figure 1 provides an illustration of the system, which in fact represents an integraton. This framework also facilitates the understanding of how a VSS system can adopt a set of goals. However, Edvardsson and Hansson (2005) warn that simple adoption of environmental goals does not guarantee that they will be achieved. In fact, Wijen (2014) presents

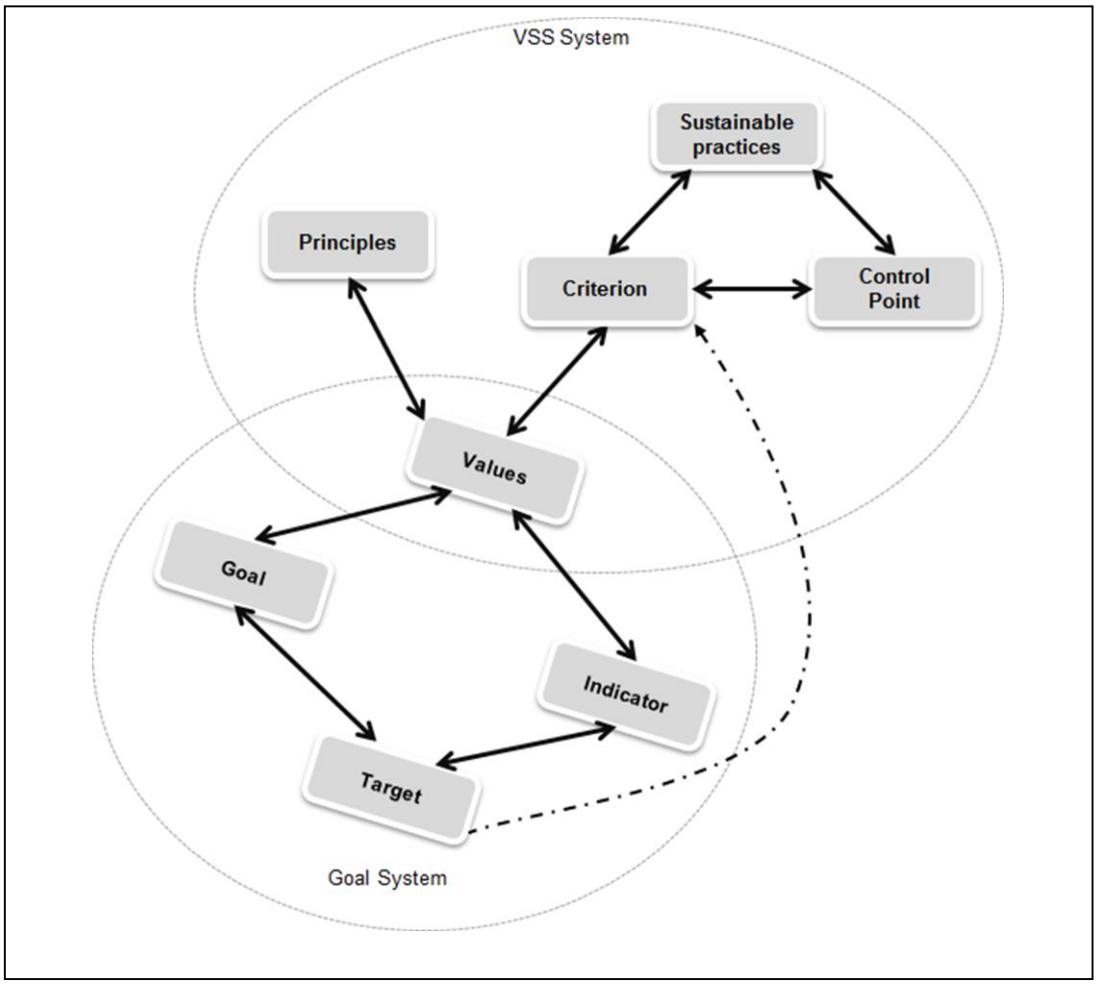

Figure 1-Relationship among Goal System and VSS system elements (adapted from Duinker 2001 with elements of our theoretical framework)

arguments to emphasize that standards are failing to achieve sustainability goals because of extreme focus in adoption of practices and not so much in the process of achieving their desired outcomes. Another factor to consider is that goals are not always effectively or rationally set (Edvardsson and Hansson 2005). Goals must also be rational (functional) by satisfying a set rationality criteria to be successful (Edvardsson 2007). (Edvardsson and Hansson 2005) conducted an extensive literature analyses to detail what rational goals should look like. The authors mentioned some goal properties that are commonly agreed in the literature. According to them, one set of popular criteria for goals is the SMART acronym which means that goals should be Specific, Accepted, Realistic, and Time-bound (Edvardsson and Hansson 2005).

(Edvardsson and Hansson 2005) further develop from the literature and propose a specific set of rationality criteria for environmental goals. The rationality criteria are derived from a main characteristic a goal should have: a goal should be achievement-inducing to be rational which means that a goal must guide and motivate agents to work toward reaching it. There is a list of properties that a goal must have in order to be achievement-inducing: goals should be precise, evaluable, approachable, motivating and coherent (Edvardsson and Hansson 2005).

More specifically, a goal is precise when it tells the direction the agent should take to achieve it as well as to what extent and when the goal can be achieved. A goal is evaluable when it enables assessment of whether the agent is in the right path to achieve it, and how far the agent is from reaching it. This allows the development of cycle where information is fed back into the goal system so that adaptions can occur to strengthen the goal system. A goal is approachable when it enables the agents to

know they can and what can be done to reach it. Goals are motivating when they make the agents want to achieve them. Finally, goals should fit together and not conflict each other, establishing coherence among them (Edvardsson and Hansson 2005).

Another contribution regarding properties of goals and targets concerns specific characteristics of sustainability goals. Volkery *et al*. (2006) assess sustainable development strategies and explain that any commitment to sustainability requires clear and quantifiable objectives and understanding of sustainable development principles. Volkery *et al*.'s work suggests that sustainability goal system should be quantified, link social, economic and environmental systems, and be in coordination with other sustainability goals. Additionally, Edvardsson (2007) notes that "*environmental goals should also be participatory, dynamic, understandable and communicable*" (Edvardsson 2007).

Further, the literature on VSS systems implies that a goal system should enable improvement, assessment, measurement and demonstration of the equal distribution of the effects and benefits of sustainability standards for different actors in different aspects of the supply chain (Elder *et al*. 2014; Kalfagianni 2014; Aras and Crowther 2012; Daviron and Vagneron 2011; Giovannucci and Ponte 2005). Another consideration is the importance of taking into account the environmental context in goal setting (Edvardsson and Hansson 2005). Hence, VSS have to turn to the peculiarities of the location where the standard will be implemented when setting a goal system.

Important contributions can also be taken from the "Bellagio Sustainability Assessment and Measurement Principles (Bellagio STAMP)" (Pintér *et al*. 2012) as guidance in setting a goal system. According to these principles an effective goal

system would require a vision that gives a direction to what achieving sustainability means; consider cross-boundaries issues and implications for decision making process; have time horizon and appropriate geographic scope; build a baseline and indicators both to allow comparisons and form the basis of assessment, monitoring and measuring of progress; support transparency and accountability of the progress assessment results and methods including disclosure of data sources, financial source, entities financing the assessment project; promote effective communication of the entire assessment process, implying a good presentation and description of the goal system as well; seek involvement of multiple stakeholders in the creation of the goal system to ensure legitimacy; and carry out continuous review and revision of the goal system for necessary adaption of goals, targets and indicators as well as monitoring, measuring and reporting processes (Pintér *et al*. 2012).

To summarize and conclude, a goal system for VSS systems is much more than having set elements such as goals and targets or standard principles, but instead it is about the relationship these elements hold among themselves, the process of setting effective goals and the attached elements, and all the sub-systems that need to be in place to institute, measure and assess progress toward the goal as well as to continuously review and adapt the goal system.

In view of that, this literature review arrives at the hypothesis that agricultural VSS systems should establish and integrate an effective goal system to their management and governance systems. This goal system will enable them to lay out a sustainability pathway as well as strengthen, assess, understand and demonstrate their impacts in relation to their clear contribution to sustainability.

3. Methods

3.1. Research Design

This is an exploratory research on governance and development of agricultural VSS. An exploratory research seeks to provide comprehension and familiarization with a subject that has not been well explored and rarely provides final answers to specific research issues (Gil 2008). Therefore, this research design seeks to provide familiarization and comprehension of whether agricultural VSS could (or do) and how they could (or do) incorporate goal systems based on the transition management approach; allowing the understanding of whether the hypothesis could indeed be a valid route to agricultural VSS, and the drawing of further inferences about this hypothesis. Moreover, this thesis explores these standards from a general perspective of all agricultural VSS to establish grounds for future research.

In addition to being exploratory, this is a qualitative research. A qualitative research involves an interpretative approach of a subject within its natural context and of how this subject is perceived by the people involved with it (Ritchie and Lewis 2003). Therefore, this research design follows a methodological approach of qualitative research as defined by Ritchie and Lewis (2003): the research design and data generation are flexible and sensitive to the social context; methods include observation, interviews and analysis of documents; and the research outputs are descriptive and take account of participants' perspective (Ritchie and Lewis 2003).

3.2. Object of study

The object of study will be agricultural voluntary sustainability standards systems.

3.3. Population and sample

In order to test the hypotheses and reach the objectives, this research approaches the perspective of the VSS community about the conceptualization and implementation of a goal system. Therefore the population is agricultural VSS experts, auditors, standard management staff and governance members and standard-setting organizations. These organizations and individuals are directly working with development and implementation of agricultural standards. They have practical experiences and have the expertise to know how these standards function. They are the ones who would know best how goal systems could be integrated within agricultural VSS systems, and what challenges these standard systems could face in doing so.

The sample was developed through the snowball technique described by Teddlie and Yu (2007). The starting point is the ISEAL Alliance 2014 Global Sustainability Standard Conference that took place in London from May 20th to May 22nd in 2014. Worldwide representatives of the agricultural VSS community attended this conference to discuss most current pressing topics about VSS. Key actors were identified during the conference. Fourteen participants were approached for informal interviews and possible future interviews. Based on the participants' interest, expertise and level of involvement with the research question they were later selected for interview. Other professionals with relevant involvement in the field were approached as well based on the recommendation of already identified experts. The final sample for interviews was based on the number of experts willing to participate in the interviews.

The conference program itself is also a source of information given that it discussed the importance of society's trust that standards are delivering positive sustainability impacts and helping countries achieve sustainability policy objectives (ISEAL Alliance 2014a).

Additionally, ISEAL Alliance is a pioneering umbrella group of sustainability standard-setters with the aim of improving and demonstrating VSS' sustainability impacts. ISEAL specifically sets codes of good practices for developing and improving VSS systems. Thus, this organization is a major source of data and documentation.

3.4. Data collection

The data collection consisted of three parts.

3.4.1. ISEAL Alliance 2014 Global Sustainability Standards Conference

The conference brought together 300 leaders from business, government, civil society and sustainability standards to discuss the importance of society's trust that standards are delivering positive sustainability impacts and helping countries achieve sustainability policy objectives (ISEAL Alliance 2014a). The discussions were directly related to this research's question. Two of the main sources of information during the conference were discussion panels and guests' speeches and informal interviews with conference's attendees.

3.4.1.1. Discussion panels and speeches:

I gathered essential facts and information from the conference speeches and discussion panels to support this research's objectives. I took notes and downloaded some presentation slides from the conference website (see ISEAL Alliance 2014a).

3.4.1.2. Informal interviews:

The purpose of the informal interviews was to make contacts for future interviews, learn more about the VSS community's perspective on the research hypothesis, collect information to address the research's objectives, and gather inputs to adjust the research methods. This part of the conference directed me, for example, to include the analysis of the ISEAL codes of good practices after a conversation with an ISEAL Alliance staff and other participants. The discussions aided in the structuring of the later interviews in a more effective way given that basic and non-in-depth questions were asked. Interviewees are kept anonymous and are referred as "participant" or simply "interviewee" and the type of organization they represent. Only those who granted permission are given names.

I conducted the informal interviews during the coffee breaks and networking sessions. They consisted in my introducing myself, mentioning that my participation was for the purpose of collecting inputs for the research, establishing contact for a potential interview, explaining the rationale of the research question and hypothesis, and directing the conversations to inquire the participants' 1- opinions whether this research hypothesis is relevant for further investigation; 2- opinions on whether it is possible and whether it is relevant for a VSS to establish a goal system. Given the exploratory nature of this research, basic and general questions concerning the hypothesis and contribution of this research had to be asked in order to verify the rationality and feasibility of further investigating the hypothesis and possible alternatives.

Since these interviews happened in casual manner during the breaks in the conference, I did not recorded them, but I took notes. I informally interviewed fourteen

representatives from agricultural VSS systems, governmental, intergovernmental and non-governmental organizations as well as from research and consulting institutes.

3.4.2. ISEAL Alliance codes of good practices and website content:

The purpose of this document analysis is fulfill the second objective of this research. Aiming to identify and analyze evidences of whether VSS schemes are considering any form of goal system setting. These codes were chosen as a consequence of the participation in the conference. When talking to VSS system representatives and ISEAL staff, they recommended the analysis of the ISEAL “Codes of Good Practices” which are a representation of guidelines and norms that VSS systems have to comply with in order to become a member of the ISEAL Alliance. The codes used in this research are the "*ISEAL code of good practice for setting social and environmental standards*"(ISEAL Alliance 2010) and the *"ISEAL Code of Good Practice for Assessing the Impacts of Social and Environmental Standards Systems (the Impacts Code)"* (ISEAL Alliance 2014b). Both codes were being revised at the time I analyzed them, therefore the latest revisions or draft, published editions were also used in the research. These editions are "*Code of Good Practice for Assessing the Impacts of Social and Environmental Standards Systems DRAFT Revision 1.1 Oct 2013*", "*ISEAL code of good practice for setting social and environmental standards: Draft Version 5.2*".

Additionally, the revision consultation comments were accessed to verify any major trend of change in the codes. Finally, the website content was researched and used. Any document not mentioned here that was used in this research was referenced to in the thesis.

3.4.3. Structured Interviews:

The interviews were based on a set of ten pre-established questions (see Appendix 2 for details). These questions were designed taking into consideration the literature review and frameworks used for the analysis. Furthermore, these questions were designed with the purpose of investigating the potential of a goal system to define a sustainability pathway for agricultural VSS systems, improve their usefulness, and establish a basis for demonstrating effectiveness and impact of these standards in contributing to the achievement of sub-global sustainable development goals.

The first two questions are directly addressing the research question. They aim to identify alternatives to the hypothesis. The third and fourth question was designed to address the third objective of this research, aiming to understand the perspective of the VSS community on the possibility of linking higher-level sustainability goals (i.e., SDGs) with VSS' structure and objectives. Questions five to ten were designed to address the research's first objective.

More specifically, questions 5 and 6, sought to clarify, from the perspective of the VSS community, if VSS systems could indeed adopt a goal system and transition management approach, and what practical challenges these approaches could face. Questions 7 to 10 were used to obtain a practical perspective on the possible structure of a goal system, so that the framework embedded in the hypothesis could be used for analytical comparisons (see tables 1 to 4 in section 3.1 and Figure 1 in section 2.5 for a summary of the framework used).

Potential interviewees were identified during the ISEAL conference and through indication of other experts. They were contacted via email with a letter explaining the

rationale of the research, the purpose and instructions for the interview (see Appendix 1 for a sample of the letter). This letter also briefly introduces the interviewee to the framework that is behind the questions. This was considered necessary to clarify concepts and assumptions of the research. The questions were also previously sent to participants to allow them time to reflect upon the topics (see Appendix 2 for a sample of the set of questions).

3.5. Method and framework for analysis

Discourse analysis based on Strauss and Corbin's (1998) technique on "*Coding, Identifying Concepts, and Asserting Relationships*" was used to examine interviews and conference speeches.

The theoretical framework was used to filter answers, statements and definitions about evidence on whether and how goal system setting could happen (or is happening) within the VSS systems, and how establishing those could improve the VSS systems. The document analysis was processed in the same way. However, while the interviews and participation in the conference aimed at capturing the perspective of the standards community and stakeholders, the document analysis aimed at an analysis from the standard-setting point of view.

The analysis used the theoretical framework developed from the literature review. Two main frameworks and their subdivisions were used: the transition management (TM) approach and the approach to goal systems. The following tables were used to facilitate the identification of issues – i.e., topics and evidence related to the theory. Nevertheless other aspects present in the literature review were also used as the basis of the analysis. For the TM approach, characteristics of "management through goals" (Neuvonen *et al*. 2014; Köves *et al*. 2013; Modell and Grönlund 2007;

Edvardsson 2004; Frantzeskaki *et al*. 2012) that portrays TM methodologies and phases of a TM approach cycle (see Table 1) were the foundation of the analysis. For the Goal System framework, the analysis consisted in using characteristics and processes (see Table 2); achievement-inducing or rationality criteria (see Table 3); and definitions of elements (see Table 4) of a goal system. For the Goal System approach, the framework on relationship among goal system and VSS system elements developed in the literature review, represented by the diagram in Figure 1 in section 2.5, was also applied to the analysis.

3.5.1. Theoretical Framework tables

Table 1- Transition Management theoretical framework: Phases and characteristics of the Transition Management approach

Phases and characteristics of the Transition Management approach	
Strategic phase: problems are structured and envisioning takes place	*(Frantzeskaki et al. 2012; Loorbach 2010)*
Tactical phase: development of the vision of sustainability and transition paths	*(Frantzeskaki et al. 2012; Loorbach 2010)*
Experimenting Phase: testing of new policy tools and innovations	*(Frantzeskaki et al. 2012; Loorbach 2010)*
Reflexive phase: monitoring, evaluation, learning and reporting happen to feed adjustments back into the cycle	*(Frantzeskaki et al. 2012; Loorbach 2010)*

Table 2 - Goal Systems theoretical framework: necessary characteristics and processes

Goal Systems necessary characteristics and processes	
A goal system should:	***Reference***
Be clear and quantifiable objectives and understanding of sustainable development principles	*(Volkery et al. 2006)*
Be quantified, link social, economic and environmental systems, and be in coordination with other sustainability goals	*(Volkery et al. 2006)*
Have participatory, dynamic, understandable and communicable goals	*(Edvardsson 2007)*
Enable improvement, assessment, measurement and demonstration of impacts	*Elder et al. 2014; Kalfagianni 2014; Aras and Crowther 2012; Daviron and Vagneron 2011; Giovannucci and Ponte 2005*
Enable improvement, assessment, measurement and demonstration of distribution of the effects and benefits of sustainability standards for different actors in different aspects of the supply chain	*Elder et al. 2014; Kalfagianni 2014; Aras and Crowther 2012; Daviron and Vagneron 2011; Giovannucci and Ponte 2005*
Consider the environmental context in goal setting, peculiarities of the location where the standard will be implemented when setting a goal system	*(Edvardsson and Hansson 2005)*
Vision that gives a direction to what achieving sustainability means	*(Pintér et al. 2012)*
Consider cross-boundary issues and implications for the decision making process	*(Pintér et al. 2012)*
Have time horizon and appropriate geographic scope	*(Pintér et al. 2012)*
Have a baseline to compare to	*(Pintér et al. 2012)*
Indicators both to allow comparisons and form the basis of assessment, monitoring and measuring of progress	*(Pintér et al. 2012)*
Support transparency and accountability of the progress assessment results and methods including disclosure of data sources, financial source, entities financing the assessment project	*(Pintér et al. 2012)*
Have effective communication of the entire assessment process, implying a good presentation and description of the goal system as well	*(Pintér et al. 2012)*
Seek involvement of multiple stakeholders in the creation of the goal system to ensure legitimacy	*(Pintér et al. 2012)*
Support continuous review and revision processes for necessary adaptation of the goals, targets and indicators as well as monitoring, measuring and reporting processes	*(Pintér et al. 2012)*

Table 3 - Goal System theoretical framework: achievement-inducing or rationality criteria

achievement-inducing or rationality criteria	
Goal systems should be:	**References:**
Precise: tells the direction the agent should take to achieve it as well as to what extent and when the goal can be achieved	*(Edvardsson and Hansson 2005)*
Evaluable: enables assessment of whether the agent is in the right path to achieve it, and how far the agent is from reaching it; and supports a cycle where information is fed back into the goal system so that adaptations can occur to strengthen the goal system	*(Edvardsson and Hansson 2005)*
Approachable: enables the agents to know they can reach the goals and what can be done to reach them	*(Edvardsson and Hansson 2005)*
Motivating: goal systems provide grounds to stimulate the agents to want to achieve the goals	*(Edvardsson and Hansson 2005)*
Coherent : goals should fit together and not conflict each other, establishing coherence among them	*(Edvardsson and Hansson 2005)*

Table 4 - Goal System theoretical framework: elements of a goal system

Elements of a goal system	
Values	*(Duiker 2001; Robert et al. 2005*
Goals	*(Edvardsson 2007)*
Targets	*(Edvardsson 2007)*
Indicators	*(Duinker 2001; Pintér et al. 2012; Modell and Grönlund 2007)*

3.6. Limitations of the methods

The main limitations of the methods concerns the design of the structured interviews. Having set questions can potentially limit the interviewee's ability to further expand into important topics. To address this limitation, I established further contacts with interviewees to get further details of about specific topics.

Another limitation is regarding the number of interviewees and time constraints to conduct more interviews. Acknowledging this limitation I ensured that I explored as much as possible what those interviewees could offer. Also, I carefully selected participants that had enormous experience and knowledge on VSS worldwide.

4. Results and analysis

This section includes the analysis of the results from the participation in the ISEAL Alliance 2014 Global Sustainability Standards Conference, ISEAL Alliance codes of good practices and website content, and interviews. The theoretical framework developed in the literature review was used to analyze the results.

4.1. ISEAL Alliance 2014 Global Sustainability Standards Conference

4.1.1. Conference speeches and panels

The conference focused on the need for trust from consumers, business and governments that VSS systems are establishing and meeting credible sustainability claims, and trust that the progress toward those claims are helping business, communities and countries achieve their sustainability goals. The central point of the discussions concerned the need to show evidence of VSS effectiveness in helping promote sustainability. Thus, the conference speeches and discussion panels were directly related to this research.

The topic given the greatest attention at the conference was the need to seek better understanding of the impacts of VSS in order to improve societal trust in them and gain more credibility. Notice here understanding not only means the need to measure and report, but also comprehend and communicate what those impacts mean toward achieving sustainability. An evidence of that need was presented in the speech of Unilever vice-president for sustainable business, Karen Hamilton. Hamilton's speech illustrated the use of a goal system that is integrated with the transition management approach. Hamilton explained that Unilever's sustainability policy set forth three major goals to achieve by 2020, focusing on transformational

changes (Frantzeskaki *et al*. 2012; Loorbach 2010) in sustainability issues (cf. Duinker 2001, Robert *et al*. 2005). The policy lays out a precise path to reach those goals, illustrating the application of the TM tactical phase (Frantzeskaki *et al*. 2012; Loorbach 2010) and the precision criteria for developing a goal system (Edvardsson and Hansson 2005) to a private policy strategy. Finally, Unilever measures the results of the policy quantitatively against the goals to make conclusions about progress and arrive at necessary changes in policy, demonstrating the possible use of elements of the conceptual framework such as adaptive management (Pintér *et al.* 2012), the TM reflexive phase (Frantzeskaki et al. 2012; Loorbach 2010) and the evaluability criteria (Edvardsson and Hansson 2005). In one example presented, Unilever has the goal of sourcing one hundred percent of agriculture raw material sustainably by 2020. According to Hamilton, Unilever has reached 43% of their goal. She then gave examples of transformational changes for communities and farms along their progress to that specific sustainability goal.

Hamilton added that purchasing sustainable-certified products is an important way of pursuing their sustainability goals. Nevertheless, as a main point, she noted that consumers expect companies to have evidence available that these sustainably sourced materials are indeed coming from efforts that actually aid sustainable development throughout the globe. Moreover, Hamilton said that consumers' trust is related to the evidence that impacts are indeed causing transformational changes toward sustainability. Given that Unilever is a large consumer of agricultural commodities, their sustainability policy can have an influence on supply-chains and VSS practices. Consequently, Hamilton concluded her speech with the message that

companies and VSS will have to be able to provide the evidence consumers are expecting, but how that can be done effectively is the challenging question.

Elaborating and recognizing the importance of this challenging question, ISEAL prepared a panel entitled “Responding to Impacts”. In this panel, Kristin Komives, ISEAL’s monitoring and evaluation manager, said that ISEAL and its VSS members are working on increasing the evidences of a credible sustainability claim. She said that although they are on their way towards providing evidences of progress, there are still gaps and advances to make. She reviewed the efforts made so far, and highlighted that credible impact assessment results are still rare. Additionally, she explained that “*recent studies suggest that observed changes cannot always be attributed to standard systems*”.

Komives then said another important finding is that there are limitations to what VSS can do by themselves. For example, how much can VSS drive and measure ecosystem changes in the long-term? This suggests a challenge for VSS’s potential to demonstrate the ability to help implement higher level goals e.g., SDGs (SDSN 2013) and provide evidence of that. To supplement, Komives pointed out that some VSS are already working on reporting their impacts through the implementation of the ISEAL Impacts Code which Komives believes is the beginning of the journey to strengthen, assess and demonstrate VSS systems impacts.

In agreement with Unilever’s vice-president, Jonathan Horrel from representing Mondelez International, another key purchaser in agriculture supply-chains, recommended that VSS focus on showing evidence by having clear objectives and working towards achieving them. Hamilton’s and Horrel’s arguments elucidate how a

goal system can be used in a sustainability policy and how these set of goals may drive demand for development of a goal system in VSS systems.

Adding some new substance into the discussion, Karen Johnson from the United Kingdom's Department for International Development (DfID) shared her view that VSS systems need to understand that goals are not only for companies but also for governments and public interests at large, presenting a possible relationship of public goals with VSS systems, and how useful VSS can be toward achieving public goals (cf. Wenban-Smith 2013). Johnson also talked about the potential these private VSS have to aid achieving international development targets. She mentioned that through sustainable practices, companies and standards can aid in tackling sustainability issues on the ground which can be very challenging for international development policies to address directly, substantiating the discussed potential of agricultural VSS to be a MoI for SDGs (SDSN 2013).

To summarize, the conference discussions validate this research's rationally by highlighting that VSS systems are a tool with the potential to help achieve private and public sustainable development policy goals, but they have to work toward showing evidence of their effectiveness in addressing sustainability issues. The conference outcomes also endorse the hypotheses by suggesting that a goal system should be integrated within the standards content and structure to help standards demonstrate and strengthen their progress on the road to sustainability. Finally, the conference points to the implementation of the ISEAL Impacts Code as a plausible transition management approach for VSS systems.

4.1.2. Informal interviews

I conducted the informal interviews during ISEAL Alliance 2014 Global Sustainability Standards Conference with the purpose of making contacts for future interviews, learn more about the VSS community's perspective on the research hypothesis, and collect inputs to adjust the research methods. Fourteen people with knowledge about VSS were informally interviewed during the networking and coffee breaks. I interviewed 14 conference participants representing 12 different organizations, of which two international cooperation and development agencies; two research and consulting institutes; and seven VSS organizations. Out of 14 participants, 13 expressed their agreement that it is relevant to further investigate whether and how goal system setting could (or currently does) happen within the VSS systems, and how establishing those could improve the VSS systems. With some reservations, participants generally believe it is possible for a VSS implement a system of goals: Seven participants (interviewees 1 to 7) expressed their agreement that the incorporation of goals is a possibility; five (interviewees 8 to 12) mentioned that it is possible, but a goal system for VSS can be a challenging idea; and two (interviewees 12 to 14) did not mention agreement or disagreement.

Most of the challenges mentioned by interviewees (8 to 12) concern measuring, reporting and verifying the impacts associated with these established sustainability goals, as well as how to attribute any impacts to VSS interventions. For example, one of the highlighted challenges is the difficulty in establishing transformational goals for ecosystems due to limitations in attributing effects of standards to that level of change. Another challenge is concerned to difficulties in addressing the difference in ecosystems and climate contexts of a VSS' geographic coverage. Also, VSS systems have their own agenda and structure, thus establishing goals would require several

changes and involve possible conflicts among different interests of different stakeholders.

Five participants (interviewees 1 to 5) not only communicated that this goal system approach is possible for VSS, but mentioned that this has already been started by some standards. A member of the ISEAL Alliance working team (interviewee 1) pointed out that VSS systems have already started implementing a goal system through the ISEAL Impacts Code. An agricultural VSS' representative (interviewee 2) also observed that they have started implementing the Impacts Code, and that seems to be a possible methodology for implementing a system of goals. However, this participant said that they would have to wait to finalize the implementation of the code to draw more conclusions.

Other possibilities and initiatives for goal systems were also mentioned in the interviews. Two representatives from an agricultural VSS (interviewees 6 and 7) mentioned that their standards have a set of non-measurable and general goals related to key sustainability concerns. These goals are then reflected in the standards' criteria to which compliance is measured by the use of indicators (i.e., control points in the framework), indicating the relationship among values and principles and control points described in the framework by Duinker (2001) and UNFSS (2010) and illustrated in Figure 1. One of the representatives from this same VSS went further and explained that in parallel to this VSS' verification processes, they have an impact assessment system to report improvement in sustainability. These improvements are measured by comparing the standards-compliant farms to a non-compliant control group. The representative suggested that indicators are used as the basis of their monitoring and assessment system, indicating that their impact assessment is based

on the adoption of the standards-compliant practices, which means the outcomes of the compliance and not necessarily impacts. This brings a question whether long-term impacts can be attributed to the mere implementation of the practices, suggesting a closer examination of this issue in a future research to enable more significant conclusions.

Despite the lack of significant conclusions about attributing impacts to this VSS, it is possible to conclude that this VSS limits their sustainability assessment to the use of a control-group outcome assessment associated with their verification processes without making the connection between impacts and measurable targets to enable measuring of progress toward their ultimate sustainability goals. Therefore, this case could not illustrate an implementation of goal system based on the adopted theoretical framework. Nevertheless, this VSS scheme innovates by involving the farmers in the assessment and monitoring processes, as it is suggested in the framework (Pintér *et al*. 2012; Edvardsson 2007) as processes and characteristics a goal system should have. Moreover, the representatives expressed that although this VSS system is still in its early stages of development, there are possibilities and potential for developing a goal system for this VSS that is in greater alignment with the framework proposed here.

Another initiative in the goal system approach was presented by Daniel Lobo (interviewee 3) from Bonsucro, a sugarcane VSS scheme. Bonsucro has a metrics-based criteria system mainly focused on GHG emissions limits. These criteria reflect quantifiable targets that the ethanol industry wants to achieve in what regards sustainability, reflecting the evaluabiilty properties of a goal system (Edvardsson and Hansson 2005; Volkery *et al*. 2006) and the presence of targets and goals

(Edvardsson 2007). Lobo further explains that Bonsucro metric targets are designed to make evident that ethanol industry is improving in sustainability and meeting European Union policy goals on climate change mitigation, demonstrating progress in transition pathway as described in the theoretical framework (i.e., Frantzeskaki et al. 2012; Loorbach 2010; Volkery *et al*. 2006; Wenban-Smith 2013). Moreover, these targets drive farmers to adopt sustainable practices (cf. definition and purpose of targets in Edvardsson 2007) to mitigate emissions. In regards to this research hypothesis, Lobo says that a goal system focused on measurable targets is needed to show how much improvement VSS are making in sustainability.

Lobo also gave a speech in the conference panel that discussed VSS as agents of trust in the supply-chain. He talked about Bonsucro's measurable performance system and the importance of it for building trust. During his presentation, I asked Lobo if he thought that in using a goal system to show that standards are working towards desirable and measurable sustainability goals would be a way of building trust. Lobo again agreed with the hypothesis of this research. Further, when discussing the link between a VSS's goal system and SDGs during the informal interview, Lobo pointed out that VSS systems need a direction to target their sustainability efforts. He says that international sustainability goals are needed to give that direction to VSS schemes.

Others also expressed their opinion regarding global sustainable development goals. The interviewee 4 mentioned that some VSS are already trying to integrate aspects of international agreements and recommendations into their standards. This interviewee stated that GlobalG.A.P, an agricultural VSS, is establishing new

standards in which they tried to absorb several UN sustainability-related recommendations into their standard structure.

In another case, interviewee 14, representing an agricultural VSS, manifested disagreement with the potential influence of SDG's on VSS systems. He mentioned that VSS are well established and they have been committed to addressing sustainability issues that governments have not dealt with for several years. The participant questions why VSS systems should be concerned in adapting to a government demand when private standards are already advanced in these matters. This case illustrates one of the challenges mentioned by other interviewees about VSS organizations having their own agenda and, thus, facing difficulties to change their standards structure and content.

In summary, the conference participants, representing a variety of organizations, agree with some reservations that establishing and integrating an effective goal system to VSS' management and governance systems is a way to enable these standards to lay out a solid sustainability pathway as well as providing foundation to strengthen, assess and understand impacts all while showing their actions progress of clear contributions to sustainability. The discussions with participants also showed examples of how VSS can build a goal system and the challenges and obstacles this idea may face. Additionally, the participants illustrated how SDGs and public goals could have an effect on the VSS' structures. Finally, the informal interviews provided a track for future research on study cases to understand better which and how agricultural VSS are developing goal systems.

4.2. ISEAL Alliance codes of good practices: standard-setting and theory of change

4.2.1. The impacts code

ISEAL Alliance is a worldwide membership association of sustainability standard organizations. ISEAL Alliance is currently formed by 21 members, from which 9 are agriculture and forestry VSS systems. Through requiring compliance with its "Codes of Good Practices", ISEAL aids in the setting and improvement of sustainability standards. ISEAL claims to be a global leader in defining good practices for sustainability standards development and improvement by way of directing VSS toward more effectiveness in delivering sustainability impacts. ISEAL's mission is "to strengthen sustainability standards systems for the benefit of people and the environment" (ISEAL Alliance 2012). ISEAL aims to improve sustainability standards impacts and effectiveness. ISEAL acknowledges that standards are expected to be able to demonstrate their impacts and results because showing evidence that supports the standard's sustainability claim is important for credibility. This is clearly remarked in some of the ISEAL's goals which are "*Demonstrate and improve the impact of sustainability standards systems"; "Improve the effectiveness of sustainability standards systems"; "Increase the adoption of sustainability standards systems"; "Define credible practices for sustainability standards systems"; "Ensure organizational and financial resilience of the ISEAL Alliance"* (ISEAL Alliance 2013a, 13).

In view of that, the "ISEAL Code of Good Practice for Assessing the Impacts of Social and Environmental Standards Systems (the Impacts Code)" was developed to help VSS systems improve and demonstrate their sustainability impacts and effectiveness in achieving their sustainability claim. There are different components of

the code that relate to the chosen theoretical framework and hypothesis. As a matter of fact, ISEAL Alliance used the Bellagio STAMP (Pintér *et al*. 2012) as one reference in developing the impacts code.

The code entered into force in 2010. However, the ISEAL Alliance explains that:

> *"Because building an M&E system takes Time, organizations that were ISEAL members prior to the formal adoption of the Impacts Code were granted three years to come into compliance. These ISEAL members will be evaluated for compliance with the code in 2014"* (ISEAL Alliance 2013b, 5).

Interestingly, during the ISEAL conference in May 2014, during an informal interview, a participant stated that the agricultural VSS system he was representing is still in the early stages of implementing the code. Consequently, the effectiveness of the implementation of this code as a foundation for implementing a goal system in light of the transition management approach cannot be assessed in practical matters yet since VSS are still implementing it. The result analysis of the code will therefore be based on its contents as well as its revision draft versions and ISEAL Alliance's website content.

The foundations of this code are a defined "theory of change" and a "Monitoring and Evaluation System (M&E)". The theory of change is the intended changes in sustainability issues that the standards want to make along with the strategies to achieve them. The code has one chapter that clearly specifies how that the VSS systems should define the desired social, environmental and economic changes they want to make in the world, indicating the lay-out of a transition pathway as proposed in the TM approach framework (Loorbach 2010; Frantzeskaki *et al*. 2012; Köves *et al*. 2013; Neuvonen *et al*. 2014). The code states that VSS should establish ultimate long-term goals in sustainability issues to which the results will be compared to assess and

report progress, demonstrating use of key elements of the framework i.e., the precision and evaluability criteria (Edvardsson and Hansson 2005), the relationship among goals and values (Duinker 2001; Volkery *et al.* 2006), MRV and feedback processes(Pintér *et al.* 2012) and reflexive TM approach phase (Loorbach 2010; Frantzeskaki *et al*. 2012; Köves *et al*. 2013; Neuvonen *et al*. 2014).

The VSS systems also have to establish a clear set of supporting strategies to increase the employment of standards-compliant practices, as part of the pathway to reach the desired change (cf. TM tactical phase in Loorbach 2010; Frantzeskaki *et al*. 2012; Köves *et al*. 2013; Neuvonen *et al*. 2014). This is a reflection of ISEAL's assumption that the increase of standard uptake leads to wider impacts which in turn will eventually raise the credibility of the standards. The effectiveness of these strategies should also be evaluated by looking how much they are increasing the use of standards-compliant practices (sustainable practices defined in the standards of a VSS system) which lead to the desired change. Expected strategy outcomes should be established in a target format (cf. Edvardsson 2007). The relationship between these strategy outcomes (or targets) and the other elements of a standard's theory of change is shown in figure 5, which is a representation of the relationship among the various elements of a possible VSS' theory of change.

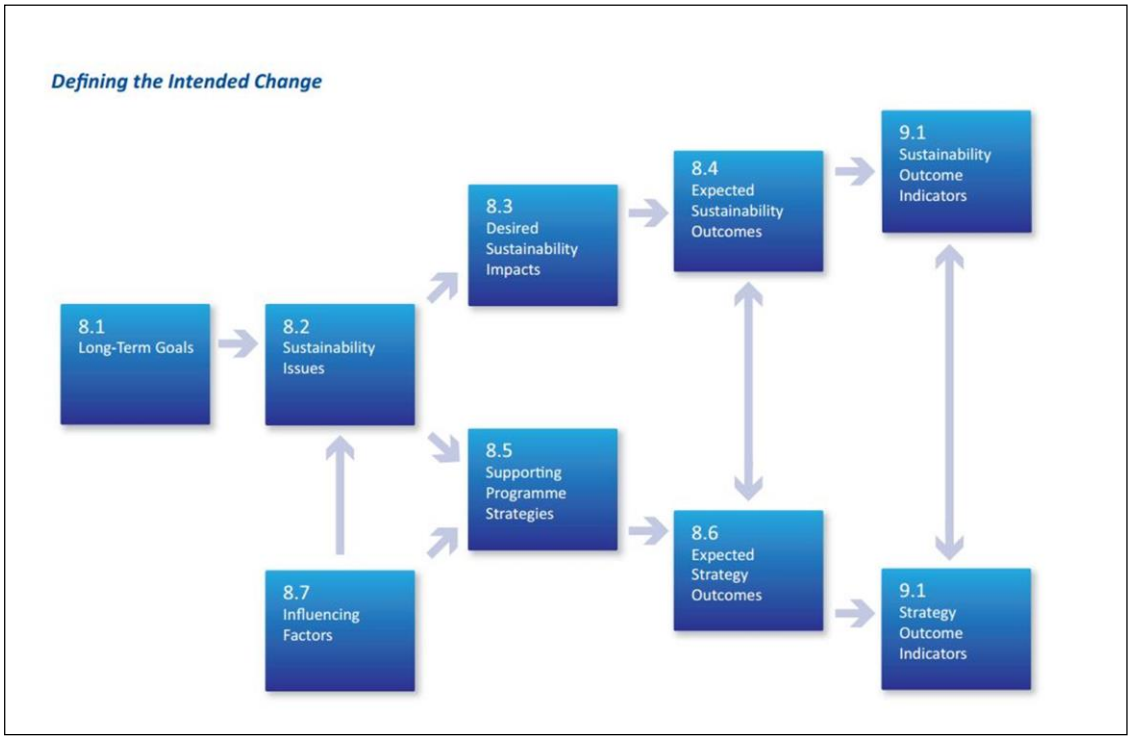

Figure 2 - VSS' theory of change (ISEAL Alliance 2010, 14)

In this chapter, the code requires that VSS systems look at sustainability issues (cf. values in Duinker 2001) and their vision of sustainability to define the long term goals, matching recommendations of the framework (i.e. Pintér *et al*. 2012). The code also requires that VSS systems explain their desired impacts and desired outcome of compliance in the format of quantitative or qualitative targets that are related to the goal and its associated sustainability issues identified by the standard managers, illustrating use goal system elements as discussed in the framework (Edvardsson 2007) and the relationship described by Figure 1 in section 2.5.

The outcome of compliance is the targeted result with compliance in the short and medium terms, while impacts are the long-term targeted changes. The code does not clearly explain what the relationship between impacts and outcome of compliance is. However, the diagram in figure 5 shows that outcome with compliance lead to

impacts. Additionally, there is a distinction in the time frame of these targeted changes (i.e. short, medium and long terms). Therefore, the interpretation here is that the code proposes targets in different timeframes; short- and medium-term outcomes would be the sub-targets to reach the ultimate target (long-term impact). Nevertheless, the standard-compliance outcome can be simply be expressed in terms of implemented standard-compliant practices as the following passage shows:

> *"Short and medium-term outcomes should be expressed in terms of the desired behaviour in individuals or the desired practices in certified entities"* (ISEAL Alliance 2010, 13).

Further, despite the differentiation between outcome and impacts, the code focuses more on outcomes and increasing compliance and uptake of VSS, and not so much on assessing and improving impacts towards the desired change, assuming that changes will occur by implementing VSS compliance requirements. Thus, one may raise the question that this could mean difficulties in measuring the impacts that could arise since merely complying with the standards, as explained by Wenban-Smith (2013), does not necessarily indicate existence of sustainability impacts.

In summary, this chapter of the Impacts Code requires standards to define their intended change and detail how they are going to achieve this change in measurable means. The following passage from the Impacts Code explains how this theory of change is structured and also illustrates the use of a Transition Management (TM) approach methodology:

> *"This section requires standards systems to document their understanding of how change is intended to occur as a result of their activities. Monitoring and evaluation will then allow them to test and refine their thinking through data collection, analysis and adaptive management. Describing this thinking will inform stakeholders how standards systems intend to make changes in the world, where change is likely to occur and what should be measured to track progress towards change"* (ISEAL Alliance 2010, 11)

The Impacts Code suggests the use of a method of the TM approach (Frantzeskaki *et al*. 2012; Loorbach 2010; Köves *et al*. 2013; Neuvonen *et al*. 2014) because VSS systems have to define processes of change – a transition – through identifying the desired changes related to sustainability issues (i.e.,TM strategic phase); establishing goals and designing a pathway of strategies to reach that vision (i.e.,TM tactical phase); and creating a means of evaluating the progress by comparing outcomes against goals and targets in addition to fostering a learning process with adaptive measures (i.e.,TM reflexive phase). A presence of adaptive management practices also indicate that strategies and tools are being tested which reflect the TM experimenting phase approach.

The code specifically defines what adaptive management is:

> *"The use of regular monitoring and evaluation in order to adjust or modify actions so that long-term goals can be obtained, while minimizing unintended consequences. It is a systematic process for continually improving and learning from the outcomes (results) of inputs and activities"* (ISEAL Alliance 2010).

This definition demonstrates how the code requires the VSS systems to adopt a theory of change that can support continuous review and revision processes (cf. Pinter *et al*. 2012) through a cycle where information is fed back into the goal system, so that adaptions can occur to strengthen the system (cf. Edvardsson and Hansson 2005). Therefore this goal system supported by the Impacts Code is evaluable (cf. Edvardsson and Hansson 2005).

Evaluability of this proposed goal system is supported by the Impacts Code's required Monitoring and Evaluation (M&E) system as well as the learning and improving processes, which reflect the adaptive management practices. Standards need to be evaluated in three ways: 1. Assessment of whether outcomes and impacts

are contributing to the long-term change they seek; 2. Evaluation if the impacts and outcomes are attributable to the work of the standards and; 3. Assessment of the effectiveness of the strategies that were adopted to foster achievement of the targets.

The M&E system consist of establishing a baseline for future comparison and indicators to monitor and measure progress, as suggested in the Goal System framework (e.g., Pintér *et al*. 2012). Indicators are also defined after sustainability issues that the targets are addressing, illustrating relationship among goal system elements (cf. Duinker 2001 and Figure 1). While the code recommends the establishing of a baseline on the basis of its importance, as mentioned by Pintér *et al*. (2012), it does not make that obligatory. The code says VSS systems should adopt it whenever possible. It is important to highlight here that the absence of a baseline could pose difficulties to assess the real contributions of the VSS systems. Nevertheless, the reasoning behind this flexibility in the code might reflect a challenge VSS systems would have in establishing a baseline in the beginning of the development of the goal system. Bringing out this challenge, representatives of some VSS systems (e.g. Fairtrade International, Rainforest Alliance and UTZ Certified) and a researcher from Wageningen University & Research Centre expressed their disagreement with the initial establishment of a baseline for the M&E system (ISEAL Alliance 2014c).

The Impacts Code also details M&E system's steps and process of data collection and management, specifying human resources and responsibilities as well as consideration of economic viability of the assessment project, as recommended in the conceptual framework of goal systems (e.g. Pintér *et al*. 2012), along with reporting and feedback processes (cf. Pintér *et al*. 2012; Edvardsson and Hansson 2005). The

feedback processes are part of the adaptive management definition and is detailed in the “Learning and improving” chapter of the code.

The code’s learning and improving section explains how VSS systems can feed results of the assessment back into the goal system, as it is recommended in the literature (Pintér *et al*. 2012; Edvardsson and Hansson 2005) to improve the VSS scheme's actual standards, criteria, or codes of practices as well as their "theory of change". This would signalize to the system managers and governance what modifications should be made in the criteria in order to reach the VSS system's desired impacts more effectively. This illustrates the influence of the targets onto the standards criteria and practices (cf. Edvardsson 2007), as described in the framework of relationships between a goal system and a VSS system represented by Figure 1 in section 2.5.

However, the challenges concerning this influential relationship and its management need to be further explored. Some of the challenges are expressed in the comments of Marion Karmann from Forest Stewardship Council (FSC) during the reviewing process of the Impacts Code. She says that it is not possible and not in the interest of FSC to identify and make changes in the content of the standards based on the code’s adaptive management proposals:

> *“Don’t forget that scheme owners do not necessarily have the power to directly change the content of the standards – for good reasons. For example, when the schemes are (bottomup) ‘multi-stakeholder based, chamber balanced, consensus oriented’ – then the stakeholder processes might decide differently from what the scheme owners secretariat suggests (top-down) to change. (A potential ‘strategy’ to overcome this conflict of interests could be to invite the stakeholders so often for consultations, that they become too tired to invest the time to identify the changes. We would never apply this strategy”* (ISEAL Alliance 2014c, 23).

Yet, the decision of not applying this adaptive management strategy can become a significant obstacle for VSS systems to achieve desired changes because simply implementing standard-compliant practices will not always guarantee that sustainability impacts will occur. This is a chance VSS systems should take to improve their systems and impacts as well as show evidence of those improvements and impacts.

The impact code also addresses other elements proposed in the theoretical framework such as involvement of stakeholder, transparency and effective communication (Pintér *et al*. 2012; Edvardsson 2007; Edvardsson and Hansson 2005). The code has a comprehensive section for participation of stakeholders. It covers identification, consultation and engagement of stakeholders in the assessment system's designing and maintaining processes (cf. Pintér *et al*. 2012). The code also specifies that stakeholders are also source of data and feedback for the evaluation and adaptive management processes. The code particularly mentions that stakeholders must be informed how and when to participate, fulfilling the framework recommendations on involvement of stakeholders in the architecture of the goal system (Pintér *et al*. 2012; Edvardsson and Hansson 2005).

As for effective communication (cf. Pintér *et al*. 2012; Edvardsson and Hansson 2005; Edavrdsson 2007), the code recommends different measures, but lacking some requirements on making the results and reports more accessible. Kate Kilpatrick representing Far Trade International observed the need for improvement in the communication guidelines through different comments during the code's revision consultation. The following comment summarizes the main concern regarding effectiveness in communication as supported in Pintér *et al*. (2012):

> *"Not sure where it fits, but there should also be an aspirational clause about the communication of ME data, asking Schemes to consider how to present and communicate ME data in more accessible ways. This includes translation into relevant languages, use of different formats, use of infographics video etc."* (ISEAL Alliance 2014c, 2).

Given the importance of communication for a goal system (Pintér *et al*. 2012; Edvardsson and Hansson 2005; Edvardsson 2007), this is definitely an area that needs more attention. On the other hand, ISEAL has dedicated attention to transparency matters in the code. The code highlights requirements for public disclosure of information about the M&E system; including data, information and description about goals, intended impacts and indicators. Yet, in order for VSS systems to improve accessibility, transparency and, consequently, credibility of their goal systems, they would need to work with additional steps that are not required in the code for an effective communication of the results and processes.

To summarize, this section analyzed the ISEAL Code of Good Practice for Assessing the Impacts of Social and Environmental Standards Systems (the Impacts Code) in light of the Transition Management and Goal System frameworks. Looking back at the hypothesis, agricultural VSS community, through ISEAL Alliance and its Impacts Code, sees the need to integrate an effective goal system to their management and governance systems to enable them to lay out a sustainability pathway as well as strengthen, assess, understand and demonstrate their impacts in relation to their clear contribution to sustainability. The ISEAL Impacts Code illustrates that this integration can be done using significant elements of the Transition Management and Goal System frameworks. Nevertheless, there are some challenging aspects in implementing a goal system, as it is defined in the theoretical framework, when using the ISEAL's proposed theory of change and M&E system. Additionally, not all components of the theoretical framework could be applied to this

analysis. Although the Impacts Code does describe processes associated to the "achievement-inducing or rationality criteria" framework, it does not suggest or provide criteria for how effective goals and targets would look like. Moreover, the use of the criteria to assess effectiveness of goal system implementation would require a study case on the VSS system's application of the code.

4.2.2. The Standard-Setting Code

The ISEAL Code of Good Practice for Setting Social and Environmental Standards (the Standard-Setting Code) is a document that lays out the basis for standard-setting processes as well as structure and content of standards. In order to foster credibility of their standards and attain to other ISEAL principles, VSS systems are required comply with the Standard-Setting Code. There are three aspects related to goal systems and transition management in this code. One is the requirement to establish clear sustainability claims and goals; another is the indication of the relationship among VSS elements and a goal system; the third is the revision of the standards according to the outcomes.

The Standard-Setting Code requires that the VSS should state and define their *"Clear social, environmental and economic outcomes that the standard seeks to achieve and how those are linked to the organization's intended change (see ISEAL Impacts Code)"* (ISEAL Alliance 2014b, 9). This suggests that the code makes clear reference to the impacts code and the theory of change, implying VSS should implement different properties of the Goal System and TM approaches such as establish clear sustainability goals (cf. Pintér *et al*. 2012; Edvardsson 2007; Volkery *et al*. 2006) and a pathway to reach those goals (cf. Loorbach 2010; Neuvonen *et al*. 2014; Köves *et al*. 2013; Frantzeskaki *et al*. 2012).

Furthermore, the code indicates that standards should only be built with criteria that relate to achieving the VSS's stated sustainability goals:

> *The standard-setting organization shall demonstrate in its standard that criteria are included to address all of the defined social, environmental and economic outcomes, and that only criteria that are relevant to meeting these outcomes are included* (ISEAL Alliance 2014b, 15).

This points out that VSS should be considering the relationship between the goal system and the standards elements when developing a goal system, showing that a goal system will have influence in how the criteria are defined, illustrating the single-way relationship between a target and a criterion in the framework of relationship among goal system and VSS system represented in Figure 1-Relationship among Goal System and VSS system elements (adapted from Duinker 2001 with elements of our theoretical framework) in section 2.5.

Similarly, the relationship among values, principles and goals (cf. Duinker 2001) is considered in this code:

> *"The standard-setting organization shall ensure that any claims made about the standard or about compliance are consistent with the defined social, environmental and economic outcomes. (See also ISEAL Impacts Code 6.5)"* (ISEAL Alliance 2014b, 15)

The code is clear in its support to the idea that the sustainability principles and values – represented by the VSS's vision of sustainability i.e. the claim – should be related to their sustainability goals i.e., the desired outcomes. Although matching a VSS's sustainability claim with its sustainability goals is essential to assess and report progress, ISEAL does not make it mandatory for standards in the entry level (associate level) of memberships. Thus, VSS systems would have to dedicate attention to this point to ensure the developing of an effective goal system.

Finally, the Standard-Setting Code requires that VSS systems make revisions of their standards to ensure that they are on the right path to achieve the sustainability goals and fulfil their claims, matching the recommendations for goal systems from the framework (cf. Pintér *et al*. 2012; Frantzeskaki *et al*. 2012; Loorbach 2010; Edvardsson and Hansson 2005):

> *"The standard-setting organization shall review a standard at least every five years for continued relevance and for effectiveness in meeting its stated objectives and, if necessary, revise it in a timely manner"* (ISEAL Alliance 2014b, 13)

This requirement shows that the VSS community, represented here by ISEAL and its VSS members, understands the importance of and uses the processes of a goal system and elements of the transition management approach (reflexive phase), as recommended in the theoretical framework, when establishing a goal system.

In summary, the Standard-Setting Code has been analyzed in light of the chosen theoretical framework. This analysis indicates that the code supports the hypothesis that VSS systems should integrate an effective goal system to their management and governance systems to enable them to lay out a sustainability pathway as well as strengthen, assess, understand and demonstrate their impacts in relation to their clear contribution to sustainability. This code does not provide many linkages with the theoretical framework, but often refers to the Impacts Code for further consideration about how VSS standards should manage their processes of changes through a goal system.

4.3. Interviews

I carried out the structured interviews throughout July 2014 to address the objectives of this research and further explore the hypothesis. More specifically, the purpose of the interviews was to investigate the potential of a goal system as tool to define a sustainability pathway for agricultural VSS systems, improve their usefulness, and establish a basis for demonstrating effectiveness and impact of these standards in contributing to the achievement of sub-global sustainable development goals.

The interviewees Daniele Giovannucci, Fabiano Silva and Frank Eyhorn all have an expansive knowledge of agricultural VSS. Daniele Giovannucci has worked internationally with research and assessment of sustainability issues since 1992. He is the co-founder and president of the Committee on Sustainability Assessment (COSA). COSA is a global consortium of more than 30 institutions dealing with assessment and management of sustainability.

Fabiano Silva holds a Ph.D. in forest sciences and he has been working with agricultural VSS since 2005. Silva is currently a university professor and sustainability consultant and an auditor for third-party verification in VSS implementation processes.

Frank Eyhorn has a Ph.D. in impacts of organic production. As a co-team leader at Helvetas Swiss Intercooperation, Eyhorn has competence in areas related to this research such as organic agriculture, fair trade, certification and sustainable livelihoods.

One of the objectives of the interviews was to understand the existing possibilities for demonstrating and improving impacts as well as measuring

effectiveness of agricultural VSS, examining how these possibilities could be related to the hypothesis.

Fabiano Silva explained that VSS demonstrate and improve their impacts through establishing criteria which tackle key sustainability issues. Silva described that a sustainability issue is identified, then principles and criteria for best practices are created, showing the relationship among the elements of a VSS as described in the framework on relationships (See Figure 1 in section 2.5).

To illustrate, Silva said that once a farmer implements sustainable practices and, thus, complies with criteria, sustainability issues are addressed and principles are realized (cf. Potts et al. 2014; Hatanaka et al. 2012; UNFSS 2010), demonstrating and improving the VSS' sustainability impacts; implying that the farm's performance in meeting the criteria would lead to the sustainability improvement. However, as shown in the literature, the mere compliance with a VSS does not automatically lead to sustainability impacts. Silva's standpoint implies, then, that VSS systems might not have an assessment system that can provide sufficiently detailed information about progress and effectiveness of these standards in promoting sustainability.

Silva added that this performance is assessed through the use of indicators for each sustainability issue the criteria aims to tackle, describing the role of indicators in a sustainability initiative (cf. Duinker 2001; Pintér et al. 2012; Modell and Grönlund 2007) and the relationship among VSS elements (see Figure 1 in section 2.5). Daniele Giovannucci and Frank Eyhor also mentioned the use of indicators, including that indicators can be used to monitor the performance in key sustainability issues (cf. Pintér et al. 2012). Eyhorn added that to demonstrate and improve impacts of adopted VSS, one can additionally "*mandate or invite a credible research institution to conduct*

a profound impact analysis as per established best practice". Giovannucci also shares the same opinion about impact assessment, implying that the combination of performance monitoring (PM) methods and impact assessment (IA) is a strong way to demonstrate and improve impacts. While IA serves as the basis for demonstration of impacts, PM serves as direction for internal improvement. This illustrates the MRV processes presented in the goal system framework (Elder et al. 2014; Kalfagianni 2014; Aras and Crowther 2012; Pintér et al. 2012; Daviron and Vagneron 2011; Giovannucci and Ponte 2005; Edvardsson and Hansson 2005), and the reflexive phase of the TM approach (Frantzeskaki et al. 2012; Loorbach 2010).

Eyhorn's answers also implied the use of the TM reflexive phase, particularly adding the idea that the results of the impact assessment can be analysed with the participation of stakeholders, as recommended by the theoretical framework (Neuvonen et al. 2014; Köves et al. 2013; Pintér et al. 2012; Edvardsson 2007). Moreover, Eyhorn's opinion included the establishment of a baseline (cf. Pintér et al. 2012) to compare the indicators of a group of standards-compliant agents with a non-compliant group overtime to measure effectiveness, implying that progress can be measured by looking at how distant the changes are from the baseline.

Giovannucci also mentioned the idea of monitoring and assessing changes. He said that the effectiveness is measured through the VSS' instituting of a clear theory of change (TOC), including the establishment of indicators to demonstrate and measure changes followed by an assessment process, as it was discussed in the analysis of the ISEAL's impacts code in section 4.2.1.

Giovannucci added that another way to measure effectiveness is to go beyond the TOC and carry out an impact assessment, but that would require "*many more*

indicators and more detailed work – this is what COSA does". Giovannucci specifically refers to COSA (2013) to emphasize his concept of impacts. COSA defines impacts:

> "*…as the intended or unintended longer-term effects (both positive and negative) that can be attributed to a specific intervention or investment and can include aspects such as competitiveness, ecosystem health, or consistently different income levels*" (COSA 2013, 2)

Figure 3 illustrates the concept of impact as described above, showing the importance of considering time and the differentiation among intervention, outcome and impact. In fact, as noticed in the literature review, there are some conceptual confusion in terms in the impact studies when attributing impacts to VSS' interventions. Studies generally describe interventions and outcomes as the impacts agricultural VSS.

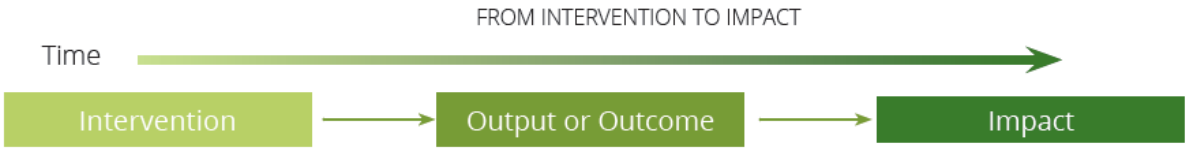

Figure 3 - Difference among interventions, outcomes and impacts (COSA 2013, 30).

COSA (2013) make the distinction and adds the definition of interventions and outcomes:

> "*'Project Interventions' or 'Inputs' are the resources and activities used to carry out or execute a project or intervention, and can include financing, know-how, and training. The 'Output' or 'Outcome' is the direct, immediate or short-term result. It is the result of the intervention and can include, for example, the adoption of different cultivation practices, new organizational practices, or the use of new post-harvest methods*" (COSA 2013, 29).

Giovannucci's remarks on going beyond the TOC to perform an impact assessment (IA) suggest that the IA is more complex than a VSS' TOC and its

monitoring and evaluation (M&E) processes. This observation also implies that ISEAL's Impacts Code would not have a strong focus on measuring the unintended and intended effects. For instance, as noticed in section 4.2.1, the Impacts Code emphasizes monitoring and evaluations of interventions and outcomes, and leaves the idea of impact assessment very open without describing how VSS should link the assessment of outcomes to impacts. In fact, the code does not even request VSS to develop indicators to monitor how and when the desired impacts are being reached.

Silva also made a conceptual remark. He said that when measuring effectiveness one must understand the difference between a performance-based and metrics-based VSS. In the first case, compliance with the VSS depends on the agent's performance in applying and managing the sustainable practices when following the criteria. Thus, the performance is assessed through indicators of quality of management, always looking to see if the implementation of the standards-compliant practices match a desired quality management. Thus, it is the effectiveness in performing the practices that will say whether the agent is complying with the criteria or not.

Therefore, effectiveness of these type of VSS would be measured by looking at the standards outcomes and not its impacts. However, as discussed before, mere implementation of the standards-compliant practices does not guarantee that there are positive impacts as defined in COSA (2013). Yet, VSS effectiveness would need to be measured by how much they are progressing towards the desired long-term sustainability change they are claiming. This observation supports Giovannucci's argument that in order to go beyond the TOC and its M&E system, which focus on

outcomes rather than impacts, a comprehensive impact assessment with other types of indicators would be needed.

Consequently, Silva's observation also implies that indicators for outcomes of VSS implementation, which are usually used as control points (cf. UNFSS 2010) in verification processes, would be different from indicators for measuring impacts and progress of VSS toward sustainability goals in a goal system. This conclusion validates the relationship framework proposed in Figure 1 in section 2.5. Further, this discussion confirms the finding the impacts code does not include indicators to monitor how and when the desired impacts are being reached. Moreover, this discussion indicates that the link between an outcome and impacts, which could not be clarified through the analysis of the ISEAL Impacts Code's TOC, may be made clearer through Daniele Giovannucci's idea of impact assessment as a way to supplement measurement of effectiveness; further implying a connection between control-points from the VSS system to indicators of impacts through the outcomes of implementation of VSS-compliant practices. Furthermore, these considerations need to be taken into account when discussing goal systems for VSS system because, according to Fabiano Silva, most agricultural VSS are performance-based schemes. With the exception of Bonsucro, all other ISEAL members are performance-based VSS (e.g. Rainforest Alliance Sustainable Agriculture Network, Forest Stewardship Council, Utz Certified, GlobalG.A.P, etc).

Silva also explained about the metrics-based VSS schemes. He said that these VSS create quantitative targets the VSS adopters have to meet, and metrics indicators are used to monitor and assess their compliance. An example of this would be GHG emission caps or reduction targets that sugar-cane producers would have to meet in

order to comply with Bonsucro's criteria. Silva said Bonsucro is the only agricultural VSS that has a solid metrics-based standard. Silva's explanation of Bonsucro matches Daniel Lobo's description already presented earlier (see section 4.1.2). Although a closer examination of agricultural VSS such as Bonsucro would be required to draw more substantial conclusions about the relationship between the standard's metrics system and a goal system, the use of metrics-based targets and indicators to express what the sugar-cane wants to achieve certainly contains a closer relationship between outcomes and impacts of the VSS that is not clearly defined for the performance-based standards.

The structured interview was also used to address the third objective of this research, aiming to understand the perspective of the VSS community on the possibility of linking higher-level sustainability goals (i.e., SDGs) with VSS' structure and objectives.

Eyhorn, Giovannucci and Silva believe that the creation of the SDGs will influence the agricultural VSS to try to align with these global goals. More specifically, Eyhorn said that if the VSS schemes do not align with the new SDGs, "*they* [agricultural VSS] *will not be considered as a contribution to sustainable development, which would be a lost opportunity*" (Eyhorn 2014 person. communication). Silva added that an evidence the agricultural VSS will want to align with SDGs is that many of them have already been reviewing their standards to align with UN level agreements and recommendations on sustainability issues, matching the opinion of interviewee 4 in the previous section.

Moreover, Silva explained that it is very possible for the VSS to align with higher-level goals through the use of principles and indicators. Silva illustrated that

SDGs would define the sustainability issues to be addressed. Then VSS would design their principles based on these sustainability issues, reflecting the literature's explanation of the relationship among goal and values (Duinker 2001; Robert et al. 2005). Here Silva showed that the relationship between SDGs and a VSS' goal system could happen through values in the goal system framework (see Figure 1 in section 2.5). Principles, according to Silva, are general goals that can be adapted to reflect global goals. Then, the indicators would be the elements that could bring the global goals to local contexts. To demonstrate, Silva said that a global goal would be the compliance with environmental law, and an indicator for Brazil would be compliance with the Brazilian Forest Code.

Eyhorn also expressed that it is possible to relate SDGs to VSS goal systems by saying that "*the VSS goals should be a sub-set of the SDGs*" with the reservation that we would have to wait to see what the final SDGs look like. Giovannucci has a precautionary perspective. He says it is very possible to link SDGs and VSS' sustainability goals as long as SDGs do not become too specific because "*VSS are well-established and will be unlikely to alter radically*" (Giovannucci 2014 personal communication), agreeing with the perspective of some of the interviewees from section 4.1.2.

Silva said that one challenge the process of aligning SDGs with VSS goal systems could be the case where there would be a need to include sustainability thematic elements that are not covered by these agricultural VSS; especially for the case of ISEAL VSS members because they have been working toward homogenization of their standards, and this process could be leaving essential elements of sustainability behind. However, Silva believes if the UN brings changes in

what and how sustainability issues are defined and addressed, VSS would still try to incorporate these changes within the standards principles. Again, Silva's speech describes the conceptual relationship between SDGs and the VSS systems and how they are bridged through values.

The interview also sought to clarify, from the perspective of the VSS community, if VSS systems could indeed adopt the goal system and transition management approaches, and what practical challenges these ideas would face.

The interviewees believe it is certainly possible for agricultural VSS schemes to establish a goal system. Eyhorn added these standards should establish a goal system "*in order to align with the greater efforts of sustainable development, and in order to measure/report on relevant impact in a harmonized way*" (Eyhorn 2014 pers. communication). Eyhorn's perspective is aligned with this research's hypothesis that goal systems will enable them to lay out a sustainability pathway as well as strengthen, assess, understand and demonstrate their impacts in relation to their clear contribution to sustainability. Giovannucci not only believes on this possibility, but said that most VSS already understand that they already have goal systems which suggests that studies be conducted to investigate what these goal systems are and how they could be related to this research's framework.

Silva pointed out to some conditions for establishing a goal system. He said that there would have to be an adjustment to the regional contexts (Edvardsson and Hansson 2005) through adaption of targets and indicators which he thinks could be a big challenge. To demonstrate, he said that Bonsucro established a target saying that the frequency of accidents in sugar-cane farms should be lower than 45 accidents per million hours. However, agriculture in the state of São Paulo, a large sugar-cane and

ethanol producing state, has a much lower occupational accident frequency. The average for São Paulo is around 4 per million of hours. Therefore, there is a large gap between a target, which was set by Bonsucro internationally, and the local context. Consequently, this target cannot stimulate any improvement of existing labour safety conditions in that state in Brazil.

Eyhorn raised the issue of the difficulties in agreeing on a universal system that aligns the VSS' system of goal with other recommendations and interests such as SDG's, COSA's guidelines, ISEAL's Impacts Code and other stakeholder's interests. He warned that the goal system can become too complex when attending different directives, but it should be made simple, measurable and applicable to all uses. Eyhorn recommended the use of SMART acronym which means that goals should be Specific, Measurable, Accepted, Realistic, and Time-bound, suggesting criteria for setting the goal system (cf. Edvardsson and Hansson 2005).

Giovannucci was generally concerned about the challenges of bringing about changes within VSS systems. He said the agricultural VSS systems "*have an existing and more or less functional business model and global customers. Change will not be welcome if it is large*" Giovannucci shares the view of some participants of the ISEAL conference as discussed in section 4.1.2.

Given that agricultural VSS systems can implement a goal system, interviewees were also asked about the structure of a goal system in order to understand if the framework of goal systems embedded in the hypothesis is actually applicable to VSS systems.

The interviewees provided different, but complementing views on what the basis for creating a goal system could be. Silva emphasized that when creating a goal system one must assess and understand the local reality of where the system will be implemented (cf. Edvardsson and Hansson 2005). He described that once the sustainability issues are identified and goals and indicators are created, one must assess the performance of an indicator of the region to which the goal system will applied before targets can be established. Here, Silva's description suggests that a baseline (cf. Pintér et al. 2012) should be established according to the particularities of the context (cf. Edvardsson and Hansson 2005) in which the goal system will be used. Additionally, Silva's description also indicate the use goal system elements mentioned in the framework such as values (Duinker 2001; Robert et al. 2005), goals (Edvardsson 2007; Pintér et al. 2012) and indicators (Duinker 2001; Pintér et al. 2012; Modell and Grönlund 2007). Silva's perspective also exemplify the relationship among those elements as illustrated by Figure 1 in section 2.5.

Silva insisted that one cannot know what the desired future is without comprehending the present condition of a reality. He explained that "*VSS are seeking to change a reality, but one can only change a reality by looking at the reality*" (Silva 2014 personal communication) (my translation). Silva's argument resembles the strategic phase of transition management methodologies where the current problems are structured (Frantzeskaki et al. 2012; Loorbach 2010). Additionally, Silva's perscpective also implied that when incorporating any higher level goals, the VSS schemes should look at the local realities to make adjustments.

Eyhorn recommends that a VSS goal system should be based on the new SDGs, suggesting that a VSS can incorporate the SDGs and be a potential MoI of

these higher level goals. Eyhorn also advocates that the VSS system should use elements of the COSA system. The COSA system:

> "*offers multiple tools for gathering, comparing and sharing information, including SMART indicators, field technologies, and implementation and analysis methodologies (…) providing a sound basis for comparison and evaluation of the effects of sustainability interventions for corporations, policy makers, and farmers*" (COSA 2013, 2-3).

Accordingly, Eyhorn's recommendation of COSA suggest that a goal system should contain a comprehensive and credible system to measure, evaluate and report impacts on sustainability, as recommended by the framework of goal systems and transition management (Elder et al. 2014; Kalfagianni 2014; Frantzeskaki et al. 2012; Aras and Crowther 2012; Pintér et al. 2012; Daviron and Vagneron 2011; Loorbach 2010; Edvardsson and Hansson 2005; Giovannucci and Ponte 2005). Additionally, this system should provide grounds for improvement and decision-making (cf. Frantzeskaki et al. 2012; Loorbach 2010; Pintér et al. 2012; Edvardsson and Hansson 2005). Therefore, Eyhorn's recommendations matches the theoretical framework and supports the hypothesis.

Interestingly, COSA system appears to provide this necessary comprehensive impact assessment that Eyhorn recommended for an agricultural VSS' goal system, corresponding to the goal system framework used in this research,. Additionally, COSA has the potential to address the current challenges in measuring i. Indeed, Giovannucci suggested that an optimal way of measuring effectiveness would include such a detailed and more comprehensive work that COSA system can provide. Thus, a more detailed analysis of the potential use of the COSA system as an essential element of a goal system should be considered for a future research.

Further, Giovannucci proposed that the basis of VSS' sustainability goal systems should be a globally agreed and transparent measurement system that provide results that can be compared against measurable targets. His advice indicates that a goal system should allow assessment measurement of progress toward desired results, in alignment with what the conceptual framework proposes (see Pintér et al. 2012; Frantzeskaki et al. 2012; Loorbach 2010).

As for specific agricultural VSS thematic elements, the three interviewees confirmed that all the social, economic and environmental issues covered by agricultural VSS mentioned in the literature (e.g., UNFSS 2010; Giovannucci and Ponte 2005) can be addressed by a goal system. Table 5 shows a synthesis of the elements the interviewees mentioned. Therefore, a VSS goal system would consider principles of sustainable development, linking social, economic and environmental systems (cf. Volkery et al. 2006) and consider cross-boundary issues (cf. Pintér et al. 2012).

Table 5 - Agricultural VSS' thematic elements a sustainability goal system can address.

Branch of sustainability	Agricultural VSS' Thematic elements
Economic	Producer livelihoods (income, vulnerability, food security), management and governance, risk and resilience and competitiveness, inclusive value chain
Social	Labour conditions (wages, rights, safety and health.), education and training, relationship with the community, basic rights and equity
Environmental	Resource use, water pollution, water use, soil fertility and conservation, air quality, climate change mitigation and adaptation, biodiversity, land use-rights and ownership, compliance with environmental laws.

Silva added that a goal system can address each of those thematic elements in Table 5 through quantitative and qualitative, time-bound target, including means of measurement and assessment, highlighting specific recommendations from the goal system conceptual framework (see Volkery et al. 2006; Edvardsson and Hansson 2005; Pintér et al. 2012 in tables 1 to 4). Silva highlighted that a goal system should be established per type commodity, taking into account the specificity of different crop cultures. However, he mentioned that the specificity of the elements of the goal system will depend on each of the thematic elements. Some of them can be very technical and require that the goal system specifies, for example, the amount of carbon dioxide emitted by a particular operation in given region, whereas other thematic elements can be more general such as compliance with environmental law. Silva's perspective creates a question on how a goal system designed for an specific commodity could be associated with SDGs. For example, could SDGs be specified for a commodity? How

the relationship between these two levels of goal systems with different degrees of specificity be structured? Should Silva's approach be taken into account, this relationship between SDGs and VSS' goal systems would need to be cleared out.

Differently, Giovannucci explained that a VSS's sustainability goal system could be geared toward different focuses, e.g. goal systems could be established for a specific commodity, for a region or for a supply-chain, or even combining all the different areas of interest. His perspective elucidates that sustainability goal systems would be applicable to all areas of interests, implying that VSS' goal systems could be adaptable to the different areas of interests that public goals (e.g., SDGs) may encompass. Enabling a more clear relationship between VSS' goal systems and the SDGs.

Eyhorn has a different view from Silva and Giovannuci. He said that goals should be universal and not specific to a supply chain or area. Suggesting that VSS' goal systems should have a closer relationship with SDGs. Further, Eyhorn recommended that the goal system should also contain aspects of the COSA system; reinforcing the idea that a comprehensive and credible sustainability impact assessment and reporting system should be included in the goal system which ties to the theoretical framework on goal systems. Eyhorn then emphasized that a goal system should focus on impacts rather than outcomes which again confirms the need to differentiate impacts from outcomes, revealing that the agricultural VSS community needs to consider including a comprehensive impact assessment into the scheme's sustainability goal systems.

Therefore, there is no consensus on whether a goal system should be focused on a specific area (e.g. per commodity, for the supply chain) or be universal. Specificity

could bring difficulties toward alignment with SDGs and universal systems could overlook particularities of a sector or a commodity. A more narrow investigation needs be conducted to understand better the relationship among higher-level goal systems (e.g. SDGs) and VSS' goal systems.

To summarize, the findings in this analysis have shown three main ways the VSS could improve and demonstrate the delivery of their impacts as well as the ways they measure effectiveness:

1. Through existing VSS verification processes;
2. Via implementation of the theory of change and;
3. Use of comprehensive impact measuring, reporting and verifying (MRV) systems.

Further, the outcomes indicate that these ways do not consider assessing how the impacts are helping these standards progress toward a sustainability goal, matching the findings from the analysis of the ISEAL codes of good practices and the analysis of the observations of the ISEAL Alliance 2014 Global Sustainability Standards Conference.

Additionally, with some reservations, the findings confirm the feasibility of the hypothesis that agricultural VSS systems could consider establishing and integrating a more explicit goal system into their management and governance architectures, enabling them to lay out a sustainability pathway as well as strengthening, assessing, understanding and demonstrating their impacts in relation to their contribution to sustainability. This confirmation is also in alignment with the findings in earlier sections

of the present thesis where the VSS community's perspective provided support to the hypothesis.

Similarly to sections 4.1 and 4.2, the interviews have presented possibilities, challenges and conditions to how agricultural VSS could implement a goal system as proposed in the hypothesis. This section also validated the theoretical framework in several ways: it showed that although agricultural VSS are not implementing goal systems as described in the conceptual framework, they already use some elements of the framework, such as elements of the TM phases and MRV systems that include indicators and baselines.

The findings from these interviews also point to the importance of having a comprehensive impact MRV method linked to the goal system. This would address the challenges the previous sections described in linking VSS implementation outcomes to credible and measurable impacts which could provide inputs to assessing the progress of agricultural schemes toward their sustainability goals. They would also help fulfill the requirement many VSS users considered critical – providing assurance to customers and regulators regarding the actual effectiveness of VSS and thus the value they get for price premiums usually associated with VSS-certified products.

Furthermore, the results of this section show that VSS could seek alignment with SDGs by contributing to and building on them. Similarly to what was summarized in previous sections, the interviewees also thought there were conditions and challenges for such alignment.

To conclude, section 4.3 has analyzed the findings of the interviews in light of the conceptual frameworks of goal systems and transition management. The findings

iof this analysis present similarities with those from the earlier analytic sections in various aspects, providing even more substantial grounds for the results and analysis of this research. Further, the section has added new elements to the existing framework.

5. Refining the conceptual framework of goal systems

Throughout every section of this thesis there has been a constant need to add to or clarify conceptual and semantic fundamentals regarding VSS and goal system elements. For example, the literature review pointed out the possibility of mixing or taking some elements of a VSS (e.g. principles, criteria, practices and control points) as being the same as elements of a goal system (e.g. goals, targets, indicators). Further, a nuclear issue was the relationship those VSS elements and the system of goals hold amongst themselves. The literature has not clearly explored the application of the broader concept of system of goals to agricultural VSS systems. As an initial effort to provide a conceptual clarification in these matters, I have structured, through the literature review section the framework of relationship among VSS and goal system elements as represented on Figure 4, earlier explained in section 2.5.

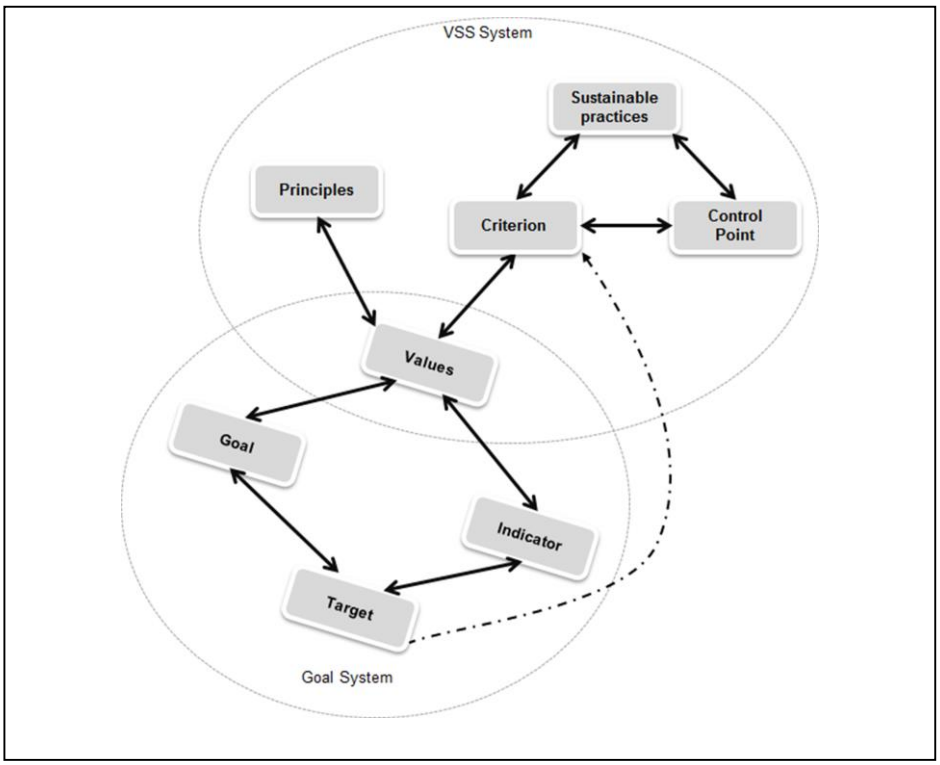

Figure 4 - Relationship among Goal System and VSS system elements (adapted from Duinker 2001 with elements of our theoretical framework)

The analysis and discussions have revealed the framework was useful to find some evidence of how agricultural VSS systems could (or already do) establish or make use of goal systems as well as how they could align with the SDG system at a higher level.

The use of the framework has also led to conclusions concerning the cases where there is a potential use or basis for a future use of goal systems, making it possible to identify in the results section possibilities, challenges and conditions with regard to how agricultural VSS could implement goal systems as well as where future research would be needed. Moreover, the framework also allowed realizing semantic misunderstandings through the input of the VSS community. As a matter of fact, the observations from my participation at the ISEAL Alliance 2014 Global Sustainability Standards Conference as well as the interviews have revealed, for example, that the differentiation between goals, VSS principles, claims and values was not always clear. For instance, during the conversations I seldom had to clarify the broader concept of the system of goals.

Nevertheless, this framework is not perfect and is still lacking some clarifications, especially in what concerns the particularities of the relationship between VSS goal systems and the SDGs. I applied and tested the framework in the analysis, and, interestingly, the VSS community's inputs allowed me to design an improved, refined and supplemented new conceptual framework (Figure 5).

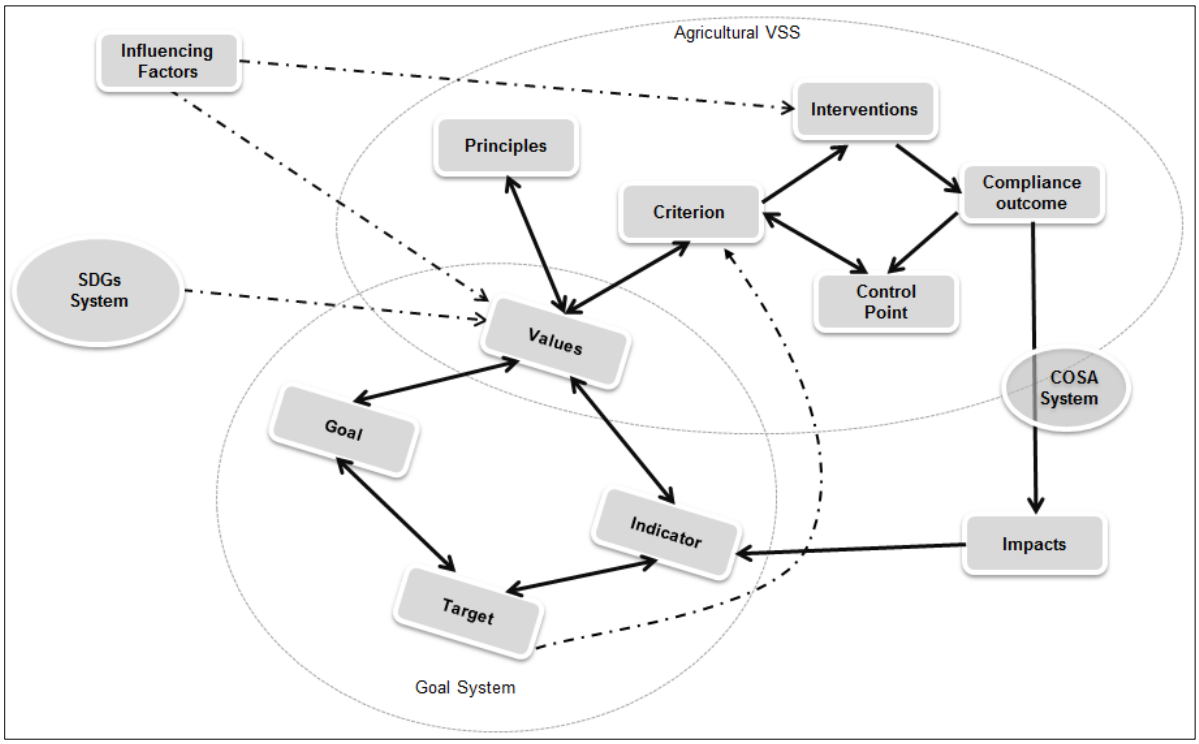

Figure 5 - Conceptual framework of an agricultural VSS goal system and its relationship with external elements

The analysis provided three main contributions to the improvement of the framework as it is represented in Figure 5. The first and most significant contribution concerns the concept and relationship among the three VSS elements, namely intervention, outcomes and impacts in addition to the understanding of their relationship with a VSS goal system. The analysis of the ISEAL Alliance Impacts Code and the findings from the structured interviews show the importance of differentiating these three elements. The concepts adopted are from the COSA System conceptual framework described and illustrated in section 4.3 (Figure 3). When applying them to the framework, as shown in Figure 5, the criteria will determine what kinds of inputs (e.g., investment, training) will be necessary to produce compliance outcomes (e.g., implementation of sustainable agricultural practices, new harvesting method, conservation practices) which will then be verified through the use of control points (or indicators), signaling whether a criterion was met or not. Then, a comprehensive MRV mechanism (represented by COSA) will define what impacts (e.g., ecosystem health,

GHG emissions) those outcomes are creating. The assessment and reporting of the impacts feed the set of indicators to determine progress toward reaching the targets.

The second contribution is regarding the influencing factors. The analysis of the interviews indicates that the perception and definitions of sustainability issues or thematic elements can be changed over time. For example, some members of the VSS community remarked that some agricultural VSS have been trying to align with the aspirations of international environmental agreements. One of the interviewed experts, Fabiano Silva, indicated that the definition of sustainability issues is the starting point to the agricultural VSS' attempts to homogenize their standards among themselves. Consequently, changes in sustainability issues (values inFigure 5) will likely generate changes in the standards structure and content as well as in how the goals and indicators are defined. Additionally, the ISEAL Alliance Impacts Code included "influencing factors" in their methodology for designing a VSS' theory of change (see Figure 2 in section 4.2) to indicate the external factors that can influence VSS' strategies to address sustainability issues and achieve their desired outcomes and impacts. Thus, influencing factors can directly act upon VSS interventions as shown in the framework in Figure 5.

The third contribution derives from the second, describing one of the possible relationships between the future SDGs and the VSS' structure and goal system. SDGs could potentially bring changes by more clearly defining specific sustainability themes and priorities. Then, as the research findings have indicated, should the agricultural VSS not cover those definitions or not address one of the relevant elements, they would have to make some changes in order to align with the SDGs. Relevance is an important consideration, as the SDGs will likely also include many sustainability

priorities that are outside of the scope of agricultural VSS. Therefore, SDGs influence possible changes in the VSS' values, as represented in Figure 5, leading to further changes in the structure of VSS as well as in their goal systems.

In sum, the conceptual framework for VSS goal systems has been explored and refined according to the analysis of the VSS community's perspective on setting sustainability goal systems for agricultural VSS schemes. The diagram in Figure 5 is the illustration of the conceptual outcome of the exploratory approach of this research.

6. Conclusions

In order to answer the research question, this thesis has aimed to add the theoretical framework of goal systems and transition management to the current discussion about the impact of agricultural voluntary sustainability standards (VSS) systems, hypothesizing that the setting of a goal system can help define a pathway of transition towards sustainability for key issues covered by any given agricultural VSS, improve the usefulness of VSS, and establish a basis to demonstrate their possible contribution toward the achievement of sub-global sustainable development goals.

Given that the current literature on agricultural VSS is largely quiet about the establishment of goals and their role in directing or evaluating their contribution to sustainability, this exploratory research departed from the VSS community point of view and has focused on the analysis of the existing architecture of agricultural VSS, to understand if and how they could (or already do) incorporate goal systems based on the transition management approach; providing understanding of whether the hypothesis could indeed be valid for agricultural VSS, and drawing further inferences from this hypothesis.

The findings validate the rationale of this research by highlighting that the VSS community understands that agricultural VSS have to work harder to show evidence of their progress in addressing sustainability issues.

The outcomes support the hypothesis with some reservations. The VSS community generally agrees that it would be possible for agricultural VSS systems to establish and integrate a more explicit goal system into their management and

governance architectures. Yet, despite the challenges in implementing it, a goal system would enable them to lay out a pathway of transition toward sustainability as well as strengthen, assess, understand and demonstrate VSS impacts in relation to their contribution to sustainability.

Although agricultural VSS are not implementing goal systems that involve assessing impacts against sustainability goals as clearly defined elements or endpoints on their path to sustainability, the findings show the VSS community has the potential to advance the implementation of goal systems that are in greater alignment with the Transition Management and Goal System frameworks. In fact some VSS already use some elements of the framework such as features of the transition management phases as well as from measuring, reporting and verifying (MRV) systems elements that include targets, indicators and baselines.

There are three main ways in which VSS are currently using elements of a goal system to improve and demonstrate their impacts as well as the ways they measure effectiveness: Firstly, through existing VSS verification processes; Secondly, via implementation of the theory of change (TOC); and thirdly, through use of comprehensive impact MRV systems.

The ISEAL Impacts Code with its TOC and MRV approach is a strong example and evidence that agricultural VSS can effectivly use elements of the Transition Management and Goal System frameworks. Nevertheless, there are some aspects concerning measuring, reporting and verifying impacts, communication, and adaptive management issues; all that would need improvement for better alignment with the framework of goal systems.

Furthermore, the findings show that selected members of the agricultural VSS community believe that while there are some challenges to overcome, the standards could indeed contribute to and build on sustainable development goals (SDGs) and be a potential means of implementation of these higher-level sustainability goals, qualifying them to be considered as contributors to sustainable development. The VSS community's perspective reveals that agricultural VSS could seek alignment with SDGs through the establishment of goal systems. On the one hand institutionalization of SDGs could influence the VSS structure and content, but on the other hand VSS might not welcome such large changes.

A closer examination of how the SDGs system could relate to agricultural VSS architecture and goal systems should be considered in future researches in order to foster comprehension of what direction policy-makers and VSS governance and management should take to make better use of VSS' potential to help realize sustainable development goals.

Another area for future research is case studies of implementation of the VSS' theory of change, in light of the transition management and goal system framework, to facilitate the identification and learning of, the leverage points the agricultural VSS should focus on when implementing a system of goals.

Additionally, further examination on metrics-based agricultural VSS might allow for more conclusions on if and how these types of approaches could ease the implementation of goal systems.

Furthermore, this thesis has identified that the COSA System has the potential to provide agricultural VSS' goal systems with the necessary comprehensive impacts

MRV system, improving VSS' ability to demonstrate and improve their delivery of impacts toward clear sustainability goals. However, I recommend more research on the practical application of the COSA System to support agricultural VSS' goal systems. Case studies could foster the understanding of how this system could be utilized in partnership with VSS' goal systems.

Recommendations to ISEAL Alliance and all agricultural VSS implementing a theory of change, are that they give more importance to utilizing a credible and comprehensive sustainability impacts MRV system when implementing their TOC; that they produce reports in a way that can be fed into their goal system to enable them to provide evidence of progress of their contributions to sustainable development; and that they address weaknesses such as those related to communication and adaptive management described in the analysis of the ISEAL Impacts Code.

As a final point, this thesis has contributed to the development and improvement of a conceptual framework for VSS goal systems that proved to be very useful to understand how agricultural voluntary sustainability standards can go about setting an explicit system of sustainability goals. The resulting framework can also be used to understand how agricultural VSS can use goal systems to realize their potential as a vehicle for the implementation of sustainable development goals. Therefore, I recommend the application of this conceptual framework of voluntary sustainability standards goal systems. It can provide the standards community and policy-makers with useful insights during their efforts to set forth truly sustainable agricultural practices that have positive long-term impacts on the well-being of the environment and humanity as a whole.

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8. Appendices and Attachments

Appendix 1: Interview Letter

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Dear Mr. XXXXXX,

I am carrying out a master's degree research on the possible use of sustainability goals and targets by agricultural voluntary sustainability standards (VSS) systems. The outcomes of this year's ISEAL Alliance Global Standards Conference and the literature indicate that the VSS community realizes the need for showing evidence of the standards' contribution to sustainability through better understanding the impact of VSS systems in the pursuit of sustainable development.

Following the 2102 Rio Summit, the international community has been paying significant attention to sustainable development goals (SDGs) and targets as central elements of the post-2015 development agenda. Initially developed at the global level, SDGs and associated targets are to be adopted and applied later at the sub-global level through diverse means of implementation (MoI). VSS systems, increasingly introduced in many economic sectors such as agriculture, have significant potential as a MoI. In order to realize that potential, VSS systems will need to consider how goals and targets fit their governance and management structure, underlying agricultural practices and how they contribute to impacts.

The purpose of this research is to examine the potential of a goal and target system to define a sustainability pathway for agricultural VSS systems, improve their usefulness, and establish a basis for demonstrating effectiveness and impact of these standards in contributing to achievement of sub-global sustainable development goals.

Therefore, I kindly ask you for your valuable contribution in participating in a structured interview focused on the attached questions. These questions seek to investigate if and how a system of sustainability goals and targets is or could be used by VSS, and what the technicalities are for integrating such a system within a standard structure.

The answers will be used to draw conclusions on the use of goals and targets by VSS systems. The answers may be cited directly or paraphrased in my master's thesis. Answers will be attributed to interviewees by name only with your explicit permission; otherwise, your answers will remain anonymous. I will be glad to send you an electronic copy of the thesis upon completion.

I deeply appreciate your contribution to this research.

Sincerely,

Jefferson Davis Andrade

M.Sc. Candidate in Environmental Sciences and Policy

Appendix 2: Interview Questions

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Interview questions for M.Sc. thesis entitled "Setting goals for Agricultural Voluntary Sustainability Standards". (Please, read letter for detailed instructions)

1. **How can a VSS demonstrate and improve its impact on sustainability? Can you give an example?**

   ANSWER:

2. **How is the effectiveness of a VSS measured? Can you give an example?**

   ANSWER:

3. *The current work on post-2015 sustainable development goals (SDGs) has discussed the role of agricultural VSS systems as one of the means of implementation of SDGs.* **Could this process of establishment of global SDGs encourage development of sustainability goals for agricultural VSS? Why?**

   ANSWER:

4. **Would it be possible to link SDGs and VSS sustainability goals?**

   ANSWER:

5. *In my research, I am arguing that through creating a system of sustainability goals and targets, VSS systems can establish a clear pathway of their contribution to sustainability as well as to achievement of sub-global sustainable development goals, demonstrate effectiveness of their sustainability claims, and improve the usefulness of their standards themselves.* **Could an agricultural VSS system possibly involve establishing clear and measurable sustainability goals and targets as a clearly defined element or endpoint of their pathway to sustainability? Why?**

   ANSWER:

6. **What would be the main challenges of creating a system of sustainability goals and targets for VSS?**

   ANSWER:

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If Answer to question 5 was 'yes', please proceed to the following questions. If the answer was 'no', this is the end of your questionnaire.

7. **What could be the basis for creating sustainability goals and targets for VSS?**

   ANSWER:

8. **What thematic elements of a VSS system could be addressed by a system of sustainability goals and targets?**

   ANSWER:

9. **What would an agricultural VSS sustainability goal look like? What kind of technical elements should a VSS goal and target have – e.g. time frame, means of monitoring and measurement, reporting, etc.?**

   ANSWER:

10. **What should the goals be focused on e.g., a specific commodity, area, supply chain etc.?**

    ANSWER:

Thank you for your contribution!

Attachment 1 - The full programme from the Global Sustainability Standards Conference, 20-21 May in London

Schedule of Events

20 May 2014

16:00 - 17:00: All about ISEAL: Presentation and Q&A on the global association for sustainability standards
Complementary overview of ISEAL for people looking to learn more about our objectives and what we do.
Evening Networking Reception
16:30 - 17:30: Registration
17:30 - 18:30: Keynote speeches

- Hans-Peter Egler, Appointed CEO, Global Infrastructure Basel
- Dr. Zhang Jianping, Director of the Department of International Economic Cooperation of the Institute for International Economic Research of the National Development and Reform Commission of the People's Republic of China
- Alastair Child, Cocoa Sustainability Director, Mars Global Chocolate

18:00 - 20:30: Drinks and canapés

21 May 2014

Public Day

08:00 - 09:00: Registration
09:00: Welcome and Opening Remarks
Karen Hamilton, Vice President of Sustainable Business, Unilever
09:15 - 10:30: Opening Panel

Responding to Results

(Impacts session supported by the Ford Foundation)

The evidence base about the contribution of standards to sustainable development is starting to grow. What does the bulk of this evidence tell us about how standards are contributing to resource conservation and improved welfare for workers and smallholders around the globe? And how are standard systems responding to this evidence? In this provocative opening panel, an influential company and NGO will discuss how standards can improve their impacts with leaders from three ISEAL members.

- Kim Cartensen, Director General, Forest Stewardship Council
- Daniel Mittler, Political Director, Greenpeace
- Rolf Hogan, Executive Director, Roundtable on Sustainable Biomaterials
- Michelle Morton, Biofuels Sustainability Manager, Shell International

- Han de Groot, Executive Director, UTZ Certified
- Nolan Quiros, Regional Manager Corporate Responsibility, Chiquita

Facilitated by: Kristin Komives, Senior Monitoring and Evaluation Manager, ISEAL Alliance

--Coffee & Networking--

11:00 - 12:30: Breakout Sessions

1. More than an Audit: Building Trust and Capacity through Certification

Sustainability standards are much more than just an ecolabel or a compliance check and many standards systems are looking to scale up the benefits that certification can provide, such as technical assistance, market access and financial stability. This session will explore possible approaches to introducing more incentives and benefits into certification, focusing on the assurance process and how to promote capacity building for producers. The Sustainability Exchange, a new platform managed by ITC, will also be launched.

- Joseph Wozniak, Programme Manager, International Trade Centre (ITC)
- Didier Bergeret, Head of the Global Social Compliance Programme, Consumer Goods Forum
- Ruchira Joshi, Programme Director, Better Cotton Initiative
- Nina Smith, Executive Director, GoodWeave

Facilitated by: Patrick Mallet, Credibility Director, ISEAL

2. The Claims Jungle: What's Credible, What's Not?

Truthfulness and accuracy in making sustainability claims are essential, yet many stakeholders struggle to understand the differences between claims, and standards systems themselves use a variety of approaches to make claims. Featuring a diverse panel of stakeholders that engage with sustainability claims, this session will drive discussion about how to improve consistency and trust in claims and labelling and avoid label confusion and misleading claims.

- Amanda Long, Executive Director, Consumers International
- Graham Bullock, Assistant Professor, Davidson College
- Adam Lavis, Senior Policy Adviser – Sustainable Business, UK Department for Environment, Food and Rural Affairs
- Blake Lee-Harwood, Communications & Strategy Director, Sustainable Fisheries Partnership

Facilitated by: Amy Jackson, Senior Credibility Manager, ISEAL Alliance

3. Unlocking Finance for Sustainable Industries: The Role of Standards and Certification

(Finance session supported by the International Finance Corporation)

How can we unlock the potential of the finance sector to support companies that use sustainability standards and certification? What are the challenges and benefits for the finance sector to take on a stronger role in driving greater uptake of certification globally? This session will look at the preliminary findings of a high-level study and introduce regional case studies that will be further discussed at lunch-hour topic tables.

- Bruce Wise, Global Product Specialist Sustainable Business Advisory, International Finance Corporation
- Thomas Ursem, Head of Corporate Social Responsibility, Rabobank
- Lucas Simons, Director, NewForesight Consultancy
- Alastair Child, Cocoa Sustainability Director, Mars Global Chocolate

4. Standards for Challenging Sectors

Standards are making an entry into a multitude of new sectors to minimise negative impacts on people and the environment. How are standards evolving in the frontiers of mining, oil and gas, dairy, electronics and other challenging sectors to raise the bar and mobilise actors around new ideas of responsible practice? This session will include perspectives from sustainability standards, industry and civil society on the role of standards in driving improvement in these critical sectors.

- Malcolm Fox, Chief Operating Officer, Equitable Origin
- Vania Grandi, Vice President Marketing - Global Copper Cathode and Precious Metals, Rio Tinto
- Donald Moore, Executive Director, Global Dairy Platform
- Monique Lempers, Senior Program Manager, Electronics, Tin and Apparel, The Dutch Sustainable Trade Initiative

Facilitated by: Barbara Bramble, Head of International Climate and Energy Program, National Wildlife Federation

5. Fostering Trust through Action: Wage Growth and Worker Empowerment in Textiles

(Living Wage session supported by BMZ)

Living wage has rapidly climbed the global sustainability agenda, mobilising collaboration among standards systems, business platforms, governments, trade unions and other multi-stakeholder initiatives. Looking at the textiles sector, this session will explore the role standards can play in bringing supply chains together to drive greater dialogue and wage growth. What are the major constraints and how can we collectively overcome them?

- Per Bondevik, Managing Director, Ethical Trading Initiative Norway
- Ruth Vermeulen, Senior International Verfication Coordinator, Fair Wear Foundation
- Edwin Koster, European Representative, Social Accountability International
- Jos Huber, Senior Policy Advisor - Private Sector & CSR, Dutch Ministry of Foreign Affairs

Facilitated by: Verena Wiesner, Division Trade, Globalization & Investment, Federal Ministry for Economic Cooperation and Development (BMZ)

--Lunch & Topic Tables--

13:30 - 15:00: Breakout Sessions

1. Standards as Agents of Trust in the Supply Chain

(Impacts session supported by the Ford Foundation)

How can standards be a catalyst of trust in supply chains, supporting suppliers to create long-term relationships with buyers, traders, investors and other actors? How does trust manifest itself for different actors? With perspectives from a certified coffee producer, a certified sugar mill and a major cosmetics and pharmaceutical company, this session will look at how a variety of standards are strengthening supply chains and generating trust for the actors involved.

- Mausi Kuhl, Selva Negra Coffee Estate, Nicaragua
- Daniel Lobo, Head of Farmer Support, Bonsucro
- Bas Schneiders, Head of Corporate Sustainability, Weleda

Facilitated by: Melanie Rutten-Suelz, Executive Director, 4C Association

2. Leading Consumers Towards Sustainable Choices

What is the role of companies in supporting consumers to purchase sustainably produced or certified products? Are there ways that brands, retailers and restaurants can use consumer trust and loyalty, as well as choice editing and communications to influence consumers? This session will explore the role of companies in building markets for certified products by using their relationship with consumers.

- Lucy King, Good Business Journey Analyst, Woolworths
- Joshua Brau, Programme Manager, Food with Integrity, Chipotle
- Greg Priest, Head of Sustainability Policy, IKEA

Facilitated by: Lara Koritzke, Director of Communications and Development, ISEAL Alliance

3. The Role of Voluntary Sustainability Standards in Environmental, Social and Governance Risk Management in the Finance Sector

The business case for banks and investors to manage the sustainability risks in their portfolio is well-established, yet only some are using standards and certification to manage these complex social and environmental risks. What are the barriers and opportunities to integrating sustainability standards into the risk assessment processes of financial institutions? This session will explore some of the evolving tools and lessons we can draw to scale up engagement and help standards become a "screen" for smarter, greener and more secure investment. The session will include a presentation of preliminary results of a joint research project by IFC, ITC and FAST on this topic.

"Financial Sector: The Role of Voluntary Sustainability Standards in ESG risk management" (study presentation)

- Ekaterina Grigoryeva, Environmental and Social Policy Specialist, International Finance Corporation
- Oliver von Hagen, Market Analyst, International Trade Centre

Panellists

- Marcelle Peuckert, Business Development Director, Forest Stewardship Coucil
- John Laidlow, Head of Sustainable Business, HSBC
- Noemi Perez, CEO and President, Finance Alliance for Sustainable Trade

Facilitated by: Joseph Wozniak, Programme Manager, International Trade Centre

4. Trust in the Multi-stakeholder Model: NGOs and Businesses Working Together

Standards such as those represented in ISEAL are founded on the idea that stakeholder groups with different interests, but a similar goal of sustainability, can come together to reach solutions. But the multi-stakeholder process can often be fraught with challenges and questions of trust. Where is a multi-stakeholder approach most important and how might it need to evolved in the future to be effective? With insight from experts involved in a diversity of standards initiatives, this session will explore how the multi-stakeholder model needs to evolve in the future.

- Cassio Franco Moreira, Head of Standards and Certification, WWF
- Natasha Schwarzbach, Head of Engagement, Bonsucro
- José Villalon, Sustainability Director, Nutreco

Facilitated by: Dawn Robinson, Associate Director, Proforest

5. Trust between Standards: From Competition to Cooperation on Living Wage and Living Income

(Living Wage session supported by BMZ)

A number of certification and labelling organisations have combined their efforts to promote a living wage for workers globally. How can their shared approach to measuring living wage make supply chains more equitable for workers and also contribute to improvements in the living income for smallholders? This session will look at this unprecedented example of standards collaboration and whether it can be a model to build trust on other challenging issues.

Speakers

- Oliver Bach, Standards & Policy Director, Sustainable Agriculture Network
- Noura Hanna, Monitoring and Evaluations Officer, UTZ Certified
- Edwin Koster, European Representative, Social Accountability International
- Eberhard Krain, Advisor in Agricultural and Forestry Standards, GIZ

Panellists

- Heleen Bulckens, Programme Manager, Ethical Tea Partnership

Facilitated by: Vanessa Linforth, Social Policy Manager, FSC

--Coffee & Networking--

15:30 - 17:00: Closing Panel

Standards in a Post-Certification World

Do standards need to rethink how they operate in a world that is looking beyond compliance and certification and towards transparency, impact and immediate sustainability results? Are new approaches needed for standards to maintain their relevance and value? With a high-level panel of thought leaders and sustainability experts, this closing plenary will challenge us all to consider the future of standards in a rapidly changing landscape.

- Euan Murray, Chief Strategy Officer, The Sustainability Consortium
- Keith Kenny, Senior Director - Supply Chain, McDonald's Europe
- Karen Johnson, Responsible Business Advisor, DFID
- Edward Millard, Director, Program Design & Development, Sustainable Agriculture, Rainforest Alliance
- Jonathan Horrell, Director of Sustainability, Mondelez International

Facilitated by: Andreas Kratz, Director Strategy and Standards, Fairtrade International

17:00 - 17:30: Closing Remarks

- Britta Wyss Bisang, Standards Director, UTZ Certified