

Oversight configuration and sustainability in global commodity chains

Learnings from cocoa



Enrique Uribe Leitz

Propositions

1. Governments are an essential actor for making voluntary sustainability standards effective. (this thesis)
2. Voluntary sustainability standards need to focus on value chain intermediaries and retailers. (this thesis)
3. Understanding how a phenomenon works precedes the measurement of its effects.
4. EU funded scientific collaboration is hampered by the incompatibility of the French and Dutch believe system.
5. The biggest challenge in society is to balance the interest of all its individuals.
6. Societies need to re-create themselves to create sustainable production systems

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**Oversight configuration and sustainability in
global commodity chains.
Learnings from cocoa.**

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To Olga

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1. General Introduction

1.1. Problem statement

Voluntary Sustainability Standards (VSS) are expanding widely in global commodity chains. For cocoa and coffee now more than 23% of the global crops surface is under certification; for cotton and tea this is around 16% and for palm oil around 11% (Willer et al., 2019). This expansion has shifted the use of the VSS from niche to mainstream markets.

The credibility of VSS is being attributed, among others, to their multi-stakeholder approach involving producers, cooperatives, supply chain actors, governments and NGOs (UNIDO-IDE-JETRO, 2013). Moreover, the integration of VSS into global commodity chains has led to the introduction of new actors engaged in enabling the implementation and the successful communication of these standards throughout the entire value chain resulting in a complex network of interacting public and private actors.

While expanding, these complex arrangements are increasingly being challenged with respect to their effectiveness, their equity, their efficiency, etc. To better understand these debates and to reflect on the future of VSS, this thesis explores the arrangements regarding the oversight configuration for the case of major VSS active in the cocoa sector.

VSS are being passed down to the primary producers via the value chain. Major VSS operating in the agri-food industry rely on the so-called 'third-party' certification system (Hatanaka & Busch, 2008). This certification system assumes that there are three different actors in the system, namely the VSS, the actor implementing the standard (generally the primary producer) and the 'third-party' (also referred to as 'the certification body' (CB) or 'the conformity assessment body' (CAB)). This third party is independent from the other two and has the task to objectively attest whether the standard is being adhered to. This 'Tripartite Standards Regime' (TSR), is the main assurance mechanism in place, that should ensure independence and credibility of the certification system (Hatanaka et al., 2012). Some certification schemes also include a control on the CBs through 'Accreditation Bodies', which audit the auditors. Furthermore, in some regions, governments have also put legislation in place around accreditation bodies to achieve a more robust system. For example, the European Union has defined requirements for accreditation bodies in the regulation EC 756/2008, which is an additional layer of control over private certification bodies. Hence, VSS are embedded in a social, political and economic network (Hatanaka & Busch, 2008). Communicating and implementing the requirements of VSS is arranged by different actors throughout the value chain including NGOs, private sector and governments (ICCO, 2012; Weiligmann et al., 2009). However, there seems little or no orchestration between the different assurance mechanisms within the private sector and those of governmental institutions controlling for the adherence to national legislation.

Hence, although there are assurance mechanisms in place it is important to understand the contours around these mechanisms and what factors are decisive for their emergence and what influences and shapes the oversight configuration.

It is therefore critical to study these VSS and their operation in practice to better understand the interplay among all actors involved. In particular, there is a lack of understanding of the oversight of the different private actors, involved in defining, implementing and demanding certification. These actors shape how (and why) the oversight configuration is organized as it is. Moreover, there is a need to understand the (lack of) interactions between the different assurance mechanisms to be able to improve the overall functioning of the oversight configuration.

This lack of understanding of the functioning of the oversight configuration represents a challenge for all the actors involved. For the VSS themselves this may result in misleading claims regarding their impact (or contribution towards their intended impact). This may catalyse a loss of trust among the retailers and brands demanding these VSS and hence in the long term to a loss of business. Likewise, for the retailers and brands using these VSS, a loss of trust may be perceived by the consumers and hence damage their reputation. At the same time, governments have an interest to enable regulations, where there is a balanced market dynamic based on precise claims towards the consumer and avoid fraud. This is especially the case, when the claims of VSS are related to public goods and/or overlapping with national legislation, aspects which are traditionally under the oversight of the state.

The cocoa sector presents a good case study since it saw the introduction and broad spread of VSS within a decade (roughly from 2008-2018). During this period, West-Africa, being the main cocoa producing region in the world, witnessed the implementation of three major VSS: Rainforest Alliance, UTZ and Fairtrade. Moreover, cocoa production takes place within a complex agricultural landscape with various environmental and social-economic challenges. For instance, cocoa production takes place within a broad range of agro-ecological zones (e.g.: differences in soil, nutrient availability, cultivars grown, etc.). The expansion of cocoa production was achieved through 'land consuming practices', i.e., at the expense of the forest and its biodiversity (Gockowski & Sonwa, 2011; Ruf & Siswoputranto, 1995; Ruf & Varlet, 2017). In these cocoa-growing zones, environmental problems such as deforestation and the disappearance of the natural flora and fauna are major concerns. There are also other challenges related to cocoa growing. First, for a long time there has been underinvestment in cocoa communities which created difficulties for maintaining and raising productivity in the cocoa plantations (Berlan & Bergés, 2013).

Second, the economic benefits of producing cocoa, even when complying with VSS (including the financial premiums provided) are not sufficient to take the cocoa smallholder farmers out of poverty (Nelson & Pound, 2009). The farmers with the lowest income worldwide are those who depend on cocoa as their primary source of revenue. Moreover, countries as Côte d'Ivoire and Ghana, where governments strongly regulate the cocoa sector (i.e., through price and/or export tariffs), we observe the lowest cocoa-related income, while farmers have the highest income dependency on cocoa (Hütz-Adams & Voge, 2014). It is also in these regions in Côte d'Ivoire and Ghana, where we find the largest cocoa volumes and the largest number of certified farmers. Hence, within this complex context, VSS were introduced with the ambition to improve the sustainability of these regions in all its dimensions, social, environmental and economic, by assuring that certain practices are being respected from the farm level until the end of the commodity chain.

Hence, in this thesis, I define *the oversight configuration* as being constituted by all the individuals and/or formal bodies involved in defining the assurance mechanisms, the levels in the supply chain where assurance takes place and the actors controlled by the assurance mechanisms as well as the content controlled for. Thus, this thesis aims to contribute to a better understanding of the oversight configurations in the agri-food sector, especially on the impediments for a beneficial application of VSS in a smallholder-based context such as the cocoa sector in West Africa. By taking the cocoa sector as an example, I aim to also contribute to better understanding the role of these VSS as governance mechanisms throughout agri-food commodity chains more widely.

The rest of this introductory chapter is structured as follows; first I present the theoretical context and elaborate on the unit of analysis. Thereafter I present the research questions as well as the methods applied. The concluding section explains the outline of the rest of the thesis.

1.2. Theoretical context

This section presents the dominant research lines, namely that of governance mechanisms and the impact measurement with respect to cocoa and certification. It does so by exploring the scientific literature on these subjects and the context in which this research agenda was conducted.

1.2.1. Governance mechanisms

Certification and standards convey information to buyers about certain characteristics of the products they purchase, mainly in the form of labels but also by means of conformity

statements (Bush et al., 2015; Henson & Reardon, 2005) or more recently, traceability codes (Mol & Oosterveer, 2015). Today's consumers demand not only high extrinsic quality products, but also a wide range of intrinsic quality specifications (Henson & Humphrey, 2010). For instance, a 'guarantee' that the production and manufacturing processes have been performed according to certain 'ethical' standards or that trade has been 'fair' for all actors involved. These credence attributes are values that are being transmitted through labels. This makes third-party certifiers a relevant signalling institution in the food sector (Deaton, 2004). Certification is needed to avoid market failures such as the ones mentioned by Akerlof (1970) on his seminal publication "markets for lemons". This is reflected in the cocoa sector in the mass-certification of low quality cocoa from West Africa instead of an uptake of certification at the high-end quality cocoa from Mesoamerica. Furthermore, Deaton (2004) describes that third-party certifiers gain their perceived independence due to the existence of 'countervailing institutions' such as ISO and national accreditation bodies, which results in credible and independent market signals.

For understanding the nature of the so-called Tripartite Standards Regime (TSR), Hatanaka et al. (2012) offer a framework to unravel the relations between VSS (also referred to as standard development organizations), Certification Bodies (CB) and Accreditation Bodies¹ (AB). These authors lay the explanatory foundation for the third-party certification system and elaborate on how the three main actors (VSS, CB and AB) interact within the system (Hatanaka et al., 2012). Furthermore, they show that this regime has emerged to ensure effectiveness and legitimacy to the certification system. Additionally, they show that the three entities involved (VSS-CB-AB) work in agreement. Moreover, Hatanaka and Busch (2008) study the operational independence and the organizational independence of (VSS-) CB-ABs and they conclude that CBs-ABs are not always fully independent and thus objective in their operation. Similarly, the Regulator-Intermediary-Target Model (RIT model) of Abbott et al. (2017) focus on the intermediary actors (meaning the CB) and acknowledges their important role in sustainability governance.

The TSR is hence a fundamental tool for 'governing at a distance' or the shift from government-led to private governance (Loconto & Busch, 2010). This is the case since industry and retail actors are the main users of these VSS (Ingenbleek et al., 2007) as this helps them to reduce costs and risks, strengthen legitimacy and enhance reputation while building a competitive advantage (Carroll & Shabana, 2010). They are therefore leading the promotion of these VSS (Tallontire et al., 2012) and, while so doing, they are also able to influence the oversight configuration and the standard requirements. Consequently, the audit burden is more on farmers than on industry and retail actors. Current VSS focus on

¹ Under this term we refer to national ABs (according to EC 765/2008) and 'international' ABs such as IOAS, ASI or any other type of ABs.

the farm level, while the requirements for the supply chain in the VSS focus on the traceability of the certified volumes and not on social or environmental aspects of the behaviour of these downstream actors. Hence, downstream actors do not have to undergo extensive training programmes nor fulfil particular social, economic, or environmental requirements. It seems that the power imbalances in agri-food value chains are leading to a 'sustainability-driven supplier-squeeze' (Ponte, 2019), and VSS are the main delivery tool for this.

Governments are also involved in market-based governance because they create and maintain the legal frameworks in which private initiatives operate (Bush & Oosterveer, 2019). Governments may also make use of private VSS (Carey & Guttenstein, 2008) and interact with private standard initiatives whereby VSS can set higher expectations for government policies, or whereby they mutually reinforce each other (Gulbrandsen, 2014b). However, within the cocoa sector, there are no examples where such mutual reinforcement between government and VSS has taken place. Rather the opposite seems to occur as producing countries have expressed concerns (Uribe Leitz & Ruf, 2020) about the introduction and use of VSS.

The existing scientific literature, however, does not provide a conceptualization of an overall *oversight configuration* but it focuses on one assurance mechanism at the time.

1.2.2. Impact measurement

The literature provides some attempts to assess the impact of VSS. However, assessing this impact proves complicated and is faced with three major methodological challenges: measuring outcome patterns, attribution in open systems and generalization of socially embedded interventions (Ton et al., 2011). It is for instance not clear what exactly should be considered as 'successful impact' (Hütz-Adams & Voge, 2014). Furthermore, sustainability standards try to make an impact at the farm level, but they do so in a context with particular social dynamics (including vested interests) between cooperative managers, individual farmers, certification bodies and an organization implementing the standard at the farm level.

Consequently, there are few robust studies about the impact of sustainability certification in the cocoa value chain. One major literature review, which included cocoa next to other commodities, did not find enough evidence about the effects of certification schemes on producers (Oya et al., 2017). This study also observed that the specific context substantially influences causality in the relationship between certification and sustainability outcomes. Finally, they classified a considerable number of the reviewed studies as

methodologically weak. Waarts et al. (2013) found that most studies about the impact of sustainability standards refer to the Fairtrade scheme and mostly cover coffee. In another literature review, Kuit and Waarts (2014) were only able to draw firm conclusions about the impact of certification for the coffee sector since data availability in other sectors – among them cocoa – was too scarce. They found that reliable data regarding the cost of certification is lacking, and that the available data presents considerable variations. For example, the up-front costs for UTZ certification was found to vary between 25€ and 106€ per farmer (Uribe Leitz, 2014b, 2014a; Uribe Leitz & Ruf, 2015). Furthermore, the assumptions behind the different data collection tools, although aiming to capture similar data, did not make it possible to capture data that was fit for the purpose and thus no further analysis was possible. Additional methodological problems were identified in the literature, ranging from sample size representativity to lack of farmers' awareness about their certified status. Some further critical comments found in literature are, for example, that while Gockowski et al. (2013), assume that VSS may lead to more tree planting (so these trees can be harvested in the next decades), other scholars find that VSS do not contribute to planting of more trees (Sanial, 2015; Sanial & Ruf, 2018). It has even been found that 'protected areas' such as national forests are in fact long time existing or newly established cocoa production sites (Bitty et al., 2013; Higonnet et al., 2017). This happened despite the "awareness" and "certification" status of such areas according to VSS. Another comment is that it is difficult to set uniform criteria for cocoa producers, which are relevant and meaningful for all regions around the world (Uribe Leitz & Ruf, 2019). Hence, it is hard to have a "one-size-fits-all" recipe for the implementation of "good agricultural practices" in cocoa cultivation.

Having in mind that any (quasi-) experimental research design has various threats to the validity of its causal inference (Shadish et al., 2002), the attribution to standards is very hard to prove. Furthermore, in the highly complex settings where VSS are being applied and where attribution has to be made, various scholars measure the ultimate outcomes of the interventions and not the immediate influence of the standards (Ton et al., 2014). This becomes evident in the absence of publications trying to measure the systemic change from any certification system in the sector. Overall, it is argued that it is not clear to what extent VSS contribute to improved conservation outcomes (Tschardt et al., 2015). Thus, until now the discussion is mostly focused on the impact of the VSS at the farm level.

At an institutional level, these methodological challenges led to the creation of multiple institutions and a search for adequate tools to measure the impact of certification standards. Some examples are the United Nations Forum on Sustainability Standards (UNFSS), the "Steering Committee of the State-of-Knowledge Assessment of Standards

and Certification²”, the ISEAL’s Impacts Code³ and the Committee on Sustainability Assessment (COSA)⁴. Despite these efforts, evidence about the impacts of standards is still weak (Loconto & Dankers, 2014) and therefore, more research on the farm-level impacts will probably not contribute towards the understanding of the root causes for a weak impact. Thus, we argue that the focus of the research should zoom out and focus on the oversight configuration which is setting the framework for controlling the adherence to the meta-standard and VSS in the first place.

1.2.3. Exploring the dominant research agenda

In the literature review it became clear that the bulk of the scientific publications on cocoa (specially on impact measurement) are relatively recent. Namely, between 2010-2014 there was a peak in the number of publications per year, while the amount remains higher thereafter. While analysing this trend it became clear that the historical-industry context is important. The increase in publications coincided with the release of the ISEAL ‘impacts code’ in 2010. (In Chapter 2, ISEAL and its codes are introduced extensively.) It is important to note at this point that ISEAL as the meta-standard in the VSS realm led to the creation of “*in-depth outcome or impact evaluations per year*” and to VSS publicly disclosing at least summaries of these evaluations. Then, while reviewing the literature it is important to understand why these papers were published in the first place. This is relevant as the effects of VSS need to be analysed in a broader context encompassing contested conditions, instruments and mechanisms (Alvarez & Hagen, 2012).

In the context of evaluations, Martinaitis et al. (2019) argue that it is critical to consider the commissioner. Since it is the commissioner who determines whether an evaluation is performed, which questions are included and what information needs to be generated as proof of impact. Having this in mind, I studied the ownership of relevant publications in the cocoa sector (N= 82) and classified them accordingly (see Figure 1). I found that 24.5% of the publications has been commissioned by the users of the standards or the VSS themselves. The largest group in the overview are “descriptive studies of market and sector trends” with 31.7%. The owners of these studies are companies, institutions, or service providers active in the cocoa sector. Thereafter, scientific publications account for a total of 43.9% of the total publications; whereby 30.5% are post-degree and 13.4% are degree-level publications.

2 See report: Steering Committee of the State-of-knowledge Assessment of Standards and Certification (2012)

3 Available at: https://www.isealalliance.org/sites/default/files/resource/2017-11/ISEAL_Impacts_Code_v2_Dec_2014.pdf

4 Available at: <https://thecosa.org/see-solutions/impact-assessment/>

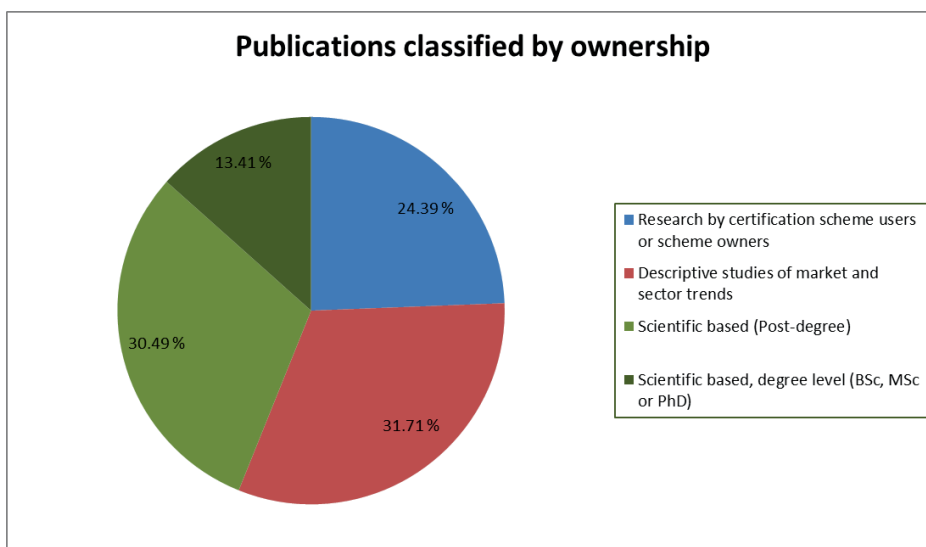


Figure 1: Classification of the literature.

Source: the author

This classification sheds some light on the reasons why the studies have been done. For the first group, the users of the standards, it is the need to measure the impact of their intervention to justify (and/or adjust) the use of VSS. For the VSS themselves, it is to learn whether they are reaching their goals and hence whether they are delivering added value to their clients and by so doing to comply against standards, such as the ISEAL 'impacts code' (this is further explained in Chapter 2). For the group "descriptive studies and sector trends," it may be assumed that the high number of publications is due to the increasing general interest into the role of VSS in the functioning of the entire agri-food network. These publications are not explicitly assessing the direct impact of the VSS in the cocoa value chain, but they are related to this topic. Finally, the science-based groups make it clear that this topic is highly interesting for the scientific community; both as a scientific exercise (degree level) as well as a professional career interest (post-degree level).

Communicating the results of a study is key when looking into the impact into the wider network. Therefore, I divided the publications in different formats as I consider this a proxy for the level of independence behind a publication and for the targeted audience a publication aims to influence. Among the identified publications, the 'report' type of publication was the most widely used with 49 reports or 60%. This may be explained in two ways: first, the target audience is very broad and secondly, the research methodology and publication channels are not standardized. Peer reviewed publications (7) account for

the smallest percentage (8.5%) while these could bring a more objective perspective on the subject and contribute to expand our scientific knowledge. Therefore, it may be concluded that, so far, not much has been learnt about the impacts of certification in the cocoa sector due to the limited number of peer reviewed papers, despite the large number of studies published. This also reflects that publishing peer reviewed papers on this topic is probably quite challenging, in particular due to the methodological problems mentioned above. Additionally, it also reflects the lack of resources for independent research within the research community, i.e., research that is not commissioned by the VSS themselves or by private industry actors using the standards. Finally, although degree level studies might have been carried out with academic integrity and may generate interesting insights, it is questionable whether these publications actually reach the practitioners in the cocoa network itself.

Hence, my review of the literature on cocoa certification shows that the VSS, due to the ISEAL impacts code as well as the actors using these VSS, have dominated the literature on the assessment of the impacts of certification in the cocoa value chain. However, there has not been any focus on the oversight of the VSS active in cocoa. Therefore, in my research I zoom out of the currently dominant lines of research to focus on the oversight configuration as a composite whole.

1.3. Unit of analysis: the oversight configuration

As mentioned in the problem statement, I define *the oversight configuration* as constituted by all the individuals and/or formal bodies involved in defining the assurance mechanisms, the levels in the supply chain where assurance takes place and the actors controlled by the assurance mechanisms as well as the content controlled for.

Since VSS are multi-stakeholder organizations, this means that multiple actors are somehow (standard setting process, certification process, market demand and communication process, etc.) interacting with the VSS and this is stretched over a longer period. The formal assurance mechanism, the 'TSR', entails a CB-AB combination performing their independent auditing services of a given VSS to a supply chain actor. Hereby, most of the content of the standards are at producer level and to a lesser extent at the level of traders, grinders, and other actors.

Moreover, there is also a meta-standard level. This is the standard of standards which is then followed by VSS. Parallel to the VSS, the meta-standard level is also defined through a multi-stakeholder process and is also stretched over time. Multiple processes like the

(meta-)standard setting process and the approval process of the individual VSS are two further assurance mechanisms within the oversight configuration.

Finally, there are certain assurance mechanisms overlapping with governmental institutions. At the farm level, whether a cocoa plot is within 'arable land,' or 'national forest' is something that national entities formally control for. At other echelons of the chain, whether a company (CB) is entitled to perform a certain service might be regulated and finally, the types of claims done at the consumer level may also be somehow regulated. All of this relates with the private assurance mechanism.

With the above in mind, I visualize the oversight configuration in Figure 2. It becomes evident, that although there is an interrelation among the different circles involved, the TSR as the formal assurance mechanism covers only one level and there is no mechanism in place that connects the diverse assurance mechanisms. That is, the assurance mechanisms are currently presented as 'stand-alone' solutions but the interactions between the different mechanisms are not well understood. Moreover, these mechanisms do not interact during their provision of assurance. Hence my choice of taking the oversight configuration as the unit of analysis in this study.

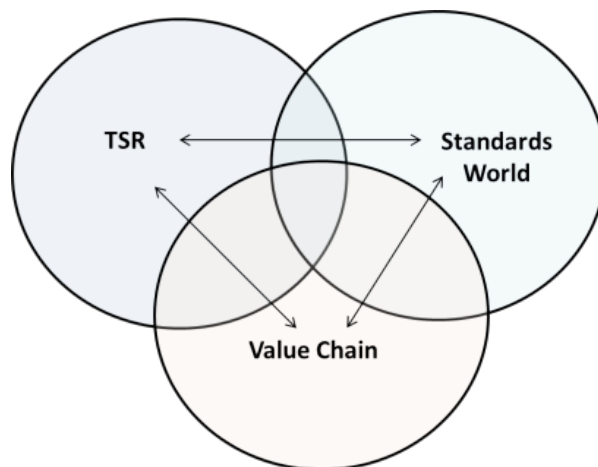


Figure 2: Scope of the oversight configuration.

Source: Author, modified after (Hatanaka et al., 2012)

1.4. Research questions

Having the above in mind, for this thesis the following research questions have been formulated. This study takes a holistic approach to analyse the oversight configuration of sustainability standards in the cocoa value chain. This is necessary since current assurance mechanisms are being enacted at diverse points of the value chain and thus, focusing on one echelon only would not lead to a complete understanding thereof. Hence, my overarching question is:

How is the oversight configuration of VSS in the cocoa sector arranged, what are the consequences of this and what are the possibilities for improvement?

To answer this overarching research question, I focus on the different elements of the oversight configuration. Therefore, this question is further divided in four sub-questions which are explored in Chapters 2 to 5. These sub-questions are:

1. *What have been the changes over time in the assurance mechanisms used by VSS in the cocoa sector? (Chapter 2)*
2. *What are the challenges of implementing major VSS (UTZ and Rainforest Alliance) in the cocoa sector at the farm level in West Africa? (Chapter 3)*
3. *What are the characteristics of the management of cooperatives in Côte d'Ivoire implementing cocoa sustainability standards and what implications does this generate? (Chapter 4)*
4. *What are the sustainability oversight configuration innovations in the development of the CEN/ISO 34101 series for sustainable and traceable cocoa? (Chapter 5)*

This thesis takes an empirical approach to this supply chain-wide phenomenon, which enables a holistic understanding of the functioning of VSS and their implementation. Currently sufficient and reliable empirical evidence is lacking on how certification is being implemented and assured at the farm level, while taking into consideration critical social, environmental and economic challenges. This way established academic discourses on VSS can be challenged with the help of empirical observations. By doing so, I hope to advance the debate towards a more realistic conceptualization of the role of VSS within global commodity chains and to contribute towards a more robust oversight configurations for VSS in agri-food value chains.

It is critical to move towards more sustainable value chains starting at the farm-level but stretching over the entire value chain. This way Northern consumers can have access to the supply of products coming from sub-tropical geographies that are meeting broad

sustainability requirements. Generating more knowledge about VSS, their implementation and their oversight is relevant beyond the cocoa sector alone. This is in particular important due to the broad adoption of standards within food sectors such as aquaculture, fruits and vegetables, etc., as well as in cases of raw materials such as in the textile industry.

1.5. Methods used and types of evidence

During the initial stages of my research, I performed various rounds of data collection. In 2013, farmer-level surveys and supply chain actor interviews were conducted in Côte d'Ivoire and Sulawesi, Indonesia; in 2014 a second round of data collection was conducted in Côte d'Ivoire and Ghana⁵; finally, in 2015 there was a small data collection in Tabasco, Mexico. During these data collection rounds at field level, I used questionnaires applied via tablets and semi-structured interviews.

I also monitored the cocoa network closely between 2012 and 2019 as part of my research. This included VSS operating in the cocoa sector, producer-level developments, exporters and chocolate companies as well as major cocoa sustainability initiatives. Data collection included gathering information about the different actors in the cocoa agri-food network by means of website research and newsletter monitoring. I participated in numerous events including cocoa conferences and topic-specific working groups or research assignments⁶. Formal and informal interviews were also conducted during this period to understand the development of the cocoa sector and the perceptions of the different stakeholders. Since various events (i.e.: ISEAL and ISO standard development working groups) have strict communication policies, there are no verbatim transcripts available. Alternatively, I refer to publicly available information for quoting; field observations are explicitly referred to as such.

Moreover, I reviewed the literature and identified those publications that addressed the overarching topic of 'certification in the cocoa value chain' and the oversight of agri-food sector. My search started with the common academic search engines. Thereafter, I focused on cocoa impacts studies by identifying major contributions and related work done by the institutions behind them. My literature review was not limited to peer-reviewed journals, since the number of publications specific to impact of cocoa certification proved limited. Therefore, I also include reports, university theses (PhD, MSc and BSc), conference contributions and technical reports. Finally, it is important to highlight that I excluded from this review, publications focusing on child labour, gender (in-)equality and household level

⁵ This was within a research assignment for UTZ certified.

⁶ For example, the author participated in the working group of the ISO series 34101, a short-time research assignment for UTZ Certified or on the creation of the world cocoa farmers organization.

analysis. Although, a few of these topics might be assessed in relation with the impact of VSS, I focused on studies which address the certification per se -including any intervention relating to certification as a 'sustainability project'.

The table below summarizes the methods used by chapter:

Table 1: Methods used by chapter.

Chapter	Methods
Chapter 2	Literature review, Comparative analysis
Chapter 3	Literature review, Field work: farmer interviews, field level observations, interviews with actors engaged in the process
Chapter 4	Literature review Interviews with cooperative management staff, field level observations
Chapter 5	Literature review Participative observations Interviews with participants

The geographical focus in this thesis is on two countries in West-Africa, namely Côte d'Ivoire and Ghana. This is justified since most certified cocoa producers live in this region. However, I tried to broaden the scope by also bringing in field observations from my work in Europe, Mexico, and Indonesia.

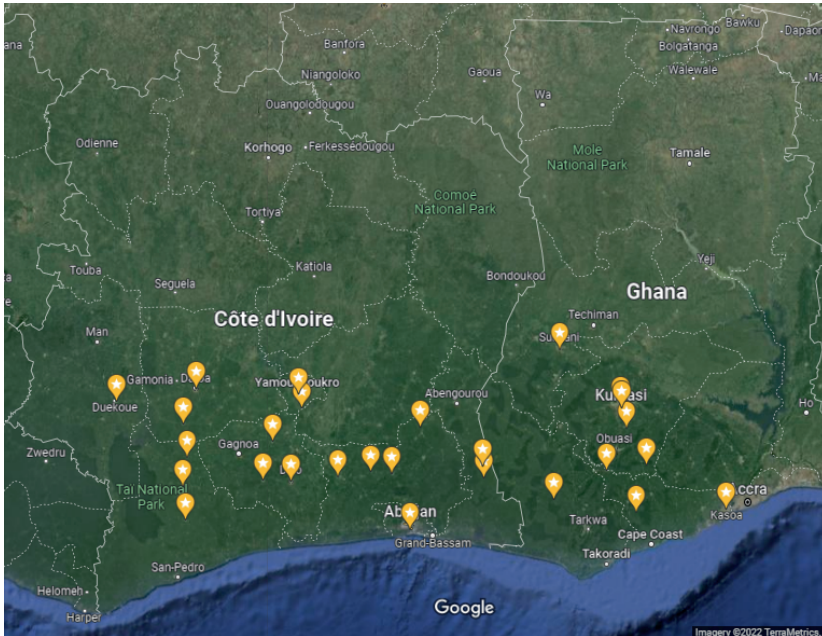


Figure 3. Map of Côte d'Ivoire and Ghana

The yellow balloons on Figure 3 represent the places where field work and /or interviews with cooperatives took place.

1.6. Outline of the rest of the thesis

The rest of this thesis is structured as follows: Chapter 2 presents in detail the main VSS in the cocoa sector (Fairtrade, Utz and Rainforest Alliance and ISEAL), all relevant the actors as well as a background of the cocoa sector and the certification process. Moreover, Chapter 2 explores the assurance mechanisms in place used by the VSS, how these change over time and their vital role in the oversight configuration. Thereafter, in Chapter 3, I present a study on the practice of certification in West Africa to shed some light on the root-causes of the systemic non-compliance to the standards at the farm level. Thereafter, in Chapter 4, I explore the role of cooperatives in Côte d'Ivoire because they are a central actor in the implementation and management of VSS in the cocoa sector. The final empirical chapter is Chapter 5, where I present the case study of the development of the ISO 34101 series, a 'standard for sustainable and traceable cocoa', where I distil its main innovations and the role of different actors in its development. Chapter 6 closes this thesis with a general conclusion presenting the main findings and answers to the research questions, a conceptual reflection on these findings, as well as a future policy and research agenda.

2. Assurance mechanisms behind Voluntary Sustainability Standards in the cocoa sector.

2.1. Introduction

The origins of 'independent auditing' draw back to ancient times. Back then accountants needed to 'assure' that the financial value of a traded product was being accounted for in a consistent, independent and reliable manner, for example, for the rulers to charge the appropriate taxes (Jayeoba & Ajibade, 2016). During the industrial revolution, the concept of *product certification* emerged to 'assure' that a technical specification was adhered to. For example, the first standard from the German Standardization Institute, the DIN 1 published in 1918, specified the dimensions of an industrial cone pin (DIN, 2019). Later on, the development of accounting standards gave an important impulse to the use of standardization and auditing techniques. Eventually, this also became a widespread practice in the agricultural and food sector (Kotsanopoulos & Arvanitoyannis, 2017).

The spread of these auditing practices in the agricultural and food sector is closely related to regulatory controls and regulations. This is most notable in Europe (Henson & Humphrey, 2010), where the European Union relies strongly on food imports. In the last decades, there has been a shift from national government-led regulation towards private and voluntary forms of governance (Bartley, 2007; Gereffi et al., 2005). This type of regulation was presented as a reliable and credible system to signal to both value chain partners and end consumers that their purchase was trustworthy and of an agreed quality. As a result, today most certification systems operating in the agri-food sector rely on the so called 'third-party' certification system (Hatanaka & Busch, 2008). Third-party certification means there is a 'Tripartite Standards Regime' (TSR), as the assurance mechanism in place to assure the independency and credibility of the system (Hatanaka et al., 2012). The independency and credibility of the TSR relies on one actor specifying a set of criteria to be met (a standard), another actor producing a product according to that set of criteria, and a third-party (a certification body) ratifying that the product complies with the agreed criteria.

The growing interest in the sustainability of raw materials used for consumer products drove installing voluntary sustainability standards (VSS) in global commodity chains, which resemble regulation based on third-party auditing. VSS are being set by multi-stakeholder organizations, composed by a wide range of actors such as multi-national corporations, traders, retailers, governments, civil society and ideally farmers. The content covered by these VSS can be very broad and cover complex socio-geographical issues such as child-labour or deforestation. Third-party certification is mostly used in global commodity chains to assure the credibility of on-product claims.

VSS have been mainly investigated from two angles: one, their governance implications, and two, their effectiveness in achieving the desired societal impact. In the first body of literature on the governance of VSS, mapping sustainability networks and the actors participating in the standard setting procedure are central (Ponte & Cheyns, 2013) as well as how these networks achieve their legitimate power -and how fragile this can be- (Boström & Hallström, 2013). Others identify incentives for certain actors behind using such standards (Fulponi, 2006) or focus on the reasons for creating standards in the first place, for instance to solve externalities or to cover a government deficiency (Abbott & Snidal, 2001). Furthermore, other studies examine how to achieve value chain coordination (Muradian & Pelupessy, 2005) or provide examples of government reactions to private standards (Wijaya & Glasbergen, 2016). Critical studies argue that third-party conformity assessments serve as a key coordinating role in international trade and are fundamental for the neoliberal 'governance' shift (Loconto & Busch, 2010).

The second body of literature critically investigates the impact and effectiveness of standards and certification. There is little evidence that this type of regulation realises positive impacts on the farm level and in the societies where they operate (Oya et al., 2017; Tallontire et al., 2012). Some signal even a '*race to the bottom*' (Gale & Haward, 2011) meaning that the requirements of the standards are diverging to minimal levels (Reinecke et al., 2012). The cost of certification has also been found to be a major factor influencing the demand for certified products, i.e., only rich countries will use them (Auriol & Schilizzi, 2015). The observed difficulty of VSS and third-party certification to deliver their promises stimulated the cocoa sector to move to company-owned supply-chain programs; in part, these also use third-party assurance models as an alternative (Thorlakson, 2018).

Both bodies of literature look at VSS and third-party certification in rather general terms. The aim of this chapter is to shift attention to the details of the oversight configurations underlying VSS, which is relevant to understand the consequences for governance and societal impact. Therefore, this chapter begins with presenting some background on certification in the cocoa sector and then introduces relevant actors and standards - including the meta-standard. Thereafter, the *tripartite standard regime* (TSR) is presented for the main standards in cocoa including their changes over time. This leads to the presentation of the main assurance mechanisms of current VSS operating in the cocoa sector, namely Rainforest/UTZ and Fairtrade. The chapter closes with a discussion regarding the assurance mechanism and its consequences.

The analysis is based on an extensive review of publicly available documents of the VSS operating in the cocoa sector. This included previous and current versions of the VSS

normative documents and websites as well as CSR reports of companies using, demanding, or implementing the standards (such as NGOs and service providers to the cocoa-sector). Secondary sources such as reference international standards and accreditation documents were also reviewed when appropriate. This review is limited to the period between 2009-2017. Furthermore, field-level observations were made during field trips including various data collection trips to producing countries (Ghana, Côte d'Ivoire, Indonesia, and Mexico) between 2012-2016. During these field trips insights were gained through interviews with key informants involved in major standards active in the cocoa sector. Interviewed key informants included individual farmers, farmer group management representatives, middlemen, traders, service and input providers, extension service and government officers, standard representatives, various certification bodies and an accreditation body.

The chapter elaborates on the problem statement central to the thesis, namely how the oversight configuration is created and operationalized in global cocoa commodity chains. Reflecting on the oversight configuration in cocoa VSS opens space to discuss possible contours of alternative models that may be a better fit for achieving sustainability in the context of layered global commodity chains.

The rest of the chapter is structured as follows: first the relevant actors in the cocoa value chains are presented, followed by a brief review of the introduction of certification into the cocoa sector. Thereafter, the relevant standards are introduced. After that the main assurance mechanism is presented and the chapter closes with a short discussion of the findings.

2.2. Actors involved in the certified cocoa value chain

Cocoa farmers

For many Mesoamerican cocoa producers there is a cultural connection with the cocoa tree, its fruits and associated rituals. However, in recent decades this cultural connection has been declining (McNeil, 2006). Only a few pockets still exist (e.g., certain communities in Tabasco and Oaxaca in Mexico) where cocoa is produced and recognized in the local markets for its cultural value. In these communities, cocoa is sold at three or four times the world market price⁷. African cocoa farmers have no particular cultural connection to cocoa. They consider cocoa a cash crop produced to be sold on the global market. These African cocoa farmers constitute a largely unorganized production base characterised by endemic poverty and illiteracy and, in some regions, child labour is still regarded as a critical problem (Lemoud et al., 2017). Cocoa farmers are, however, not just cocoa

⁷ Own observation field visit 2015

farmers. As observed during field work, cocoa farmers grow an average of four other crops in Ghana and six in Côte d'Ivoire (Uribe Leitz, 2014b). Steijn and Vermeulen (2016) also found that 83% of cocoa farmers have other sources of income besides cocoa, including cultivating other crops and earning wages through labour. In Côte d'Ivoire, rubber (*Hevea brasiliensis*) was found to be the preferred complementary crop to cocoa for several reasons, including for being a year-round source of income (Bymolt et al., 2018; Ruf, 2007). The same research found that in Ghana and Côte d'Ivoire, farmers selling other crops than cocoa generate additional income, which raised them above the World Bank's poverty line. However, cocoa VSS do not recognize or accommodate supplementary crops as they are only designed for the management of the one particular export crop (Cohn & O'rouke, 2011).

Cooperatives, producer groups and other farmers' organizations

Cooperatives, producer groups and other forms of 'farmer organizations' represent the certificate holders within the cocoa value chain. Hence, these are the 'on-farm' actors getting certified. There is a wide range of cooperatives, producer groups or similar structures in the cocoa sector. In producing countries with higher levels of education, infrastructure, (etc., countries such as Costa Rica or Ecuador), cooperatives provide more and better services to its members and have stronger bargaining power than in African countries. In countries such as Ghana or Côte d'Ivoire the situation is more challenging. For example, in Côte d'Ivoire there was an unsuccessful attempt to promote cooperatives as a rural development strategy during the 1970s (Yapo, 1989). This failure created a feeling of distrust among the elderly and decision-makers within the cocoa communities which is still present (Ruf et al., 2019). Hence many cooperatives in the country are *de facto* cocoa collection centres. However, since VSS require a cooperative structure as certificate holder, these collection centres have been adapted and today they have taken up some basic elements of a cooperative in order to get certified and hence fulfil the standard's requirements.

Implementors: Traders, processors and other actors

Next to the individual farmers and their cooperatives, the cocoa supply chain is completed with local traders, buyers, exporters, grinders and chocolate brands. For certification to take place all these actors are involved in the coordination of the supply chain and in some cases these actors are crucial for the implementation of the VSS to take place at the farm level. Hence, within this thesis I refer to these actors involved in the certification process as 'implementors'.

Farmers and supply chain actors may be certified against one or more VSS. Hence, depending on the composition of the supply chain, one or more certified entities are

involved making the process complex. Local traders represent the most underexamined actor in the cocoa supply chain in the existing literature. Most studies focus on either the producers or on the major exporters, chocolate brands and consumers. However, local traders play a significant role, not only by aggregating small volumes across extended regions but also by communicating (and sometimes also implementing) the needs from the markets to the farmers.

Most formal traders and cocoa grinders are international companies, many of them with a large market share. For example, only eight trader/grinders and six chocolate producers dominate the chocolate supply worldwide and they all have double-digit shares of certified cocoa included in their supply chains (Fountain & Hütz-Adams, 2018). Besides the actors directly involved in the value chains and engaged in cocoa processing and chocolate production, there is also a range of other private sector actors involved in certification related activities, including:

- Multi-stakeholder networks and platforms, which co-create VSS or initiatives that support, use or demand certification.
- Accreditation and certification bodies: these audit companies issue the certificates and provide legitimacy to the system as a 'third-party'. Their credibility relies on their independence from the VSS (Tanner, 2000). Hence, this assurance mechanism is regarded as the most credible (and cost effective) mechanism in the agri-food industry.
- Consultancy companies: these companies enable the certification programs, develop sustainability strategies, and use certification as their main tool (up to consumer facing marketing campaigns).
- Extension service providers, (in many cases these are international NGOs): these organisations provide support for farmers and cooperatives, for example through offering training and advice for successfully implementing certification programs that lead to certified producers (cooperatives).
- Industry-wide organizations: there are many organizations in the cocoa sector, each with a specific focus and they directly or indirectly engage with certification activities, e.g.: cross-sectorial organizations such as the World Cocoa Foundation, the European Cocoa Association, etc.
- Governments and public entities: some public agencies may fund VSS or related initiatives that lead to certified supply chains and in some cases official extension services may be involved in certification-related activities.

As this overview illustrates, the cocoa sector constitutes a complex network involving many and very different actors. Many producers act very locally, while traders, grinders and chocolate brands have an international presence. Beyond these economic actors a wide

range of other actors surrounding the cocoa producing, trading and processing agents are also involved. All of them influence the functioning of the network.

2.3. Certification and the cocoa sector

The need for certification in the cocoa sector did not originate from within the cocoa agri-food network but from external actors. The origin of certification in the cocoa sector draws back at least to the year 2001 when the Harking-Engel Protocol was signed between the Chocolate Manufacturers Association (CMA), the World Cocoa Foundation (WCF) and US senators and representatives. This protocol included the commitment by the chocolate industry to develop and implement voluntary industry-wide standards of public certification to assure that the cocoa beans sourced have been grown and processed without the worst forms of child labour (Payson Center, 2007). This gave birth to the International Cocoa Initiative (ICI) and to models of certification by the industry to comply with the protocol. Failing to achieve the ambition of the protocol, the efforts of the industry then led to considering independent and credible certification systems (Payson Center, 2010). The political agenda in the USA in the early 2000s which led to the Harking-Engels protocol is reflected 20 years later in the development and implementation of cocoa voluntary sustainability standards (VSS). This process illustrates the transition from a public commitment to enhance sustainable cocoa to the creation of private and multistakeholder initiatives to implement these ambitions.

Cadbury was the first major chocolate company which started in 2008 to use the Fairtrade certification scheme for all its dairy milk chocolate sold in the UK. Shortly after, MARS Inc. followed by committing to source 100% certified cocoa by 2020 (Fountain et al., 2012). Subsequently, the major chocolate brands made similar commitments (Hershey's Company, 2013). All these commitments and engagements with VSS aiming at delivering sustainable cocoa, were made under the assumption that these VSS were well suited to drive positive change in the context of smallholders producing cocoa. Besides these private commitments towards creating a certified cocoa supply chain, also other efforts were being made through the establishment of multistakeholder platforms. The first one was founded in the Netherlands in 2010, which led to the signature of a letter of intent according to which all cocoa imported to the Netherlands should be sustainably sourced by 2020 (Payson Center, 2010). Thereafter, in 2012, Germany followed with a similar approach called the German Initiative for Sustainable Cocoa (GISCO, 2013). Next to these voluntary private standards and agreements, the cocoa industry embarked on the creation of an industry-wide standard for 'sustainable and traceable cocoa'. This initiative started in 2013 with a petition to the International Organization for Standardization (ISO) in collaboration

with the European Committee for Standardization (CEN/ISO). After six years of work, the ISO standard for 'sustainable and traceable cocoa' was published in 2019 (ISO, 2019b).

Industry commitments and the additional support given by multistakeholder platforms led to an increase in the number of certified cocoa farmers. According to Potts et al. (2010) in 2008, the total share of sustainable cocoa in the global market was 1,2%, combining Fairtrade (0.2%), Fairtrade Organic (0.1%), organic (0.7%) and Rainforest Alliance (0.2%). By 2016, at least 16% of the global cocoa area was certified -extending virtually to 23% when considering multiple certification (Lemoud et al., 2017). At that time, the largest market share was for UTZ.

2.4. Main sustainability standards in cocoa

In the cocoa sector, the dominant VSS are UTZ Certified, Rainforest Alliance and Fairtrade International. These three VSS have shown a rapid evolution over the past 20 years (Kuit et al., 2014). This is true in terms of the growth in the number of certified farmers and in terms of the constant change in the content of their standards, their way of communicating and modes of working. Together they certify more than 30% of the world cocoa harvest (Fountain & Huetz-Adams, 2015). UTZ and Rainforest Alliance announced their merger in 2017 (Rainforest Alliance, 2017), which was finalized in 2019 and materialised in a single standard in 2020 under the name Rainforest Alliance. Moreover, nearly all major industry actors expressed their commitment to purchase 100% 'sustainable cocoa' in the years to come. Thus, certified cocoa production is on its way to become mainstream. This implies that producers in developing countries will have to adhere to these standards in order to access the world-market (Fulponi, 2006; Mol & Oosterveer, 2015). Hence, in the cocoa sector, VSS have become *de facto* mandatory (Mergenthaler et al., 2009).

Fairtrade International and UTZ Certified/Rainforest Alliance, show many similarities. For example, they are all full ISEAL members and they thus adhere to all ISEAL codes. These VSS are visible to consumers through labels, and they try to differentiate themselves from each other at the point of sale through a "niche" in their focus (i.e.: Fairtrade is "most social" versus Rainforest being "better for the environment").

The UTZ Cocoa standard version 1.0 was launched in April 2009, Rainforest Alliance "Local indicators for sustainable cocoa production (Côte d'Ivoire and Ghana)" date also from April 2009 and finally, Fair Trade "Standard for Cocoa for Small Producer Organizations" v.1.0

from May 2011, while the Fairtrade 'COCOA PROGRAM' was launched in January 2014⁸. Finally, none of these three VSS started their operations in the cocoa sector (UTZ and Fairtrade started in the coffee sector). However, based on their annual reports they all present constant and considerable growth rates in the cocoa sector. Although these VSS compete in the marketplace, they have similar requirements and the number of requirements per sustainability area are also very similar. (See Figure 5.) The content-wise similarity is so close that UTZ and Fairtrade audits could be performed at the same time.

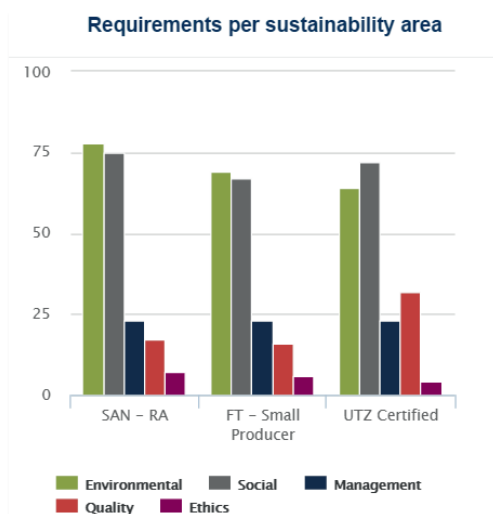


Figure 4. Requirements per sustainability area and standard

Source: standardsmap.org (last accessed January 2020)

The dominant VSS rely on a set of written requirements that contain terms and concepts that refer to international laws and conventions, technical guidelines, and further specific references. At the same time, these VSS have slightly different definitions for the same term and they define different thresholds for compliance to a similar requirement. For example, the number of shade trees per hectare differ, as UTZ requires 12 trees and Rainforest Alliance 18-20 trees. Finally, since these VSS should be applicable world-wide, the contents need to embrace all possible scenarios and practices known for a certain crop (i.e.: cacao); this makes certain requirements difficult to apply in certain parts of the world, which is illustrated by the following challenges:

⁸ Personal communication by phone with FT-International on the 22.10.2015

- Worst forms of child labour: In West-Africa this is very hard to monitor and enforce and in Latin America not a relevant issue.
- Garbage disposal (i.e., agrochemical bottles): many countries do not have any garbage disposal system in place. This is especially true in farming communities.
- Calculation of the number of shade trees per hectare within the cocoa agroforestry system.
- Further examples: respect for wild-life, buffer-zones, gender-equality, social conduct, clean livelihood, etc.

It is important to notice that the “users of the standards” (i.e., traders, grinders and alike) and consumers cannot distinguish among the different VSS, and some do not have the competence to understand what is behind them (differences between the similar VSS). There is a clear lack of understanding at the user and end-consumer levels. For example, the Rainforest Alliance standard operated at its early stages without any accreditation and later with a private accreditation body, while UTZ and Fairtrade demanded an accreditation. Meanwhile the ‘market-place’ (users and end-consumers) never seemed to discriminate Rainforest Alliance for its lack of oversight. Looking at the content dynamics of the main VSS in cocoa, mainly incremental changes can be observed in the attributes being certified through VSS, namely the shift from product technical specifications (for instance the length of a wooden table) towards intrinsic or credence attributes (e.g.: women’s participation in a democratic election or the function of wildlife corridors). Yet, as shown below, the assurance mechanism underlying the content behind these VSS remains largely intact.

2.4.1. Fairtrade

In 1988, Max Havelaar launched its first Fairtrade label. The initiative started with coffee from Mexico being sold in Dutch supermarkets. The idea was successful and therefore replicated in many other countries while the range of certified products also increased. In 2011, the initiative changed to its current name Fairtrade (Fairtrade International, 2016a).

Fairtrade International originated as a ‘niche’ market initiative that tried to create an alternative trade organization to provide high quality products to consumers in the global North while ensuring equitable (‘fair’) prices by means of an established ‘Fairtrade minimum price’ for the producers in the global South and this under better trade conditions. When Fairtrade products entered the mainstream supermarkets (conventional retailers) they had to engage with price-driven competition. The latest development within Fairtrade International is the creation of commodity-based ‘sourcing programs’ that allow companies to commit to higher purchases of Fairtrade products. These sourcing programs are labelled with a Fairtrade mark (slightly different to Fairtrade certified products) (Fairtrade

International, 2016b). Fairtrade International is the first standard among the 'sustainability standards' that offers a 'carbon credits' standard to address climate change. This is being done in collaboration with the Gold Standard. The growth of Fairtrade International has been considerable, in 2002 revenues were around 2 million € and by 2018 they reached 21 million € (Fairtrade International, 2019).

In this thesis, I only consider Fairtrade International and not the other Fairtrade initiatives such as Fairtrade USA, EcoCert Équitable, Fair for Life, etc. Although these other VSS within the broader Fairtrade movement do not differ substantially from the original Fairtrade standard, I explicitly make this limitation because they represent only a very marginal proportion of the certified cocoa worldwide.

2.4.2. UTZ Certified

UTZ Certified origins go back to the 1990s and at that time the focus was only on coffee and the aim was to implement 'sustainable quality'⁹. The concept was developed by a Dutch coffee roaster and a Belgian-Guatemalan coffee producer. The concept proved successful, so over time UTZ Certified developed additional standards for tea, cocoa and later hazelnuts. Additionally, UTZ Certified also provided traceability services to other standards development organisations such as the Roundtable on Sustainable Palm Oil (RSPO) (UTZ, 2015b). UTZ had a continuous and fast growth. In 2004 their revenues were approximately 1 million € and by 2017 they reached over 24 million €¹⁰.

UTZ is a multi-stakeholder initiative managed through a Supervisory Board and a Standards Committee. The positions within these bodies changed over time and this was the main mechanism for UTZ to become and remain independent. UTZ distinguished itself from other VSS by claiming that their farmers produce more responsibly and are becoming more professional over time. Also, intermediary actors in the supply chain could credibly show their commitment towards sustainable production by sourcing UTZ Certified products. As mentioned above, UTZ and RA merged 2020, whereby the Rainforest Alliance name remained.

2.4.3. Rainforest Alliance

The initiative goes back to 1984, when a group of NGOs started cooperating. In the beginning, their certification seal was called 'ECO-OK'. Over time the initiative grew and in 1997 the members decided to create a more formal network. This gave birth to the still

⁹ Original name was UTZ Kapeh, which means "good coffee" on a Mayan language.

¹⁰ Source: UTZ Certified annual reports

existing 'Sustainable Agriculture Network' (SAN) and to the establishment of a product label 'Rainforest Alliance Certified™', launched in 2001. The growth of Rainforest Alliance has accelerated since its creation. Several private companies, such as Chiquita bananas and Kraft foods (now Mondelez International), sourced SAN/Rainforest Alliance certified products from the beginning. Later on many other retailers and brands followed, leading to the wide range of products on the supermarket shelves with Rainforest Alliance certification that can be found today (SAN), 2015). SAN/Rainforest Alliance has grown from a total revenue of 15 million USD in 2006 to more than 58 million USD¹¹ in 2018.

Since its creation, SAN/Rainforest Alliance has developed several versions of its standard(s). A major revision took place in 2008 when Rainforest Alliance had to comply with ISEAL's Codes of Good Practice. As a result, updated versions of the SAN/Rainforest Alliance standards were published in 2009, which included for the first time cocoa-specific local indicators for Côte d'Ivoire and Ghana (SAN, 2010a).

The Rainforest Alliance label has tried to distinguish itself from other VSS by claiming that its standard protects and promotes a better environment (forest, soils, rivers and wildlife). However, over time the similarities between Rainforest Alliance's strategy and the approach taken by UTZ led to the merger of both organizations. This was announced in 2017 (Rainforest Alliance, 2017) and completed with the launch of Rainforest Alliance latest standard version in 2020. The merger of Rainforest Alliance and UTZ has led to a restructuration and the new four Rainforest Alliance pillars are: 1) certification and standards, 2) advocacy, 3) tailored programs and 4) landscape and community. Although the UTZ label will remain on the supermarket shelves for a limited period, the new Rainforest Alliance standard will immediately replace the UTZ standard and eventually also the label at the point of sale (Rainforest Alliance, 2020). The 2020 Rainforest Alliance standard includes some new concepts, for example 'shared responsibility' and 'smart metrics'. Shared responsibility is implemented via the payment of a 'sustainability differential' and financing of 'sustainability investments', which should enable supply chain actors to implement sustainability measures at the farm level. These additional payments, anchored in the standards, bring the Rainforest Alliance standard closer to the Fairtrade approach. The 'smart meter' component, which are criteria that measure with a certain 'metric' a given topic for example, number or percentage of workers below the living wage-provides a clear example of the impact-based approach, which is pursued more widely in the world of VSS. Finally, the new Rainforest Alliance standard is being used in other crops than only the typical tropical commodities, such as coffee, cocoa, tea and hazelnuts, and now also includes typical monocultures such as pineapples, avocados, palm oil and

¹¹ SAN(RA) Annual reports

oranges¹². This is a further example of the expansion of the Rainforest Alliance standard and hence of its market penetration.

2.4.4. ISEAL Alliance, the meta-standard

The ISEAL¹³ alliance is an umbrella organization for VSS. The ISEAL alliance was initiated by commodity-led standards, namely: Fairtrade Labelling Organization International (FLO), Forest Stewardship Council (FSC), International Federation of Organic Agriculture Movements (IFOAM) and the Marine Stewardship Council (MSC) (Loconto & Fouilleux, 2013). Nowadays ISEAL members also include jewellery, and golf-related VSS. ISEAL's core activity is the creation of a series of standards for VSS; ISEAL's meta-standards are the 'Standard Setting Code', the 'Impacts Code' and the 'Assurance Code'. Hence, ISEAL is a meta-standard-setting organization. In addition, ISEAL provides a series of services for its members with the aim of creating consensus about what is 'good' and 'not good' among VSS. Next, ISEAL helps creating and sharing knowledge among VSS (Loconto & Fouilleux, 2013). ISEAL also sets a political agenda and executes this agenda by bringing together different institutions within the sector. Furthermore, ISEAL codified a standard model for transnational rule-making organizations (Dingwerth & Pattberg, 2009) and plays the role of 'a market watchdog protecting the legitimacy of the sustainability standards movement' (Reinecke et al., 2012). Thus, ISEAL can be considered an institutional entrepreneur (Loconto & Fouilleux, 2013) by means of coordinating various sustainability standards to seek benefits. This 'resource orchestration' creates a competitive advantage for the involved organizations (Sirmon et al., 2011). Moreover, ISEAL is very actively engaging with its 'community' which ranges from VSS staff, over CB and ABs to certified farmers, their cooperatives as well as traders, grinders, brands retailers, consumers and even governments and international institutions. By means of conferences, workshops, and webinars, etc. ISEAL defines which standards are 'sustainable' and these are only standards which comply with all of its three codes, namely the 'Standard Setting' code, the 'Impacts' code and the 'Assurance' code. The compliance of the VSS against these codes is reviewed by independent reviewers appointed by ISEAL. The details behind this process are defined by ISEAL compliance program. Other standards that are on their way to comply with ISEAL codes are referred to as 'community members'.

Of interest regarding the assurance mechanism of sustainability standards is ISEAL's Assurance Code. Table 2 presents the references regarding the use of Accreditation Bodies (AB) in the version 1 of the Assurance Code (ISEAL-Alliance, 2012) on the left side of the

¹² For a complete list of the certified products and origins, visit the [Rainforest Alliance public certificate search website](#).

¹³ Formerly named "International Social and Environmental Accreditation and Labelling (ISEAL) Alliance", today only named "ISEAL Alliance"

table and on the right side of the Table version 2 (ISEAL, 2018). The Table shows how ISEAL determines what is acceptable for standards to include in their assurance mechanism.

Table 2: ISEAL Assurance requirements version 1 and version 2

ISEAL Assurance Code v1 2012	ISEAL Assurance Code v2 2018
<p>6.6.1 Oversight Mechanism: ... "Where standards system owners incorporate accreditation as an oversight mechanism, they shall ensure that accreditation bodies comply with ISO 17011 in addition to the relevant Assurance Code requirements. Where the standards system owner is the assurance provider, they shall ensure that oversight is carried out by personnel independent of those engaged in the assurance process."</p>	<p>5.4.5 Accreditation: "Where the scheme incorporates accreditation as an oversight mechanism, the scheme owner shall ensure that accreditation bodies comply with the current version of ISO/IEC 17011 in addition to the Assurance Code requirements that apply to oversight bodies".</p>
<p>Guidance to the same point: [...] "Though this clause requires conformity with ISO 17011 for accreditation bodies, it does not prescribe membership by accreditation bodies in the International Accreditation Forum. In contrast to national accreditation, international accreditation is a better model for international social and environmental standards systems. International accreditation bodies operate internationally in a particular sector, rather than nationally in a wide variety of sectors. This creates certain advantages including the ability to build greater expertise in evaluating assurance in specific sectors."</p>	<p>Guidance to the same point: "Where other forms of oversight are implemented, the scheme owner may also want to consider regular evaluation against ISO/IEC 17011 to improve the quality of its oversight system".</p>

Table 2 shows how the ISEAL defines why *international accreditation bodies*¹⁴ can (or should) be used over *national accreditation bodies* (NABs). At the same time, it is important to note that ISEAL refers to ISO standards (namely 17011 or 17065). This indicates the complex interaction and interdependencies among the public and private standards (or industry management- and process-oriented standards). This is part of ISEAL's legitimacy

¹⁴ International accreditation bodies are for example IOAS or ASI, which are independent/private accreditation bodies in the sense that they do not comply with Regulation (EC) No. 765/2008. National accreditation bodies such as DAkkS, RvA or UKAS are compliant with such regulation.

strategy, which reinforces and harmonizes the nature of the main VSS in cocoa. As a result, version 2 is less descriptive than version 1, allowing more free space for VSS when it comes to their oversight mechanisms.

2.5. The persistent assurance mechanism

This section presents the changes over time in the assurance mechanisms used by cocoa VSS. Next, we describe the similarities between the major VSS, which informs a typification of the assurance mechanisms.

Looking at the assurance mechanism of the VSS at hand, we can see that there was a streamlining in the institutional arrangements with the introduction of ISEAL's assurance code. Namely, the highest oversight level is imposed on the VSS themselves -instead of a National Accreditation Body (NAB). This illustrates the powerful position that ISEAL has within the VSS world, namely that of legitimizing the structure of the assurance mechanism. This is done through private ABs (i.e.: created and run by ISEAL members) over the use of NABs, which have a governmental recognition. Although some CBs might still be accredited against multiple ISOs by NABs, this is not exclusively because the VSS do not require it.

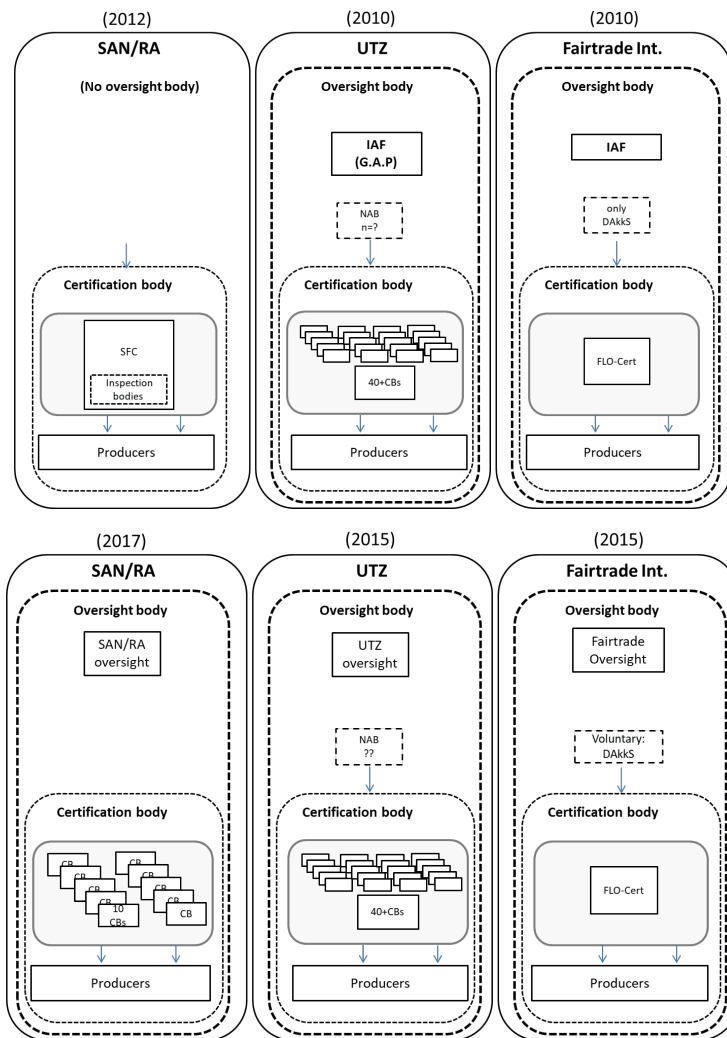


Figure 5: Tri-partite Standards Regime (TSR) of Rainforest Alliance, UTZ Certified and Fairtrade International and their changes over time¹⁵

SAN: Sustainable Agriculture Network, RA: Rainforest Alliance, SFC: Sustainable Forest Certification, IAF: International Accreditation Forum, G.A.P.: Good Agricultural Practices, DAKKS: German Accreditation Body, FLO-Cert: the certification body of Fairtrade International.

Source: the author

Figure 5 summarizes the assurance mechanisms in place for the three VSS. The figures on the top layer represent the institutional arrangements in place before the VSS started their operation in the cocoa sector. The lower layer represents the changes in 2017 and 2015

¹⁵ Please note that the Rainforest Alliance had an intermediary arrangement between the two situations shown in the diagram. For sake of simplification, we only take the two presented above.

respectively. As we can see, as ISEAL members, they show some further alignment in their assurance mechanism in the current situation; there are only minor differences.

From Figure 5, it becomes evident that the assurance mechanisms are very similar. Also, their change over time has been rather limited. The meta-standard ISEAL facilitated this streamlining of the assurance mechanism(s) over time. This observation resonates with (Henson & Humphrey, 2010), who point out that there is a '*rationalization of the standards regime over time*' and that it is becoming harder to make distinctions between standards. This trend even led to the merging of two major VSS (Rainforest Alliance and UTZ).

As we can see from Figure 5, the current assurance mechanisms are focused on the farm level and to a lesser extent to the control of the CBs via accreditation. Interestingly, there is no 'independent or external' assurance element to control for any type of outcome. All the processes are audited based on procedures and documented evidence. Whether a VSS is achieving its outcome or whether a cooperative is providing an added value to its members and its members for example, to society or the environment is not being accounted for.

At the level of supply chain actors such as brand companies, grinders and traders, there is the certification as 'supply chain actors' where auditing is restricted to the mass-balancing of the declared certified volumes. Hence, the oversight configuration is such that the farm level has the biggest load of requirements to comply with and has the largest audit burden whereby the rest of the supply chain actors have agreed to this (un-)balance.

2.6. Discussion

Overall, the assurance mechanisms in place in all VSS active in cocoa do not show major differences. The assurance mechanisms even reflect the same design as an accounting standard, an industrial specification establishing conformity of an industrial gear, or the accreditation of a management system of, for example, a hospital. This type of path dependency underlying the form of oversight in the domain of sustainability standards in global commodity chains bring into question whether this generic assurance mechanism - the design of the TSR- is fit for purpose in the dynamic and global context of the cocoa sector. Questions relate to the goals of the VSS, e.g., the social and environmental welfare of a small-scale cocoa farmer, are very different from accounting or industrial standards. Moreover, supply chain management and value chain governance evolved substantially since the last century when this assurance model was first introduced. A lesson from tracing the incremental changes in the global cocoa chain is that, with the increase in the complexity of attributes being addressed by VSS, one may expect that the assurance

mechanism evolves as to *assure* the new attributes on a robust manner. Lacking a robust institutional environment that can assure the oversight, implementation, and communication of a certain set of standards within a chain implies that the VSS is not necessarily being adhered to by all stakeholders. Consequently, the VSS may lead to invalid claims. Therefore, it deserves to rethink the design and use of the main assurance mechanism in its current situation. However, there seems to be little space in the cocoa sector to do so.

A plausible explanation for the observed persistence of the assurance mechanism in cocoa is its reinforcement by power relations in the value chains, specifically, the power of *implementors* of standards and certification. Implementors are currently able to shift the audit burden down to the producers since they bring this tool to the farmers. This becomes clear, when looking at the governance structure of VSS, where we find many actors, such as implementors and end-buyers (brands, retailers, NGOs). However, certified producers are not in the “driving” seats of these multi-stakeholder initiatives (Bennett, 2017). Smallholders are not sufficiently embedded in the standard setting procedures (Tallontire et al., 2014), which makes it hard to include their points of view or shift the focus of the assurance mechanism away from them. Therefore, the power imbalance within the standard setting procedures and certification processes (which reflect the power balance within the cocoa value chain) directs the audit burden to the farm level, while ignoring the rest of the supply chain.

Moreover, ISEAL itself is not being audited. The assurance mechanism at the ISEAL level is one of peer reviews among compliant VSS and specific committees during the attestation of compliance of a specific VSS. This takes place in average every 5 years and there are no publicly available reports on the audits of a VSS.

Finally, there is no element on the assurance mechanism to relate the assurance from one VSS to another VSS or between the VSS level and the ISEAL level. This means that assurance among the layers is disconnected.

3. Cocoa Certification in West Africa: The need for Change.

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3.1. Introduction

The goal of this chapter is to discuss various implementation challenges of current cocoa certification schemes at the farm level in West Africa. To this end, the chapter presents a selection of certification criteria (requirements) from the two leading certification schemes: UTZ Certified and Rainforest Alliance. The criteria selected exemplify typical implementation problems in the West African cocoa sector, though they are by no means an exhaustive list.

Perhaps nowhere is the term 'mass certification' more deserved than in the cocoa sector. Today, more than 30 % of global cocoa production is under certification, and this is concentrated in Côte d'Ivoire (Lemoud et al., 2017). Although there is a considerable amount of double and triple certification (Fountain & Huetz-Adams, 2015), it is evident that cocoa certification is not a niche market. Nevertheless, despite these high percentages, current certification schemes are largely not successful in delivering what they stand for: sustainable (social, environmental and economically viable) cocoa production for the farmers. We argue that current practices will come to a "dead-end" within a few years in the cocoa certification business in West Africa, leading to farmers not participating in certification schemes, industry actors not profiting from certified products, and consumers no longer trusting certification labels.

Therefore, this chapter aims to shed some light on the roots of the 'non-compliances' from cocoa farmers (producer groups) with the requirements laid out by certification schemes, as well as the consequences thereof, e.g., a different perception of the concept of certification by cocoa farmers (producer groups) and little credibility from the user/consumer side. By doing so, we expect to motivate all actors involved in the cocoa certification business to re-think their strategy and adjust accordingly.

The focus of this chapter is to illustrate why the current certification criteria cannot deliver intended outcomes in the West African scenario. With this view, the chapter has the following objectives:

- Showcase some certification criteria that are unachievable,
- Illustrate why these certification criteria cannot be achieved by the average cocoa farmer,
- Question current certification practices, and
- Propose some discussion points for improvement.

Our observations come from several data collection rounds made in Côte d'Ivoire (or the Ivory Coast) and Ghana between 2013 and 2015. Furthermore, additional data and observations come from key informant interviews and secondary data found in cocoa-related studies.

In this context, this chapter supplements and continues existing studies on the impacts of certification at the farm level (Ingram et al., 2014; KPMG, 2012). The chapter starts by giving a short overview on the certification schemes of interest in Sect. 24.2. Thereafter, Sect. 24.3 highlights and discusses the challenging certification criteria. The chapter ends with conclusions and recommendations in Sect. 24.4, highlighting the need to reconsider many elements of today's certification systems.

3.2. Cocoa Certification Schemes

This chapter presents a selection of compliance criteria found on the two most active certification schemes in the cocoa sector in West Africa: UTZ and Rainforest Alliance.¹⁶ Criteria defined by these certification schemes are presented and major challenges for successful implementation are discussed. This chapter only addresses the 'on-farm criteria' and thus, it does not cover the chain of custody aspects (traceability requirements) of the schemes.

This section starts with a brief presentation of UTZ and Rainforest Alliance certification schemes, followed by a presentation of the different certification criteria found to be difficult to comply with at the farm level.

3.2.1. Rainforest Alliance Certification Scheme

The Rainforest Alliance certification scheme is based on a Sustainable Agriculture Standard developed by the *Red de Agricultura Sostenible* (also known as Sustainable Agriculture Network or SAN), which is a coalition of independent non-profit conservation organisations that share the mission of being the global network transforming agriculture into a sustainable activity (SAN, 2015).

For this section, the authors have reviewed the SAN standard version 3, July 2010 (SAN, 2010b), which at the moment of writing this chapter was used in certifications at the farm level and which has been studied over the last years in Côte d'Ivoire and Ghana.

The SAN standard is composed of 10 principles. Each principle is divided into criteria, of which there are 100 in total.¹⁷ There are two types of criteria: 'critical' and 'normal'. The

¹⁶In January 2018, the Rainforest Alliance merged with UTZ. It is planned that in 2019 a single, new agriculture certification programme built upon the best elements of both existing programmes will be published. Both the Rainforest Alliance and UTZ schemes will continue to run in parallel until the publication of new programme at the end of 2019.

¹⁷Principle number and total number of criteria within principle are presented as "x.y", where "x" is a number of principle and "y" is a total number of criteria within this principle, e.g., principle 1 and

latter may apply depending on the individual circumstances of each producer. Out of all criteria, there are 47 which must be assessed in all cases (i.e., are not subject of the non-applicability rule), and only 16 'critical criteria' that must always be complied with by any farmer seeking certification.¹⁸

Additionally, there other standard documents that need attention. One is the group certification standard (SAN, 2011), since this document defines the criteria that must be met by a group, i.e. training and capacity building, risk assessment, and internal management system. This document has 16 criteria, of which five are critical. The second set of documents are the regional indicators established for sustainable cocoa production, which have been defined exclusively for Ghana and Côte d'Ivoire (SAN, 2009). These documents should be consulted in addition to the generic sustainable agriculture standard. Each document addresses the peculiarities of each country and thus are slightly different, i.e., the criteria covered are not the same.¹⁹

Finally, it is worth mentioning that the SAN launched its new standard version 2017 in September 2016 (see SAN 2017 version 1.2, July 2017).²⁰ This new document presents many changes compared to the previous version; however, since this standard has not become obligatory by the time of writing, the 2010 version will be mainly considered in this chapter.

3.2.2. UTZ Code of Conduct (Standard)

The UTZ Code of Conduct (hereafter referred to as 'standard') is defined by the UTZ Certified Foundation, a multi-stakeholder organisation based in Amsterdam, the Netherlands. The UTZ standard has two versions, one for producer groups and one for individual producers. Since individual certification is not relevant to the cocoa sector in West Africa, it will not be further discussed in this chapter. Thus, we focus on the core Code of Conduct for group and multi-group certification version 1.1 (UTZ, 2015a).

The UTZ standard is divided into 4 blocks, representing the four pillars of sustainable agriculture: A – Management, B – Farming Practices, C – Working Conditions, and D –

11 criteria within it are presented as "1.11". Here is the total listing of criteria: 1.11; 2.9; 3.6; 4.9; 5.19; 6.20; 7.6; 8.9; 9.5; 10.6 = 100.

¹⁸See pages 9 and 10 of the Sustainable Agriculture Standard (SAN 2010).

¹⁹Ghanaian covers criteria in principles: 1, 2, 3, 5 and 8, while Ivorian covers criteria in principles: 2, 3, 5 and 10.

²⁰On 31 August 2017, the Rainforest Alliance (RA) and the Sustainable Agriculture Network (SAN) signed an agreement for the transfer of ownership of the shared SAN/RA certification system entirely to the Rainforest Alliance. The RA became the sole owner and operator of the certification scheme on 1 January 2018.

Environment. Each block is divided into control points. There are two types of control points: mandatory and additional. UTZ defined several control points that must be complied with after each year of certification. This is seen as continuous improvement, an example of which would be 64 control points in the first year vs. 112 control points in the fourth year.

Besides the main standard, UTZ has defined some control points which are only applicable to cocoa production, which can be found in the Code of Conduct cocoa module (UTZ, 2014). The following Table 3 summarises of the control points applicable to the UTZ standard. Brackets indicate the number of additional control points from the cocoa module.

Table 3: Number of control points in UTZ Standard (v.1.1)

Applicable to (audited/inspected on)	Number of Control Points
Group level	61 (3) = 64
Group level + Member level	45 (3) = 48
Member level	12 (1) = 13

3.3. Challenging Certification Criteria

In this section we present different certification criteria of both the UTZ and Rainforest Alliance schemes. Each criterion is presented in *italics* as defined by the certification standard.

UTZ criteria are presented as follows: UTZ + Reference to document, e.g., Group certification "G" (or "CO" for cocoa module) + block in the document, e.g. "A" and number of criteria: [UTZ G.A.1.1] *text of a criterion* [M/G/G+M 1-4]. This last indication refers to who must comply with (M = Member, G = Group, and G+M = both Group and Member) and the year they need to comply with this criterion (i.e., year 1, 2, 3 or 4).

Rainforest Alliance criteria are presented as follows: [SAN/RA + Gh/CI (when local indicator defined for Ghana or Côte d'Ivoire is being referred to) + number of criteria].

3.3.1. Issue of Definition and the Abusa Case

Certification schemes set up definitions to delimit their scope of action. These definitions encounter some complications. For example, the SAN standard defines 'farmer' in the following way:

[SAN/RA 2010] Farmer: For the purpose of this standard, the person or entity that manages a farm or group of farms. It may be a company, an individual farmer, a cooperative or other organisation or individual responsible for managing a farm.

In West Africa, labour arrangements are complex. In cocoa growing regions, we find the "abusa/abunu" labour arrangement, where sharecroppers are granted permission to work the land (cocoa plot) and in return the landowner receives one third (*abusa*) or half (*abunu*) of the harvest. In Ghana, the *abunu* contract may also designate a sharing of the cocoa farm itself between the landowner and the person who clears the land and plants cocoa. In Côte d'Ivoire, this arrangement takes the more explicit name of "*Planter-Partager*", literally plant-and-share (Colin & Ruf, 2011). Additionally, there are communal or traditional working arrangements (e.g., "weeding gangs") where a task is done by a group or people, including the farmer, family members, hired labourers, and/or shareholders (*abusa/abunu* are the terms used for both the contract and the contracted persons).

As we can see from the definition above, standards²¹ fail to address the actual labour arrangements (i.e., *abusa*), which is problematic because potential benefits of certification (e.g., training and inputs) are not provided to the person doing the work at the farm level. As described by Glin et al. (2015) for the organic cocoa sector, the lack of addressing the *abusa* in the cocoa certification systems constitutes a source of distrust, since landlords (farm owners) keep the benefits of the premium for themselves—although all the work is done by the *abusa*. Our empirical observations reaffirm these statements.

Firstly, some *abusa* may have a deeper knowledge of cocoa farming than the owner/inheritor. They may influence the decision process, as well. For instance, we observed cases of *abusa* obliging their landlords to buy fertilizers under the threat of leaving the farm (Ruf et al., 2014).

Secondly, the proportion of cocoa farmers hiring *abusa* varies enormously from one region to another. It depends on the size of the farm and on the life cycles of the farm and the farmer. An old farmer with an old but well-maintained 10-hectare cocoa farm may require three *abusa* contracts, while a young farmer with two hectares of young cocoa will rely on his own labour force.²² Availability of family labour also plays an obvious role. Farmers who send their children to school need more *abusa*. In addition, regions close to borders usually benefit from an abundant supply of labour in general and from a surplus of candidates taking *abusa/abunu* contracts. Finally, when a survey focuses on certification, farmers may

²¹UTZ Certified refers to 'sharecropper' in their definitions; however, their certification system has no provision in place to ensure that sharecroppers directly benefit from certification.

²²The conjunction of the life cycles of the cocoa farmer and his/her cocoa farm is one key element of cocoa cycle's productivity (Ruf and Siswoputranto 1995).

tend to declare the *abusa* working in the certified farm plot and deliberately “forget” the *abusa* hired on a non-certified farm plot. For instance, in our data collection in 2013, only 12.2 % of the UTZ certified farmers²³ declared having *abusa/abunu* working for them. In our other sample of farmers certified by UTZ and Rainforest Alliance, with a high proportion of old farms and farmers and 20 % of the sample along the Ghanaian border, the percentage rises to 40 % for the same year (2013)²⁴. Along the Ghanaian border, in the regions of Aboisso, Abengourou, Agnibilikrou, at least 50 % of the farmers reported hiring *abusa*.

Finally, despite a general decline due to inheritance and the division of farms between several inheritors, the estimates for the percentage of farmers in Côte d’Ivoire who hire *abusa* are around 20 % in 2017/18, a significant portion of which have some valuable knowledge of cocoa farming.

The *abusa/abunu* is not only excluded from monetary benefits from certification but is also completely absent in the certification process. In some cases, *abusa/abunu* are not even documented (identified) within the internal management system of the producer groups. Although certification schemes can react relatively quickly to these definition flaws (if identified) by amending their documents²⁵, it remains to be seen whether the introductions of new definitions in the newer versions will lead to an improvement. An effective improvement measure would be to introduce or amend criteria to ensure that the standards benefit (or embrace) excluded actors.

Independently of the definitions and control points chosen by the certification schemes, it is doubtful that the complex societal arrangements of these West African countries can be controlled (and improved) through the approach of currently available certification schemes, since these rely on the auditing of documented procedures and contracts.

3.3.2. Intermingled Issues

In most of the cocoa belt in West Africa, ‘traditional’ land arrangements, as well as non-existent or weak property rights concerning land tenure and forest resource management are a reality. These factors are of course intermingled with a series of further complications, such as national policies, law enforcement issues, massive migration waves, economic growth, etc. The aspects of land use and tenure, deforestation, and shade trees are closely

²³Sample size 98 farmers, Côte d’Ivoire only.

²⁴Sample size 140 farmers, Côte d’Ivoire only, 120 certified.

²⁵SAN/RA version 2017 now includes the terms ‘smallholder’, ‘group member’ and ‘worker’.

interrelated. However, for the sake of illustration, these three issues are discussed separately below.

Land Use and Rights

In most of the cocoa belt in West Africa, traditional land arrangements are still in place. There is a constant struggle between “landowners” or, more precisely, individuals who claim landownership rights and those individuals who already have access to this land. These landowners may be local “kings” (or similar), or a politically connected person, or more simply farmers who claim indigenous rights to the land (i.e., autochthon farmers). These landowners, or ‘rightful’ persons, mainly grant farming rights to the migrants willing to become cocoa farmers or those who wish to expand their cocoa farms. However, these landowners have very uncertain rights to their land. Actually, as already discovered by Dozon (1975), land sellers affirm a right to land by the act of selling it. However, buyers do not usually receive a land title. Furthermore, the assets (woods, minerals) of that land can be exploited by the rightful landowner at any time. A typical example is transferring timber rights to loggers in areas where cocoa is being cultivated by a farmer. This creates uncertainty towards on-farm investment by the cocoa farmers cultivating the land and thus, to the ways the land is managed. However, the fascinating cocoa booms of Côte d’Ivoire and Ghana demonstrate that this uncertainty does not prevent farmers from clearing forests and investing in cocoa farms. This can be explained by the uncertainty of land ownership rights in the West African scenario, where land itself is seen as private property by multiple actors at once and/or as a common resource, resulting in rather something in between.

Farmers may claim ownership of their land once they have cultivated it, including unclaimed land, which might be in protected forests and national parks. This means cutting or burning down forest to establish a cocoa plot (or similar). This is the “tragedy of the commons” (Boni, 2005; Ruf & Varlet, 2017; Woods, 1999), since cocoa farmers seek to maximise their returns in terms of migration/establishment costs: during the first decades of their settling as cocoa farmers, not much consideration is given to the forest, soil fertility, or the environment—which could be considered a rational strategy in light of the risks at stake from the farmers’ point of view.

Below is an example of the criteria to be controlled for by the certification schemes at the farm level regarding land use and tenure:

[SAN/RA 7.6] The farm must have a legitimate right to land use and tenure, demonstrated by presenting the appropriate official documentation. If there is no such documentation the farm must show either:

- a. *The absence of significant disputes on land use, tenure and access, or.*
- b. *The consent of local communities, regarding the land, natural and agricultural resources.*

Bearing in mind the actual land ownership structure in West Africa, we see this criterion as unachievable in most parts of the cocoa belt in West Africa. The assumption that these stipulations must be met raises the question of audit credibility, since such criteria cannot be audited by external parties entering a community for merely a few hours. We will return to audit integrity and the robustness of the oversight mechanism in the conclusion.

Deforestation in Cocoa Production and Certification

Deforestation rates in West Africa have been significant in the last decades, and there are various reasons behind this. The primary forest is almost gone. Remaining national parks are under high pressure (Gockowski & Sonwa, 2011). A major driver for this continuous deforestation is the expansion of the cocoa frontier. In Ghana between 2001 and 2006, the cocoa production area increased by 15 % (Ruf, 2007). In Côte d'Ivoire, the 12 years of politic-military crisis from 2000 to 2012 relaunched cocoa migrations at the expense of protected forests with impressive annual rates of deforestation, up to 6 % in the eastern regions (BNETD et al., 2016). Figure 6 below presents the tree cover loss, clearly illustrating that those areas most affected are cocoa growing areas.

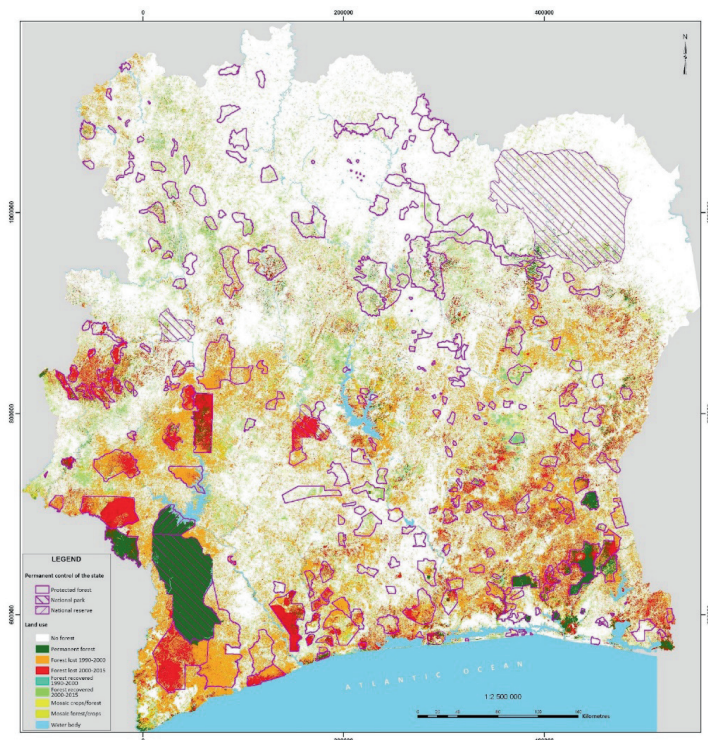


Figure 6: Tree cover loss in Côte d'Ivoire 1990–2000 (orange) and 2000–2015 (red).

(Source: BNETD et al. 2016; map reproduced by kind permission of BNETD).

In Côte d'Ivoire, four out of six reserves surveyed by Bitty et al.(2013) were found to be transformed into cocoa plantations. A further spectacular showcase is the forest reserve of the Haut-Sassandra, with its 100,000 hectares converted into cocoa farms in less than 10 years (Barima et al., 2016). Other national resources, if available, clearly state that the timber resources are degraded and that the volumes of timber deforestation are hard to estimate, due to the high amount of illegal extraction (Ghana FRI, 2014). In 2017, the "zero-deforestation" slogan put forward by several companies and institutions, which have begun fearing environmental lobbies, remains a myth (Ruf & Varlet, 2017). Deforestation remains intense. Despite this, the UTZ certification criteria include the following:

*[UTZ G.D.109] No deforestation or degradation of primary forest occurs or has occurred **since 2008**. [M 1]*

[UTZ G.D.110] No deforestation or degradation of secondary forest occurs, unless:

- *a legal land title and/or landowner permission and/or customary land rights are available, and*
- *government permits are available (if required). [M 1]*

[SAN/RA 2.1] Critical Criterion. All existing natural ecosystems, both aquatic and terrestrial, must be identified, protected and restored through a conservation program. The program must include the restoration of natural ecosystems or the reforestation of areas within the farm that are unsuitable for agriculture.

[SAN/RA 2.2] Critical Criterion. (...) the farm must not destroy any natural ecosystem. Additionally, from November 1, 2005, onwards no high value ecosystems must have been destroyed by or due to purposeful farm management activities. If any natural ecosystems have been destroyed by or due to purposeful farm management activities between November 1, 1999, and November 1, 2005, the farm must implement the following analysis and mitigations (...)

As we can see, certification requirements are classified as 'critical' (SAN/RA) or obligatory from year one (UTZ). We also see that these criteria set a certain date as reference for the acceptance of deforested or degraded land as cocoa plot. However, with the precarious data availability at hand, these certification criteria cannot be audited, as there is no system in place that records deforestation—not to mention the temporal scale. In other words, it is impossible to verify these criteria at farm level.

In cases where certification bodies rely on the applicant (producer interested in receiving the certificate) as a source of information, the result is obvious. This gives an example for "system induced responses"²⁶, where the farmers are narrating the information, they have been trained to tell within the certification trainings. This way, an auditor will hear what he

²⁶Other examples are tree density, child-labour, protection equipment, etc.

needs to hear during the certification audit. As a result, all farmers in West Africa can comply with these criteria and thus, achieve certification.

Finally, the identification and protection of “*natural ecosystems*” or “*areas within the farm unsuitable for agriculture*” are very abstract notions that are understood differently by different actors, making these terms essentially meaningless at the farm level.

Shade Trees and Agroforestry Systems

Certification schemes support the concept of “agroforestry systems” by fixing a minimal number of “shade trees” that should be present per hectare. The following requirements are being set:

[UTZ CO.B.1] At least 12 shade trees per hectare are maintained and distributed evenly on cocoa plots. [M 2]

*Clarification for Compliance: Enough suitable trees are planted **to eventually have 12 mature trees per hectare.***

***Newly planted trees are taken care of**, and are non-invasive, and/or nitrogen fixing, and/or highly nutritious species that provide optimal canopy cover **(at maturity)**.*

Trees can be used for other purposes (e.g., wood or fruit), as long as the number of 12 trees per hectare is maintained.

[UTZ CO.B.2] Group members have access to enough shade tree seeds or seedlings to meet their needs. If they cannot obtain them themselves, a program is in place for distribution. [G 2]

[SAN/RA 2.7] The farm must establish and maintain vegetation barriers between the crop and the areas of human activity (...)

[SAN/RA 2.8] Farms with agroforestry crops located in areas where the original natural vegetative cover is forest must establish and maintain a permanent agroforestry system distributed homogenously throughout the plantations. The agroforestry system’s structure must meet the following requirements:

*a. The tree community on the cultivated land consist **of minimum 12 native species per ha** on average (Interpretation guide: Fruit trees, may be counted among the 12 species of item (a) of the criterion).*

b. The tree canopy comprises at least two strata (stories).

c. The overall canopy density on the cultivated land is at least 40 %.

As we can see, these requirements on the number of shade trees per hectare focus on the long term. At the same time, the credibility of the control mechanisms in place to guarantee these criteria is dubious. For example, the inspection of these criteria during an audit would require an unfeasible length of time.

Optimistic scholars find that certified cocoa agroforestry systems are already more profitable than conventional (i.e., full sun) cocoa farming systems. For example, Gockowski

et al. (2013) estimate that certified cocoa plots will lead to higher revenues in a 20-year production cycle, due to the sales of timber originating from the shade trees. The optimistic assumption behind their calculation is that the timber will be sold as additional revenue by the cocoa farmers, which implies that the land and tree tenure problem(s) mentioned above will be solved in within 20 years as well as all the regional challenges that lead to deforestation in the region. Although this is desirable, we are still very far from an economic timber-related benefit for cocoa farmers in West Africa.

In sum, certified farms are not required to have mature shade trees above the cocoa canopy, but rather simply a plan to get there one day. In other words, certification schemes allow full-sun cocoa plantations with tree-seedlings planted on the cocoa plots. This makes sense, since it reflects the full-sun cocoa reality of the field; however, it exemplifies that the actual aim of the criteria might never be achieved, although a plan is audited yearly. From the farmers' perspective, full-sun plots tend to have higher yields, although there are various downsides, such as higher input need and possibly shorter tree life (Asare, 2016). However, full-sun practices are common in the certified cocoa plots of Côte d'Ivoire and Ghana. For example, the 45-year-old cocoa belt in the Soubré region has not collapsed. On one hand, a few young farms were still established in the 1990s by clearing the very last pockets of classified forests between Soubré and the Taï National Park. On the other hand, technical changes and innovations also explain a true resilience. Ageing cocoa farms were maintained through increasing pesticide treatments and adoption of chemical fertilizers in the 1990s, followed by the adoption of chicken manure in the 2000s/2010s (Ruf, 2015). In addition, and despite their interdiction by certification, herbicides were massively adopted to make for the increasing labour cost. Finally, there is an occasional strategy of letting spontaneous timber trees regrow when the cocoa trees are ageing, a strategy adopted by 30 % of the cocoa farmers, which also started long before the certification (Sanial, 2015).

3.4. Criteria out of Reach?

Certification schemes also try to address issues that are not only out of the reach of the individual farmers and/or producer groups, but also out of the reach of entire communities and even national governments. For example:

[SAN/RA 5.17] The farm must have mechanisms to guarantee access to education for the school-age children that live on the farm. Schools established and administered by certified farms must have the necessary resources, personnel and infrastructure to be able to provide an educational experience that complies with national legal requirements.

[SAN/RA 2017 4.31] *The farm management and group administrator provide access to health care and basic education to all workers.*²⁷

Although the above criteria are well intended, the attempt to shift the responsibility of access to basic education and health care to farm management is an aberration. Many West African countries struggle to achieve these goals through their national governments and infrastructure-related projects, even with the support of international donors/strategies. As a result, such criteria give certification schemes—and the entire cocoa industry using them—a negative effect on their applicability and credibility. At the same time, these criteria incentivise a regional segregation of the producers based on the local infrastructure and/or context, since those farmers (groups) based in more privileged regions (e.g., where public schools are available) will most likely have a lesser investment (cost) in order to achieve 100 % of the certification criteria compared to those farmers that are in less suitable regions (with less infrastructure available). This is a clear disadvantage for those farmers in such areas. Therefore, we see more certified farmers in regions where the infrastructure is more developed and where governments can provide more services, e.g.: at the side of the main roads or bigger villages. For example, in 2013, when we established a sample of 14 cooperatives to launch a fertilizer test, the chocolate companies involved in the project oriented us toward cooperatives that were all settled on the main roads. Certified cocoa farms were closer to roads than non-certified ones, which can lead to cooperatives buying ordinary cocoa in the bush and occasionally re-labelling it as certified cocoa.

3.4.1. The “Cooperative” (Producer Group) Problem

There is a large body of literature about the benefits that cooperatives (or other forms of producer groups) can bring to small holders or more broadly, for producers in the agri-food sector (Boström et al., 2015; Calkins & Ngo, 2005). The more recent type of “hybrid” cooperative arrangements (Ménard, 2007), which deviate from “typical” cooperatives, can be even more beneficial to producers. However, the West African cocoa sector has important historical aspects that need to be understood and considered, namely the “*Groupement à Vocation Coöperative*” (GVCs) in Côte d’Ivoire and farmer umbrella organisations set up by COCOBOD in Ghana.

In Côte d’Ivoire, for example, GVCs were introduced by the government as a way to organise the countryside (Woods, 1999). Due to various reasons outside the scope of this chapter, GVCs failed; however, what is important is that they left behind a profound lack

²⁷This criterion is new to the latest revision of the SAN standard and was not present in its 2010 version (see SAN 2017).

of trust among farmers especially regarding the “collective action” principle of a cooperative (Sissoko, 1994; Yapo, 1989). This is very apparent when doing data collection on the cooperative level in these regions.

Since certification was introduced on a large scale in West African countries (ca. 2008²⁸), many projects were launched by international traders, exporters and NGOs in the region to establish (or reactivate) “cooperatives” in order to access the certification process. At the same time, many local cocoa traders transformed their business into cooperatives. The size of the groups varies from country to country, as we see in figure 7 below. Such group sizes are not achieved out of intrinsic farmer motivation and devotion to the cooperative, they are a result of external influences. Traders becoming head of cooperatives know their job, which is in favour of the sustainability business, but their dependence upon external support and premiums may have a detrimental effect on this sustainability in the long run. The extent of the externally created cooperatives is illustrated by figure 7. There we see a total of nine certificate holders embracing an average of 4468 members (producers) in Ghana and 78 cooperatives embracing an average of 1080 members (producers) in Côte d’Ivoire (Uribe Leitz & Ruf, 2015). Years 1 and 2 on the middle/right are the average number of certified producers within the total number of producers. This also indicates that not all producers within a group achieve certification on the same year.

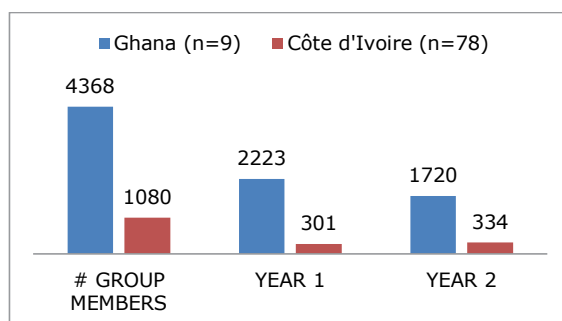


Figure 7: Average number of producers per group (cooperative) in Côte d’Ivoire and Ghana and the number of certificate holders (n)

Source: the author

Functional and long-lasting cooperatives (farmer groups) seem to be successful when established and managed with the external support of industry partners or NGOs²⁹ (Uribe Leitz, 2014a). See Glin et al. (2014) for a further example of successful organic certification in Ghana with external support.

²⁸Our dataset indicates 2008 as year when certification was first achieved by various cooperative (groups).

²⁹Our dataset indicates that only 3 farmer groups (out of 28 interviewed) are farmer-led. All other are led by ‘partners’ in the value chain (exporters, middlemen, etc.) or NGOs.

Finally, we have the social capital dimension. Social capital encompasses cooperation, social organisation, and human interactions and is measured by proxies such as trust reciprocity and networks; therefore, high social capital is reflected in low-transaction costs within an economy, well-functioning institutions, and widely recognised and accepted social norms within a society (Svendsen & Svendsen, 2009). At the cooperative level, this means that in order for cooperatives to benefit from certification, high levels of social capital are needed (Snider, 2016). Therefore, we can conclude that cooperatives in the context of West Africa are more often family businesses or cocoa buying centres than true cooperatives. These groups, which are created and maintained with external support (due to lack of social capital from within), are doomed to fail without the external support that guarantees transparent governance and service delivery mechanisms that benefit cooperative members. Consequently, for cooperatives to be certified independently in the future in West Africa, all actors need to invest in building social capital and trust at the farm level.

3.4.2. "Training" and Farmers' "Sensitisation"

Training for farmers has been available in West Africa for decades. For example back in 1975 in Côte d'Ivoire, as detailed by Yapo (1989), "(...) *the 'Groupements à Vocation Coopérative' (GVC), gathered cocoa (and coffee) farmers and trained them to follow a detailed agricultural calendar hand in hand with the provision of necessary inputs. In return, the farmers received a non-reimbursable premium per hectare*". However, Ruf (1987) reported that only 18 % of the new cocoa plots created in the 1970s benefited from the premium and associated training (hybrid planting material, nursery techniques, planting in line, etc.). More than 80 % of the farmers continued to utilise their own labour-saving and capital-free methods of planting, namely, direct sowing at high density, which proved to be quite a defensible system when forests were abundant, and the land was fertile. In addition, farmers acknowledge that many beneficiaries of the subsidy abandoned the farm plots in the 1980s. Farmers who really wished to create new plantations in the 1970s did not need any premium, while most beneficiaries of the premium planted mostly for this monetary advantage.

This shows the relative inefficiency of premium payments and training of good agricultural practices over a long period. But it also shows that farmers can adopt a technique when they need to. In the 2010s, most farmers adopted the technique of nurseries because of the environmental changes related to massive deforestation: less useful rainfall, lower fertility, and higher weed pressure. Farmers even innovate and find their own solutions to make the nursery techniques and transfer of seedlings to the fields more efficient, especially by using deeper holes and applying animal manure.

This illustrates that the system of “training” farmers with unsuited techniques at a given period and “rewarding” them with a premium has already been used in the past, with very limited success. To a certain extent, certification programmes repeat the same mistakes, proposing labour-consuming techniques that farmers are already familiar with and may apply in the future when (if) the average size of the cocoa farm drops below two hectares and thus these techniques become attractive again. Today, the average is still above four hectares. However, today’s certification schemes continue listing long and unsuitable training curricula as a central part of their systems:

[UTZ G.A.19] Training is provided to group members and to operators of farms on all topics relevant to them in the following areas:

Block A) Management

Block B) Farming Practice

Block C) Working Conditions

Block D) Environment

Trainings are carried out by a competent person(s) and include tests or checks that the training content has been understood. Training records are kept for each training. [G 1]

Clarification for Compliance: Trainings are sufficient in number and duration to meet the group members’ needs. Trainings are clear and understandable to group members.

At least two topics are addressed per year in a training(s). By the end of the fourth year, all of the following topics have been covered by internal or external trainers:

Block A) Management:

- Traceability

Block B) Farming Practices:

- Good farm maintenance and productivity

- IPM approach and measures

- Crop diversification

- Safe handling and use of permitted pesticides, including pre-harvest intervals and re-entry times

- Harvest and postharvest practices

- Product quality and food safety

- Record keeping skills

Block C) Working Conditions:

- Occupational health and safety

Block D) Environment:

- Protection of water bodies

- Protection of flora and fauna

- Climate change

- Waste management

Competence of the trainer(s) can be demonstrated by official qualifications, and/or attendance certificates of training courses, and/or proven experience.

Each training record indicates the date, topics, summary, length, and name of the trainer(s).

Attendance lists include participant signatures/fingerprints and gender.

[UTZ G.A.20] Awareness raising activities are held and documented for group members and group member workers, and their families, to inform them about: Block C) Working Conditions. [G 1]

Clarification for Compliance: At least two topics are addressed per year. By the end of the fourth year all of the following topics have been addressed by internal or external trainers:

Block C) Working Conditions:

- Worker's rights*
- Child labour, including hazardous work and trafficking*
- Importance of education*
- Equal rights and opportunities for women*
- Sexual harassment, diversity and discrimination*
- Health and safety including HIV/AIDS, re-entry times and hygiene*
- Family nutrition and other issues that improve general health*
- Other relevant topics*

[SAN/RA 1.9] The farm must implement a training and education program in order to guarantee the effective execution of the social and environmental management system and its programs. The training topics must be identified according to the standard, the position, and type of work carried out. Records must be kept that include the participants' signatures, topics covered and the instructor's name for each training or educational event. The required training must be paid as part of the normal workday.

In sum, it is not a matter of endless training for farmers. Today, current certification programs have the same elements as the concepts in the 1970s and the actors behind certification schemes do not seem to reflect on the *lessons learnt* in the last decades. We need to start looking at the roots of *why* farmers are not able (or not interested) in applying the *knowledge gained* in these decades of trainings. The main answer lies in labour productivity and risk management. Most techniques taught in the field schools of certification programmes (two harvests per month, forbidding herbicides, digging holes for compost, etc.) require additional labour per unit of surface, while labour diminishes in availability (Ruf et al., 2013; Uribe Leitz & Ruf, 2015). Some criteria, such as wildlife conservation (e.g.: termites) are wholly undesirable for farmers whose cocoa trees are attacked by termites. The only new element of today's system is that certification bodies are independent organisations which independently audit the results.

A side effect of the training curricula and the way it is being controlled (i.e., audits) has led to the awareness of cocoa farmers providing the "right" answer in the presence of visitors to their farms. Cocoa farmers are well aware of all issues that have been thought and can recite the learnings (Ruf et al., 2014). However, they are also aware that there is no evident or direct benefit or added value for them in implementing their learnings or simply, there are no resources for implementation.

The roots of the problems are not yet understood and there is little effort being made in order to address this. Therefore, we urge all involved stakeholders to better understand the situation of the farmers and adjust their certification systems accordingly.

3.4.3. On-farm Practices: IPM, Fertilizers, Pruning, etc.

On paper, certification schemes sufficiently cover all on-farm practices. However, the major drawback is precisely that: the record keeping. In order to make the certification system auditable, there must be thorough record keeping. This is a major impediment, not only because many cocoa farmers are illiterate, but because no farmer sees a benefit in recording their daily operations.

Furthermore, many on-farm practices required by certification schemes can be impossible to achieve by the farmer, due to local infrastructure or service provision (e.g.: proper disposal of empty agrochemical containers, etc.). Finally, since the control mechanism (audit) is not able to control for on-farm practices in a reliable manner and farmers do not see any added value, they have little incentive to adopt them. The following are a few examples.

Soil Fertility, Fertilizer Use and Agrochemical Application

Soil fertility is the backbone of a successful crop production system. Proper management of soil fertility assumes knowledge of the types of soils, their nutrient availability, and most importantly the nutritional demands of the crop. These aspects are difficult to determine at the farm level without the necessary equipment (pH-meter, etc.) and/or accessible service provision (capable extension services). Additionally, in West Africa, there are nation-wide cocoa fertilizer recommendations that do not pay attention to the types of soil where cocoa is being produced or the age of the plantation, which is not an optimal solution on the long term and brings many challenges (Snoeck et al., 2016). This does not give cocoa farmers a good starting point.

In relation to soil fertility and fertilizer use, we find the following criteria:

[UTZ G.B.46] Measures are taken to improve soil fertility according to the nutritional needs of the crop, including compensation for nutrients lost from harvests.

Fertilizers used (organic and inorganic) are used efficiently to maximize uptake. [M 3]

Clarification for Compliance: Measures to improve soil fertility include e.g.:

- Planting nitrogen-fixing species*
- Agroforestry practices*
- Composting*
- Application of inorganic fertilizer*

Measures to correct low soil pH are implemented when possible.

If soil pH is low, acidifying nitrogen-based fertilizers are avoided or are used in combination with lime.

Efficient fertilizer use considers the prescribed dosage, period or timing and intervals of application, and release properties.

[SAN/RA 9.2] The farm must have a soil or crop fertilization program based on soil characteristics and properties, periodic soil or foliage sampling and analysis, and advice from a competent and impartial professional or authority. (...)

Due to infrastructure limitations and scarce information availability in the cocoa growing areas, it can be assumed that few of the farmers can satisfactorily comply with these requirements. Similarly, one can argue that information availability and general knowledge about further inputs, such as agrochemicals (pesticides, fungicides, etc.), is very scarce in cocoa growing regions. Furthermore, agrochemical composition (i.e., active ingredients) and country-and-crop-specific registration is a very complex subject that we cannot address further here. However, these aspects of legal compliance and knowledge about the used inputs impose a big impediment for farmers. More importantly, for many years, certification programmes remained reluctant to provide chemical fertilizers. As mentioned above, they focused on compost, which was too labour-intensive and never demonstrated its efficiency on cocoa yields. In addition, when fertilizers are provided through the exporter/cooperative system, farmers have no say and must take what has been chosen for them. This is another way to infantilise farmers precisely when, in that specific case, infrastructure and external support—information about new inputs recently available on the market, and foliar and soil analysis to achieve the right fertilization schemes—would be useful.

Assuming that farmers can access the (appropriate) inputs for cocoa at the farm level, certification schemes have these criteria:

*[UTZ G.B.51] Pesticides listed on the **Banned Pesticides List** cannot be used at any stage of production or stored for use on the certified crop.*

*Pesticides listed on the **Pesticides Watch List** can only be used if:*

- all IPM measures have been applied,*
- **less hazardous alternatives** are not available, and*
- specific recommendations are followed to mitigate or reduce the risks related to the hazardous nature of the product. [G+M 1]*

Clarification for Compliance: A system is in place to monitor the use of pesticides listed on the Pesticides Watch List.

[UTZ G.D.107] Pesticides and inorganic fertilizers are not used:

- within 5 meters from any permanent or seasonal water body that is 3 meters wide or less (or within 2 m if the farm is less than 2 ha),*

- within 10 meters from any permanent or seasonal water body that is over 3 meters wide, or
 - **within 15 meters** from any spring.

Run-off from organic fertilizer is minimized. [G+M 1]

Clarification for Compliance: Clear instructions are in place for all persons who apply fertilizers and pesticides.

*[SAN/RA 6.5] Personnel who apply or handle agrochemicals must have examinations necessary to determine the potential effects of the agrochemicals they handle before initiating such activities on the farm. These workers must not suffer from chronic diseases, hepatitis or renal diseases, or respiratory diseases nor have been declared mentally challenged. Only males between the ages of 18 and 60 are permitted to apply agrochemicals. On farms where organophosphates and carbamates are applied, cholinesterase **examinations must be carried out** every six months or as stipulated by law, whichever is more frequent. (...)*

As we can see, these criteria assume a high level of information and knowledge on the farm. Not only there are lists distinguishing between 'banned' and 'watch list' chemicals, but there is also an implied distinction between less and more hazardous chemicals.³⁰ Additionally, considering the small cocoa plots must respect all safety parameters mentioned, substantial percentages of the farms could potentially be excluded from the agrochemical applications. This would be counter-productive in terms of the Integrated Pest Management (IPM), since those parts of the cocoa plot would be incubating pests and diseases.

While the requirement for routine medical examinations for the persons making the agrochemical applications is a respectable goal, it is questionable whether this can be performed in the cocoa growing areas.

According to some surveys, certification projects facilitate farmers' access to pesticides (Ingram et al., 2014). In our own surveys, we could not identify any difference, with an average two rounds of pesticides per year (Ruf et al., 2013; Uribe Leitz, 2014b; Uribe Leitz & Ruf, 2015). In any case, if increasing the pesticide use by certified farms is one of the direct outcomes of certification, should it be considered an achievement? Is this in line with the objective of IPM which aims to reduce the use of pesticides per hectare? Finally, regardless of the input amounts, increased cocoa yields should compensate as a positive effect of certification. After almost 10 years of certification, this remains highly debatable.

³⁰These lists, where products are being categorised as 'banned' or in the 'watch list' are being defined by the certification schemes. These lists usually take as a basis internationally recognized lists of the UN, FAO and or WHO. Additionally, certification schemes restrict these lists even further with the intention of reaching higher environmental goal. Unfortunately, there are no studies that prove whether the objective of the certification is being achieved. For example, there are substitution effects among active ingredients and/or these lists create regional production restrictions for those producers where there are no chemical alternatives available. Therefore, more research needs to be done regarding the consequences of these lists at the farm level in different growing regions.

Some surveys conclude that certification had no impact on cocoa yields (Ruf et al., 2013). Others find a slightly positive impact (Ingram et al., 2014). However, slightly higher yields in certified farms do not prove an impact of certification per se. There are many important factors involved, such as impacts of better farming practices, access to inputs (i.e., within the certification programme), the regional conditions for cocoa farming or further socio-economic aspects.

Additionally, there is a selection bias within the certification process, which tends to filter better-performing farms and compare these with the least productive ones. For example, autochthon farmers of the central-west and western regions are rarely organised in cooperatives, and thus rarely certified (Lemeilleur et al., 2015). Thus, they are more likely to be taken as control samples of non-certified farmers. However, as they have smaller farms than average, lower access to labour and poorer yields, it is likely that comparisons between certified and non-certified farms is turned into comparison between migrant and autochthon farmers or comparison between two different regions (which includes differences in soils, precipitation patterns, etc.). That does not prove that certain farmers in a region are not benefitting from the certification, but it illustrates the attribution impediment towards its real impact.

Finally, another bias is the incentive given to the certified farmers and cooperatives to deliberately convert 'ordinary cocoa' from non-certified farms into 'certified cocoa' in the expectation of a premium. However, this is extremely difficult to prove, since these practices are carefully hidden by farmers and/or cooperatives making these conversions.

3.4.4. Premiums

Certification schemes should not only bring environmental and societal benefits to the cocoa growing communities, but they also aim to bring higher economic profits. To this end, they have the certification premiums, which is usually an additional amount of money paid to the producers (producer groups) for certified cocoa beans.

*[UTZ G.A.26] A "Use of UTZ premium" procedure is in place and is communicated to the group members. The UTZ premium clearly benefits group members in cash and/or in kind. [G 1]
Clarification for Compliance: The "Use of UTZ premium" procedure and records include:*

- group management spending (e.g., audit cost),*
- products and services delivered to the group (e.g., training, storage facilities), and*
- Group Member premium: benefits in form of cash or tangible goods (in kind).*

Records are kept updated.

Table 4: Premium repartition per kg in Côte d'Ivoire and Ghana in USD (year 2014/15)

Received by	Côte d'Ivoire	Ghana
Producer groups	0.019–0.097	0.017–0.113
Farmers	0.039–0.097	0.064*
COCOBOD	n.a.	0.020

* On average

Table 4 reveals various issues: first, that there is no fixed premium amount and that the results of the premium negotiation between the groups vary. Considering that the premium granted to the producer group itself is supposed to cover the implementation cost of the certification programme, we see that there are big differences in the cost management at the group (cooperative) level and thus improvement possibilities. Finally, it is important to note that in Ghana, due to the strong government intervention in the cocoa sector, the government can capture a percentage of the premium.

Although our data collection recorded increasing number of farmers receiving premiums between 2009 and 2015, the total amount of cocoa sold as certified remains below 10 % on average.

3.4.5. Diversification Strategies: Role of Other Products

Certification standards try to encourage diversification of crops and herewith income sources. Here the UTZ criteria as example:

[UTZ G.B.43] Diversification of agricultural production and/or other sources of income is encouraged and practiced to adapt to market and/or climate change. [G+M, optional control point during all years, i.e., 1 to 4]

Clarification for Compliance: Diversification considers intercropping, establishment of home gardens with highly nutritional plants, or any other type of diversification.

In the following we present data regarding diversification strategies in Côte d'Ivoire (Uribe Leitz, 2014b). Here we see that, in our sample, 36 % of the farmers had identified and planted rubber (*Hevea brasiliensis*) as the best income diversification option besides cocoa. Rubber was found at all different stages of development. The main incentive for the farmers is the constant income throughout the year, since rubber is harvested and sold on a monthly basis (unlike the main harvest season of cocoa, followed by a smaller harvest a few months later). At the same time, the downside of rubber production is that it takes seven years before it can be harvested. Only 2 % of these farmers reported rubber to be in production and as a reliable and constant income source.

Another important diversification crop in the same sample was palm oil (*Elaiés guineensis*). One identified reason was that a local company had a strong support programme for farmers, including free plantlets, etc. Additionally, once in production, palm oil not only brings additional income, but it is also being consumed by the producers as palm-wine or cooking oil.

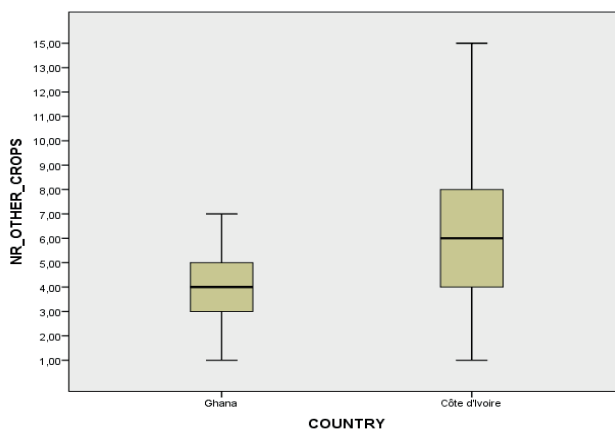


Figure 8: Number of other crops cultivated by cocoa farmers in Ghana and Côte d'Ivoire

Source: the author

The box plot presented in the figure above shows the range of crops that cocoa farmers have on their plots under cultivation besides cocoa. In our dataset, almost 70 % of the farmers receive 'non-cocoa income', which is generated from the other cultivated crops and/or from paid labour to the farmers. Furthermore, our data shows a significant correlation between non-cocoa income and other tree-crops, since rubber, palm oil and coffee fall under this category and are the most logical cocoa substitutes.

However, current certification schemes focus only on one commodity and fail to give added value to other crops being produced. In other words, current certification schemes have no impact on diversification, since they focus on keeping farmers concentrated on cocoa production.

3.5. Conclusions and Recommendations

3.5.1. Conclusions

Cocoa certification in the West African context is challenging. This chapter reviewed the two biggest certification schemes active in cocoa, namely UTZ and Rainforest Alliance, and

their criteria demanded at the cocoa farm level. We identified criteria that have major issues during the implementation at the farm level, which relate to:

- Labour arrangements: certification schemes fail to embrace the complexity of the West African labour arrangements and thus, the benefits of the certification are not always being perceived by all actors involved in cocoa production (e.g., *abusa/abunu*, family members, etc.).
- Cocoa production is directly linked with deforestation, and this is partly related to land use rights. These overlapping components influence how the cocoa plantations are being managed, including the zero-shade strategy applied during a long period of the life cycle of the cocoa farm, regardless of the number of shade trees mandated by the criteria. The major problem with these criteria is that they cannot be checked during an audit (within the oversight system) either because there is no information available (deforestation), because the arrangements are so complex (land use) or because it is simply not realistic to control for such issues (number of shade trees per hectare/canopy density).
- Criteria out of reach of the certification systems, such as access to education or medical assistance, are also being assigned as a 'responsibility' of certification schemes. On one hand, this is impossible for some farmers to achieve, while on the other hand this is clearly not the responsibility of the certification scheme (or private industry) to comply with and inspect.

Current certification schemes are mainly in the hands of externally created cooperatives or farmer groups. On the one hand, the fact that many cooperatives have been created by traders transforming their business into 'cooperatives' offers a degree of business sustainability, since the head of the cooperative is a trader who knows his job and who can take quick decisions. On the other hand, it can be reasonably assumed that these type of 'cooperatives' generate strong asymmetries at the expense of their members, the cocoa smallholders. Finally, most of these cooperatives might have not been created without the premium and without external support. Therefore, the cooperative as the key unit of the certification system may trigger conflicts and do not appear to be socially sustainable.

Farmer training is problematic. Unfortunately, training curricula fail to address the reasons why farmers are not changing their on-farm activities and/or adapting new techniques. Training has been provided for a few decades now. This is an example of inefficient time and resource allocation for both the farmers and the actors implementing the certification standard(s).

In order to perform correctly Integrated Pest Management (IPM) and fertilizer applications, there is a demand for information, tools and equipment that must be available for cocoa

famers. Unfortunately, these are not available in cocoa growing areas. Moreover, the oversimplification of management techniques (i.e., standardise fertilizer application for an entire country, the choice of fertilizer imposed by the certification project, or the application of agrochemicals during the cocoa year) can become counter-productive on the long run. In order to achieve economic benefits, premiums are being used by the certification schemes. Although this is welcomed, most of the production is not being sold as certified and thus, premiums are only paid for a small fraction of the cocoa sold.

Cocoa farmers produce much more than cocoa, in average around 4–6 other crops. Approximately 70 % perceives a 'non-cocoa' income, which is essential to sustainability and resilience of cocoa farms. Unfortunately, certification schemes are only able (if at all) to provide an added value to the cocoa crop.

In sum, we see significant issues with current certification schemes at the farm level. At the same time, we see a very active communication of these scheme owners towards the consumers. Having seen so many implementation flaws at the farm level, it is questionable whether the claims towards the consumers can be sustained.

Moreover, we see a twofold hidden objective in the service delivery of certification schemes for the cocoa industry: first, it binds producers to their buyers through mid-term certification projects, which rely on bonding contracts (a spot-market for certified cocoa is not at the farm level, but down the chain). Secondly, mass certification is a paradox. On the one hand, it aims to boost cocoa production in West Africa, as the premium is an attempt by the chocolate industry to make cocoa production look more attractive than other crops (e.g., rubber). On the other hand, sustainability requires diversification. In principle, certification schemes aiming at sustainability should provide a premium for crops other than cocoa, something which cannot be addressed by the cocoa industry itself.

Therefore, the sustainability agenda needs to be addressed at the level of entire regions, including several commodities and value chains. Certification schemes need to capitalise on their current momentum to integrate other sectors such as palm oil, rubber and coffee, and together bring about real change in the associated West African growing communities. Independently of the certification criteria, it is doubtful that the complex societal arrangements of the West African countries can be monitored (and improved) through the current approach of the certification schemes at hand, since these rely on auditing of documented procedures and contracts. Today's certification criteria and auditing raises many questions about the credibility of the system. Therefore, we suggest exploring new oversight mechanisms, such as the certification of the companies creating and supporting cocoa farmer groups and not the certification of the cocoa farmers themselves, since this

is not reliable. Furthermore, for certification to work in the future in West Africa, all actors involved need to invest in building social capital and trust at the farm level.

3.5.2. Recommendations

The roots of the implementation problems at farm level are not yet understood, and there is little effort being made in order to address this issue. Therefore, we urge all involved stakeholders to better understand the situation of the farmers and adjust their certification systems and training accordingly.

If the objective is to make cocoa more environmentally friendly, which presupposes more agro-ecological approaches, crop diversification (e.g., timber, palm oil, coffee and rubber sectors) and husbandry (sheep, pigs, chicken, etc.) involved in these farming systems, then all these elements should be considered in the certification programmes.

A new approach to the certification should include certifying timber trees as the main target of an agro-forestry system as well as the water quality on farm, etc. as environmental indicators. These examples of indicators are directly affected by the (mono-)cropping systems and practices.

If the objective is to 'train' farmers, it is the role of the certification schemes to identify why farmers' knowledge and capacity for innovation has been repeatedly underestimated and to adjust their training curricula and eventually the implementation methods accordingly.

Current mass certification is driving agricultural extension backwards, to the top-down approaches of the 1960s. In this context, we see a global need to (re-)start considering farmers' innovations and study how they can be accompanied and amplified. Only by understanding farmers' situation and embedding them in the development and study of their surroundings we will be able to create a sustainable system. In relation to certification schemes, this especially includes the establishment of criteria that pursue 'what is good for the farmers', which should not be so strongly influenced by the industry and public as it is today.

4. Cooperatives, certification labels and cocoa smallholders in Côte d'Ivoire?

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4.1. Introduction

In Côte d'Ivoire, the prodigal country of cocoa, cocoa farmers themselves are actually growing poorer (Balineau et al., 2017; Rusman et al., 2018), with the finger of blame being pointed at deforestation associated with the "cocoa frontier" (Higonnet et al., 2017; Kroeger et al., 2017; Ruf & Varlet, 2017; Sanial & Ruf, 2018). Since the early 2000s, certification labels using the terms sustainable (UTZ, Rainforest Alliance) and fair trade (Fairtrade) to describe themselves have developed in the cocoa sector in Côte d'Ivoire. They are the national manifestation of an international trend. A study conducted by the International Trade Centre (see: Lernoud et al., 2018) estimated that 22.8% of the world's cocoa cultivation areas are affiliated with one or more sustainability labels³¹. These labels are generally based on a group certification system involving producer cooperatives, their members and downstream buyers all at once. Such certification systems struggle to achieve the objectives of the theories of change developed by the organisations that manage these labels or, in fact, generate negative effects (Nelson, 2017; Oya et al., 2018; Smith, 2015). According to Fairtrade International's theory of change³², compliance with Fairtrade standards (in particular the best trade conditions) should allow the cooperatives to promote more sustainable livelihoods. Impact studies in many sectors revealed the key role of the cooperatives in this dynamic (Darko et al., 2017). In Côte d'Ivoire, the task is immense: a study conducted on behalf of Fairtrade International revealed that 58% of the Ivorian households growing Fairtrade-certified cocoa have an income below the extreme poverty line of around 460 CFAF/day/person, translating to approximately 1,350,000 CFAF per year per family (Rusman et al., 2018). As far as UTZ and the Rainforest Alliance (since merged as Rainforest Alliance) are concerned, the mechanism for improving producers' incomes is based on market mechanisms via compliance with good practices aimed at increasing quality and yields. One recent study investigating UTZ certification in Côte d'Ivoire concluded that the cooperatives function well and provide services to the producers, who are expressing increasing satisfaction (Ingram et al., 2018). However, other studies have shown that many cocoa farmers are not even aware that they are "certified" (Ingram et al., 2014; Uribe Leitz & Ruf, 2015, 2019) and other field experiences in Côte d'Ivoire encourage more caution and return different findings. This satisfaction appears to be dictated and virtual, with the cooperatives "leaving their members in the dark" (Uribe Leitz & Ruf, 2019). In 2017, a representative of a cocoa cooperative in Peru, who was visiting his counterparts in Côte d'Ivoire, expressed his surprise to the researchers there. He noted a lack of real support among the farmers in the country for the

³¹ In the scientific literature, the term "sustainability labels" generally also includes the Fairtrade fair trade certification label. However, this terminology is by no means proof that said labels are conducive to development and sustainability.

³² The labels have their own "theories of change" to describe the way in which their interventions are meant to result in a chain of events with effects which are intended...but neither observed nor demonstrated (Ton, Vellema and Ge 2014; Arensman, van Waegeningh and van Wessel 2018).

cooperatives, as if it weren't "their business". Why should they be so distrusting of the cooperatives?

The lack of a "cooperative tradition", the relative failure of the first forms of cooperative associations (Groupements à Vocation Coopérative – GVC)" developed in the 1980s and the State's extremely strict control of the sector for decades probably all play a role in the distrust of their cooperative observed among the farmers. In this context, this article specifically examines the characteristics of the cocoa cooperatives and the way in which they manage different certification systems in their relations upstream with "exporters", generally multinationals (trader and/or manufacturer), and downstream with their members, the farmers each with an average of 4 hectares of cocoa. As, without forgetting the multinationals and State's share of the responsibility, the aim of this article is to demonstrate the dysfunctions of the cooperatives and certifications, each sustaining the other, generating the farmers' distrust.

After having characterised the development context of the sustainability labels in the cocoa sector in Côte d'Ivoire, and specifically the key role played by the cooperatives, we shall demonstrate that the farmers' distrust of their cooperative is particularly³³ linked to the dysfunctional management of the benefits (primarily the premium) associated with the Fairtrade, UTZ and Rainforest Alliance certification systems. In the case of Fairtrade, this is joined by the management of the guaranteed minimum price.

4.2. The key role of the cooperatives in the management of the sustainability labels' monetary benefits

The UTZ, Rainforest Alliance and Fairtrade cocoa certification systems each display their own particularities. In its origins, as its name suggests, Fairtrade aims for "fair trade" for a better quality of life in the "communities", favouring community facilities (schools, free clinics, markets, etc.). Rainforest Alliance intends to guarantee the consumer the protection of the environment and tropical rainforests. UTZ promises above all ethical cocoa with no child labour. At least for Rainforest Alliance and UTZ, these particularities on paper do not withstand factual scrutiny on the ground: the fundamental objective is to introduce these farming practices that are supposed to improve cocoa yields (Lemeilleur

³³ Among the further factors fuelling the distrust that we do not investigate here, we note the labels' specifications on labour-intensive farming practices when the operations are already facing labour shortages. There is also a loss of the farmer's degrees of freedom: a) the cooperative tries to prevent farmers from selling the cocoa elsewhere, even if the cooperative itself does not have the funds available to purchase it; b) the cooperative relays the choices of inputs imposed by the exporters such as the type of fertiliser to be used (Ruf et al., 2013, Uribe-Leitz and Ruf 2013; 2019). These pressures and losses of degrees of freedom result in the "cooperative-certification" system arriving at the opposite of the solidarity and the product's linking value supposedly generated by a mutually beneficial operation (Weber 2011).

et al., 2015). However, in a sector characterised by a multitude of small farmers, these labels rely on a key link: the cooperatives. In the context of the cocoa sector in Côte d'Ivoire, however, conditions do not yet appear to be in place for them to fully play their role.

4.2.1. Cooperatives under the influence of multinationals, heavily taxed small producers

In Côte d'Ivoire, the world's leading producer of cocoa, the cooperatives in the sector remain small, bringing together 200 to 5,000 farmers, and focused on the collection and resale of cocoa beans, without processing, as well as on a few services (access to inputs, support in phytosanitary treatment of the plantations, technical training, etc.). They were founded between 2000 and 2010 (Figure 9).

Since 2011, public policies have returned to a set purchase price for the producer at the beginning of each season for a quality defined by the bean count – fewer than 110 beans/100 g. This price is accompanied by a commercialisation scale from the village to the port and, therefore, a purchase price for the exporter. These set prices are supposed to take into consideration the global price and taxation intended not to exceed 25% of the price for the producer, an undertaking with the World Bank which is being more or less fulfilled. For example, in 2017-2018, for a producer price set at 700 CFAF³⁴/kg, the commercialisation scale and the transport from the village to the port was 80 CFAF and the price at the port was 780 CFAF. Taxation as per the single exit tax (DUS) and parafiscal charges amounted to around 190 CFAF/kg, equating to 28% of the producers' gross incomes.

Beyond this heavy taxation of low incomes, the sector is practically governed by several multinationals (including Mondelez, Nestlé, Mars, Cargill, Barry Callebaut, Olam, etc.) capturing the greatest share of the added value with hypermarket chains. Farmers receive 6% of the value of a bar of dark chocolate sold in Europe (Dorin, 2003; Fountain & Hütz-Adams, 2018; LEBASIC, 2016)³⁵. In around 1999, the partial liberalisation of the commercialisation of cocoa prompted the giants of the grinding and trading industries to establish facilities in Côte d'Ivoire to be closer to their sources of supply. Very quickly, the strategy of these groups became to encourage and support the founding of cooperatives in order to create supply monopolies for themselves. Similarly, they encourage the

³⁴ 1 euro = 655.9 CFA francs (CFAF).

³⁵ "In 2001, over 70% of the price including all taxes of a bar of dark chocolate containing 61% cocoa goes to the chocolatiers and distributors (63% in 1992), with less than 6% reaching the Ivorian producer (7% in 1992)" (Dorin 2003, p 48, translated from French original).

cooperatives to join the Rainforest Alliance and UTZ certifications that they have promoted, covering the joining fees in exchange for a monopoly on their cocoa. These “sustainability” certifications are first and foremost tools for guaranteeing the sustainability of the multinationals’ cocoa supplies.

4.2.2. Voluntary “sustainability” labels in the Ivorian cocoa sector

Of the 800,000 to 1,000,000 Ivorian farmers, around 330,000 are UTZ certified, more than 100,000 are Rainforest Alliance certified and more than 56,000 are Fairtrade certified (Fairtrade International, 2018; Newsom et al., 2017; UTZ, 2017b). Sales of Fairtrade-certified cocoa almost doubled from 80,000 to 150,000 t between 2016 and 2017³⁶. The rate of cooperatives obtaining certification in accordance with a “sustainability” label grew exponentially at the turn of the 2000s³⁷, but this growth is largely down to the initiatives of *pisteurs* and *traitants*³⁸ having converted their private business operation into a “cooperative”, partly in order to be able to benefit from tax benefits and certification premiums (Ruf et al., 2013). These organisations created by the *pisteurs* and *traitants* represent 80% of the UTZ-certified cooperatives (Uribe Leitz & Ruf, 2015). There appear to be few cooperatives founded by farmers who have decided to group together.

The certifications generate premiums, intended to contribute to raising the income and well-being of the producers. The Fairtrade Premium was set at 200 USD per tonne (t) of cocoa beans during the period of our investigations. It is a sum paid to the cooperatives by the buyers in addition to the purchase price for the raw materials. According to information published by Fairtrade, it is intended to be invested in community projects. As far as the Rainforest Alliance and UTZ premiums are concerned, their sums were not fixed but were supposed to be negotiated between the parties. Around 2010, they were around the same threshold of 200 USD/t of cocoa. Then the average UTZ premium dropped to 122 USD/t in 2013 and further to 83 USD/t of cocoa beans in 2017 (UTZ, 2017a).

In addition to this premium, the Fairtrade system had the distinctive feature of defining a “guaranteed minimum price” for cocoa of 2,000 USD/t of beans (a Free On Board (FOB)

³⁶ This dynamic is due in part to the launching of the Fairtrade Sourcing Program (FSP). This additional option opens new market opportunities allowing the certification of products using only cocoa as a Fairtrade-certified ingredient.

³⁷ 199 cooperatives obtained Fairtrade certification in 2018, compared with just 18 in 2013.

³⁸ “*Traitant*” and “*pisteur*” are the terms in use in Côte d’Ivoire since colonial times to describe the middlemen between the farmer and the exporter. As the French term indicates, the *pisteur* (tracker) is the one who travels the tracks and purchases the cocoa from the farmer before passing it on to the *traitant* (contractor), generally based in the large market towns. The former often works with the latter’s capital and is paid a form of commission.

price, which is to say a delivered price at the port of export) at the time of our investigations³⁹. The first observation is that this price is low and of no great significance.

It is an FOB price from which the differential between the FOB and farm-gate must be deducted, including taxes. In this way, at an exchange rate of around 550 CFAF/USD in October 2017, the FOB price is equivalent to 1,115 CFAF/kg, from which the 415 CFAF of differential and taxes must be deducted, reducing the price to 700 CFAF, which is precisely the official price stated by the Coffee and Cocoa Council (CCC) for the *grande traite*⁴⁰ of the 2017-2018 season. Specifically, the only recent period when the Fairtrade price has theoretically been able to play its compensatory role spans the months of April to August 2017, corresponding to the *petite traite* of the 2016-2017 season. The dollar exchange rate at that time was 615 CFAF, giving a farm-gate price of around 815 CFAF/kg. Thus, during the *petite traite* of 2016/2017, a window opened theoretically allowing Fairtrade to give farmers the opportunity to benefit from a guaranteed minimum price.

4.2.3. The governance of the cooperatives; at the heart of the members' distrust

The objective of this article is to analyse the functioning of the cocoa cooperatives with the aim of better understanding the farmers' distrust and their poor understanding of the labels. Just who are these cooperatives, rather recent, vehicles of certification, appearing to leave their members in the dark, but themselves driven by and under the influence of multinationals in a sector subjected to considerable levies by the State? Small, with no industrial process, and confronted with the multinational cocoa companies, but supported by a certification programme, do these small cooperatives manage to stay close to their members and their interests, to maintain a capital of trust and solidarity? Are there dysfunctions which are specific to them or originate from the certifications, for example biased governance, an absence of transparency, a particular game regarding the premiums and the guaranteed price? In accordance with the principles of the International Cooperative Alliance (ICA), the Uniform Act of the Organization for the Harmonisation of Business Law in Africa (OHADA)⁴¹ in force in West Africa stipulates that:

"A cooperative is an autonomous group of individuals who willingly join together to fulfil their aspirations and meet their common economic, social, and cultural needs so as to form a corporate body whose ownership and management are collective and where power is

³⁹ This minimum price was raised by 20% by the Fairtrade International authorities at the end of 2018, increasing to 2,400 USD/t of beans; the premium was raised from 200 USD/t to 240 USD/t.

⁴⁰ The terms *grande traite* and *petite traite* have been in use there since colonial times to refer to the main harvest (from September/October to January/March) and the smaller, secondary harvest (around April to August) of the season respectively.

⁴¹ Article 4 L. 521-1 of the OHADA Uniform Act on Cooperatives.

exercised democratically and according to the cooperative basis." (OHADA, 2011). According to this act, the producer organisations would be schools of democracy, a means of learning about collective decision-making and a force for helping family farming to get its problems recognised. In theory, a cooperative is effectively a tool for defending the interests of its members. The trust within the cooperative is meant to lay the foundations for the member-cooperative relationships (Henninger & Barraud-Didier, 2013). The cooperative form has also been widely chosen by champions of fair trade as the optimum form of collective organisation for the redistribution of its benefits (Nicholls & Huybrechts, 2017).

In 2016, for the purposes of internal research at the French Agricultural Research Centre for International Development (CIRAD), a first pre-sample of 40 UTZ- and Rainforest Alliance-certified cooperatives were selected at random from a list of 81 cooperatives marketing between 300 and 4,000 t of beans in 2014-2015 as provided by a credit organisation. We noted the origins of their founders, whether they were more farmers or more *pisteurs* and *traitants* as well as the dates the cooperatives were founded and the dates, they joined the certification programme.

At the end of 2017, a second pre-sample of 41 cooperatives was compiled for a study into the interest of free trade for cocoa farmers financed by the European Union: 35 cooperatives were selected at random from a list of 129 cooperatives from the Fairtrade network. Six other, neighbouring ones, enrolled with other certifications, made the sample up to 41. In addition to the date of their founding and the date they joined the different certification programmes, we also recorded a brief biography of the founder(s) of the cooperative. Then we listed all or some of the members of the cooperatives' management teams, including their age, education level and whether they were related. The analysis grid was based on a brief history and organisational structure of the cooperatives' boards and management teams: chairman, manager, treasurer, accountant, not forgetting the ADG (group administrator), who is responsible for managing the group's certification(s). The investigation continued with the premiums distributed to the members and the guaranteed minimum price.

In addition, a survey of 250 farmers who are members of these 41 collectives was conducted in order to compare their opinions with those of the management teams. This method does not completely avoid the pitfall of recitation⁴², but we reduced the risks by

⁴² The multinationals give recommendations to and advise the cooperative management, which put pressure on their members to give a standardised response, praising the benefits of the certifications. The cooperatives' management teams tend to steer researchers towards the most favoured and obedient farmers. Surveys of producers have recorded an increasing extent of imposed recitation (Ruf *et al.*, 2018).

taking care to survey most cooperative member farmers without leaving the management time to send instructions and by balancing the villages close to and far away from the cooperative’s headquarters.

4.3. Cooperatives for farmers or farmers at the service of cooperatives?

4.3.1. Is the predominance of “*pisteur* cooperatives” the fruit of the certification dynamic?

At the end of 2016, the first study was conducted with 40 cooperatives which corroborated the earlier findings. The “cooperatives” founded by the *traitants* and *pisteurs* largely prevail over those created by one or more farmers, especially as of 2006 (figure 9). This study also confirmed the exponential growth in the certification of cooperatives in the early 2010s, predominantly due to cooperatives founded by *traitants* and *pisteurs* (Figure 9).

Figure 9: Profile of founding of cooperatives (2016 study)

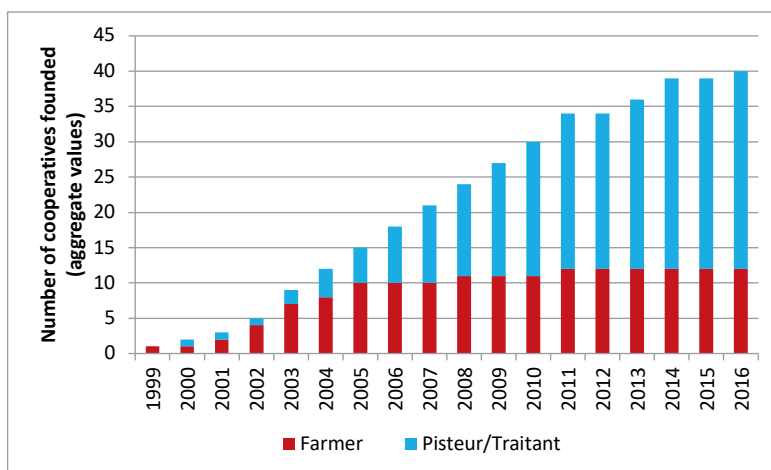
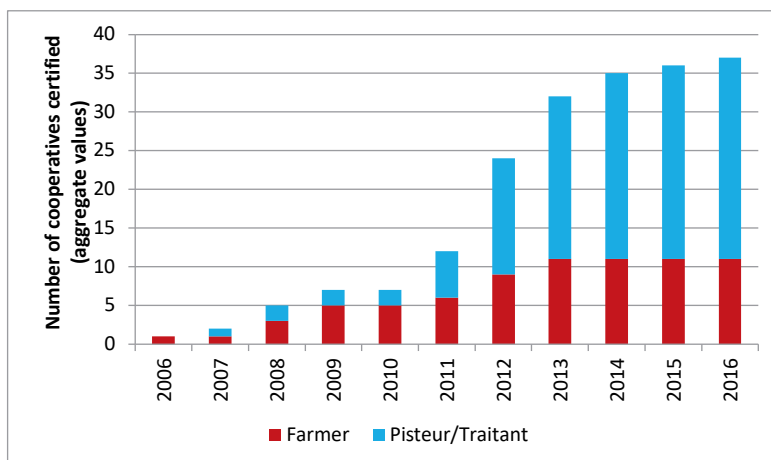


Figure 10: Profile of certification of cooperatives (2016 study)

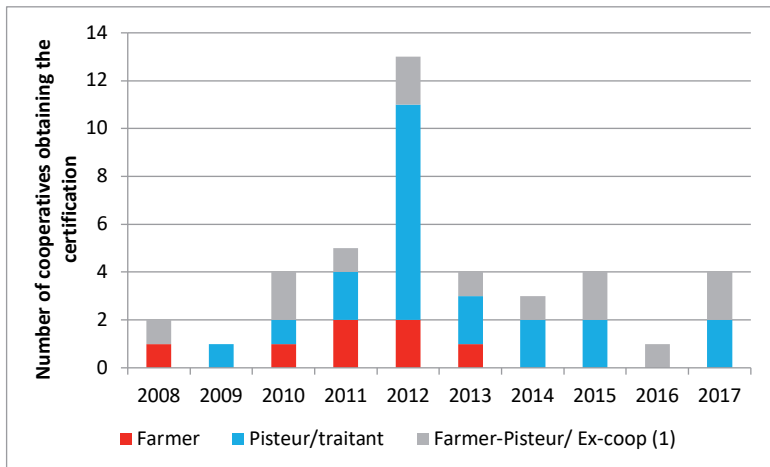


Source: Authors' surveys, November 2016.

In most cases, our studies show that the *pisteur* or *traitant* mobilises the farmers, who supply him with cocoa (his supplier network) and convinces them to become "members of a cooperative", promising various advantages, possibly including the certification premium. In other cases, farmers are not even aware that they have been "registered" in a cooperative, and even less so that they are UTZ, Rainforest Alliance or Fairtrade certified.

The study in late 2017 confirmed and further pinpointed the diagnosis regarding the founding of the cooperatives. Barely 20% could still be considered to have been founded by a core group of farmers wanting to join forces. Almost 50% of the cooperatives are run by former *pisteurs* or *traitants*, who still manage the "cooperative" structure as their commercial business with strong personal or family ties. They often have their own plantation of cocoa trees (and rubber trees), but the founding of the cooperative clearly corresponds to conversion of their former *pisteur/traitant* "business" into a cooperative (Figure 11).

Figure 11: Founding of “farmer” and “pisteur” cooperatives, 2018 study



“Ex-coop”: Ex-member of a cooperative management team who left said cooperative to go on and found “his own”.

Source: Authors’ surveys, December 2017.

The survey at the end of 2017 also introduced an intermediate category – corresponding to 30% – which comprises the cases where the boundary between farmer and *pisteur* is not as clearly established. Such instances may be initiatives of groups of farmers looking to engage the services of a *pisteur*. However, a more interesting phenomenon, it is primarily former members of a cooperative who have seen how such organisations function from the inside and establish direct contact with other farmers with a view to founding their own cooperative.

The rise in importance of the certifications can also be explained by the post-liberalisation reform already mentioned above, which sets the minimum purchase price of the beans for the farmers. The income from the certification therefore appears to be a means of compensating the differential in the fixed price set by the State via the CCC. This differential of 80 CFAF/kg, for several years now already, is considered too little and leads players to create collectives in order to get “certified”. As such, considering the interests of producers is a priori reduced in this “superficial” conversion to the principles of cooperativism. On the one hand, this cooperative movement does indeed represent part of a process of strengthening the private interests of one or several families, very often of immigrant origin. This movement reflects the overall dynamism of the “northern” communities in the country, prolonging the already long-existing movement of young Burkinabes into the world of the *pisteurs* and the commercialisation of cocoa (Ruf & Honoré, 1998).

4.3.2. Cooperatives between family alliances, ethno-community affiliations and commercial representations

Here, we shall demonstrate that the composition of the management teams of the studied cooperatives results in their dysfunctions and the farmers' distrust. In practice, the management teams are composed of three key members of the board of directors (the chairman – CBD –, the treasurer and the secretary general) and three salaried executives of the cooperative (manager, accountant and group administrator – ADG). The founder or co-founder of the cooperative is most often the chairman, yet, sometimes, he officially retires from the post whilst maintaining control by appointing a son in the key role of treasurer and a trusted individual as the chairman. In cases where the cooperative comprises multiple *pisteurs*, they share out the key roles.

The characteristics of the management teams presented in Table 5 offer a superb overview of the history of the cooperatives and, furthermore, of the "Ivorian-Burkinabe" cocoa plantation economy. In addition to the geographical origin of the board members, their age, gender and education level (where 0 signifies no schooling, 1 signifies primary education, 2 signifies secondary education and 3 signifies higher education) display surprising constants, with each of them revealing a part of the explanation for the divide between the cooperative management and the farmers.

Most chairmen, founders of the cooperatives, are still the first generation. They have "been in the cocoa sector" for 30 years or more. A minority of them have already given up their seat to the next generation, sometimes still within their lifetimes. Whether they boast many years of experience as *pisteurs* or not, they are all relatively old and illiterate men (not a single woman in our sample). Except for the east of Côte d'Ivoire, where autochthonous people, primarily the Anyi, have retained an important position in the cocoa sector, most of these chairmen are immigrants and at least half of them of foreign extraction (Table 6).

This distribution of geographic origins is therefore the product of a long tradition of extensive migrations from the centre of Côte d'Ivoire, Burkina Faso and, to a lesser degree, from Mali and even Benin⁴³. The logical result is an immigrant elite who have invested a lot in the commercialisation of cocoa, firstly as *pisteurs* and *traitants* before converting themselves into cooperatives. The differences in ethnic origin, both instrumentalised and regulated by policies, may contribute to the distrust within the cooperatives.

⁴³ There are a number of reasons for the immigrants' economic success: the desire to escape from the poverty of the region of origin, access to a pool of workers in the region of origin, access to land which has long been facilitated by public policies and local companies, the solidarity of networks and the political and demographic weakening of the autochthonous populations (Schwartz, 1979; Ruf, 1988; Balac, 2002; Chauveau et Colin, 2010).

Table 5: Characteristics of the board members of cocoa cooperatives in Côte d'Ivoire

	CBD	Manager	Treasurer	Accountant	ADG
Age	51 (8)	40 (8)	42 (12)	36 (9)	38 (4)
% female	0%	10%	5%	34%	0%
Education level	1.0 (1.1)	2.8 (0.4)	1.2 (0.7)	2.6 (0.3)	3.0 (0.0)
Related to CBD		15%	50%	3%	6%

Source: Authors' surveys, December 2017.

Table 6: Geographical origin of the board members of cocoa cooperatives in Côte d'Ivoire

	CBD	Manager	Treasurer	Accountant	ADG
Autochthonous	15%	20%	17%	20%	14%
Allochthonous ⁴⁴	41%	60%	40%	74%	81%
Allogenuous	44%	20%	43%	6%	5%
Total	100%	100%	100%	100%	100%

Source: Authors' surveys, December 2017.

Insofar as most chairmen are illiterate and do not yet have Ivorian nationality, they often opt for an Ivorian manager, a university graduate and usually young, who will be put forward to the country's authorities.

The control of power is equally apparent through the "treasurer/accountant" dualism. At least 50% of the treasurers are close relatives of the founder CBD, often a son or a nephew, but this percentage approaches 70% if one also includes more distant kinship ties. Despite their low education level, often just primary school, they often play a key role in the cooperative, supervising the accountant, who has a higher education level but no kinship ties.

The ADGs, associated with the UTZ and Rainforest Alliance certifications, are young, male university graduates (not a single woman). With some exceptions, there is no kinship with the remainder of the board. Whether they are paid by the exporter or the cooperative, their expense is deducted from the certification premium and therefore under the

⁴⁴ Migration to the forested south from the centre and north of Côte d'Ivoire as well as from other neighbouring countries has truly shaped the plantation economy in Côte d'Ivoire to such an extent that it has defined the following, widely adopted semantic classification: "autochthonous" to refer to populations established for the longest time and progressively asserting a right to the land, "allochthonous" for the immigrants considered to come from other regions of Côte d'Ivoire and "allogenuous" for immigrants considered to come from other countries. Even if they are no longer immigrants, this semantic classification persists for the second or third generation.

exporter's control. As such, they are "agents of the multinationals", with university educations, who are installed in the cooperatives. They advise and offer support to the cooperative and farmers support, but also play a major role in the reporting of information on the members of the cooperative and cocoa production. Beyond their described role of good management of the internal control system associated with group certification, receiving hefty questionnaires from the exporter to pass on to the farmers, they feed the industry and trade databases – and not the certification agencies.

The difference in ethnic or national origin between the members of the collective and management teams, and in particular the kinship ties within said teams, contribute to the collusions between the executives and, consequently, to the members' distrust.

The role of the *ADG*, the "exporter's eyes and ears" within the cooperative and among its members, dedicating lots of time to organising the collection of information on the farmers on behalf of the exporter, financed by the certification, poses a question. Why is this expense approaching espionage deducted from the certification premium? The farmers sign a waiver, a form of agreement concerning the gathering of their personal data, but aren't they then even more suspicious? Not understanding the content, an illiterate farmer surely knows full well that he is signing something under pressure.

Admittedly, this confusion between private commercial businesses and cooperatives does present some positive aspects. Overall, the management teams are competent and capable of taking quick decisions. The biographies of some cooperative chairmen are exemplary of the dynamism at work in the cocoa sector, capable of functioning as a social elevator typical of a migratory dynamism. (For example, the chairmen of Socoopem in Grabo/San Pedro and Ekakog in Lakota have remarkable career histories.) However, this composition of the management teams is a major dysfunction of cooperatives, inevitably leading to the temptation to collect the certification benefits at the producers' expense. It is, in fact, the initial motivation for many cooperatives.

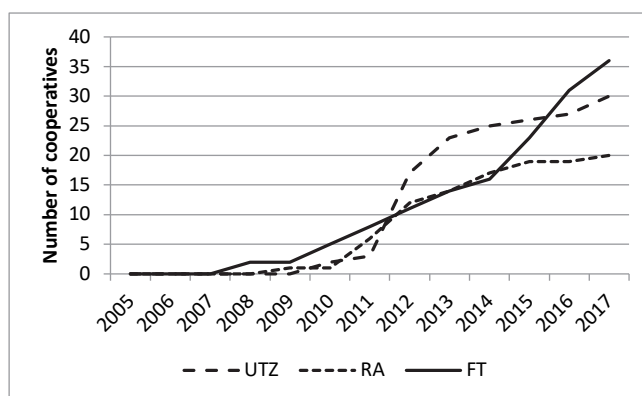
4.3.3. An asymmetrical governance

Our survey of the 250 farmers shows that at least 40% of them do not really understand the certification, as they do not know the generic term and even less so the names Rainforest Alliance, UTZ and Fairtrade. They only know that they are in a "project", that they must comply with some rules in theory and they can expect a premium⁴⁵.

⁴⁵ We use the expression "at least 40%" because we haven't escaped a classic bias related to the investigators' knowing the environment too well. We noticed over the course of the study that the

Compared with UTZ and Rainforest Alliance, Fairtrade is even less well known among farmers. This may be explained by the recent rise of the Fairtrade label in Côte d'Ivoire, as we discovered in the studies (Figure 12).

Figure 12: Evolution of the 3 main cocoa certifications in 41 cooperatives



Source: Authors' survey, December 2017.

However, this lack of understanding of the Fairtrade label among the farmers is also the result of the governance of the cooperatives. 80% of them already had a UTZ or Rainforest Alliance certification before acquiring the Fairtrade certification. They are interested in Fairtrade as a legitimate means of trying to break their dependence on a single exporter and a single certification, but they remain very discreet towards the farmers in order to increase their room for manoeuvre on the use of the premiums.

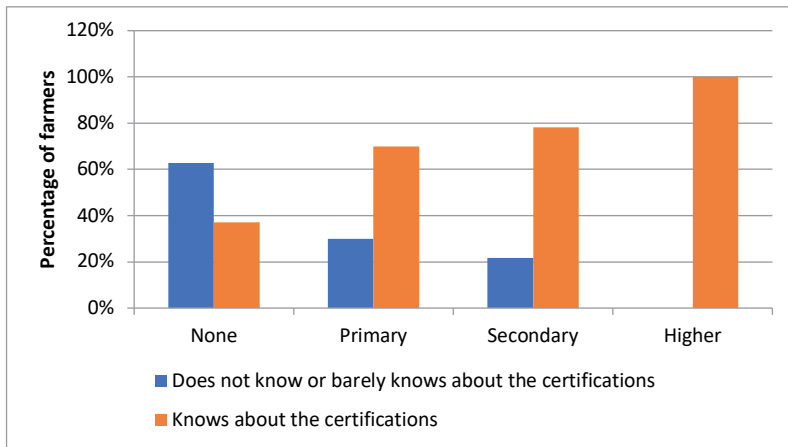
The majority of the farmers understand or guess the cooperative management teams' game of getting rich behind their backs to some extent, but they are in no position to defend their rights and express themselves. General meetings are usually parodies and the farmers do not have access to information⁴⁶.

Ultimately, the low education level weighs on the farmers' mastery of certification (Figure 13).

investigators were listing and describing the actions of certification until farmers were persuaded to understand something about it.

⁴⁶ For example, the lorry slip returning from the port contains valuable information, with the respectively UTZ-, RA- and FT-certified tonnages of cocoa. The farmers are obviously never given access to this information.

Figure 13: Education level and knowledge of the certification



Source: Authors' survey, December 2017.

The farmer's low education level undermines their capacity to intervene in the governance of the cooperative. In the 2010s, and despite decades of cocoa farming's supposedly financing schooling for farmers' children, 40% of cooperative members had still never attended school. As for the 60% who had "attended" school, half of them went to primary school and half made it to secondary school. Cocoa farmers who have attended further education institutions are still extremely rare. Like the cooperative chairmen, the lack of schooling does not inhabit the ability to undertake and innovate based on one's own experience and that of one's neighbours and relatives. Still, even if they are aware of being members of the cooperative, such a rate weighs on the farmers' ability to inform themselves and negotiate with cooperative management teams. They have no way of verifying the income from the certification or the expenses of their cooperative. These issues are not addressed in general meetings or perhaps more aptly the parodies of general meetings. In the case of Fairtrade, they have no way of assessing the share of premiums invested in social initiatives. Farmers sense this asymmetry of information.

In this context of cooperatives whose origins and management teams are often largely controlled by one person or a small group of people, faced with farmers with a low education level, governance has very little chance of being transparent. The cooperative management teams have neither the interest nor even the capacity to explain how the certification systems work to the farmers. As the farmers do not understand the standards, the inevitable results are asymmetries of information at the farmers' expense.

4.4. Consequences: unequal distribution of the monetary benefits associated with the certifications

4.4.1. The premiums

In the case of Fairtrade the 200 USD/t premium is, initially, meant to be invested in community projects such as schools, village pumps and tracks. It is not a premium for individuals. In practice, this allows the cooperative management not to inform the farmers of the Fairtrade certification. However, the management teams of cooperatives are faced with management and arbitrage difficulties: a farmer whose tonnage is sold under a UTZ contract receives an individual premium. His neighbour whose tonnage is sold under a Fairtrade contract receives nothing. Faced with the discontent of farmers to whom the dual UTZ and Fairtrade certification is deliberately not explained, the majority of the cooperative management teams have negotiated a division of the premium into four shares with Fairtrade⁴⁷: 25% for the cooperative's management and equipment costs; 25% for individual farmers' premiums; 25% for "sustainable cocoa", which implies the purchase of fertilisers and phytosanitary products; and 25% for social investments. This repartition allows them to facilitate smoothing and equalisation between individual UTZ and Fairtrade premiums, but it also allows them to reduce social investments to the congruent share and to maximise transactions on management fees, equipment and fertilisers on credit, from which the management team benefits in the form of commissions or even double payments (Ruf et al., 2018).

For UTZ, in some cases, of a premium in the sum of 200 CFAF during our first investigations, 30 to 35 CFAF are retained by the export and/or bean-grinding company to reimburse the initial loan to the cooperative (support and extension system). This deduction from the premium also serves as a cover for possible unpaid debts due from the cooperatives. The 65 to 70 CFAF, (recently revised down to 60 CFAF) are allocated to the cooperative, of which 35 to 40 CFAF are kept by it and are meant to finance various marketing costs (purchasing of trucks, etc.), service costs (supply and credit of fertilisers and phytosanitary products), possible social projects (water pump, school kits, etc.) and an extension share (notably their "lead farmers"⁴⁸ network). The remaining 30 CFAF are meant to be redistributed among certified farmers.

⁴⁷ This redesigning of the premium, a finding of the survey conducted for the European Union obtained in the majority of cooperatives surveyed, does not appear to be reflected in any official Fairtrade text, but has also not been contested by Fairtrade, which has been made aware of the findings.

⁴⁸ Associated with the certifications, the "lead farmers" are the cooperatives' extension workers, responsible for teaching "good agricultural practices" under the partial supervision of the ADGs, and therefore the exporters.

Thus, in the best-case scenario, the farmers receive just 25 to 30% of the UTZ standard certification premium paid to the cooperatives by the “giants” of the cocoa industry. Due to the dysfunctional nature of the cooperatives and the industry, farmers actually receive less – probably 15-20% on average. As an indication, in the 2017 survey of 250 farmers, the average production of certified cocoa in 2016 was 1,500 kg, which should have returned an average premium of 45,000 to 50,000 CFAF per farmer. According to the surveys, they would have received 34,000 CFAF, with 15% of certified farmers having received nothing⁴⁹.

We were only able to access the list of premiums distributed to farmers in two cooperatives. An initial comparison of the list with the declarations raises serious doubts. An example is given for five farmers in Table 7, but the discrepancies are almost systematic and more than 50% on average. As already mentioned, we have even identified fictitious farmers, invented by the cooperative management.

Table 7: UTZ/Rainforest Alliance premiums paid and declared by the management

	Sum of premiums paid	
	Cooperative list	Farmer’s declarations
Farmer 1	85,000	50,000
Farmer 2	71,000	0
Farmer 3	80,000	34,000
Farmer 4	119,000	0
Farmer 5	129,000	0

Source: Authors’ survey for the European Union, 2017-2018.

In fact, the manufacturer alone decides on his purchase quotas of UTZ or Fairtrade and notifies the cooperative that the payment of the premium will cease on a particular date. The cooperative’s inevitable strategy will consist in searching for “ordinary” cocoa elsewhere, for example in remote villages, and converting it into “certified” cocoa before the deadline, therefore having to allocate it to member farmers on paper whilst pocketing the premium. Even unbeknownst to them, the farmers suspect that their premiums are being misappropriated.

All certifications viewed together; the state also has its share of responsibility. By setting a price for an imposed bean count criterion (for example 110 beans per 100 g) and a transport scale from the cooperative to the port of 80 CFAF/kg, it makes it easier for the

⁴⁹ These figures are only indicative, as they are declared, and farmers tend to overestimate them in order not to run into problems with the cooperatives, which often provide instructions in this sense.

cooperatives to cheat. On the one hand, the cooperatives consider the transport scale to be insufficient for covering costs and “make up for it” with the premium, whereas, on the other hand, the criterion of 110 beans equals 100 g is easy to achieve between October and December, but often impossible later during the second peak of the harvest between April and June. The cooperatives adapt by sorting the beans to the disadvantage of the farmer. The weakness of the controls by the certification bodies refers to a falsehood or great naivety about “traceability” and to a hefty responsibility of the certification bodies, but also of the trade/industry as a whole, which turns a blind eye to the cooperatives’ fraudulent practices.

In other words, even if a premium of 25 or 30 CFAF/kg seems ridiculously low compared with a producer price of 700 or 750 CFAF/kg and public taxes of 190 CFAF/kg, it injects “lots of money” into the system, with lacking control. Certification thus offers the possibility for cooperatives and all the major players in the industry to cheat and abuse members of the cooperatives. The latter only play one role in the game, but the cheating is evident enough to make farmers distrust the cooperatives’ management teams, particularly as they see them getting richer before their very eyes.

4.4.2. The guaranteed minimum price myth

One of the most welcome criteria put forward by Fairtrade Africa⁵⁰, asserting its superiority over the other certifications by way of this unique feature, is the guaranteed minimum price, often referred to as the “compensatory price” by Fairtrade Africa’s representatives. A reference price of 2,000 USD/t until 2017/2018 (raised to 2,400 USD/t in 2019) would apply as soon as the global rate fell below that threshold. The aim of this measure is to protect farmers against market fluctuations. However, for a cooperative, being listed as a Fairtrade-certified operation does not necessarily mean that it will sell its product on Fairtrade business terms. That all depends on its order book and the willingness of its buyers to promote this quality by including the Fairtrade label on chocolate products and paying for a “Fairtrade” licence with national associations (e.g., Max Havelaar France).

The finding returned by the “farmer” survey is brutal. As the study took place after the 2016-2017 *petite traite*, when the Fairtrade minimum price returned above the producer price in Côte d’Ivoire, 92% of Fairtrade-certified farmers have never received it and 12% reported not even knowing it existed. Just 8% said they had benefited from it, specifying a “supplement” of around 105-110 CFAF/kg during that *petite traite*. However, all of these

⁵⁰ Fairtrade Africa is the African network of Fairtrade-certified producers.

beneficiaries, with no exceptions, are either section delegates (or even a vice CBD) or close relatives of the CBD.

Beyond the inevitable clientelism between close relatives of the cooperatives' management teams, four explanations seem to intervene to varying degrees depending on the cooperatives:

- The industry stopped Fairtrade contracts during the 2016-2017 *petite traite*, refusing to pay the compensatory price, particularly at a time when the beans were decreasing in size and quality.
- Some companies did buy some Fairtrade product at that time and validated the premium, but refused to pay the compensatory price, referring to the poor quality of the beans during the *petite traite* and the low bean count at the time – which is true, but had not been anticipated in the contracts that they had knowingly signed.
- In at least one case, the cooperative found itself in an “arrangement” with the exporter’s agent and a *traitant*, with sharing of the compensatory price between the three: one third for “ ”.
- Some companies bought and paid the guaranteed minimum price, but the cooperative refrained from informing the farmers.

These dysfunctions in terms of the premium and the minimum guaranteed price thus directly implicate the certification agencies, including Flocert, and the cooperative management, but also the industry, which is therefore partly responsible for the division between the cooperatives management and farmers. Once more, the latter may be very poorly informed but do still notice some of the anomalies.

4.5. Conclusion

Cocoa farmers, even if they only understand a minuscule part of the certification process, are distrusting of “their” cooperatives, to which they have never really belonged and which do not defend common interests, much rather private interests, going against the values of cooperativism. Since they were introduced, and despite their modest size, these cooperatives have only paid marginal attention to the farmers and their needs and have been encouraged to manipulate the information passed on to their farmer members, as inevitably they are tempted to reroute part of the premiums and the minimum guaranteed price on the rare occasions when it might be applicable. The situation is therefore very different from the message being given to consumers purchasing bars of UTZ-, Rainforest Alliance- or Fairtrade-certified chocolate. Consumers are unlikely to realise this.

Even if the certified farmers are aware of the manipulations of which they form the object, the asymmetries of information and the poor rate of schooling do not help them to defend their rights within the cooperative. Only a minority of farmers close to the management,

generally relatives, are aware, as they are informed and benefit sufficiently from the system. However, without active participation and without the satisfaction of their members, the cooperatives will not be able to survive in the long term (Bhuyan, 2007; Hernández-Espallardo et al., 2013). As the situation currently stands, these "sustainability" certifications and the cocoa cooperatives implementing them have proven nothing in terms of sustainable development and fair trade.

The Ivorian cocoa cooperatives are integrated in an exporter/certification system which both aids and restricts them at the same time and which is responsible for part of the opacity of the relationships between the cooperatives and their members. Reciprocally, the cooperatives' dysfunctions and their relationships with their members lead to biases in the certification system. The large private groups (Mars, Nestlé, Mondelez, Cargill, Barry Callebaut, Cémoi, Blommer, Olam, Zamacom) and the certification schemes (UTZ/RA, Fairtrade) are aware of this, but some have neither the interest nor the capacity to modify the system in depth, as, despite collecting massive quantities of data, they know very little about the collectives and even less about the farmers. Some actors are trying to improve their presence. For example, Fairtrade International is reviewing its guaranteed minimum price policy and has conducted studies into the producers' incomes, honestly revealing that the certification does not help farmers escape poverty (Rusman et al., 2018).

This article ultimately focuses on the dysfunctions of the cooperatives at the expense of the farmers but should not forget the state levies and the profits of the cocoa multinationals and supermarkets, leaving farmers with just 6-8% of the value of a bar of dark chocolate sold in Europe.

In this context, the result is recommendations for action preferentially at farm level. It is about helping them develop a share capital, which is essential for the democratic functioning of cooperatives. Some NGOs believe that they are contributing to this development by supporting the cooperatives' management teams, but in doing so they are also widening the gap between the management and members. The urgent situation is the opposite. It is about systematically informing farmers about the contracts concluded between cooperatives and exporters under these "sustainability" labels. One of the main priorities is the transparent management of the premiums: this requires an innovative effort directed at the participatory management of the farmers.

5. Creating a CEN/ISO 34101 series for sustainable and traceable cocoa: an innovative sustainability standard developing process

5.1. Introduction

As illustrated in the introduction to this thesis, sustainability challenges in the cocoa commodity chain are currently predominantly addressed through certification schemes (van Tilburg et al., 2007), in particular Rainforest Alliance/UTZ⁵¹ and FairTrade International. These private initiatives have created an elaborate configuration involving different social actors in the design, implementation, and monitoring of standards for sustainable cocoa (See Chapter 2). These schemes are however also criticized for several reasons. Critics point at their lack of inclusiveness, particularly towards smallholders and local communities (Cheyns, 2011), the dominance of (Western) experts and NGOs in designing the standards (Ponte & Cheyns, 2013) and the influence of a small group of well-resourced vocal stakeholders (Belton et al., 2010). Furthermore, their impact on the sustainability of cocoa production is being considered as modest (Ingram et al., 2018), while the economic benefits of complying to these standards are not always clear either (Ingram et al., 2014; Uribe Leitz & Ruf, 2015). These criticisms raise the question whether another configuration of actors promoting sustainability standards may be more effective and thereby create an alternative pathway to promote a more sustainable cocoa commodity chain.

This chapter therefore addresses the question whether and how more inclusive and effective strategies of promoting sustainability in the cocoa can be designed. An interesting alternative approach that has recently been attempted in the cocoa sector is the process initiated by the European Committee for Standardization (CEN) in collaboration with the International Standardization Organization (ISO) to develop a CEN/ISO (34101) standard for sustainable cocoa. The initiative was taken by national governments' institutions on the request of the cocoa industry. In this initiative, national, government-led, standardisation bodies take the lead thereby diverging from the currently dominant initiatives led by private organisations. Moreover, the initiative is not mainly driven by organisations originating from consumer countries, as both governments from cocoa producer and from cocoa consumer countries are involved in the process. The intention of the initiative is to develop a global standard for sustainable cocoa that can subsequently be inserted in national government legislation as well as in global value chain arrangements. These innovations in the sustainability governance of agri-food chains deserves closer scrutiny in order to identify the innovations this process is generating and to draw lessons with respect to the development of future sustainability standards for the governance of global agri-food commodity chains more generally.

⁵¹ In June 2017 Rainforest Alliance and UTZ announced that they would merge but that the name 'Rainforest Alliance' remains. Their new standard will be issued in 2020.

This chapter analyses the process of developing the CEN/ISO 34101 series as a standard for sustainable cocoa. By documenting the standard setting process, we intend to shed further light on the ability of official international standardization institutions to avoid the pitfalls that private certification schemes encounter. More specifically, we aim to answer the following research questions:

- What are the sustainability governance innovations in the development of the CEN/ISO 34101 series?
- What lessons can be learned from the creation of this standard series for certification scheme development?
- Can this process contribute to improved private supply chain governance?

The remainder of this chapter starts with explaining the research methods applied in this study, followed by an overview of the process to develop the CEN/ISO 34101 series. Then I review the main innovations in the process of creating the CEN/ISO 34101 series and discuss the main findings and close the chapter with a conclusion.

5.2. Methods

The development of the CEN/ISO 34101 series for sustainable cocoa presents a unique empirical example of the active involvement of national authorities in the creation of a sustainability standard in collaboration with a wide range of private stakeholders. This is a case study, in which I explore the specific dynamics of developing a global sustainable commodity standard with the engagement of different government actors. Although this single case study is concrete and time and commodity specific, my ambition is, following Flyvbjerg (2006) and Gerring (2004), to generate insights which have broader relevance for the development of global commodity standards promoting sustainability. The process of developing a new sustainability standard within the CEN/ISO system for the global cocoa sector is illustrative for the more general trend (especially in Europe) of promoting sustainability in food provision utilizing standardization as a means of governance.

I studied the process of developing the CEN/ISO 34101 series as standard for sustainable cocoa over the period from 2011 to 2018. The start of the process was in 2011, when the preparatory work started, and this research finished when the first three parts of the series were published and part 4 was at the final stage of approval.

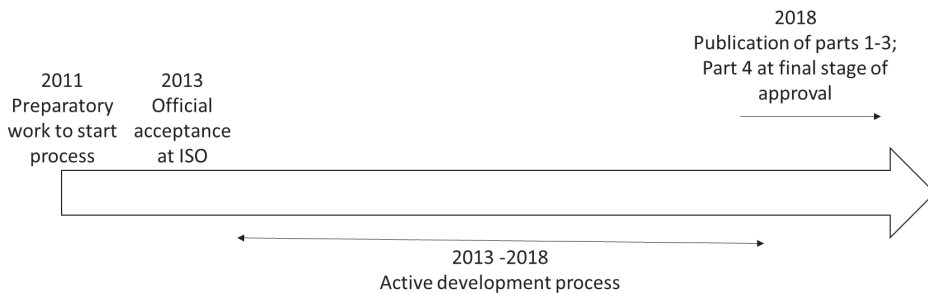


Figure 14: Temporal dimension of the study.

During this period, I looked into the way the standard was being set, thereby building upon Djama et al. (2011) divide standards in different time periods and reasons for their development. This is followed by a close analysis of their internal governance arrangements and their ways of dealing with managerial challenges, such as decision making, creating consensus around auditing, benchmarks, etc. (Ponte & Cheyns, 2013). Next, I investigated the role of expert knowledge, the formats of negotiation and looked into stakeholder engagement to explore the legitimacy of these initiatives. In addition, I reviewed stakeholder participation, transparency and accountability as further elements potentially contributing to standards' legitimacy (Fuchs et al., 2009). Particular attention was hereby paid to the involvement of private and public actors, as in this case public actors take up a prominent role in a context where there is a general shift away from nation-state regulation of environmental aspects to private or market-based regulation (Mol, 2008).

This research builds on the method of process tracing (Bennett & Elman, 2006), which is a qualitative research method aimed to develop in-depth understanding of a process occurring over a longer period of time. This method has been selected because this research focuses on analysing a process that took several years and involved a range of different stakeholders. Focusing on such a long period of time makes it important to make the temporal dimensions explicit, and requires the researcher to gain a detailed knowledge of the phenomena under investigation (Bennett, 2010).

An important method used during this research were observations collected during the CEN/ISO standard development process. I participated, in a formal role, in the standard development process from 2015 until the publication of the ISO standard(s) in 2019. This formal role entailed the participation in a national mirror committee and in various working groups of the ISO as well as in international meetings. With respect to publishing findings from committee and working group meetings in this chapter I follow the official ISO policy on communication of committee work (ISO, 2016) and rely on publicly available documentation only. I make use of the documents that were released during the public

enquiries that were part of the creation of the ISO 34101 series. I also analysed the literature on the ISO standard setting procedures as a tool for cross-verification. Finally, I did stakeholder consultations with participants from Ghana, Côte d'Ivoire and the Netherlands and carried out interviews with members of ISO working groups, thereby covering the different stakeholder groups, namely producers, exporters, processors, chocolate brands, civil society organizations and governments. These interviews were carried out between 2014 and 2017 to gain a better understanding of the standardization process and the viewpoints of the different actors. Throughout this research I adhered to the strict data protection rules and confidentiality terms as established within the ISO standard setting procedure.

5.3. Analysis

5.3.1. A brief review of the CEN/ISO standard setting procedure

The International Standardization Organization (ISO) coordinates and provides the framework for the creation of internationally recognized standards. The European committee for standardization (CEN) is the European counterpart of ISO. For a standard to be recognized by both CEN and ISO, the standard needs to be developed in accordance with the Vienna agreement⁵² rules, which stipulate the procedures for technical co-operation on standardization. This prevents duplication of efforts and reduces time while developing the standards.⁵³ This also implies that when approved by CEN, the standard is applicable to all European legislations, meaning that all EU-countries are obliged to adopt the standard within a certain period. At international level, ISO member countries may refer to the standard within their legislation, making it mandatory although endorsement of CEN/ISO standards is a voluntary decision for each ISO member state.

Most activities involving CEN/ISO are executed via the National Standard Bodies (NSB). NSBs are national governmental institutions responsible for standard-related issues. Currently, 162 NSBs are member of ISO, involved in one or more standard development processes (ISO, 2017). There are two possible modes of involvement in a standardization process, namely: "participating" members (P-members) or "observer" members (O-members). The latter do not have voting rights during the standard development process. NSBs are responsible for the communication among and the engagement with all the relevant stakeholders in their countries. In each country, stakeholders appoint experts,

⁵²Available under:

http://www.rehva.eu/fileadmin/EU_regulations/Standards_and_standardization/ISO_standards/Vienna_Agreement.pdf

⁵³ <https://www.cencenelec.eu/intcoop/StandardizationOrg/Pages/default.aspx>

who participate in the standard development process. These experts are generally working in the relevant sector (product, service, etc.) and have a direct relation to the topic of the standard. Experts participate on a voluntary basis or as part of their normal work (industry, government, academia, etc.).

Experts gather in technical committees (TC) at the national and the international level. These are managed and overseen by the Technical Management Board of the ISO⁵⁴. Due to the large number of products/topics where ISO standards are being developed and have already been finalized, TCs are sub-divided in Sub-Committees (SC). For example, TC 34 “Food products” has currently 842 published standards and 117 standards under development⁵⁵. Sub-Committee 18 on cocoa falls under TC 34 (referred to as TC34 /SC 18), has 24 P-members and 23 O-members. TC34/SC18 has developed two standards for cocoa beans⁵⁶ and four standards for the 34101 series for sustainable and traceable cocoa⁵⁷ and in this paper these four standards are referred to as the 34101 series.

Finally, any CEN/ISO standard can be used by different stakeholders to make different claims, based on different types of conformity assessment (first, second and third party). This is called the “neutrality principle” which means that all CEN/ISO standards allow for different levels of conformity assessment. Thus, CEN/ISO are standards and not labels and therefore they cannot be used as such for communication with the final consumer (B2C).

5.3.2. A brief history of the CEN/ISO 34101 “sustainable and traceable cocoa” series

The development of the ISO 34101 series started in 2011. The time frame for the development of the CEN/ISO standard stretched until 2018 although the formal acceptance and hence the official standard development process only started in 2013 and the finalization was delayed several times as well, so it was finally launched only in May 2019 (ISO, 2019a). The proposal to create a new working item was brought up during a meeting by the Netherlands Standardization Institute (NEN). Initially, the standard was intended to be developed within CEN (the European committee for standardization), mainly because the need for such a standard came mostly from Europe-based stakeholders. However, due to the international nature of the cocoa value chain, producing countries were also involved in the ISO standard development process-

⁵⁴ <https://www.iso.org/governance-of-technical-work.html>

⁵⁵ <https://www.iso.org/technical-committees.html>

⁵⁶ Namely: ISO 2292:2017, cocoa beans -sampling and ISO 2451:2017, Cocoa beans – specifications and quality requirements

⁵⁷ <https://www.iso.org/committee/5100987.html>

The 34101 series: content and implications.

The CEN/ISO 34101 series is composed of four different parts. Each part, or sub-standard, covers particular issues, which means that each stakeholder in the value chain adheres to a particular sub-standard. Below we present a brief overview of the four different parts:

ISO 34101- part 1, Sustainable and traceable cocoa: Requirements for a sustainability management system.

This part includes the "Plan-Do-Check-Act" (PDCA) concept that is also included in other ISO's such as the 9000 series. The PDCA concept entails that the management system is expected to plan yearly activities (Plan), perform them (Do), implement certain control over its operations to verify that the aim is being achieved (Check) and in case this is not the case implement corrective actions (Act). Moreover, this part 1 also introduces the concept of a "Cocoa Farm Development Plan" (CFDP), within the management system and this is envisaged for every farm. The CFDP includes contractual agreements, an extensive collection of farm and household data, and can be used as a baseline for further comparisons. This is seen as the main tool to achieve continuous improvement and can be considered a novelty in the world of standards. The challenging aspect of the CFDP is that it must be tailor-made for every individual cocoa farmer. This has major implications, as it is time-consuming, expensive and demands a very specific set of skills from the staff developing such CFDPs, which may not always be sufficiently available in the cocoa producing regions.

ISO 34101- part 2, Sustainable and traceable cocoa: Requirements for performance (Profit, People and Planet related)

This part has requirements covering four main areas: general, economic, social and environmental issues and they are all related to the activities at cocoa farm level. There is a division in low, medium and high-level requirements to reflect the "low entry, high bar" way of organizing the standard, with a maximum of 60 months to move from one level to the next one. From a sector-wide perspective, the introduction of three levels with 60 months each generates a rather long-term planning for the cocoa sector, which should give the entire sector enough time to implement this new sustainability standard. The differentiation between three levels within the standard poses a difficulty for its implementation. For instance, within a producer group all levels could be present simultaneously at the different individual farms and therefore there is a need to monitor the progress for each of these farms individually. Keeping an overview of which farmer needs to 'move to the next level' may be complicated.

A further novelty of this CEN/ISO series and particular for part two is the introduction of various new concepts that had not been used before in the CEN/ISO world of standards' language. Some examples of these unfamiliar concepts are: "*procedure for negotiating on*

a premium”, “premium”, “cost of implementation”, “fertilizer ready” and “living wage”. These new concepts are derived in part from the world of private standards and illustrate that the topics addressed in the ISO 34101 series were not present in previous CEN/ISO standards. Nevertheless, this innovation brings challenges in detailing the exact understanding and interpretation of these, generally, broad terms during the implementation process of the standard and in particular in the monitoring process.

Furthermore, whether all these criteria can be assessed at the farm level through an audit remains to be seen. For example, requirement 6.4.5 in part 2 aims to motivate the farmers and farmer organizations to try to have children registered with birth certificates. Assessing such a criterion implies more time spent in the auditing process as well as the availability of additional competences with the auditor.

ISO 34101- part 3, Sustainable and traceable cocoa: Requirements for traceability

This part covers the requirements for traceability systems within the cocoa supply chain. This includes requirements for the organizations involved in cocoa farming, trading and processing, whereby, the principle of “one step forward, one step back” is being used. This means that a stakeholder only needs to have the traceability information (document track) of its immediate trading partners (from which company the cocoa was bought and to which company the cocoa was sold). Hence, the traceability requirements do not require complete transparency along the entire cocoa value chain.

ISO 34101- part 4, Sustainable and traceable cocoa: Requirements for scheme owners

Part 4 covers multiple aspects and is intended to be used in combination with the other three parts of the series. This part defines the requirements for certification scheme owners of sustainably produced cocoa and derivate products. This includes the legality and independence of a scheme owner, requirements for developing and managing a certification scheme, as well as procedures and policies needed to achieve its objectives and to drive continued improvement.

Additionally, this part lays out the requirements for bodies performing audits and certification assessments, which go beyond the requirements already specified in the already existing standard ISO 17011⁵⁸. Furthermore, this part defines requirements for all other activities relevant for the certification process such as time frames for audits, time accepted for closing non-conformities, audit time and auditor competences.

⁵⁸ ISO 17011, conformity assessment –general requirements for accreditation bodies accrediting conformity assessment bodies.

Finally, part 4 includes the requirements for making claims of conformity against this CEN/ISO series, which include business to business (B2B) and/or business to consumer (B2C) communication. It also includes a requirement for licensing and control of a third-party mark by means of contractual arrangements or comparable agreements. In sum, part 4 takes parts of ISO 17021⁵⁹ and 17030⁶⁰ and adds an extra level of detail. Interestingly, part 4 also includes certain elements coming directly from private/NGO-owned certification schemes and the ISEAL meta-standards. For example, requirements for publicly available information, oversight of the scheme owner, defined text for acceptable claims, the duty to develop guidance documents by the scheme owner and the measurement of the performance of the scheme, are all understood as enabling the higher degree of credibility that the current private standards have.

Hence part 4 of this series is an innovation in the CEN/ISO standards development world. None of the existing ISO standards⁶¹ sufficed to satisfy the needs of the cocoa industry and hence a new approach had to be developed.

5.3.3. The 34101 standard setting process

Developing a CEN/ISO standard for sustainable and traceable cocoa was already agreed upon in 2011 but it was only until 2013 that the standard setting process officially started. At that time, there were already private standards in place, such as Rainforest Alliance, Fairtrade and UTZ, while various national governments, such as Ivory Coast and Indonesia⁶², were planning (or had already started) to create their own national standard to address the sustainability challenges in the cocoa sector. However, different actors in the cocoa sector saw flaws in both the private and the national (governmental) standards.

For example, the existing private standards were generally considered too expensive and therefore not useful for large-scale implementation. Additionally, only one third of the production certified by private standards was sold as such (Fountain et al., 2012). National governments did not consider private standards an effective solution since they rarely adopt private standards into their legislation. Hence a more holistic approach was needed to solve the sustainability challenges that the industry faced. Thus, the intention was to develop a CEN/ISO standard that could be widely adopted and spread throughout the entire cocoa value chain.

⁵⁹ ISO/IEC 17021-1:2015: conformity assessment-requirements for bodies providing audit and certification of management systems

⁶⁰ ISO/IEC 17030, conformity assessment-general requirements for third-party marks of conformity

⁶¹ ISO 22003 (food safety management systems), ISO14000 environmental management, ISO 17067 (guidelines for producer certification schemes), etc.

⁶² <http://www.csp.or.id/news/nvB4m-.html> news of Tuesday, 3 October 2017 14:09:32 Drafting the National Working Competency Standard (SKKNI) for Sustainable Cacao.

Nevertheless, not all stakeholders agreed on the utility of developing such a global standard for sustainable cocoa. For instance, Brazilian representatives expressed their concerns that a CEN/ISO standard would become a non-tariff barrier for international trade and therefore they decided not to get involved in its development. Several other countries, actors and institutions also made the decision not to participate because they did not see a real benefit in creating such a standard (Mexico and Jamaica), because they did not have the necessary interest or resources to participate actively (ICCO and COPAL), or because they were not aware of the development process at all (which was the case for several small industry partners and producers).

Even those stakeholders who participated in the process did not all agree on the actual goals that the CEN/ISO standard development process should aim for. Engagement with the different actors throughout the standard setting process learned that different stakeholders expected the 34101 series to bring different potential benefits. For instance, some industry actors had the hope that this new ISO series would “bundle all the independent standards” into one that everybody agrees upon and most importantly, one that would be cost-effective. According to an exporter’s Internal Control System project manager in Ghana: *“The [CEN/ISO] is a standard that covers all the aspects and requirements of all the current standards together. That means the group will **not** have to be certified on RA, UTZ and Fairtrade. It will be easy to implement and **cost effective**”*. Hence in sum, there were different perspectives on the development of the CEN/ISO standard: from a governmental perspective, developing a CEN/ISO standard would offer a legal enforcement vehicle that would not be available when relying on private standards only. European countries would have a CEN standard that could be applied throughout Europe and non-European countries would have an internationally recognized standard they could adopt into their national legislation or comply with when exporting their cocoa beans. From the perspective of the existing private standards participation in the standard development process would give them the opportunity to influence the standard and to maintain their own value proposition by delivering an added value to their clients going beyond the CEN/ISO standard. And finally, from the perspective of the cocoa farmers this process would give them the possibility to participate in the development of a standard they could apply on their farms and that would be recognized by all other stakeholders.

During the early stages of the standard development process, the different working groups and committees had to make critical decisions to define the value proposition of this new standard series. In the end, they agreed that the CEN/ISO standard should serve as a tool to guide sustainability in the cocoa sector and therefore focus on the requirements for sustainable cocoa production (activities on the farm), determine the minimal conditions for

the traceability of the cocoa beans in the supply chain and finally define the requirements for the management system. Ultimately, the standard should allow for including as many farmers as possible, meaning that entering the CEN/ISO certification should have a “low threshold” for farmers in the most challenging situations, whilst enabling a long-term improvement in the production practices so as to enable ultimately a “high bar” in sustainable practices for all producers.

5.3.4. The country representation in the 34101 series

The composition of the committees and the roles of the experts in these committees were of key influence in the way the standardization process evolved. In the CEN/ISO standard development process we found participation of a wide diversity of experts and stakeholders, especially from producing countries. However, participation of a stakeholder during a meeting did not ensure their active input or influence in the standardization process. For instance, we found some countries’ participating NSBs, such as Colombia and Jamaica, had a rather limited *active* involvement because their experts did not make any contribution reflecting their interests. The involvement of Mexico, for example, had a mostly informative character, since the participating expert did not express any ambition to contribute to the development of the standard. Also, participation from the West African cocoa-producing countries was rather selective. For example, certain producer representatives in Ghana and Côte d’Ivoire became only aware of the standard development process four years after its launch. Some of these producer groups were given the opportunity to join a national mirror committee meeting only after they actively requested and insisted to participate. One explanation for this selectivity is that each NSB may define its own rules and each NSB has its own way of communicating with and enabling their national mirror committee. These communication practices reflect their capability to create a sufficiently active stakeholder group within their country and thereby to contribute to the standard development process internationally. Our observations are aligned with Mol (Mol, 2008), who found inequality between the ISO member countries with respect to their influence on the ISO (14000) development process. Therefore, we may conclude that participation in the committees developing the cocoa standard was selective and strongly dependent on individual experts’ skills and the functioning of the NSBs.

It became also clear that the economic interest of a country is reflected in their participation in the standardization process. The secretariat of the standardization process was, for instance, shared between Ghana and the Netherlands. Ghana is the second largest producer of cocoa (ICCO, 2017) and this commodity is the main income source for 95 per cent of the households living in the forest areas of the country (Ghana Statistical Service, 2008). The Netherlands is the world’s largest importer of cocoa beans, the second largest

grinder of cocoa beans, as well as the biggest re-exporter of cocoa beans and chocolate in Europe (CBI, 2017). Together the NEN (the Dutch standardization agency) and the GSA (Ghana Standards Authority) created a twinned secretariat. This twinned arrangement had two aims: a) to train the GSA on how to run a standardization process as a way of capacity building within the ISO and, b) to have a higher degree of participation and a greater sense of ownership among the producer countries. Nevertheless, not all countries that are important in the global cocoa sector participated in the standard development process. For example, Brazil and the Dominican Republic, the fourth and ninth biggest cocoa producing nations respectively (ICCO, 2017) were absent. Neither Togo nor Sierra Leone, with a cocoa-sector that is important for their national economy, nor Central American countries, where high-quality cocoa is produced, were active in the process. Figure 15 presents the “Participating” and “Observer” countries involved at ISO level.

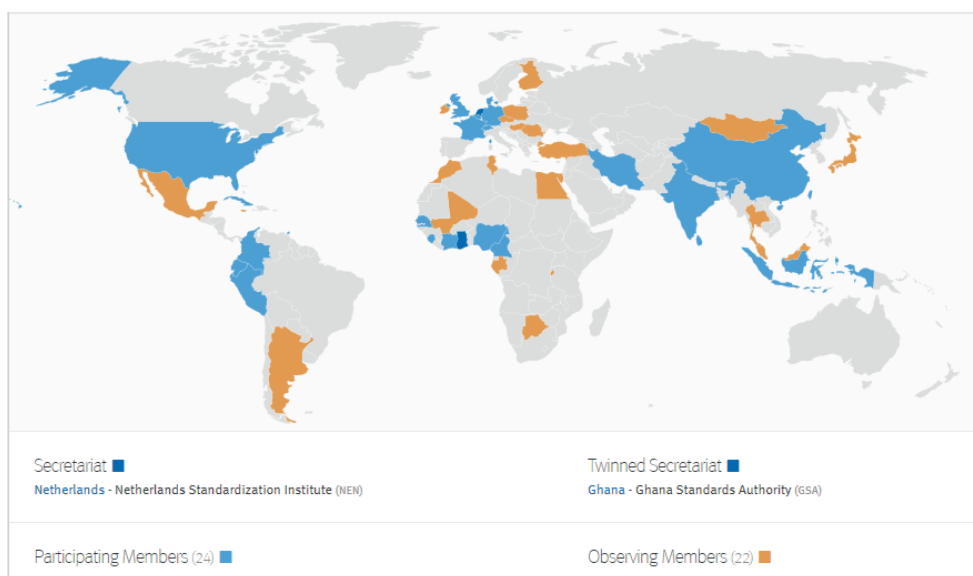


Figure 15: Countries participating in the development of the ISO 34101 series.

Source: www.iso.org (date of access: 28th December 2017).

This imbalanced participation is important because it remains doubtful whether the countries that did not participate in the standard development process will adhere to this standard series in the future.

5.3.5. The ‘ISO language’ and ‘meetings format’

Two major critical issues came up during the CEN/ISO standard development process. First, the different participants were not always familiar with the procedures ISO applies

when developing a standard. The language used in the standard development process was based on the various rules implied in the CEN/ISO standardization process in general. For instance, documents may contain "blue text", which is a text given by CEN/ISO procedures and therefore cannot be modified. Another example is the high-level structure in the text of a management system standard which is also required by CEN/ISO. Another confusion derives from the neutrality principle because although there was consensus among the participating experts that this CEN/ISO series should be credible and follow the strictest assessment process, i.e., third-party certification, within a CEN/ISO standard this cannot be specified due to its neutrality principle. According to its principles, ISO is only creating standards while the different types of conformity assessment and the daily monitoring of the standard do not fall under the authority of ISO and are left to the scheme owner. Different stakeholders were not aware of these formal procedures which contributed to confusion. This confusion led to many discussions, especially around the type of claims that could be made and how different assessment types should be communicated. These long discussions resulted in the late decision to create a part 4 (requirements for scheme owners) in the series, which was only made when parts 1-3 were already well-advanced. This belated creation of part 4 and the extensive discussions on the question which ISO standards should be taken as the normative documents consumed a lot of time. In addition, the extensive amount of time needed to develop the standard resulted in a regular turnover of experts participating in the different committees which meant that the rules and the history of the already agreed text had to be explained continuously to the newly involved experts and stakeholders. The regular lack of familiarity with the ISO language and procedures among the participating experts meant a constant degree of confusion and a permanent threat for further delay as discussions were constantly repeated.

Second, the format of the committee meetings demanded a specific set of skills from the experts involved. They had to be able to speak in public, be confident and well-spoken which was not always the case. For example, a discussion between a highly educated and motivated employee of an international company and a non-educated cocoa farmer is likely to be problematic. In general, the better educated people were more outspoken than the less educated stakeholders (personal observation). It may be expected that the better prepared and outspoken a person is in a meeting, the more likely it is (s)he is able to convince their peers to include their interest in the standard. This is particularly relevant in the cocoa sector with its high market concentration (Lemoud et al., 2017), where leading companies are operating internationally and therefore able to align their needs worldwide and defend their interests in multiple national committees using common strategies. This is being done with the help of a vast international network of highly educated experts who can participate effectively in the committee meetings. On the other hand, the rest of the cocoa sector is not concentrated, includes millions of cocoa producers, thousands of

chocolatiers, dozens of national governments⁶³, and is therefore less able to effectively and efficiently streamline their interests. They also lack a coordinated network of experts to defend their interests during the meetings. Therefore, the opportunities of shaping the content of the standard are clearly larger for the large international companies. Confirming Ponte & Cheyns (2013), there is need to strengthen the position of the other stakeholders to assure their access to expert knowledge and to allow them to acquire 'subtle' negotiation skills to assure a more balanced influence in developing the content of the standards from all stakeholders.

5.4. Discussion

The cocoa industry, which already applied two existing private certification schemes (RF/UTZ and FT) as a niche-market strategy, pledged the CEN/ISO to create the ISO 34101 series. This two-fold strategy can be explained by pointing at the pressure that this industry received for securing the sustainability of the entire cocoa sector. An international standard, developed via CEN/ISO, was seen as the most logical way forward to move from sustainability being a tool for niche-differentiation by a few to becoming a pre-competitive responsibility for all.

The CEN/ISO series was expected to result in increased cost-efficiency by avoiding multiple audits for different schemes and the need to comply with the different requirements of the various standards at the farm level. However, as yet it is unclear whether the CEN/ISO series will effectively reduce costs. First, due to the neutrality principle of the CEN/ISO it is not possible to define one single conformity assessment level. This means that first, second, and third-party audits remain possible, involving additional costs. Furthermore, different claims can be made on the basis of the conformity assessment type which demands a high level of transparency when communicating claims and most importantly, better-informed consumers (purchasers) due to the wide range of options which would most likely entail additional costs. Hence, there is a need for further research to measure the actual benefits of the CEN/ISO 34101 series once this has become operational within the cocoa sector.

The absence of a label can be interpreted as a positive property of this standard, when compared to the existing private standards. The elimination of labelling fees and the broad, sectorial, approach developed in this standard facilitates the lives of producers and supply chain actors. At the same time, the CEN/ISO series allows private standards and other service providers to have an added value by providing solutions for traceability, developing

⁶³ Some governments may be clustered around certain needs (i.e., West-African vs. Mesoamerican countries), however, the cocoa-related interest of each countries vary considerably.

database management systems or organizing training and support. This way the CEN/ISO series could be implemented in a similar fashion as the EU-regulation for organic food (Padel et al., 2009) which combines an agreed-upon basic standard that becomes obligatory once adopted in national EU member state legislation.

However, in case countries do not introduce the CEN/ISO standard into their national legislation, the adoption of this standard by cocoa producers will remain voluntary. In that case, the industry, processors, and chocolatiers must demand the implementation of the standard and thus decide what level of conformity assessment they intend to incorporate. This situation creates considerable room for manoeuvre in the cocoa sector. For instance, in case the CEN/ISO series becomes part of a regional trade agreement (e.g.: between the EU and West African countries) and not in another one (e.g.: between the EU and the Andean community), producers in certain regions may be negatively affected. In that case the CEN/ISO 34101 series would become a technical barrier to trade (TBT), which is exactly what the CEN/ISO intended to avoid.

Finally, various stakeholders expressed the fear that this CEN/ISO standard would lead to an even larger imbalance in the power relations within the cocoa value chain. If this series is not explicit enough in its requirements, national governments of producing countries that introduce this series into their national legislation, may have a further tool to exploit cocoa producers or impose new requirements for exporting such as taxes. However, this is not necessarily the case as there are also examples of transnational rule-making organizations which started with a certification scheme and developed into a widely accepted public-private governance framework (Dingwerth & Pattberg, 2009), such as the EU-legislation on organic food, the Kimberley Process on diamonds and the World Commission on Dams.

5.5. Conclusions and Recommendations

Today's agri-food value chains face important sustainability challenges and these are often addressed through introducing governance instruments aiming for increased transparency (Mol & Oosterveer, 2015). However, using these instruments, such as standards and certification schemes, is accompanied with many challenges, including the costs involved, their multiplicity and their lack of accessibility for smallholders. The cocoa sector is a clear illustration of this development and in response the cocoa value chain has resorted to the CEN/ISO standardization procedure for assistance to deal with these challenges (Murphy & Yates, 2011). This way, the cocoa sector tried to create a more effective instrument for sustainability governance and by doing so the cocoa sector is pushing the commodity standardization process to new frontiers.

This chapter started by presenting the need for innovations in the management and governance of sustainability in the cocoa sector. We then reviewed the main characteristics of the new CEN/ISO 34101 series for sustainable and traceable cocoa, which include requirements, approaches and terminology until now only used in NGO-initiated certification systems. Examples are providing proof of the impact of the scheme activities and providing training. This is a surprising result because initially the process started within the highly formal CEN/ISO standardization world and, supported by the industry, tried to develop an alternative to the NGO-owned certifications systems. This echoes the observations made by Reinecke et al. (2012), on the trend among different sustainability standards to reach a convergence over crucial overarching items while maintaining their differences only within this common frame.

The CEN/ISO 34101 series allows for inserting a sustainability standard for a commodity into national legislation, an opportunity that was not available before. The CEN/ISO standardization process has also opened up the opportunity for direct participation of producing and consuming countries. Although this participation is time consuming, it does give a voice to a broader range of stakeholders than private standards generally do in their programs. Therefore, we conclude that the CEN/ISO standardization process creates a more balanced playing field by involving producers, the private sector and governments. Nevertheless, it remains to be seen what the adoption rate of this CEN/ISO series at the farm level will ultimately be and, especially, how transparent the cocoa sector will be in communicating about the different claims included in the standard series. It is furthermore unclear how this series will be scaled up and how thoroughly the governments and industry will demand and verify the CEN/ISO claims. Another uncertainty are the actual implementation costs involved and the time investment needed to comply with the standard. Finally, the introduction of yet another standard might lead to an even further fragmentation of the market (Wijaya & Glasbergen, 2016). For instance, by differentiating between stringent third-party certified standards for expensive chocolates and self-assessed compliance for cheap chocolates.

The CEN/ISO standard development process is particular in the sense that it resulted in the creation of a series that includes four parts whereby, part 4 was constructed only at an advanced stage of the process and includes elements from the other series (mainly management and scheme requirements). This can be interpreted as the consequence of a complex standardization procedure and an indication for considerable reflexivity in the process. We furthermore found that the CEN/ISO standard development process entails complicated rules and procedures that are sometimes difficult to understand for different participants. Hence a simplification of the language and the consequences of the different

rules/procedures would help to ease the process and facilitate broader participation. The long time needed to develop the standards led to a continuous replacement of experts and hence to regular delays and to a repetition of earlier discussions and of the decisions already made. Therefore, the standard setting process would benefit from a more efficient procedure, where revisions can also be taken on in an agile manner. With respect to the involved participants, we found an asymmetry between the well-organized network of highly educated staff of international companies versus the unorganized representation from producer countries (both at governmental and farmer level). This is reflected in the level of involvement of certain stakeholder groups, where some could forge the standard to cover their needs while others were much less able to do so. Still, the complex and lengthy standardization process did give a voice to all involved stakeholders, and this should be appreciated. It is recommended that the CEN/ISO secretariat reduces the time needed for developing such a standard in the future in order to limit the fluctuations among participants and to be more efficient. Finally, for the credibility of the standards it is of crucial importance to enhance the input of small and medium-sized enterprises, individual farmers and NGOs. This could be achieved by standardizing the involvement rules and fee structures of the NSBs and by allowing for remote access (online) to meetings.

The CEN/ISO series offers a new arrangement of engagement and ownership which has not been seen previously in the governance of sustainability certification schemes, namely one that is developed by the industry, involves national governments through control and oversight and allows the already existing NGO-owned certification schemes to profit from it. For industry actors, the absence of a label and a private scheme owner as well as flexibility when choosing the type of conformity assessment should translate into lower costs and more flexibility, while still ensuring the credibility of the CEN/ISO standard. For producers the 'low entry, high bar' approach to the standard promises a rapid uptake with a long-term horizon for achieving the ultimate level of performance. For policy makers in producing countries, this CEN/ISO standard series means a tool that can bring national legislation closer to private standards and hence results in a beneficial situation for farmers. In addition, these policy makers and scheme owners could explore possibilities for creating and using traceability systems to satisfy private standards and to facilitate support to smallholders. Fostering more efficient public-private partnerships these standards could serve as a vehicle to align international efforts towards more sustainable value chains. This can be seen as a possible solution to what Bush & Oosterveer (2019) refer to as the '*primary challenge*' to developing governance alternatives where states and private initiatives can engage more effectively instead of private initiatives trying to replace state intervention. Public-private approaches should foster open and transparent information about outcomes and impacts to promote cross learning between the different arrangements in the private and public sectors (Gulbrandsen, 2014a). These approaches

could then also be used in other types of commodity (or service) where national and private governance arrangements have proven to be inefficient.

Sustainability governance of agri-food commodities, especially those depending on smallholders, could be improved by merging the different 'silos' in which practitioners, regulators and academics working on sustainability related topics are operating in different regions around the world. For instance, in West-Africa we find cocoa-farmers who also produce coffee, rubber and palm-oil together with various sustainability initiatives for each of these crops: the RSPO (Roundtable on Sustainable Palm Oil) for palm oil, the SNR-I (Sustainable Rubber Initiative) for rubber, and the GCP (Global Coffee Platform) for coffee. All these initiatives address similar sustainability aspects involving the same farmers which is hugely inefficient. This problem can only be tackled when the complexity of sustainability is approached as an inter-sectoral, industry-wide holistic challenge through effective cooperation in each agro-ecological region. Hence, we suggest assessing the possibility of creating a management standard for tropical agricultural production practices by using the CEN/ISO standard setting approach and by narrowing down the commodity-based standards to the basic unit of production, the farm.

6. Conclusion

6.1. Introduction

This thesis studied the oversight configuration used in sustainability initiatives in the cocoa (global) commodity chain. That is: the mechanisms in place to control adherence (compliance) to certain voluntary sustainability standards (VSS). Therefore, I divided the oversight into *the actors involved in the control itself* (who is controlled by whom and how), *the standard setting procedure* and *the content to be controlled for*.

The cocoa sector was selected because it saw a late but swift adoption of VSS in the value chain and today approximately 23% of the global crop is under certification (Willer et al., 2019). At the same time, cocoa is a global commodity with a high degree of concentration, where eight traders/grinders control 60-80% of the global cocoa trade, six manufacturers control 40% of the world's chocolate market. In this sector three certification standards are used to fulfil its needs for sustainability certification (Fountain & Huetz-Adams, 2015). Hence, the cocoa sector has received a lot of attention from academia and the media.

This thesis supplements two bodies of literature which need mentioning here. First, there are the many efforts to measure the impact of the different VSS at the farm level. This impact measurement literature has its criticism because it is trying to measure complex indicators in a complex environment. Second, there is a body of literature dealing with the governance aspects such as the rise of VSS and thereafter also the rise of meta-standards (ISEAL), the different arrangement in place, the legitimacy of the different actors, etc. What is lacking in the existing literature is an evaluation of the oversight configuration and its configuration with respect to its contribution to the impact of VSS. Carefully questioning all the elements of the current oversight configuration is needed since it might shed some light in roots of the criticism found in other bodies of literature. Thus, standards and their oversight configuration are a composite whole that need analytical attention. Hence this thesis aims to unpack the traits of the current oversight configuration in the cocoa sector and its implications for the standards world. By so doing I hope to contribute to a discussion about the lack of external assessment of the established oversight configurations.

This concluding chapter is organized as follows: first, I summarize the key findings from the previous chapters. Second, I elaborate on the properties of the dominant oversight configurations. Third, I contrast the dominant oversight configurations with the initiative of developing an ISO 34101 series on sustainable cocoa. This can be seen as an 'experiment' in the cocoa sector to develop an alternative to the currently dominant VSS. Fourth, I elaborate on the implications of these empirical chapters and reflect on possible alternatives to the currently dominant oversight configurations. The chapter closes with an overall conclusion.

6.2. Key research findings

The main empirical contributions of this thesis are the 'unpacking' of the different constituents of the oversight configurations in VSS currently used in the cocoa sector. First, I will summarize my findings with respect to the actors involved in the formal organization of control, secondly, on the content of what is controlled for and thirdly, on the standard setting procedure.

The first constituent is the *formal organization of control*. Here we find two parts: 1) The third-party audit system, and 2) the auditee (the certificate holder) – in cocoa normally a cooperative. The first part is the oversight mechanism, the third-party audit system. Here I observed the main arrangement, whereby one actor (usually a CB) audits another actor (usually its client) against the content of a given standard. This third-party audit system has not been changed since its inception and use by VSS. Furthermore, the key actors needed for certification to take place - that are, the end buyers (retailers and brands), the grinders/traders, the organizations bundling producers into cooperatives, and the agents providing assistance to an internal management system, (what I refer to as 'implementors' in Chapters 1 and 2)- are not covered by the third-party audit system and neither by any other instrument of the oversight configuration. Moreover, both the control mechanism the third-party audit system and the ISEAL meta-standard compliance program rely on processes that assess a documented compliance, while the oversight mechanism is not controlling for the actual outcome of the standards. I also found a disconnect between the third-party auditing level and the meta-standard level. Each VSS works in isolation, i.e.: they can only exclude a 'wrongdoer' from their own system, and there is no connection between each VSS and their meta-standard (ISEAL). Hence, the meta-standard arranges a horizontal control mechanism among VSS, but there is no connection between the horizontal (meta-standard) and the vertical (the individual VSS) axes. Hence, I question whether this oversight system suits its purpose in the sustainability arena.

The second part of the control is the auditee. Hence, in Chapter 4 we focus on the cooperatives (producer organizations) in the West African cocoa sector, in particular on how and by whom they are created. This chapter illustrates a major structural problem in the oversight configuration, namely that cooperatives are not trusted by their members and are often not able to fulfill the requirements of the sustainability standards (e.g.: payment of premiums). Hence, although cooperatives are the building block of the assurance mechanism of VSS they are lacking sufficient capacity to enforce a proper control upon their members. Therefore, there is the need to pay attention to the discrepancy between the standards content and the expectation for assurance at the level of cooperatives.

The second constituent is *what is controlled for*. This is studied by analyzing the content of the standards to be fulfilled at the 'cocoa plot' in the West-African setting. In Chapter 3, I was able to distil the main flaws of certification criteria at the farm level. These flaws are that the defined criteria are not understandable to the farmers, nor practicable in their daily life, nor relevant to their farming systems or simply unachievable (due to financial or social constraints). There is a clear discrepancy between the content of the standard and the reality of the cocoa farms and what is supposed to be audited for by the oversight instance.

The last constituent is the *standard setting procedure*. This was the focus of Chapter 5. There I followed the development of the ISO 34101 sustainable cocoa series. Changing the existing oversight configuration within current global commodity chains seems difficult. It has an established assurance mechanism and a consolidated group of stakeholders. Exploring the creation of the ISO 34101 series provided the perfect opportunity to study innovations in the oversight configuration. This case study allowed me to explore how standards are being written. Hence, this Chapter presents insights in relevant aspects of defining a standard and its oversight mechanism. That is, which actors are enabling the development of the standard, which actors provide input (engage in shaping the standard), the possible uses of the standard as well as the alternatives in the assurance mechanism. Moreover, Chapter 5 also presents an example for innovation in the standards landscape since it merges the content found in the major VSS while it opens the window to incorporate the standard into legislation. This innovation therefore leads to a fundamental difference in the oversight configuration in the realm of sustainability standards in global commodity chains because governments are also included.

Still, the persistence of the dominant oversight configuration can be noted in the lack of changes in the third-party auditing system since VSS started operating and in the similarities between the oversight configuration of private VSS and that of the ISO 34101 standard series.

6.3. Properties of the current dominant oversight configuration

Above, I have unpacked the different constituent elements of the oversight configuration. In this paragraph I take a step back to look at these constituents and reflect upon the main properties that influence the oversight configuration. By considering the oversight configuration as the unit of analysis, I can distil its properties. In other words, my conceptual contribution shifts the focus from the instrument itself to the entire configuration in place. By doing so, I identified in this thesis four main properties of the

current dominant oversight configuration in the cocoa sector. These four main properties of this configuration can be summarized as presented in Figure 16 below.

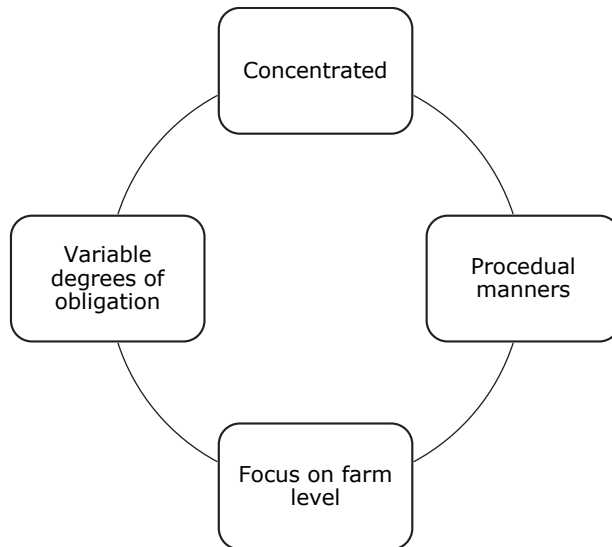


Figure 16. Properties of the oversight configuration

Source: the author

First, the oversight in the cocoa sector is highly concentrated. In terms of standards, it is concentrated in two VSS, namely Rainforest Alliance (UTZ) and Fairtrade. Together, they account for the majority of the certified area, which is located mainly in Ivory Coast and Ghana. Thus, commodity actors (from farmers to traders and processors) have few options in choosing a VSS. Moreover, both dominant VSS are ISEAL compliant (full members). ISEAL is the meta-standard organization, which defines 'codes of good practice' regarding how credible sustainability standards should be established and which elements these must comply with (Chapter 2). As the meta-standard for both standards active in cocoa, ISEAL plays a major role in the definition of the oversight configuration and the enactment thereof through the obligatory approval of VSS against its meta-standard. This concentration has several implications. First, only a limited group of experts and their institutions provide input into the development of these standards and their oversight configuration. As presented in Chapter 2, many of these experts are 'implementers', which means they are not controlled through the oversight mechanism. Since they are not included, their contribution to achieving VSS' sustainability goals remains unknown. Second, both VSS are present and active in all cocoa sector developments and initiatives, including in the creation of the ISO 34101 series as described in Chapter 5. Hence, the concentration in

the oversight mechanism seems to hinder innovation since all VSS available share the same constraints, challenges and flaws in terms of design and content.

Second, as presented in Chapter 2, the focus on procedural manners of control results in a rigid oversight configuration. These procedural manners rely on the so-called third-party audit as their main instrument for control. Certification bodies (CBs) performing these audits undergo a 'conformity assessment' (i.e.: ISO 17065 and/or 17021) or similar ways of accreditations by independent accreditation bodies (ABs). For example, a CB verifies whether a cooperative has an internal management system capable of delivering shade trees to all its members; instead of controlling whether shade trees provide cocoa trees any shade in reality. Therefore, the oversight is not designed to control for the intended outcome of the criteria but controls for the presence of documented procedures. Also at the meta-standard level there is only procedural control on the adherence to the diverse ISEAL codes. The mere existence of a system, criterion or policy and its documental evidence during ISEALs full membership application or maintenance procedure is assumed to be sufficient. This is in line with Paiement (2016), who noticed that in terms of transparency the standard setting code is mostly concerned with procedural transparency. Procedural and documental controls dominate the oversight configuration of both the individual VSS and the meta-standard. There is no oversight of the intended outcome(s) and the procedural approach contributes to a rigid oversight configuration.

Third, most of the criteria of VSS are directed at the farm level - see Chapters 3 and 4. The bulk of the VSS criteria are addressing topics at the farm level -including social, environmental, and economic issues. Thus, the focus of the oversight at farm-level is mainly enacted through audits. Along the value chain, actors are certified and audited, but the criteria are mainly restricted to managerial and certified goods traceability aspects and to criteria assuring the payment of the premiums or standard related investments⁶⁴. Many of these criteria that are supposed to be controlled for during an audit i.e., land tenure rights, deforestation, access to health care, etc. (see Chapter 3) are extremely challenging to control for during an audit at the farm level. Hence it is assumed, that the monitoring and evaluation systems of the VSS are additionally controlling for these topics. This is also anchored in the 'impacts code' of ISEAL. However, as demonstrated in Chapter 2, there is no oversight element that controls for the functioning, set up, execution or outcome of the monitoring and evaluation systems within the oversight configuration.

⁶⁴ The Rainforest Alliance standards version 2020 has now introduced additional criteria on the 'sustainability investments and sustainability differential' (SD&SI) topics which reflect the premium criteria for first buyers in the Fairtrade International system.

Fourth, the oversight presents a *variability in the degree of obligation*. VSS are arrangements made by the private sector and only used on a 'voluntary' basis. The highest punishment that an individual VSS can impose on an actor (normally a farmer) handling outside its rules, is the exclusion of its certification system. However, within the value chain there are variable degrees of obligation when it comes to who needs to adhere to VSS. For instance, farmers might not have any alternative but to be certified, while brands might opt not to get certification at all-or just for a proportion of their products. Hence within the value chain there is a non-consequential adherence to the VSS.

On the other hand, the private nature of VSS implies that public entities do not need to be always consulted or informed about their doings nor that these standards always have to be in line with (inter-)national obligations. Moreover, there are no public regulatory mechanisms that can come into force within these voluntary systems. For instance, there are no legal consequences when deviating from the private standards. Therefore, while standard setting procedures encourage public actor involvement, this does not mean that an effective participation is given to them.

The oversight configuration only controls for the interactions between VSS-CB-certified entity and between meta-standard-VSS. However, there are no oversight elements aiming to control any other actor or interaction among stakeholders, such as actors influencing the VSS and its meta-standard or implementers (incl. service provisioners) that implement certification, such as CBs (ABs) and producers. These properties of this oversight configuration give industry actors plenty of space to engage in their own way with sustainability commitments. Furthermore, within the cocoa sector the current oversight configurations results in an opportunity for shifting between VSS. The oversight configuration is limited to their own internal system and the meta-standard ISEAL does not include any kind of provision to 'punish' or control for an certified actor to change from one VSS to another recognized VSS. This is the case since different actors in the cocoa sector have different definitions⁶⁵ of what sustainable cocoa is. This lack of oversight among the ISEAL members allows for this shifting and as shown derived in Chapters 2 and 5 of this thesis. This means, there is no mechanism to control for wrongdoers within the entire oversight configuration.

The current oversight configuration has been internalized over the last two decades by a leading group of private VSS, which at the same time, created their meta-standard organization (ISEAL), which defines codes of good practice for sustainability standards.

⁶⁵ As an example, within the EU, see the differences among the German Initiative on Sustainable Cocoa (GISCO) and the Dutch Initiative on Sustainable Cocoa (DISCO).

These private VSS share the common focus on creating consumer facing labels that are mainly demanded by brands and retailers in the global north. Most of them even have their main offices in Europe and the US. At the same time, the commodities being certified and the farm level actors that are being controlled under this specific oversight configuration are in the global south. Hence the oversight configuration seems to be dominated by a group of private actors with a specific set of concerns when trading (cocoa) from south to north. Therefore, the oversight configuration can be seen as 'northern' approach to 'southern' challenges.

6.4. The ISO experiment as an alternative

In this section I discuss the results of looking into an alternative to the dominant oversight configuration presented above. The ISO 34101 series on sustainable cocoa offers an illustrative example of introducing innovative approaches to the oversight configuration of sustainability standards. Developing the ISO 34101 series can be considered an experiment.

I start by elaborating on four main differences between the currently dominant oversight configuration and the ISO 34101 case.

First, any ISO signatory country can participate in the development process through its National Standard Bodies (NSB). The ISO 34101 series development process included the participation of countries such as Cuba and Iran, countries which are normally not visible in the cocoa sector. Hence the development process has the potential to reach a much broader audience than private VSS with their high level of concentration.

Second, with the National Standard Bodies (NSB) leading the development process, there is a fundamental change in the role that public and private actors play. When public NSB across the world have carried out the (national) standard development consultations, all participating NSB meet at ISO level to draft the international standard together. The approval of the standard and the resolution of any controversial issue during its development are solved via a voting system. Hence there is a democratization of the standard setting procedure without the north-south divide that can be observed in private VSS. Moreover, the case of ISO 34101 shows that governments can effectively be involved in developing global sustainability commodity standards.

Third, the ISO 34101 series opens a window to include legislation in the oversight configuration. This is a fundamental difference which enables a variety of changes compared to the current oversight configuration. Every country needs to adopt the ISO

34101 standard into its national legislation. This gives space to new actors and institutions to enter the oversight configuration and there would be a homogeneous adaption to the standard and no longer the variable degree of obligation that currently exists.

Fourth and final, the involvement of public bodies and the possible adoption of the standard in the legislative framework means that the development and implementation of the ISO 34101 series is more time consuming when compared to the private sector led initiatives.

Besides these differences, there are also several similarities between the ISO 34101 series and the VSS. First, similar topics are being addressed and sometime even similar words are used. Second, the focus of the ISO 34101 series is also on the farm level. This may be a foreseeable result of the standard development process, since all the VSS, ISEAL and individual companies (members and users of VSS) were very active in the standard development of ISO 34101 series since its inception (See Chapter 5).

The ISO 34101 series takes some steps to address the weaknesses observed in the dominant oversight configuration. The comparison between these two different arrangements points at some possible ways forward to more sustainable global cocoa chains.

6.5. Looking forward

Having understood the properties of the oversight configuration of both the VSS and the ISO 34101 series, it is better understandable how the oversight works and why it operates as it does. This allows better understanding some of the criticism (i.e.: lack of impact) found in the literature on the farm-level impact. Moreover, using the oversight configuration approach and looking into its elements and properties, allows for thinking about possible changes to the dominant configuration. This provides a new lens for studying the oversight of global commodity chains.

Concentrated

Going towards a hybridization of private standards and public instruments in the cocoa sector is an important potential innovation. Such a hybridization is not new as the examples of the FLEGT system in timber and the Biofuels scheme in the EU show. These examples give enough grounds to expect that this would be major step forward for the cocoa sector. By so doing, the concentration in the current oversight configuration would be broken up since many new actors would participate and give input into the new system.

Procedural manners

The similarities between the private standards and the ISO 34101 series point towards another possible improvement. Neither of these two oversight configurations is moving beyond procedural manners of control and the intended outcomes are not being measured by the (standard) oversight configuration. Therefore, they all lack the possibility of directly addressing the criticism of reaching insufficient impact through the adherences to the sustainability standards at the farm level.

Focused on farm level

The content of the standards and its outcome measurement should consider all actors involved in the global cocoa commodity chain and not focus at the farm level. There is need to expand beyond farmer level. This is in line with current legislative developments in the EU, where legislation on due diligence is being discussed as one pillar of its Farm-to-Fork strategy. Herewith, by including all commodity chain actors, VSS would contribute by accelerating the adoption of due diligence and expanding the political frontier. This would be a necessary step towards the creation of a sustainable food system as envisaged in the EU Farm-to-Fork strategy.

Variable degrees of obligation

It would also be advisable to regulate the accreditation of bodies operating in the sustainability oversight configuration. This would mean the creation of an ISO accreditation standard for meta-standards (and hence all the private standards). This is advisable since the goals pursued by private sustainability standards are mostly public goods (for example biodiversity maintenance). Therefore, the state cannot leave all its oversight responsibilities to the private sector. In sum, I see the need for the state to be part of the oversight configuration, particularly with respect to the independent measurement of the progress made by the approaches (sustainability certification) and individual standards (VSS). By so doing, there would be an even-playing-field for all actors in the chain, as they all need to comply against a clear set of requirements.

When considering the oversight configuration as a whole and the detailed standards at hand, it becomes clear that, the form of standards requires a change of mind-set. Pursuing the hybridization of private and public governance tools means fundamentally changing the oversight configuration. By so doing it becomes possible to reach new actors and markets (e.g.: south-south trade) and hence respond to new needs. One possibility to address these new needs is by systematically delegating more responsibility to (local) users of the standards and the actors surrounding them. This can be done by delegating the task of identifying the most appropriate way to address the main sustainability concern(s) to local modes of production. There are already various approaches in that direction as seen

for example, in the case of the Marine Stewardship Council in fisheries, the Participatory Guarantee Systems (PGS) in organic agriculture and the National Interpretation Guidelines within the GLOBALG.A.P. System -the latter just to provide an example of more descriptive and rigid approach. At the same time, this would eliminate the possibility for simply shifting VSS from the main oversight configuration since there would be a more general approach to the implementation and the oversight of sustainability standards.

Hence, future research could study how to enable a change of mindset in the standards world. This includes the perception of the state vis-à-vis private standards and vice versa. Only then can we understand what is hindering a closer collaboration between the state and the private VSS and be able to design a collaborative hybrid-system. At the same time, future research could explore novel oversight mechanisms that enable reliable control without being entirely procedural. These novel oversight mechanisms should stretch over the entire value chain in a distributed manner and assess the entire configuration as a composite whole.

6.6. Conclusion

This thesis studied the constituents of the oversight configuration in the global commodity chain of cocoa. I found one dominant oversight configuration in the cocoa sector. This configuration makes it difficult to assess the sustainability performance in all three of its pillars (social, environmental, and economic) at all level(s) (farm, trader/grinder, chocolate brands and retailer). Therefore, I argue that there is a need to look at the entire system's configuration when assessing options for improving sustainability in global commodity chains. The system needs to be improved in a comprehensive manner, instead of focusing only on the technical aspects (content of standards) or on certain actors (certification bodies or farmers) and embrace all actors involved with the standards. The thesis has made clear that the oversight configuration is extremely rigid. Although the ISO 34101 series provides a good starting point to reflect on possible innovations, it provides an example only of the small changes that the sector currently is willing to take. Hence a change of mind set is needed to improve the VSS more fundamentally and especially their oversight configuration. Future research could investigate possible pathways to bring this change into motion.

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Summary

In recent decades, many global commodity chains have embraced certification against Voluntary Sustainability Standards (VSS). Examples are palm oil, aquaculture, coffee, and cocoa. These VSS use labels and conformity statements to convey information to buyers about certain characteristics of the products they purchase. Today's consumers demand not only high extrinsic quality products, but also a wide range of intrinsic quality specifications, which are hard to verify. For instance, the 'guarantee' that the production and manufacturing processes have been performed according to certain ethical standards or that trade has been fair for all actors involved. These credence attributes are passed along the supply chain, normally required by consumers in the global north and imposed upon producers in the global south. VSS are the main tool for certifying against these credence attributes. Hence, VSS have become a relevant signalling institution in the agri-food sector.

VSS are expanding widely in global commodity chains and for cocoa now more than 23% of the global crops surface is under certification. Hence, the use of VSS has shifted from being in niche markets to become mainstream market labels. These VSS have adopted the so-called 'third-party' certification system as their main assurance mechanism. This certification system assumes that there are three different actors in the system, namely the VSS, the actor implementing the standard (generally the primary producer) and the 'third-party' (also referred to as 'the certification body' (CB)). This 'Tripartite Standards Regime' (TSR) is the main assurance mechanism in place, intended to ensure independence and credibility of the certification system. Moreover, the sustainability arena has seen the emergence of a 'meta-standard' which sets criteria for VSS themselves, as a further assurance mechanism. Hence, it is important to understand the contours around these mechanisms and what factors are decisive for their emergence and what influences and shapes the *oversight configuration*. In this thesis I define *the oversight configuration* as being constituted by all the individuals and formal bodies involved in defining the assurance mechanisms, the levels in the supply chain where assurance takes place and the actors controlled by the assurance mechanisms as well as the content controlled for.

This thesis opens the 'black-box' of the oversight configuration of VSS active in the cocoa sector. The cocoa sector presents a good study case since it saw the introduction and broad spread of VSS within a decade (approximately from 2008-2018). During this period, West-Africa, being the main cocoa producing region in the world, witnessed the implementation of three major VSS: Rainforest Alliance, UTZ and Fairtrade. Moreover, cocoa production takes place within a complex agricultural landscape with various environmental and social-economic challenges.

With the above in mind, Chapter 1 presents the dominant lines of research within the cocoa certification literature, in particular on governance mechanisms and impact measurement. This dominant research agenda is explored by means of its ownership, in particular who has commissioned the research. Thereafter the oversight configuration as a unit of analysis is elaborated upon and the overall research question is presented: *How is the oversight configuration of VSS in the cocoa sector arranged, what are the consequences of this and what are the possibilities for improvement?*

To answer the main research question, this thesis focused on different elements of the oversight configuration. Chapter 2 presents all the actors involved in certification activities -which I refer to as 'implementors'- as well as the VSS as such and their meta-standard. From Chapter 2 it becomes clear that the main assurance mechanism used by the VSS has been very persistent over time. That is, it has not changed much since VSS started using it and it has the same design as an accounting standard or an industrial specification standard. This means that credence attributes are being attested in a procedural manner as tangibles in other industries, which raises the question whether the assurance mechanism is fit for purpose.

After looking at the assurance mechanism as such, Chapter 3 discusses a selection of certification criteria (requirements) from the two leading certification schemes: UTZ Certified and Rainforest Alliance. By crystalizing the implementation challenges of these VSS at the farm level in West Africa it becomes clear that the oversight of these requirements cannot be attested for. This Chapter also sheds some light on the essential role of actors outside the assurance mechanism (the implementors), in achieving and maintaining the certified status.

Since VSS mainly certify producer groups at the farm level, Chapter 4 explores the role of cooperatives in Côte d'Ivoire as a central actor in the implementation and management of VSS in the cocoa sector. By exploring who created these cooperatives and when, as well as by looking at the management composition of these cooperatives, this Chapter highlights the distrust among members of a cooperative vis-à-vis its management. This Chapter also illustrates dysfunctions in the implementation of VSS at the cooperative level. For example, in the premium payment and the minimum pricing. It becomes clear that the cooperative, and specially the implementors surrounding it as the certified entity needs more attention both by the VSS and the assurance mechanism to be able to deliver its intended function, namely the compliance of all its members against a VSS.

Having touched upon the main elements of the oversight configuration, the main assurance mechanism (third-party audit), the content being audited for and the certified entity (the cooperative), Chapter 5 shifts its attention to the development of a new standard for sustainable and traceable cocoa, namely the ISO 34101 series. Hence, this Chapter is a case study, where the main aspects of a standard setting procedure are presented. This is the case within the international standards organization (ISO), which is fundamentally different from the private VSS due to the active role of national governmental institutions. This Chapter discusses the main innovations and similarities of the ISO34101 series to the private VSS and its possible implications for the cocoa standards world.

Finally, Chapter 6 closes this thesis with a general conclusion presenting the main findings and a conceptual reflection on these findings. This learns that the oversight configuration of the VSS active in cocoa presents four properties, namely: being concentrated, focused on procedural manners, focused on the farm level and with variable degrees of obligation. Chapter 6 elaborates on these properties, contrast these to the ISO standard as an alternative and suggests a future policy and research agenda.

Samenvatting

De afgelopen decennia zijn veel wereldwijde voedingsketens overgegaan tot certificering op basis van duurzaamheidsstandaarden. Voorbeelden hiervan zijn palmolie, vis, koffie en cacao. Deze standaarden gebruiken labels en audits om kopers van deze producten informatie te geven over hun duurzaamheid. De hedendaagse consument vraagt niet alleen producten van hoge kwaliteit, maar ook met een groot aantal moeilijk controleerbare specificaties. Bijvoorbeeld, de garantie dat de productieprocessen volgens bepaalde ethische normen zijn uitgevoerd of dat de handel voor alle betrokkenen eerlijk is verlopen. Deze eisen worden opgelegd aan producenten in het zuiden. Informatie over het productieproces wordt verder doorgegeven in de keten, voornamelijk aan de rijkere consumenten in het westen. Duurzaamheidsstandaarden zijn dan ook een belangrijk informatie- en communicatie-instrument geworden in de wereldwijde voedingssector.

Duurzaamheidsstandaarden in wereldwijde voedingsketens hebben zich snel uitgebreid en voor cacao is nu meer dan 23% van het mondiale landbouwareaal gecertificeerd. Het gebruik van duurzaamheidsstandaarden is dus verschoven van niche naar mainstream. Deze standaarden gebruiken het zogenaamde "third-party" certificeringssysteem als hun belangrijkste garantiemechanisme. Dit systeem gaat ervan uit dat er drie verschillende actoren betrokken zijn, namelijk de duurzaamheidsstandaarden, de actor die de standaard implementeert (doorgaans de primaire producent) en de "derde partij" (ook wel "de certificerende instantie" (CI) genoemd) die controleert of aan de standaarden is voldaan. Dit "Tripartite Regime" is het belangrijkste garantiemechanisme, bedoeld om de onafhankelijkheid en de geloofwaardigheid van het certificeringssysteem te waarborgen. Daarnaast is er een "meta-norm" ontstaan die criteria vaststelt voor de duurzaamheidsstandaarden zelf, als een extra garantiemechanisme. Het is dan ook belangrijk om deze mechanismen te begrijpen en te analyseren welke factoren bepalend zijn voor hun ontstaan en hun functioneren. In deze dissertatie definieer ik deze configuratie van toezicht als de combinatie van alle personen en formele organen die betrokken zijn bij het definiëren van de borgingsmechanismen, de niveaus in de voedselketen waar de borging plaatsvindt, de actoren die door de borgingsmechanismen worden gecontroleerd alsmede de inhoud waarop wordt gecontroleerd.

Deze dissertatie opent hiermee de "black-box" van het toezicht op de duurzaamheidsstandaarden in de cacaosector. De cacaosector vormt een goede case, aangezien de cacao-productie plaatsvindt in een complex landschap met diverse ecologische en sociaaleconomische uitdagingen. Bovendien heeft de invoering en brede verspreiding van duurzaamheidsstandaarden binnen een decennium (ongeveer van 2008-2018) plaatsgevonden. In deze periode is West-Afrika, de belangrijkste cacao-producerende regio

ter wereld, getuige geweest van de invoering van drie duurzaamheidsstandaarden: Rainforest Alliance, UTZ en Fairtrade.

In hoofdstuk 1 worden de belangrijkste onderzoeklijnen binnen de cacao-certificeringsliteratuur gepresenteerd, in het bijzonder met betrekking tot bestuursmechanismen en impactmeting. Deze dominante onderzoeksagenda wordt verkend aan de hand van wie de opdracht tot het onderzoek heeft gegeven. Daarna wordt de configuratie van toezicht als eenheid van analyse uitgewerkt en wordt de algemene onderzoeksvraag gepresenteerd: *Hoe is de configuratie van toezicht van de duurzaamheidsstandaarden in de cacao-sector georganiseerd, wat zijn de gevolgen hiervan en wat zijn de mogelijkheden voor verbetering?*

Om deze vraag te beantwoorden wordt in dit proefschrift aandacht besteed aan verschillende elementen van de configuratie van toezicht. Hoofdstuk 2 presenteert alle uitvoerders die betrokken zijn bij certificeringsactiviteiten, alsmede de duurzaamheidsstandaarden en hun meta-norm. Dit hoofdstuk maakt duidelijk dat het belangrijkste borgingsmechanisme dat door de duurzaamheidsstandaarden wordt gebruikt, in de loop der tijd niet veel is veranderd. Sinds de duurzaamheidsstandaarden het zijn gaan gebruiken heeft het dezelfde opzet als een boekhoudnorm of een industriële specificatienorm. Dit betekent dat indicatoren op een procedurele manier worden gemeten. Dit doet de vraag rijzen of het borgingsmechanisme geschikt is voor het doel om sociaaleconomische en ecologische duurzaamheid te versterken.

Nadat het borgingsmechanisme is geanalyseerd, bespreekt hoofdstuk 3 een selectie van de certificeringscriteria (eisen) van twee toonaangevende certificeringsregelingen: UTZ Certified en Rainforest Alliance. Door de praktijk van de uitvoering van deze duurzaamheidsstandaarden op bedrijfsniveau in West-Afrika te bestuderen, wordt duidelijk dat de werkelijke implementatie van deze eisen niet kan worden gegarandeerd. Dit hoofdstuk werpt ook enig licht op de essentiële rol die actoren buiten het garantiemechanisme spelen bij het bereiken en behouden van de gecertificeerde status.

Aangezien duurzaamheidsstandaarden voornamelijk producentengroepen op bedrijfsniveau certificeren, onderzoekt hoofdstuk 4 de rol van coöperaties in Ivoorkust als centrale actor in de uitvoering en beheer van duurzaamheidsstandaarden in de cacao-sector. Door na te gaan wie deze coöperaties heeft opgericht en wanneer, en door te kijken naar de samenstelling van het management van deze coöperaties, belicht dit hoofdstuk het wantrouwen tussen de leden van een coöperatie en haar management. Dit hoofdstuk illustreert ook verschillende disfuncties in de implementatie van duurzaamheidsstandaarden op coöperatief niveau. Bijvoorbeeld bij de premiebetaling en

het hanteren van minimumprijzen. Het wordt duidelijk dat de coöperatie, en vooral de uitvoerders eromheen als gecertificeerde entiteit, meer aandacht van zowel de duurzaamheidsstandaarden als het garantiemechanisme nodig heeft om de beoogde functie te kunnen vervullen, namelijk de naleving van een duurzaamheidsstandaarden door al haar leden.

Nadat de belangrijkste elementen van de configuratie van toezicht, het belangrijkste borgingsmechanisme (audit door een derde partij), de inhoud waarop wordt gecontroleerd en de gecertificeerde entiteit (de coöperatie) zijn behandeld, wordt in hoofdstuk 5 aandacht besteed aan de ontwikkeling van een nieuwe standaard voor duurzame en traceerbare cacao, namelijk de ISO 34101-serie. Dit hoofdstuk is een casestudy, waarin een proces van normering wordt geanalyseerd. In dit geval gaat het om een proces binnen de internationale standaardorganisatie (ISO), waarin nationale overheidsinstellingen een actieve rol vervullen. Hiermee verschilt dit proces fundamenteel van de private duurzaamheidsstandaarden die in de andere hoofdstukken zijn bestudeerd. Dit hoofdstuk bespreekt de belangrijkste vernieuwingen en overeenkomsten van de ISO34101-reeks met de private duurzaamheidsstandaarden en de mogelijke implicaties ervan voor de wereld van standaarden in de cacao.

Hoofdstuk 6 tenslotte sluit dit proefschrift af met een algemene conclusie waarin de belangrijkste bevindingen en een conceptuele reflectie op deze bevindingen worden gepresenteerd. Hieruit blijkt dat de huidige configuratie van toezicht op de duurzaamheidsstandaarden die actief zijn in de cacaosector vier eigenschappen vertoont. Deze configuratie is namelijk: geconcentreerd, gericht op procedures, gericht op het niveau van de primaire productie en met een variabele mate van verplichting. Hoofdstuk 6 werkt deze eigenschappen uit, zet ze af tegen de ISO-norm als alternatief en stelt een toekomstige beleids- en onderzoeksagenda voor.

About the author

Enrique Uribe Leitz was born in Mexico City on 27th February 1984. After finalizing high school in Mexico, he went to Germany for a work and travel adventure in 2003. In 2006 he started his studies of agronomy at the University of Bonn and graduated in 2010. After two years of work at a standard setting organization (GLOBALG.A.P.), he decided to engage in a PhD in September 2012. During his PhD he also engaged in various research assignments among others for the standard setting organization UTZ in West Africa and the European Parliament. By 2016 he started working again at GLOBALG.A.P. to finance his PhD and life in Germany. Enrique got married in 2017 and in 2018 his first child (Eli) was born, followed by the second child (Pia) in 2020. In July 2020 Enrique started working for the Eurogroup Deutschland a subsidiary company of the REWE Group, a major German retailer.

Completed Training and Supervision Plan

List of learning activities:

Name of the learning activity	Department / Institute	Year	Credits (ECTS) (1 cr. = 28 hrs)
A) Project related competences (managing your own research project)			
1. Writing a research proposal	DEC/WUR	2012	6
2. Economics of agribusiness (AEP-2306)	AEP/WUR	2012	6
3. Supply Chain Management (MST-24806)	MST/WUR	2012	6
Subtotal part A			18
B) General research related competences (becoming a broad academic)			
1. Research methodology: from topic to proposal	WASS	2012	4
2. Institutional Economics (AEP-20806)	AEP/WUR	2012	6
3. Agri. Transformation and rural innovation field course (Quality Research Methods) Uganda	AgTraIn	2014	10
4. Scientific writing	WASS	2014	2
Subtotal part B			22
C) Career related competences (personal development and your own future)			
1. AgTraIn Introduction course (Copenhagen), and 2. Scientific communication course (Prag)	AgTraIn	2012	2
2. French intensive course, Montpellier	SupAgro	2015	1
3. TropenTag Conference, Berlin <i>'Private standards, their institutional arrangements and their theoretical links to livelihoods improvement and food security'</i>	ATSAF	2015	1
4. IFAMA Conference, Costa Rica <i>'Sustainability standards: Outdated assurance systems and their consequences', and 'Developing the CEN/ISO 34100 series for sustainable and traceable cocoa: observations from an innovative standard setting process'</i>	IFAMA	2022	1
Subtotal part C			5
TOTAL CREDITS (30 - 45 credits)			45

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