Smallholder Inclusion in the Global Value Chain for Sustainable Palm Oil

Governance and Power Relationships in the RSPO

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Abstract

Palm oil the most commonly used vegetable oil in the World, finding application in a wide array of products and industrial processes. The oil is extracted from the fresh fruit bunches of the African Oil Palm. Owing to the profitability of oil palm cultivation, the crop has become popular among smallholders, who contemporarily account for an estimated 35-40 % of global palm oil production. However, oil palm cultivation has been associated with a range of unsustainable practices. The Roundtable on Sustainable Palm Oil has emerged to promote sustainability in the industry. Because of the extensive involvement of smallholders in oil palm cultivation, any attempt to make the industry sustainable must include the smallholders. The Roundtable of Sustainable Palm Oil can be construed as an embodiment of the institutional setup in which the global value chain for sustainable palm oil is embedded. It distinguishes between Scheme- and Independent smallholders, each of which are assigned different levels and responsibilities towards their buyers. Thus, the inclusion of either type of smallholder will impact the governance of the industry differently. This thesis examines the institutional setup embodied in the Roundtable for Sustainable Palm Oil, in order to assess the conduciveness of smallholder participation in the global value chain and draw inferences as to the mode of governance promulgated by this setup. It is argued that the institutional setup provides an incentive structure that favour the inclusion of Scheme smallholders, a finding which does not correspond with the distribution of gains along the value chain that conventional global value chain theory predicts. Thus, the analysis is broadened to include the various interest coalitions, involved in the Roundtable on Sustainable Palm Oil, their sources, and application of power vis-à-vis one another. In this, the thesis breaks with the traditional vertical confines of global value chain analysis, by including NGOs, who are external to the value chain *per se*, but hold the potential to influence the institutional setup. It is argued that the global value chain for sustainable palm oil is governed by a leading coalition, representing the interests of downstream actors in the chain, but that the NGOs are able to exert considerable indirect influence over the leading coalition. Thus, the puzzling distribution of gains smallholders and their buyers, is explained by the exertion of power over said buyers from the leading coalition and the NGOs, promoting smallholder inclusion on favourable terms in order to promote sustainability in the industry.

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1 Introduction

The global demand for palm oil has increased significantly over the past decades, as palm oil provides an input in a wide array of products and industrial process, including foods, animal feeds, soaps, detergents and surfactants, cosmetics, pharmaceuticals, nutraceuticals (Teoh 2010; USDA 2016). It has been estimated that palm oil is used either directly or indirectly in more than 50 % of packaged goods in supermarkets (Brandi et al. 2013). Palm oil is derived from the fruit of the African Oil Palm (*Elaeis guineensis*) (oil palm), which is grown in more than 43 countries across the humid tropics, with the brunt of global production taking place in Indonesia and Malaysia (Sheil et al. 2009). Oil palm possess certain characteristics, which makes it attractive vis-à-vis other vegetable oil crops, such as soybean, grapeseed, and sunflower. One of these characteristics is the oil palm's high yield per hectare (yield/ha), which is up to 9.8 times higher than other vegetable oil crops (Teoh 2010). More recently, palm oil has also attracted the interest of biofuel producers, due to the high calorific value of biodiesel derived from palm oil relative to other typical energy crops, such as maize (Sheil et al. 2009; Lee et al 2011). Due to these comparative advantages of the oil palm, its cultivation has increased exponentially since the 1970s (USDA 2010; Palm Oil World 2016).

It has been estimated that there are roughly 500 million smallholder (SH) farms worldwide, i.e. farmers with limited resources compared to the regional sector average, especially with regards to land resources (IFAD, 2013). These farmers comprise a significant proportion of world farms (85 %) and are primarily found in the developing countries, where agricultural sectors generally are characterised by low yields and outdated production methods with a high potential for realising productivity gains (Beall, 2012; IEA 2014). Owing to the abovementioned advantages of oil palm cultivation and the perennial nature of the plant, which offers permanent employment to workers in rural communities, governments in developing countries have been devising schemes for rural poverty alleviation based on the proliferation of oil palm cultivation among smallholders and in rural communities since the 1970s (McCarthy 2011). Congruently, 35-40 % of palm oil is produced by SHs on a global scale, distributed over an estimated 3.5-4.5 million SHs (Nagiah & Azmi 2012; Wangrakdiskul & Yodpijit 2013; Rowling 2015; RSPO 2015a).

However, oil palm cultivation does not necessarily constitute a panacea to rural development in developing countries, as the industry has been associated with an assortment of distinct, yet interdependent sustainability issues, stemming from poor management and unsustainable

agricultural practices, which hold the potential to produce negative environmental and social impacts (Beall 2012). Thus, oil palm cultivation carries the potential to become a double-edged sword, if not managed properly. The literature posits that a prerequisite for releasing these potentials, or mitigating adverse effects, is a conducive institutional setup, which can help foster SH participation in the Global Value Chain (GVC) (See for instance UNCTAD 2016; IEA 2014; Jumbe et al. 2009; Amigun et al. 2008; Dufey 2007).

The sustainability issues of agriculture and bioenergy has been the subject of intense debate over the past decades (Beall 2012). These issues, combined with the absence of power of the nation-state vis-à-vis the multinational firm, has given rise to private standards and certification schemes aimed at ensuring sustainable production; especially in agro-food industries (Wahl & Bull 2013; Beall 2012; Djama et al. 2011). Private standards typically take the form of voluntary schemes, which certify production as sustainable on a range of parameters defined in the individual standard (IEA 2013a; UNCTAD 2016). Consequently, these standards can be viewed as part of the institutional setup that governs GVCs and thus as having an impact upon the mode of governance employed therein.

One such standard is the Roundtable on Sustainable Palm Oil (RPSO), which works to promote the production and use of sustainable palm oil, seeking to transform the industry so that certified sustainable palm oil (CSPO) becomes the norm (RSPO 2014a). In their review of the literature on sustainability certification of SHs, Loconto and Dankers (2014) found that the effectiveness of a standard overlaps with its method of including SHs: A finding which seems to be exacerbated in the case of the RSPO, due the structural importance of SHs in the palm oil industry. This makes the inclusion of SHs a significant caveat for the effectiveness of the RSPO in mitigating the unsustainable impacts of oil palm cultivation.

Certification of SHs is a relatively new phenomenon for the RSPO, which distinguishes between Scheme Smallholders (SSH), who are typically tied to a larger oil palm grower/plantation, and Independent Smallholders (ISH), who are formally independent farm holds. The first SSHs were certified in 2010, while the first ISHs were certified in 2012 (Brandi et al. 2013). As a consequence, the research on the effects of RSPO certification on SHs is rather limited. It does seem to be recognised that the primary motivation of SHs to seek certification is the prospect of financial gains (see for instance Brandi et al. 2013; Hidayat et al. 2015). However, the brunt of the current research

seems to be directed towards the ex-post effects of SH certification on environmental and social issues, whereas little attention has been diverted towards the financial impact of certification upon SH livelihoods, with a few notable exceptions (see for instance Molenaar et al. 2013; Reitberg 2016). The distinction of the RSPO between SSH and ISH is significant, in that the RSPO prescribes very different responsibilities to Growers/SHs in the case of SSH and ISH respectively, which carries significant implications for the governance setup and the distribution of gains between Growers and SHs. Consequently, this thesis seeks to explore:

> *How the institutional setup of the RSPO incentivise SSH and ISH respectively to seek certification? And how does this impact the governance in the Grower-SH link in the GVC for CSPO?*

Since the results of the analysis yielded puzzling results relative to conventional GVC theory, in that the distribution of gains at the Grower-SH link in the GVC for CSPO seems to be skewed towards the weaker actor, the thesis seeks an explanation for this by broadening the focus of the research to also explore *what underlying power relationships can explain this discrepancy between theory and finding*?

In answering this question, a modified GVC framework is employed, expanding the analysis to include actors, who are not formally included in the chain, but might potentially influence the institutional setup in which the GVC is embedded via the RSPO. Thus, it is sought to ascertain whether any stakeholder interests can be said to be leading interests in the GVC for CSPO.

The thesis is divided into seven sections. The first section introduces the philosophical stance and methodology brought to bear in answering the research question and baseline data used in the analysis. The second section elaborates on the theoretical framework employed in the analysis, while the third section moves on to provide background information on the RSPO and the GVC on palm oil in general, as well as the GVC for CSPO specific to the RSPO. The fourth conducts a cost-benefit analysis of RSPO certification for SSH and ISH respectively, to ascertain whether the RSPO incentivises one type of SH over the other, and draws implications as to the mode of governance emerging in the GVC for CSPO at the link between Growers and SHs. The fifth section moves the analysis to a deeper level, examining the power relationships between stakeholder underlying the institutional setup of the RSPO. The sixth section provides a discussion of the findings of this thesis and the final, seventh, section presents the concluding remarks.

2 Methodology

This chapter outlines the methodological framework of this thesis, elaborating upon the method of study, data collection, -coding, and the delimitations that this thesis is subjected to. Yet, as noted by Bryman and Bell, "[m]ethods are not simply neutral tools: they are linked to the ways in which social scientists envision the connection between different viewpoints about the nature of social reality and how it should be examined" (2007, p. 4). Thus, this chapter starts off with an introduction to the philosophical stance on scientific research held by the author and the epistemological implications drawn from this ontological stance, which informs the methods chosen to conduct this research. Much is gained by clarifying the philosophical point of departure for the thesis, as underlying assumptions are highlighted and the focus of the investigation is explained and justified. Consequently, the following subsection clarifies and justifies the Critical Realist position taken by the author.

2.1 Philosophy of science

Critical Realism is a relatively young philosophy of science, which has rapidly gained momentum in the academic community (Buch-Hansen & Nielsen 2005). Even though a number of writers have contributed to the development of the position, Roy Bhaskar is usually recognised as its founding father (Benton & Craib 2011). The ontology of Critical Realism draws from a realist perspective, in that reality is believed to exist independently of social perceptions thereof. At the same time, Critical Realists reject the notion that reality is limited to empirical observation, positing that reality is deep, open, stratified, and differentiated (Benton & Craib 2011).

In Critical Realism, reality is composed of an *empirical* domain of observations and an *actual* domain of events, both of which are somewhat readily accessible, as well as a *real* domain of underlying structures and mechanism that generate actual events. Moreover, social reality is conceptualised as an open system, where specific contexts influence the actual events that are generated by the underlying mechanisms. The various structures of reality are perceived to be hierarchically organised into a number of strata, where complex structures function in accordance with, but are not determined by, more basic structures at lower ordered strata (Benton & Craib 2011). Finally, reality is believed to be comprised of numerous entities, whose structures equip them with different causal potentials and dispositions (Benton & Craib 2011). The causal potentials constitute generative mechanisms that enable entities to make certain things happen.

The objective of Critical Realists is exploring the causal structures and mechanisms, which underpins the occurrence, or non-occurrence, of events. However, agency is not neglected, as social structures are believed to be both enabling, constraining, and dynamic, meaning that social structures are produced, sustained, and altered by human action and –interaction. These actions and interactions are, in turn, defined by actors' perception of their social context. (Benton & Craib 2011). Lastly, as structures are changeable, they are not fixed over space and time (Benton & Craib 2011). The relationship between structure and agency is conceptualised as an interaction taking place through phases of structural conditioning, social interaction, and structural conditioning (Benton & Craib 2011). This conceptualisation of structures and agency is what makes Critical Realism "critical". At the centre of the philosophical position, lies a conviction that social science should aid emancipation from oppressing or sub-optimal structures, by treating objects of inquiry critically (Benton & Craib 2011). I.e. to identify causal structures and mechanisms underlying particular events, thus allowing actors to engage proactively in altering the status quo of the social context wherein they find themselves.

The ontology described above carries epistemological consequences in that reality is considered something one can obtain knowledge about, but which is not easily accessible. This is reflected in the Critical Realists' distinction between an *intransitive* dimension, covering the objects of inquiry in social science, and a *transitive* dimension, containing our understanding and knowledge of the intransitive dimension at any given point in time (Buch-Hansen & Nielsen 2005). These dimensions do not develop in tandem, meaning that change may occur in one dimension without prompting a change in the other. Consequently, while scientific studies may advance our knowledge of reality, Critical Realists reject that absolute truths can be obtained, positing that one can never claim to have found the definite explanation to a given phenomenon (Benton & Craib 2011). Nevertheless, absolute relativism is avoided, in that Critical Realism does not present definitive criteria for judging scientific finding to be true or not, but instead relies on extensive data collection, scientific debate, and theoretical refinement for driving the development of knowledge. Consequently, multiple explanations of a given phenomenon and interpretations of data are not only possible, but desirable, and rational judgement is employed in determining the explanatory power, and thusly quality, of scientific findings (Easton 2009; Buch-Hansen & Nielsen 2005).

As mentioned above, Critical Realists take an interest in examining the occurrence or non-occurrence of particular events, and in uncovering the structures and mechanisms that underlies a

certain event in a given context. This contextual focus stems from the perception of reality as an open system, which renders the formulation of laws problematic and potentially misleading (Buch-Hansen & Nielsen 2005). Thus, it has become a fundamental tenet of Critical Realism to describe the world through causal language (Easton 2009). To this end, Critical Realists invoke retroduction as their main mode of reasoning. Retroduction entails moving beyond observations to identify the structures that have produced them. On the basis of retroduction, researchers in the Critical Realist tradition form transcendental arguments, or hypotheses, about the world, which are then later tested and revised (Benton & Craib 2011).

Finally, Critical Realism argues that one should be cognisant of the differences between the social- and natural sciences, and recognise that suitable methods in each field may indeed overlap, but also differ significantly (Buch-Hansen & Nielsen 2005). Thus, meanings and ideas become central concerns in social science, as they exert a strong influence on how social events unfold. Yet, the central aim of the social researcher remains to probe beneath the surface of observations, to uncover the underlying structures and mechanisms. As a consequence, while qualitative methods are usually preferred, Critical Realists observe an eclectic epistemology and employ diverse methods in the pursuit of uncovering said structures (Easton 2009). Moreover, supporters of Critical Realism deny the existence of objectivity in social science, striving for reflexivity about preconceptions instead (Benton & Craib 2011). This account of science renders any scientific finding fallible and open to empirical testing, causing knowledge to develop through a dialectic process of moving back and forth between theory formulation, -testing, and -refinement (Buch-Hansen & Nielsen 2005).

In conclusion, Critical Realism provides an integrative approach, which is particularly suitable to investigating the complex issue of multi-stakeholder governance in GVCs. The emphasis placed on general structures along with specific contexts sheds light upon why a certain observation, such as the manner in which smallholders are included in the GVC for CSPO, may become intelligible once its background and circumstances are factored in. Furthermore, the simultaneous focus on structure and agency in Critical Realism helps make sense of the dynamics underlying the negotiations shaping the governance regime of the RSPO.

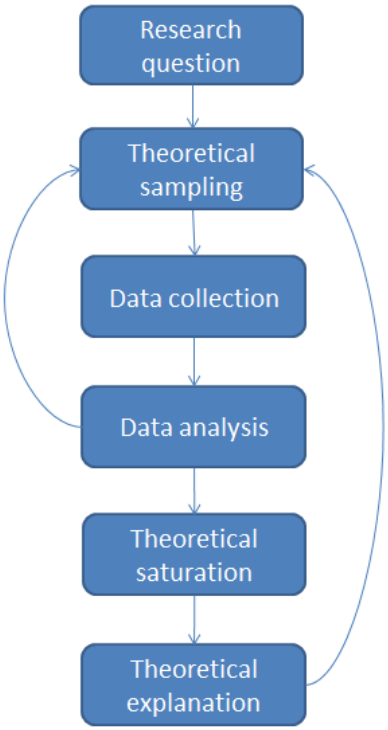
2.2 Research design

The research design of this thesis is qualitative in nature and takes a point of departure in Grounded Theory. Developed by Glaser and Strauss in 1967, Grounded Theory has become one of the most

commonly used frameworks for analysing qualitative data (Bryman & Bell 2007). The approach is defined as a "theory that was derived from data, systematically gathered and analyzed through the research process. In this method, data collection, analysis, and eventual theory stand in close relationship to one another" (Strauss & Corbin 1998; cited in Bryman & Bell, p. 585). The two key features of Grounded Theory are that the approach is concerned with the formulation of theory rooted in data, and grounded in an iterative process, wherein data collection and analysis proceed in tandem, repeatedly referring back to one another, in accordance with the Critical Realist notion of knowledge-creation through a dialectic process.

Grounded Theory is anchored in four key tools, namely; *theoretical sampling*, *coding*, *theoretical saturation*, and *constant comparison*. Theoretical sampling refers to "a process of data collection for generating theory whereby the analyst jointly collects, codes, and analyzes his data and decides what data to collect next and where to find them" (Glaser & Strauss 1967; cited in Bryman & Bell, p. 459). It is conveyed implicitly in this definition that data collection is a continual and dynamic process. Coding refers to the process of dismantling data into its constituent parts, naming the parts to define key concepts or categories of data in the analysis (Bryman & Bell 2007). Theoretical saturation relates to the dyadic process of data collection and coding, denoting the saturation point, where additional data collection becomes unnecessary to further develop the category (Bryman and Bell 2007). The process of constant comparison is predominantly implicit in academic works rooted in Grounded Theory. The concept entails the authors constant comparison of data with the phenomenon under investigation, in order to ensure the correct coding of data and the theoretical elaboration of the corresponding category (Bryman & Bell 2007). In this regard, constant comparison is also important in identifying the point of theoretical saturation.

Figure 1 - The process of Grounded Theory



2.3 Method

This thesis conducts a single case study on the conduciveness of the institutional setup of the RSPO to SH participation in the GVC for CSPO. Thus, the object of interest is the manner in which the RSPO, understood as an institutional framework in which the GVC for CSPO is embedded,

includes various types of SHs. Holding to the Critical Realist notion that the world is deep, open, stratified, and differentiated, the thesis seeks to explore possible underlying causal structure and mechanisms, in the form of the power relationships between the various stakeholder coalitions involved in the RSPO, their sources of power, and their relative influence upon governance in the GVC for CSPO, through their ability to influence the institutional framework that is the RSPO.

A case study entails the detailed and extensive investigation of a single occurrence, such as the governance structure for SHs under the RSPO, allowing for a considerable amount of attention to the complexity and the particular nature of said occurrence (Bryman & Bell 2007). A single case study can be based on a particular organisation, location, or person, and tends to favour qualitative- over quantitative data, as qualitative data is deemed better suited to generate in-depth knowledge of a phenomenon (Bryman & Bell 2007). Case studies frequently contain longitudinal elements, assessing the particular phenomenon over a period of time, or through a period of change (Bryman & Bell 2007). This thesis is no different, considering the changes in the institutional setup of the RSPO over a period of 13 years (2002-2015), and the underlying causes of these changes. This longitudinal dimension will shed light upon the development of governance structures in the GVC for CSPO, through which the dominant interest, or leading actors, in the GVC can be revealed.

The case study is divided into two separate parts. The first part concerns itself with the empirical domain of actual events, ascertaining the costs and benefits to SSH and ISH respectively, and the implications to GVC governance at the link between Growers and SHs that can be inferred from these findings. Thus, this section concerns itself with the individual, average SSH and ISH in the GVC for CSPO, conducting an analysis at the micro-level.

The second part of the analysis moves to a deeper level, seeking to uncover the underlying structures of the RSPO, which might influence the governance at the link between Growers and SH. This is done, in order to ascertain the factors which might explain an apparent divergence from the governance structures foretold by conventional GVC theory. In conducting this analysis of power relationships between stakeholders in the GVC for CSPO, the analysis moves to a meso-level; focussing on the interest coalitions formed by these stakeholders, while remaining within the confines of the RSPO, which constitutes the object of investigation. The RSPO itself divides its stakeholders into seven constituencies, which in turn roughly form three interest coalitions; the supply chain constituencies (SCC), including the downstream actors of the GVC, primarily

representing business interest in the European Union (EU); the non-governmental organisations (NGO), comprised of environmental- and social NGOs, seeking to promote environmental- and social sustainability; and the Growers, representing oil palm cultivators and millers, i.e. the upstream actors of the GVC.

Table 1 - Stakeholder constituencies and interest coalitions in the RSPO

Constituency	Interest coalition
Consumer goods manufacturers	SCC
Processors and traders	
Retailers	
Banks and investors	
Environmental NGOs	NGO
Social NGOs	
Oil palm growers	Growers

This has been done, as the RSPO itself follows this loose grouping of stakeholder coalitions, for instance in working group meetings and in the Complaint System of the organisation (see for instance RSPO SHWG 2015; RSPO *undated*). As a consequence, it is not always possible to discern actors below these levels in the organisational documents of the RSPO, upon which this analysis is based. It should be noted that the coalitions are sometimes internally divided on issues, and that the analysis will take this into consideration, wherever such a distinction is possible and appropriate.

In terms of the usefulness of the findings of this thesis, the particular case is often the object of interest of a case study in its own right, as the author seeks to provide an in-depth understanding of a specific occurrence, which is often not generalizable across cases (Bryman and Bell 2007; Easton 2009). However, Critical Realism holds that the study of particular occurrences can indeed unearth quite fundamental social structures, which might be relevant in explaining less particular situations as well (Buch-Hansen & Nielsen 2005). Thus, although the purpose of Critical Realists is not to produce law-like statements, and the purpose of this research is not theory generation *per se*, but rather the theoretical explanation of a particular event, this thesis might produce insights into the operationalisation of GVC theory going beyond the vertical confines of governance analysis, as well as into the social structures underlying events in similar situations of multi-stakeholder governance, such as the Roundtable on Sustainable Soy (RTSS).

2.4 Data collection and coding

The following subsection summaries the process of data collection and -coding of the thesis. The data collection was organised in two separate 'rounds', pertaining to the cost-benefit analysis and the analysis of underlying power relationships respectively.

2.4.1 Cost-benefit analysis

The analysis of benefits and costs of SH participation in the GVC for CSPO primarily employ secondary data in the investigation, in that the collected data existed prior to this research, but has been ascribed new meanings. Through a process of theoretical sampling on the livelihoods of SHs in oil palm cultivation and the livelihood improvements stemming from RSPO certification, data was uncovered and compiled into 11 categories, or codes, based on the themes that emerged from the collected data. These codes included:

1. Increased market access
2. Price premiums
3. Productivity gains
4. Social benefits of certification
5. Benefits of organisation and training
6. Land titles and -disputes
7. Land title costs
8. Auditing costs
9. Upfront costs
10. Recurrent costs
11. Finance and debt

This process was cognisant of the fact that any discreet data point can, and indeed should, be included in several codes (Bryman & Bell 2007). In addition, it was found that SHs themselves, are most aware of, and motivated by, the financial improvements to their livelihoods that RSPO certification can bring (Brandi et al. 2013; Rist et al. 2010; Hidayat et al. 2013). Therefore, the analysis was primarily focused on the monetary costs and benefits from RSPO certification. A review of the codes through strictly financial lenses, revealed that a number of the codes referred to the same phenomena. For instance, the financial gains that could be realised from codes 4 and 5, were captured under the auspices of code 3, in that the improvements stemming from social

benefits, such as improved education, and benefits from better organisation and training in agricultural practices, were reflected in better farm management, which materialised itself in higher yields/ha. Similarly, the costs of auditing and land titles were captured under the auspices of upfront and recurrent costs of certification. Consequently, the field was narrowed down to two core codes, each containing a number of sub-codes:

1. Financial benefits of certification
    a. Market access
    b. Price premiums
    c. Productivity gains
2. Costs of certification
    a. Upfront costs
    b. Recurrent costs

These codes are employed in the analysis, to ascertain the financial value, measured as the Net Present Value (NPV), of RSPO certification for SHs. Congruently, these core codes are taken to be representative to changes to the input-output structure of the GVC for CSPO at the link between Growers and SHs, from which inferences can be drawn as to the governance in this link of the GVC.

2.4.1.1 Baseline data for cost-benefit analysis

A characteristic feature of the current literature on SH involvement in the oil palm sector, is that research is fractured and generally based on small samples or individual cases (with a few notable exceptions, e.g. Brandi et al. 2013; Molenaar et al. 2013; and Reitberg 2016), and that little effort has been applied to produce and compile baseline data, which is often unavailable due to SHs patchy recordkeeping prior to certification (World Growth 2013; Brandi et al. 2013). Yet, if one is to approximate the costs and benefits of SH participation in the RSPO, certain baseline data is needed, including:

- An estimated oil extraction rate (OER) and kernel extraction rate (KER)
- A baseline for income from fresh fruit bunches (FFB) prior to certification

Extraction rates are useful, in that some studies report SH productivity as metric tons (MT) of crude palm oil (CPO) per hectare, although SHs primary output is FFB. Consequently, it is necessary to convert these reports to MT of FFB/ha. This is done by applying the OER, which denotes the

percentage of FFB that is converted to CPO in terms of volume. OER is a complex issue, as it relates not only to the technical capacity of the individual mill, but also to the quality of the FFB. The RSPO suggests applying a standard OER of 20 % and a KER of 6 % (Jiwan 2011; RSPO SHWG 2015). These suggestions seem to correspond relatively well with findings from other studies, which report OERs between 18-22 % and KERs of approximately 5 % (Reitberg 2016; Molenaar et al. 2013; Palm Oil Mill 2016).

Baseline income to SSH prior to RSPO certification can be approximated by holding the price of FFB in together with annual yield/ha. The price of FFB follows the price of CPO and palm kernel oil (PKO), multiplied by OER and KER respectively (palm oil mill, 2016). Over the past 10 years, the price of FFB has remained relatively stable, except for a few outlying years driven by a stark increases in the price of PKO. Over this period, the average price of FFB has amounted to € 145.16.

Table 2 – World CPO, PKO and FFB price; 2006-2015 (€); Based on IndexMundi 2016a

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Avg.
CPO Price	334.9	579.2	365.6	429.7	673.0	667.1	592.0	559.2	531.2	472.3	520.43
PKO Price	441.6	703.6	560.7	490.0	1,016.2	791.6	664.3	670.9	737.9	768.7	684.56
FFB Price	93.5	158.1	106.8	115.3	195.6	180.9	158.2	152.1	150.5	140.6	145.16

The yield/ha of CPO has remained relatively stable over the past decade, around four MT CPO/ha, corresponding circa to 20 tons FFB/ha[1] (IndexMundi 2016b). Yet, these yields denote plantation productivity. SHs typically exhibit lower yields/ha than plantations, as SHs produce 13.1 tons of FFB/ha per year on average (Molenaar et al. 2013). Furthermore, there exists a productivity gap between SSHs and ISHs, where SSHs realise yields of 17.1 tons FFB/ha per annum and ISHs attain yields of 11 tons FFB/ha per annum (Molenaar et al. 2013). As yields have been relatively stagnant over the past decades, these findings are taken to be representative of the period. Consequently, the findings above correspond to an annual income of € 2,569.32 and €1,596.75 for SSH and ISH respectively, which correlates fairly well with the findings of other studies in the field (see for instance Molenaar et al. 2010; World Growth 2013; Molenaar et al. 2013; Reitberg 2016).

[1] 4*(1/0.2) = 20

Table 3 - Exchange rates; 1 EUR (€); Based on Reitberg (2016)

Currency	Exchange rate (1/EUR)
Indonesian Rupiah (IDR)	14,778
Malaysian Ringgit (MYR)	4.5
Thailand Baht (THB)	39
United States Dollar (USD)	1.1

As the average income/ha for the two types of SH, roughly correlates with the findings of other studies measuring income for SHs at a given point in time, it is assumed that the costs of certification found in these studies are representative as well. Thus, the analysis of the costs of certification in this thesis is based upon the data of Reitberg (2016), who collected financial data from eight cases of SH certification under the RSPO across the globe. These costs have been averaged according to SSH and ISH respectively, in order to ensure comparability with the baseline income/ha, based on the average world price of CPO. In order to ensure the comparability of findings, the exchange rates used by Reitberg (2016) has been employed in this study.

2.4.2 Power relationships in the RSPO

Data on the relative influence of RSPO stakeholders vis-à-vis one another, has been gathered from organisational documents, such as minutes from Executive Board (EB) meetings, General Assemblies, and Smallholder Working Group (SHWG) meetings. These documents have provided the basis to determine the position of the various interest coalitions on certain issues related to the governance of the RSPO. The documents are considered to be credible sources of the views and arguments of the involved stakeholders, as minutes are reviewed and approved by the participating members. The findings have been triangulated with other organisational documents, such as the original and revised Principles and Criteria of the RSPO, to ascertain the adopted and rejected proposals of constituencies in the RSPO, and supplemented with other studies conducted on power relationships within the RSPO, to which other means of data collection were available, such as Cheyns (2011), who conducted observational studies and in-depth interviews of RSPO stakeholders between 2003-2009.

The theoretical sampling for this analysis was informed by the inferences to governance drawn from the cost-benefit analysis. Yet, as relatively few issues within the RSPO pertain directly to the governance of SHs, the scope was broadened to include other governance mechanisms which might impact Grower-SH link. The coding of data was steered by the theoretical framework of Tallontire

et al. (2011), categorising data as Legislative-, Executive-, or Judicial Governance. This was done, in order to transcend the confines of traditional GVC theory, wherein power relationships are often understood as vertical relationships within the chain (see for instance Gibbon & Ponte 2005). However, because the RSPO is comprised of several stakeholders, some of which are not part of the GVC for CSPO *per se*, there was a need to categorise data in a way that would let the analysis move beyond the vertical conceptualisations of conventional GVC theory, and include the possible indirect influences of NGOs, that could be exerted upon companies in the GVC through the RSPO. It should be noted that the framework of Tallontire et al. (2011) is employed as a heuristic tool for framing the data, whereas the analysis of power relationships is operationalised through the conceptualisation of Three Faces of Power, which is deemed especially suited for the analysis of indirect and/or 'invisible' power.

The secondary data was sought supplemented by semi-structured interviews with key personnel involved with the RSPO. Interviewees were sought, who had been involved in the RSPO for at least seven years, who had been involved in either the EB or the SHWG during that time, and who had participated actively in discussions. These criteria were established, in order to ensure that interviewees could contribute with historical insights to the development of governance mechanisms and SH involvement in the RSPO. Seven persons fulfilling these criteria were identified, two of which replied positively to the request for an interview, one replied negatively, and four did not reply. Of the two confirmed interviewees, one withdrew on the day of the interview. The one conducted interview has been used to supplement the initial findings, yet no inferences has been drawn on the basis of the interview alone, as interviews "has meaning to the researcher only in terms of other interviews and observations" (Bryman & Bell 2007, p. 473).

2.5 Delimitations

Similar to any other academic investigation, this thesis is subject to a series of constraints and delimitations. Firstly, it faced the classical trade-off between detail and overview. This trade-off has seen different solutions in the various parts of the analysis. In the cost-benefit analysis, the focus was to provide a detailed account of the financial improvements to SHs livelihoods provided by RSPO certification for the various types of SH recognised by the RSPO system. Other studies have taken a broader approach to address this issue, considering the improvement of a range of aspects on livelihoods, such as financial-, natural-, human-, social-, and physical capital (see for instance Hidayat et al. 2013). While such an integrative approach would be more relevant in assessing the

actual livelihood improvements from RSPO certification, the objective of the analysis is to determine the incentives for certification that the RSPO offers to SHs. Therefore, a more in-depth approach has been chosen, at the expense of a broader overview of the improvements that might stem from certification.

While the opening part of the analysis focus on a detailed account of financial improvements to SHs livelihoods from RSPO certification, the second part takes a step back, seeking to provide an overview of the internal processes and power relationships that have helped shaped the RSPO since its inception. Consequently, the explanation takes a point of departure in the broader interest coalitions that can be identified within the organisation, at the expense of a more detailed account of individual actors and certain nuances have been left out of the analysis. One such nuance is the impact of national governments and policies, which certainly carries an impact on governance in the GVC. Thus, it is important to consider that the findings in this thesis might not offer a comprehensive causal explanation for the governance of the GVC for CSPO.

3 Theoretical Elaboration

The following chapter introduce the theoretical framework upon which this thesis is based, namely GVC analysis. The chapter provides an account of the evolution of the approach, aiming to highlight the strengths and weaknesses of the approach with particular attention to governance and the conceptualisation of power between actors. It is argued that a more comprehensive conceptualisation of power is needed, than that proposed in conventional GVC analysis. Thus, the framework is expanded to include horizontal actors, capable of influencing the institutional setup in which the GVC is situated. This extension is operationalised by the conceptualisation of Three Faces of Power.

3.1 Global Value Chains

The approach known as GVC analysis first appeared in the literature in the mid-1990s, under the name Global Commodity Chains (GCC) analysis. Drawing upon insights from Hopkins and Wallerstein's notion of *commodity chains*, which constitute a "network of labo[u]r and production processes whose end result is a finished commodity" (Hopkins and Wallerstein (1986); cited in Gibbon & Ponte 2005, p. 74), Gereffi and Korzeniewicz (1994) presented an analytical framework focused on the emergence of global manufacturing systems, where economic integration goes beyond trade in raw materials (input) and final products (output), to incorporate centrally coordinated yet transnationally dispersed production networks. The term *chain* implies that the analysis is centred on vertical relationships between actors. The GCC approach rapidly gained traction within the academic community in the mid-1990s. Initially, the approach was most commonly used for case studies of manufacturing of commodities such as clothing, agri-foods, consumer electronics, and automobiles and auto components (Gibbon & Ponte 2005).

Gereffi and Korzeniewicz (1994) identified four dimensions of commodity chains:

1. Input-output structure
2. Geographic configuration
3. Form of governance
4. Institutional framework

The *input-output structure* concerns the geographical coverage of the commodity chain and was chiefly used describe the chains configuration. The *form of governance*, relates to internal coordination within the chain and entry barriers to chain participation. Traditionally, the GCC

literature distinguished between two archetypes of governance, producer-driven and buyer-driven chains. Producer-driven chains were said to exhibit barriers to entry, which are related to upstream activities, thus incentivizing lead firms to maintain control of capital-intensive functions and outsource labour intensive functions. Buyer-driven chains were said to be common in labour-intensive economic sectors, where functions such as market information, product design and marketing would constitute entry barriers and be kept under the control of lead firms, while production would be outsourced. The *institutional framework* delineates the external conditions that the GCC is subject to. The institutional framework is of particular importance, as it determines the rules of the game, i.e. the terms of chain participation defined by key agents or institutions. Thus, firms seeking to upgrade, i.e. improve their position within the GCC and capture a higher proportion of the value added to the end commodity, are enabled and constrained by the institutional framework.

Since the turn of the century, the term *commodity chain* has been abandoned in favour of *value chain*, drawing upon Porter's definition of the value chain as the "interconnected and sequential nature of economic activity in which each link adds value in the process" (Porter 1985, cited in Gibbon & Ponte 2005, p. 77), which arguably encompass a broader range of goods and services than the narrower notion of a commodity. Consequently, the GCC approach has come to be known as GVC analysis (Gibbon & Ponte 2005). While Porter originally designed the concept of value chain as a heuristic tool for the individual firm to understand and optimize its value-adding activities, the political economic use of the concept deviates from this notion in that it does not relate to a specific firm or country. Rather, GVC analysis concerns itself with the full range of activities that are required to bring a good or service from its inception to the end-user, including the coordination of the value chain itself (Gibbon & Ponte 2005).

3.1.1 Governance

Governance constitutes a key concept in GVC analysis. As stated above, governance relates to the internal coordination and the barriers to participation in any given GVC. While the institutional framework might serve to enable and/or constrain suppliers seeking to upgrade their position in the GVC, governance forms the organisational basis upon which developing country firms partake in international trade. Thus, the benefits associated with upgrading are contingent upon participation in a GVC (Gibbon & Ponte 2005). Accordingly, the governance of a GVC sets the prerequisites for participation in, or exclusion from, the chain.

Gereffi and Korzeniewicz (1994) identified governance as power relationships between various actors, which govern the way that financial, material and human resources are allocated along the chain. A chain is said to be governed, if a certain firm (or set of firms) is able to set and enforce the manner in which other participants in the chain operates, that is if said firm (or group of firms) is capable of dictating what type of products that are to be produced, how said product should be produced, in what quantity and at what price (Bitzer *et al*. 2008). A GVCs governing firm(s), is said to be the chain's lead firm(s).

The concept of governance has been the subject of some debate, in that the initial dichotomy of producer- or buyer-driven chains carries an implicit presumption that suppliers are powerless vis-a-vis the industrial structure of the lead firm and occupies a captive position in the GVC (Gibbon & Ponte 2005). However, governance is a dynamic process in which lead firms does not automatically retain power over suppliers (see for instance Pietrobelli & Saliola 2008; Tokatli 2007). This fact is reflected in the later works of Gereffi, Humphrey and Sturgeon (2005), which formulates a governance framework to replace the original dichotomy. This framework identifies three variables, which in congruence determine the mode of governance of a given GVC:

1. The complexity of the information and knowledge required for a transaction between firms to take place
2. The ability to codify and transmit information between parties, and
3. The capabilities of supplier in relation to the level of capabilities required for the transaction

Each of these variables are, at least, partially external to the lead firm. The complexity of information and knowledge required in transactions relates primarily to industries, not individual firms, although it should be acknowledged that some firms might possess capabilities that increase the knowledge requirements for their transactions above industry average (Dallas 2014). The capabilities of the supplier relate to the supplier's ability to learn, implement the acquired knowledge and improve internal processes, whereas the ability to codify and transmit information between the parties relates to the capabilities of both the lead firm and the supplier in congruence (Dallas 2014). Thus, the updated framework allows for changes in power relations between the actors in the GVC and the three variables described above becomes not only determinants of the mode of governance in the chain, but also of the balance of power between the lead firm and its suppliers (Dallas 2014).

The three variables are placed in a matrix, which yields eight different modes of governance, three of which are deemed implausible, leading Gereffi, Humphrey and Sturgeon (2005) to identify five different modes of governance in GVCs:

1. *Market*; characterised by low complexity of transactions, high ability to codify information, and high capabilities of the supply base.
2. *Modular*; characterised by high complexity of transactions, high ability to codify information, and high capabilities of the supply base.
3. *Relational*; characterised by high complexity of transactions, low ability to codify information, and high capabilities of the supply base.
4. *Captive*; characterised by high complexity of transactions, high ability to codify information, and low capabilities of the supply base.
5. *Hierarchy*; characterised by high complexity of transactions, low ability to codify information, and low capabilities of the supply base.

While the updated framework incorporates some important insights into what influences the adopted form of governance, as a means of coordination in a value chain, it holds some inherent flaws. First, the model primarily relates to the forms of coordination between actors with different functional positions in the chain, meaning that it exhibits limited explanatory power with regards to the overall governance of the GVC. In doing so, the model narrows down chain governance to an aggregation of inter-firm relations which limits the analysis, due to a narrow conceptualisation of power (Dallas 2014). As noted by Gibbon and Ponte:

> "[by] focussing on make or buy decision-making processes, and thus a transaction cost or microlevel approach to power, the framework misses the larger picture [...] One of the strongest qualities of the GVC approach in its earlier formulations (as GCC) was indeed precisely its inclusion of power in economic relations and transactions and a willingness to recognize aspects of power excluded from other analyses of international production and trading relations" (2005, p. 83-84).

Second, the restructured framework excludes the influence of external institutional frameworks on the governance of the GVC. Yet lead firms does not operate in an institutional vacuum. Indeed, regulation external to the GVC plays an increasingly important role, with industry standards

becoming de facto prerequisites for market access, not only for suppliers to the GVC, but for lead firms to the industry as well (UNCTAD 2016; Gibbon & Ponte 2005; Djama et al. 2011). Thus, GVC analysis requires strengthening not only with regards to the plurality of relationships within chain itself, as was achieved with the updated framework, but also in relation to the institutional framework in which the GVC is embedded (Gibbon & Ponte 2005).

3.1.2 The separation of powers approach to governance

In response to the critiques raised against Gereffi, Humphrey and Sturgeons framework and to the increasing importance of standards and multi-stakeholder initiatives in GVC governance, Gibbon, Ponte and Vestergaard expands the definition of governance, positing that governance is "the shaping of the conduct of others through network forms of organisation involving a wide range of state- and non-state actors, mainly through exchange and negotiation, rather than state-led regulation" (Gibbon, Ponte & Vestergaard 2011, p. 1). In doing so, they also expand the analysis to actors outside of the specific GVC, breaking with the traditionally firm-centric approach to GVC analysis (Dallas 2014). Thus, the analysis comes to include a range of actors, which engage in asymmetric power relations, competing for influence over the governance of GVCs in a quasi-neopluralist fashion, where lead firms occupy a privileged position vis-à-vis other actors in the process. In this regard, it is important to remember that power is not a resource, which can be stockpiled and spend at will. Rather it is a continuing process between actors, wherefore one should focus the analysis on the exercise of power, allowing one to consider the dynamic nature of power relationships that are continually constituted and reproduced by actors' interactions (Tokatli 2007).

In line with Gibbon, Ponte and Vestergaard's expansion of the governance concept, Tallontire et al. (2011) developed an analytical framework designed to expand GVC analysis "beyond the vertical", recognising that each individual link in the GVC constitutes a network of its own, which carries with it implications for chain governance, and in turn necessitates a horizontal analysis of how various actors seek to influence governance. Thus, the framework of Tallontire et al. (2011) aims beyond the vertical aspects of chain management, i.e. the processes of internal chain coordination within a specific GVC, and include actors which holds the potential to influence GVC governance and the institutional framework in which these are embedded, examining the standards surrounding a specific GVC, in order to ascertain which interest are most strongly represented and consequently which actors lead governance of the chain (Tallontire et al. 2011). This is achieved by separating the governance process into three distinct categories:

1. Legislative governance
2. Executive governance
3. Judicial governance

Legislative governance covers the origins of the standard, exploring its links with other standards in the public and private sphere, who was involved with formulating the standard and who might be excluded by it. Furthermore, it should be investigated whether the standard is concerned with a specific industry or can be applied to a variety of sectors, what constitutes the basis for participation and the manner of constitution governing the organisation of the standard (Tallontire et al. 2011). *Executive governance* relates to process of the standard's implementation, the tools used to ensure that standards are met, whereas *judicial governance* focus on the particularities of how compliance is assessed and monitored and the consequences of non-compliance (Tallontire et al. 2011).

An important question, which should be addressed, is whether standards constitute the means for lead firms to govern the GVC indirectly or if it contains its own, locally negotiated dynamics (Tallontire et al. 2011). Yet, in employing control at a distance over the value chain, the lead firm itself does not exert direct power over the majority of the chain, but rather governs by means of its privileged position in the chain (Gibbon & Ponte 2005). Thus, it becomes imperative to consider the "invisible" exercises of power, i.e. to focus on the various faces of power.

3.2 The Three Faces of Power

The notion of different faces of power has been developed over decades, drawing on the works of a range of scholars, such as Dahl, who wrote on the exercise of power in political processes in 1957, Bachrach and Baratz, who introduced the notion of "two faces" of power in 1962, and Lukes, who identified perceived needs and interest as the third face of power in 1974 (Fuchs 2007). The following takes a point of departure in Fuchs' (2007) compilation on the three faces of power and their exercise in political processes.

A commonly acknowledged definition of power, is that A has power over B, insofar as A can make B do something that B otherwise would not (Morgenthau 2006). However, as this definition neglects the sources and specific uses of power, Fuchs argues that a multidimensional conceptualisation of power should be employed when investigating actors' exercise of power in political processes. This is especially true for non-state actors, whose sources of power are less obviously given than those associated with states. Consequently, Fuchs develops a framework

comprised of instrumental-, structural-, and discursive power for conceptualising the power resources expended by actors in pursuing their interests, while stressing that interests are not static, but the outcome of actors' continual social learning (Fuchs 2007; Fuchs et al. 2010). Such a framework allows for the analysis of the specific power of actors' within both structural/contextual and ideational/discursive dimensions, thus taking the "invisible" exercise of power into account (Fuchs 2007).

Instrumental power relates to a relational, actor-centred conceptualisation of power, in accordance with the definition of power mentioned above. It measures the direct influence of an actor vis-à-vis another, viewed as the actors' capability to achieve political results, i.e. as diplomatic success of an actor and the ability to impose its will upon others in negotiations (Fuchs 2007; Uusi-Rauva 2010). The strength of instrumental power stems from the concepts' ability to provide an assessment of actors' raw power and direct influence over one another. Yet, Fuchs raises two points of critique against the isolated use of the conceptualisation. First, basing the analysis of power relations solely on the available resources of any given actor is prone to result in a "mechanistic causality […] of actors' choices and actions" (Fuchs 2007, p. 57). Second, instrumental power is inadequate when it comes to measuring power independent of the outcome of direct negotiations (Fuchs 2007). These shortcomings are mitigated through the use of the structural and discursive faces of power.

Structural power is rooted in the material structures that distributes power, either directly or indirectly, among actors. In order to produce a feasible assessment of power relations, these structures should be considered in the analysis (Fuchs 2007). The implication of such a conception of power is that certain issues might never be put on the table during negotiations, due to their unacceptability to central actors. Consequently, structural power focus on the input side negotiations and the "predetermination of the behavioural options of political decision-makers" (Fuchs 2007). The greatest difficulty in assessing structural power is the fact that the threat of its use is rarely made explicit, i.e. its exercise is invisible.

Discursive power relates to the power of ideas, mirrored in discourses, cultural norms, and institutions. Discourses form actors' perceptions about the context within which they find themselves and consequently influence perceived needs and interest of an actor within said context. This perception, in turn, informs the actors which courses of action are considered as desirable or, indeed, available in the given context (Fuchs 2007). However, as power is not static, discursive

power is approached from a structuration perspective, meaning that while actors are constrained by their perceived context, they also maintain a certain degree of agency to deploy discourses strategically, in order to further their own interests (Fuchs et al. 2010).

4 The RSPO and the GVC for sustainable palm oil

The following chapter provides background information on the RSPO, including the *raison d'être* of the organisation, its governance structure, and the certification standard. The chapter then proceeds to describe the GVC for CPO and CSPO, including the input-output structure and geographical dispersion of the chain, as knowledge of these structures produce valuable insights into the functioning of the chain and the relationship between its actors.

4.1 The Roundtable on Sustainable Palm Oil

The cultivation of oil palm has been associated with a range of negative impacts to environmental- and social sustainability. The environmental sustainability impacts of oil palm cultivation includes greenhouse gas (GHG) emissions from land clearance through burning and exacerbated by deforestation of primary forest areas, which simultaneously release GHGs into the atmosphere and limits the Earth's ability to absorb such gases in the future (see for instance Koh & Wilcove 2008; Shiel et al. 2009; Eggleton et al. 1999; MacDonald et al. 1999; Danielsen et al. 2008; Gibbs et al. 2008; Weiss et al. 2002; and Fargione et al 2008). Additionally, deforestation has negative impacts on biodiversity and eco-system services, as it threatens the natural habitats of a range of species, for instance the Orangutan (Maddox 2007). The social sustainability impacts of oil palm cultivation pertain to the negative impacts on human health from haze, caused by the use of burning as a method for land clearance, and the increased costs these impacts impose on society as a whole (Rowell & Moore 2000). Furthermore, the development of oil palm plantations carries negative livelihood implications, through contested land ownership and degradation of eco-system services, which cause social conflict (see for instance McCarthy 2011; Nesadurai 2013; Teoh 2010; Pye 2011; Levin et al. 2012; Obidzinski et al. 2012).

The negative impacts of palm oil on environmental and social attracted the attention of environmental- and social NGOs during the 1990s, who launched a series anti-palm oil campaigns (Rowell & Moore 2000; Pye 2011; Pichler 2013). These campaigns made a particular impression on consumers in Europe (Pye 2011). The RSPO emerged in response to the increased attention directed at the unsustainable practices of the palm oil industry during the 1990s. As it has been estimated that many of the environmental and social impacts of oil palm cultivation could be lessened or mitigated through the introduction of good agricultural- and best management practices (BMP), the RSPO was founded in light of these criticisms, with the objective of ensuring the continual supply

and use of palm oil, by making its cultivation sustainable and thus acceptable to Western political consumers (Yousoff and Hansen 2007; RSPO 2002).

The initiative emerged as an informal cooperation between several MNCs and the World Wildlife Fund (WWF), who initiated the cooperation with the objective of establishing a market-based mechanism to ensure sustainability in the palm oil industry. A roundtable model was decided upon by the involved parties (RSPO 2002). An organising committee was established and the inaugural roundtable meeting was held in Kuala Lumpur in 2003 (RSPO 2014a).

In 2004, the RSPO was formally established under the Swizz Legal Code as a non-profit organisation that works to promote the cultivation, production, and use of CSPO (RSPO 2014a). The vision of the RSPO is to transform the market, by making CSPO the norm; a vision that is operationalised by the development, implementation, and verification of international standards for sustainability in the palm oil industry, which are subject to periodical reviews (RSPO 2014a).

4.1.1 Governance structure of the RSPO

The RSPO is in principle governed by its members, which are divided into three membership categories:

- Ordinary members
- Affiliate members
- Supply chain associates

The members govern the RSPO through the general assembly (GA), which is convened annually with the objective of ensuring transparency in RSPO's administrative- and financial operations, as well as setting the working agenda for the RSPO in the following year (RSPO 2014a). The GA also constitutes the forum wherein members can propose and deliberate resolutions, i.e. changes to the RSPO system (RSPO 2014a). Resolutions are adopted or rejected by simple majority and cannot be changed at the GA, but must either be voted on in their presented form or withdrawn (Hospes 2011; RSPO GA 2008). In 2015, the RSPO had a total membership of 2,282, spanning 78 countries, but only the 1,151 ordinary members are allowed to vote at the GA (RSPO 2015a). The ordinary members are divided into seven constituencies, or interest groups, depending on their function in the GVC of palm oil (RSPO 2015a):

1. Consumers Goods Manufacturers: 513 members

2. Processors and Traders: 391 members
3. Retailers: 59 members
4. Banks and Investors: 13 members
5. Oil Palm Growers: 134 members
6. Environmental- and Conservation NGOs (ENGOs): 29 members
7. Social- and Developmental NGOs (SNGOs): 12 members

The Oil Palm Growers (Growers) represent the upstream activities of the value chain for palm oil, including cultivation of the palm and the processing of FFB into CPO and PKO used as inputs in downstream activities. While SHs are formally included in the Grower constituency, the group is often representative of the larger industrial plantations (see for instance RSPO GA 2007). Thus, Growers and SHs are treated separately in this thesis. Consumer Goods Manufacturers, Processors and Traders, Retailers, as well as Banks and Investors represents the downstream activities of the palm oil sector and are generally in agreement on the functioning of the RSPO (see for instance RSPO EB 2005a). ENGOs and SNGOs are external to the GVC, but retain a place in the RSPO, as a means of engaging civil society and include non-business interest (RSPO 2002). It should be noted that firms are not strictly tied by the boundaries set by these constituencies. For instance, the Oil Palm Grower constituency covers a range of actors, spanning from multinational, vertically integrated firms to SHs in the producing countries. Rather, firms choose their primary operation along the GVC, when they apply for membership (RSPO 2016b). As a consequence, considerable divergences of interest might exist within the particular constituencies. Furthermore, while government agencies and research institutions occasionally participate in roundtable meetings and other activities of the RSPO, they are formally excluded from RSPO membership, as a means of maintaining independence in decision-making along the GVC (Cheyns 2011).

The EB is the guiding body of the RSPO. It decides on how to implement resolutions passed at the GA and sets the strategic agenda for the RSPO (RSPO 2014a). Each interest group has two representatives on the EB, which are elected by their own constituency (RSPO 2014a). The Growers are awarded four representatives: One representing Malaysian growers, one representing Indonesian growers, one representing growers from the rest of the world, and one representing SHs (RSPO 2014a). Representatives are elected for two years, in a staggered manner, in order to ensure continuity in the work of the Board. The EB operates by consensus, defined as the absence of sustained objection (RSPO 2014a).

The decisions of the EB are administrated by the four standing committees, each of which is dedicated to a specific area of RSPO operations: Standards and certification, trade and traceability; communications and claims, and finance (RSPO 2014a). The standing committees convene working groups (WG) for specific projects and tasks within the RSPO, such as the SHWG, tasked specifically with the inclusion of SHs in the standard. WGs are comprised of representatives of the seven constituencies, based on interest in the topic of the WG, and operates by consensus (RSPO 2014a).

4.1.2 The certification standard

The certification standard of the RSPO is anchored in the principles and criteria (P&C) of the organisation. There are eight core principles (RSPO 2013a):

1. Commitment to transparency
2. Compliance with applicable laws and regulations
3. Commitment to long-term economic and financial viability
4. Use of appropriate best practices by growers and millers
5. Environmental responsibility and conservation of natural resources and biodiversity
6. Responsible consideration of employees, and of individuals and communities affected by growers and mills
7. Responsible development of new plantings, and
8. Commitment to continuous improvement of key areas of activity

The eight principles are operationalised by criteria, indicators, and guidelines that constitute the BMP, which Growers must adhere to if they seek to achieve sustainability certification. The P&C was originally developed in 2005 and adopted at the 4th General Assembly (GA4) in 2007, following a two-year trial period (RSPO GA 2007). The P&C was reviewed in 2013, resulting in the addition of four new criteria and 40 new indicators (RSPO 2013a).

Compliance with the P&C is assessed by accredited third party auditors called Certifying Bodies (CB). Growers must undergo a certification audit, in order to achieve RSPO certification, which is valid for five years. The Grower then becomes subject to annual surveillance audits in the ensuing four years (RSPO 2014a).

A specified version of the P&C was released for SSHs in 2009 and ISHs in 2010 respectively. SHs share a common definition in the RSPO system as:

> "Farmers growing oil palm, sometimes along with subsistence production of other crops, where the family provides the majority of labour and the farm provides the principal source of income and where the planted area of oil palm is usually below 50 hectares in size" (RSPO 2009, p. 3)

In addition, SSHs are defined as SHs who are "structurally bound by contract, by a credit agreement or by planning to a particular mill" (RSPO 2009, p. 4). SSHs are often not free to choose which crops to develop on their land, and are often organised, supervised, or even manged directly by the Grower to which they are tied (RSPO 2009).

ISHs are characterised as SHs that have their freedom to manage their land as they see fit; which crops to plant and how to manage them, as well as being self-organised and self-financed (RSPO 2010). ISH are subject to simplified P&C, while SSH are subject to the P&C in their entirety, due to their structural linkage to more capable actors (RSPO 2016a).

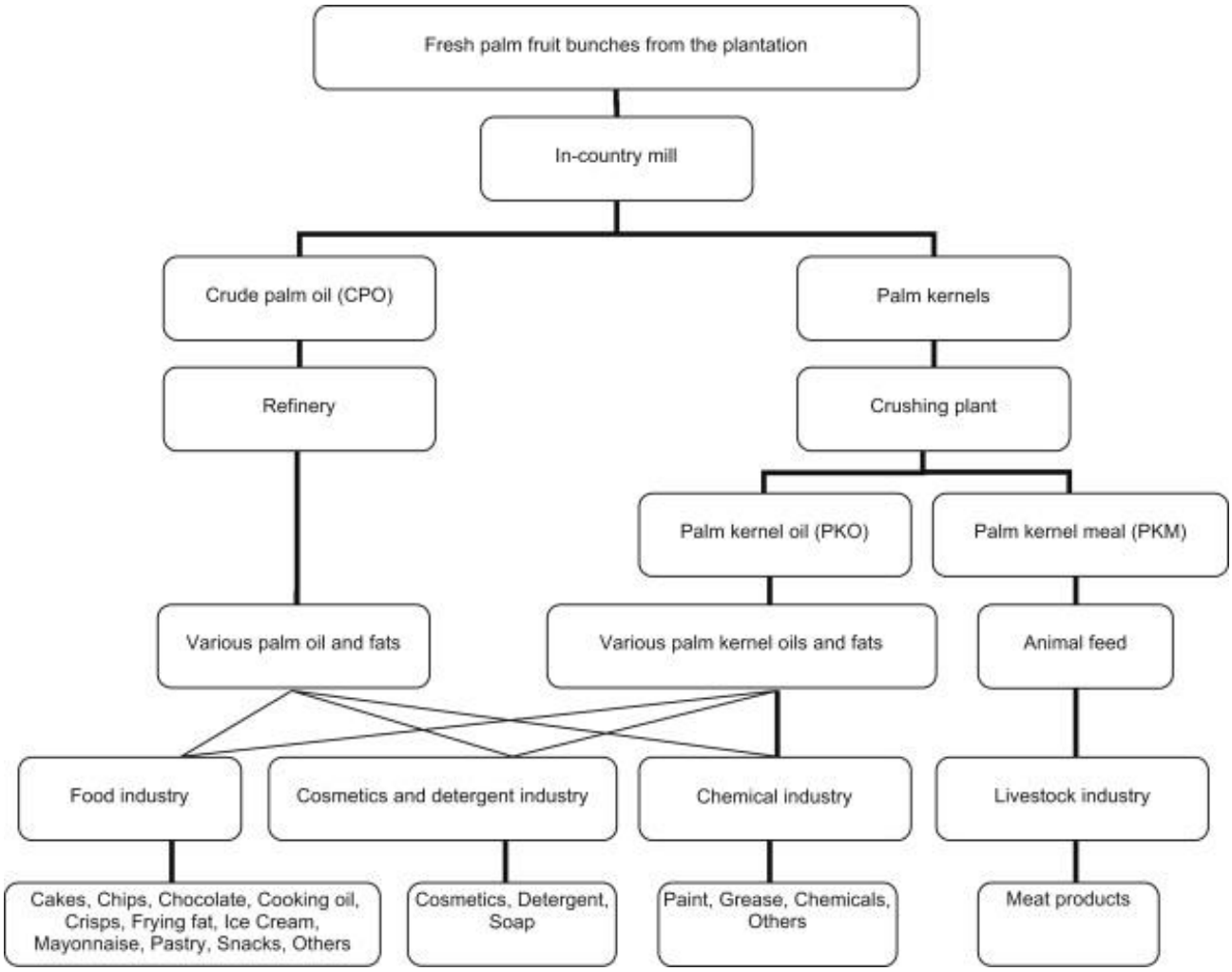
4.2 The global value chain for sustainable palm oil

The following section outlines the GVC for CSPO, which is taken to be similar to the GVC for CPO, as the end-use of either oil is identical, and the two GVCs merely differ in the sustainability of the produced FFB and palm oil. Thus, the two chains are also intertwined, in that the governance of one chain might affect the underlying power relationships of governance in the other. For instance, by providing non-sustainable alternative production paths to Growers, allowing them to 'vote with their feet' on issues of sustainability in palm oil production. The following maps the GVC of the palm oil industry as a whole, yet attributes particular attention to the possible interlinkages between the two, making distinctions between the two chains where appropriate.

4.2.1 Input-output structure

The palm oil industry is involved in the production of a wide array of products and industrial process, including food, animal feed, soaps, detergents and surfactants, cosmetics, pharmaceuticals, nutraceuticals (Teoh 2010). In 2014 it was estimated that roughly 80 % of global palm oil consumption was used for food products, 15 % was used in personal care products, and 5 % in bioenergy production (IUF 2015). Thus, the palm oil industry offers a value chain, wherein a single input (FFB) finds a widespread application, making its cultivation attractive as the divergence of end-uses confers an inherent sectoral diversification for Growers, limiting the risk of declining demand in end-markets.

Figure 2 - Example of a palm oil GVC; source: von Geibler 2013



The primary input of the industry is CPO and PKO, both of which are derived from the fruit of the oil palm (*Elaeis guineensis*) (Sheil et al. 2009). The fruits of the oil palm grow in clusters, known as FFB (Sheil et al. 2009). An oil palm has a lifecycle of approximately 25 years and typically begins to yield FFB in its fourth year (Molenaar et al. 2013). The yield of the palm increase gradually over the first three years, known as the *yield-building phase*, reaching its full potential in its seventh year. From the 7^{th}-20^{th} year, the so-called *plateau phase*, the oil palm maintains a steady state of output. Finally, the oil palm enters the *declining phase* from its 21^{st}-25^{th} year, where yields decline by approximately 33 % over five years, corresponding to a decline of 8.34 per year (Reitberg 2016). This means that the first three years of an oil palm planting confer negative cash-flows, as the plantation experience costs in maintaining the oil palm plot, while income from the investment will not materialize until the fourth year.

Oil palm offers an oil yield/ha that is up to 9.3 times higher than other oil crops (Teoh 2010). This confers an advantage to oil palm producers, in that less land inputs are required to produce an equal quantity of vegetable oil, which makes oil palm a particularly attractive investment for SHs, who often face constraints in the amount of land available (Brandi et al. 2013). Furthermore, FFB becomes ripe for harvest roughly every two weeks (Molenaar et al. 2013; Sheil et al. 2009). Owing to a low level of mechanisation in the industry, field operations, and particularly harvesting, are labour intensive activities, requiring approximately five workers per hectare (Teoh 2010; Levin et al. 2012). Thus, the industry offers year-round employment, which has made it a popular choice for poverty alleviation schemes targeting rural development (McCarthy 2011).

4.2.2 Geographic scope

The oil palm is native to Central- and West Africa, but has dispersed throughout the humid tropics, including Central- and Latin America, where it is believed to have been introduced between the 14th to 17th century, and to South East Asia, where it was introduced in the 19th century (Sheil et al. 2009; Poku 2002; Henderson and Osborne 2000).

Table 4 - Palm oil; global production; by country; 1,000 MT; based on USDA 2016 and USDA 2012

	2008	2009	2010	2011	2012	2013	2014	2015
Indonesia	20,500	22,000	23,600	25,400	28,500	30,500	33,000	32,000
Malaysia	17,259	17,763	18,211	18,700	19,321	20,161	19,879	17,700
Thailand	1,540	1,345	1,288	1,546	2,135	2,000	2,068	2,100
Colombia	795	770	775	885	974	1,041	1,110	1,273
Nigeria	850	850	850	850	970	970	970	970
Other	3,074	3,145	3,224	3,286	4,477	4,602	4,606	4,799
Total	44,018	45,873	47,948	50,667	56,377	59,274	61,633	58,842

Contemporarily, palm oil is grown in more than 43 countries, with the brunt of production taking place in Indonesia, Malaysia, Thailand, Colombia, and Nigeria (Sheil et al. 2009; USDA 2016). On average, Indonesia and Malaysia alone have accounted for approximately 86 % of world production per year since 2008 (USDA 2012; USDA 2016). While some palm oil is used domestically, e.g. for cooking or to fulfil biofuel blend-in mandates, the majority of palm oil is exported to consumers in other countries (USDA 2012; USDA 2016).

Table 5 - Palm oil import; by country; 1,000 MT; based on USDA 2016 and USDA 2012

	2008	2009	2010	2011	2012	2013	2014	2015
India	6,867	6,603	6,661	7,250	8,364	7,820	9,256	9,250
EU	5,505	5,438	4,639	5,300	6,812	6,969	6,718	6,700
China	6,118	5,760	5,711	6,300	6,589	5,573	5,696	4,600
Pakistan	1,915	2,172	2,102	2,150	2,245	2,725	2,826	3,000
Egypt	1,024	1,174	1,277	1,350	969	1,075	1,489	1,350
Bangladesh	700	951	996	975	1,030	1,232	1,280	1,458
United States	1,036	994	980	1,089	1,293	1,220	1,143	1,304
Other	10,890	12,225	13,541	13,659	14,819	15,389	16,214	16,146
Total	34,055	35,317	35,907	38,073	42,121	42,003	44,622	43,808

The main consuming countries of palm oil include India, the EU, China, Pakistan, Egypt, Bangladesh and the USA. Over the past eight years, the EU on average accounted for 15.78 % of global imports of palm oil, whereas the markets of South East Asia and the Indian Sub-Continent (India, China, Pakistan, and Bangladesh) on average account for 42.27 % of global imports. While a significant proportion of palm oil is directed towards the EU market, the lion's share of consumption takes place close to the palm oil producing countries. This relationship can be construed as a market structure, which grants power to the Oil Palm Growers and Processors, in that they can sell their produce as CPO to the markets in South East Asia and the Sub-Indian Continent, where the uptake of CSPO remains low (RSPO 2015a; Pichler 2013). However, to draw such a conclusion would be to simplify the intricacies of the GVC for CSPO.

Table 6 - RSPO market share (%) in terms of production; 1,000 MT; based on USDA 2012, USDA 2016, and RSPO 2016d

	2008	2009	2010	2011	2012	2013	2014	2015
CSPO production	619	1,474	3,522	5,573	8,184	9,792	11,909	12,886
Global production	44,018	45,873	47,948	50,667	56,377	59,274	61,633	58,842
Market share	1.41%	3.21%	7.35%	11.00%	14.52%	16.52%	19.32%	21.90%

Since 2008, when the production of CSPO commenced under the RSPO, the market share of CSPO in terms of production has increased steadily and reached a market share of 21.90 % in 2015. In terms of market share as a fraction of global import/sales, the global uptake of CSPO has increased in a similar fashion, reaching 14.11 % in 2015, a level which roughly corresponds to the EUs share of global imports in that year.

Table 7 - RSPO market share (%) in terms of sales; 1,000 MT; based on USDA 2012, USDA 2016, and RSPO 2016d

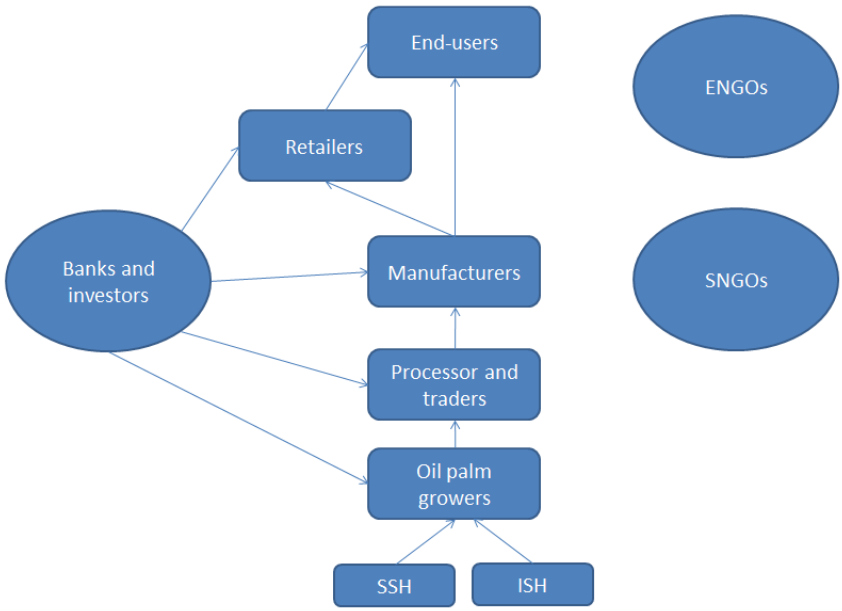
	2008	2009	2010	2011	2012	2013	2014	2015
CSPO sales	4	344	1,281	2,491	3,479	4,513	5,349	6,183
Global imports	34,055	35,317	35,907	38,073	42,121	42,003	44,622	43,808
Market share	0.01%	0.97%	3.57%	6.54%	8.26%	10.75%	11.99%	14.11%

While correlation does not imply causation, there are two factors, which indicates that the EU has been a driving force in the production and uptake of CSPO. First, the EU constitutes the World's biggest economy and the second largest importer of CPO worldwide (RSPO 2014a; USDA 2016). Access to this market is limited by the sustainability requirements of the EU, stipulated by the 2020 Climate and Energy package and the Renewable Energy Directive (EU RED), which requires actors not covered by the EU Emissions Trading System (ETS), including agro-foods, to uphold certain sustainability standards (EU COM 2008; EU 2009). Second, some of the world's biggest brands and companies are based in the EU – including Unilever, Nestlé, Ferrero, Tesco, Sainsbury's, and Migros – which have made commitments towards the sourcing of 100 % RSPO between 2015-2020 (WWF 2016). For instance, Unilever – the world's largest consumer of palm oil, accounting for circa 2.6 % of global palm oil consumption in 2015 – has achieved its goal to source 100 % CSPO (IUF 2015; USDA 2016; WWF 2016)[2]. It is possible, that these sourcing commitments in MNCs could spill over to operations in countries outside of the EU. For example, based on public commitments made to the sourcing of CSPO, the RSPO projected that the share of CSPO for Manufacturers in India and China would increase from less than 1 % in 2014 to 55 % and 93 % respectively in 2020 (RSPO 2015b). This seems to suggest that the demand for palm oil is largely driven by Manufacturers and Retailers based in the EU, i.e. the Manufacturers and Retailer constitute the lead actors of the GVC.

Held together with the findings of the input-output structure, that the GVC is characterised by low barriers to entry and high level of labour-intensity, a picture emerges on the GVC for CSPO. As illustrated in Figure 2, the GVC for palm oil contains a myriad of distinct value chains, based on the end-product of the CPO. Yet, a more generic GVC can be composed, based on the interest groups represented in the RSPO:

[2] Unilever's consumption of palm oil amounted to 1,513,265 MT in 2015 (WWF 2016). Held together with the global palm oil production of that year, Unilever's marketshare becomes: (1,513,265/1,000)/58,842=0.0257

Figure 3 - Generic GVC for CSPO



The certified FFB (CFFB) is produced by certified Growers, including SSH and ISH, who supply CFFB to the the mill. It should be noted that Growers and mills often are interconnected, as mills are set up in plantations, in order to establish central collection points for FFB, which needs to be processed within 48 hours from harvest (Mahmud et al. 2010). The processed CSPO and distillates are shipped to Manufacturers, who in the case of CSPO are primarily based in the EU (RSPO 2014a; RSPO 2015a). The Manufacturers produces the final products and market them either through a Retailer or directly to the end-user. The Banks and Investors supply credit to actors across the GVC, except SHs, who often rely on other Growers for credit (Feintrenie et al. 2010). The NGOs are external to the GVC *per se*, but provides input on sustainability criteria and issues through their involvement in the RSPO.

5 Conduciveness of SH participation in the RSPO

The following chapter seeks to answer how the institutional setup of the RSPO incentivise SHs to partake in the GVC for CSPO, i.e. to seek sustainability certification through the RSPO, and how these incentives might impact the manner of SHs insertion into the GVC and how this will impact governance at the link between Growers and SHs. It is commonly acknowledged that SHs primarily are motivated by financial gains (see for instance Levin et al. 2012; Brandi et al. 2013; Hidayat et al. 2015). As noted by Hidayat et al., "the SHs [are] unaware of the philosophy behind sustainability certification and the concept of the RSPO. For them, certification [is] a set of technicalities that need to be fulfilled to improve their production and get a better price for their FFB" (2015, p. 32). Therefore, this chapter takes a point of departure in the financial improvements available to SHs through RSPO certification. There is a general trend across various certification schemes that both benefits and costs increase with certification, while the effects on net income remains inclusive (Loconto and Dankers 2014; ITC 2011). Thus, the question of financial incentives becomes a question of the relative increase of benefits and costs stemming from RSPO certification, as well as the opportunity costs of foregone options that resources could otherwise have been directed towards. Consequently, this chapter assess the nominal increase in financial benefits and costs, in order to conduct an NPV analysis of RSPO certification for SSHs and ISHs respectively, to ascertain the conduciveness of the RSPO for the participation of various types of SHs.

In their comprehensive literature review of voluntary standards, Loconto and Dankers (2014) found that manner in which such standards include and organise SH in their certification schemes, is reflected in the mode of governance at various links in the respective industries GVC. Therefore, a secondary objective of this chapter is to draw inferences from the manner in which RSPO organise SHs upon the mode of governance, as set out by Gereffi, Humphrey and Sturgeon (2005). In this regard, the financial costs and benefits of SH inclusion are taken to be representative of changes stemming from certification to the input-output structure of SH in the GVC for palm oil. These changes can be used to draw inferences about the manner in which this particular link in the GVC for CSPO is governed.

This chapter is divided into four sub-chapters. The first sub-chapter analyses the average financial benefits stemming from sustainability certification of SHs under the RSPO, including benefits from increased market access, price premiums, and increased productivity in the form of higher yields/ha.

The second subchapter assesses the average financial costs of sustainability certification for SH in the palm oil industry, paying particular attention to the upfront cost, or initial investment, required to achieve certification, as well as the recurrent costs of maintaining sustainability certification once it has been achieved.

The third sub-chapter ascertains the net present value of the combined financial costs and benefits, taking the opportunity costs of investing in certification, as well as the time value of money into account. While the former sub-chapters concern themselves with the plateau-phase of the oil palm's lifecycle, this subchapter consider the entire lifecycle of the palm, which limits the profitability of the investment somewhat. It is assumed that the lifecycle of the oil palm initiates with certification, i.e. that BMP is employed from the onset of the planting of the oil palm. This is done, as the productivity gains found in subchapter 5.1, and their corresponding financial benefits, are dependent upon the application of BMP from the onset of the palm oils lifecycle. Insofar as BMP has not been applied in the early stages of the oil palm, peak yields would be lower (Molenaar et al. 2013).

The fourth sub-chapter draws inferences to the implications for governance at the link between Growers and SH in the GVC for CSPO. These inferences are based upon the findings of changes to the input-output structure of the GVC brought about by certification, ascertained in the previous sub-chapters, as well as observations of the governance setup in the literature.

5.1 Financial benefits of RSPO certification

5.1.1 Market access

The literature often stress increased market access as a factor of paramount importance for the livelihood impact on SHs from participation in GVCs (see for instance Beall 2012). However, market access does not seem to constitute an issue for the SHs themselves. When asked, a mere 2.6 % of SHs agreed that they saw increased participation in markets as a potential benefit from certification, as compared to the 57 % who expect direct financial benefits (Brandi et al. 2013). One reason for this discrepancy between the recommendations of the literature and the reality of the SHs, could be that the demand for regular CPO is increasing, driven by increased demand in India and China, while CSPO uptake currently is insufficient to clear the produced quantities of CSPO, which are primarily sold to the EU (see section 4.2.2) (RSPO 2014).

FFB must be processed within 48 hours of harvest, as the fruit deteriorates rapidly subsequent to harvesting, to the detriment of its oil content. This means, that harvested FFB should reach a mill within 24 hours of harvest (Mahmud et al. 2010; Hidayat et al. 2015; Molenaar et al. 2013). Thus, it seems unlikely that RSPO certification could enable SHs' participation in international markets, except through book-and-claim programmes such as GreenPalm (see section 5.1.2).

SHs' access to markets does carry significant implications. The demarcation line between SSH and ISH is that SSHs are contractually bound to one particular Grower, whereas ISHs theoretically are free to pursue better prices for their FFB in the free market. However, the physical characteristics of the FFB necessitates fast processing of the produce, which is made difficult by poor infrastructure, lacking means of transportation among SHs, and long waiting times at the mills. During the wet season, where road conditions are the harshest, 30 % of SHs took more than eight hours to get their produce to the mill, and 17 % experienced waiting times of an additional eight hours or more (Molenaar et al. 2013). Transportation times are a major issue for many SHs, causing them to organise the selling of FFB through their cooperatives or to sell to a trader, who resell the FFB to the mill. In 2013, 96 % of SSHs sold their produce through a cooperative, whereas 4 % sold directly to the mill (Molenaar et al. 2013). Similarly, 4 % of ISHs marketed their produce directly to a mill, whereof 40 % could access up to three mills, allowing some flexibility in where they chose to offload their FFB (Molenaar et al. 2013). Thus, ISHs often face of monopsonistic buyer-base, similar to that of SSHs, preventing them from realising the theoretical gains available from free market competition. Of the remaining ISHs, 23 % sold their FFB through a cooperative and 73 % sold through to a trader (Molenaar et al. 2013). This market structure carries important implications, as traders naturally offer lower prices than mills, in order to make their efforts worthwhile, and mills have been shown to favour SSH in times of low demand (Brandi et al. 2013). These factors contribute to lowering the prices that ISHs receive for their produce, which on average have been found to be 33 % lower than the prices enjoyed by SSHs (Molenaar et al. 2013). Applying the lower prices offered to ISHs to the baseline cost of FFB decreases the FFB price to €97.26/MT[3], which in turn decrease the annual income of ISHs from €1,596.75/ha to €1,069.82/ha[4].

[3] 145.16*0.67=97.26
[4] 97.26*11=1,069.82

5.1.2 Price premiums

The primary motivation for SHs to achieve sustainability certification is the expectation that they will receive price premiums on their FFB. As noted by Hidayat et al. (2015), certification constitutes a tool for SHs, with which they can increase their production and attain premium prices. Some SHs even noted that they:

> "[o]bviously […] want to join the RSPO because the RSPO guarantees selling of certified product […] For farmers the first and the most important thing is a higher price of the product" (Hidayat et al. 2015, p. 32).

The assertions above seem to highlight some misconceptions regarding sustainability certification under the RSPO. The RSPO does not guarantee the sale of certified product nor the attainment of price premiums on certified FFB. Rather, it is stipulated under the auspices of the P&C that "Growers and millers deal fairly and transparently with [SHs] and local businesses" (RSPO 2013a, p. 41).

Two avenues exist for SHs to attain price premiums under the RSPO, both of which are market based mechanisms:

1. Selling directly to a mill
2. Selling certificates through GreenPalm

The first option is available to both SSHs and ISHs. The approach has been found to confer a price premium on CFFB of 4-5 % (Brandi et al. 2013; Reitberg 2016)[5]. Taking these rates into account, the following applies a premium rate of 4.5 % to the FFB price of €145.16/ton, to achieve a price premium of €6.53/ton[6], equivalent to an annual additional income of €85.54/ha relative to the baseline average yield/ha of 13.1 per SH[7]. However, the productivity- and price differentials between SSH and ISH must be taken into account, in order to calculate a precise estimate of the premiums enjoyed by SSH and ISH (see sections 2.4.1.1 and 5.1.1).

[5] The premium is contingent upon achieving an increased quality in FFB, which is assessed by the mill (Brandi et al. 2013).
[6] 145.16*0.045=6.53
[7] 6.53*13.1=85.54

Table 8 – Price premium (€) per MT and ha; including 33 % price differential for ISH

	FFB price/MT	Income/ha	Premium/MT	Premium/ha
SSH	145.16	2,569.32	6.53	115.62
ISH	97.26	1,069.82	4.38	48.14

Taking these differentials into account, SSHs receive a premium of €6.53/ton, corresponding to an additional annual income of €115.62/ha. Conversely, ISHs attain a premium of €97.26/ton FFB, equivalent to an additional annual income of €48.14/ha.

The second option, selling certificates through GreenPalm, has only been made available to ISHs (Hidayat et al. 2015). GreenPalm is a certificate trading programme, which allows RSPO certified Growers to sell certificates for CSPO to Manufacturers and Retailers (GreenPalm 2016a)[8]. This enables CSPO to be sold, without necessitating a physical exchange. When ISHs were allowed to attain group certifications under the RSPO in 2010, they were included in the GreenPalm programme, allowing them to sell certificates based on reported volumes of produced CFFB, which allows them to maintain relations with non-certified buyers and still retain a price premium (GreenPalm 2016b).

Based on market data from GreenPalm, the average premium price/MT from January 2011 to September 2016 equals €1.93 corresponding to an additional annual income of €21.23/ha[9]. (see Appendix A). it should be noted the global market exhibits a rather low uptake of CSPO. From 2011-2015, approximately 50 % of produced CSPO has been sold in end-user markets per annum (RSPO 2015a). This excess supply serves to drive down market prices, diminishing premiums from sustainable production. It therefore seems unlikely that larger premiums for CFFB will materialize in the foreseeable future, unless this trend changes.

5.1.3 Increase in yields

Oil palm is an efficient crop in terms of yield (measured as annual tonnage of FFB/ha) compared to other vegetable oil crops, producing a yield/ha that is 9.3 times higher than soybean, 7.6 times higher than rapeseed, and 5.8 times higher than sunflower (Teoh 2010). However, yields have stagnated across the sector between 1975-2015 (see section 2.4.1.1). Furthermore, there exists a yield gap between plantations and SHs, estimated at roughly 35-40 %, due to a lack of the necessary

[8] A GreenPalm certificate is tied to one MT of CSPO, allowing a particular batch of CSPO to be traced through the GVC (GreenPalm 2016b).
[9] 1.93*11=21.23

agricultural skills, knowledge, and high quality inputs (Teoh 2010; Brandi et al. 2013). Thus, one of the most severe challenges currently facing the palm oil industry is to increase the productivity of SHs and close the yield gap.

The most direct impact of RSPO certification, is the increase in yields that stems from complying to the BMP stipulated in the P&C (Brandi et al. 2013; RSPO 2013a). The average yield across the industry amounts to approximately 3.5 MT CPO/ha per year, corresponding to 17.5 MT FFB/ha[10] (Teoh 2010; Levin et al. 2012). Concurrently, RSPO certified producers experience average yields of 5.1 MT CPO/ha per year, equivalent to 25.5 MT FFB/ha[11] (Levin et al. 2012). It should be noted that these yields apply to industrial plantations and that SHs tend to be less efficient, even under the RSPO.

Attaining increases in yield/ha represents the most significant direct economic benefit from RSPO certification. As SHs are usually paid according to the volume of FFB they bring to the mill, plus a premium based on quality, an increase in the output of FFB/ha translates into a direct increase in income (Brandi et al. 2013). In addition, the increased output volume will not fluctuate with market prices or from a bad harvest resulting in lower quality, constituting a more stable income increase than price premiums. This is especially true for SSHs, where the growers are contractually obliged to purchase their produce.

Yield increases also constitute a rather easy method of increasing income, as the increase should materialise simply from compliance with the RSPO P&C (Brandi et al. 2013). An example of this could be the productivity gap between SSH and ISH (see section 2.4.1.1). This divergence in productivity mostly stems from the use of low quality seedlings for planting. In 2013, Molenaar et al. (2013) found that 50 % of ISHs utilized low quality inputs in their oil palm cultivation, whereas 97 % of SSHs had access to high quality inputs through their Growers, and that where inputs where available, they were often not applied according to the standard. Brandi et al. (2013) found that the productivity gap between ISH and SSH could be decreased from 47.37 % to 10.53 %, through the use of high quality inputs. Thus, ISHs could increase their annual production from 11 MT FFB/ha to 15.8 MT FFB/ha[12].

[10] 3.5/20*100=17.5
[11] 5.1/20*100=25.5
[12] 1-0.1053=0.8947 and; 17.7*0.8947=15.84

Table 9 - Increase in yield/ha (MT) from implementing BMP (12 %)

	Baseline yield/ha	Incremental yield from BMP	Total yield/ha
SSH	17.70	2.12	19.82
ISH	11.00	6.16	17.16

In addition to the productivity gap addressed above, both SSHs and ISHs have been found to underperform with regards to BMP, e.g. by maintaining old oil palms too long before replanting, incorrect application of fertilizers and herbicides, and the harvest of unripe or rotten FFB (Mahmud et al. 2010). Reitberg (2016) found a potential to increase yields by 12-30 % through the application of BMP.

Table 10 - increase in yield/ha (MT) from implementing BMP (30 %)

	Baseline yield/ha	Incremental yield from BMP	Total yield/ha
SSH	17.70	5.31	23.01
ISH	11.00	8.14	19.14

By implementing BMP, SSHs face an incremental yield/ha in the range of 2.12-5.31 MT FFB per annum, corresponding to a realised yield of 19.8-23 MT FFB/ha. ISHs realise a higher incremental yield from implementing BMP, due to the increase attributable to applying high quality inputs. Consequently, the group could realise increased yields in the range of 6.16-8.14 MT FFB/ha, corresponding to total yields in the range of 17.16-19.14 MT FFB/ha, almost closing the productivity gap between SSH and ISH completely.

Knowledge has been found to be a key factor in achieving certification and higher yields. SSHs are better suited for certification in this regard, due to the knowledge transfer and extension services that their Growers are required to provide by the RSPO (RSPO 2015a; Brandi et al 2015). These services often mean that SSHs are better organised than ISH cooperatives. For instance, SSHs have been found to be employing specialised division of labour within the group, to have higher levels of coordination of harvest and FFB transport to mills within the group, and to ensure maintenance of infrastructure (Brandi et al. 2015). ISHs often lack this level of coordination as well as the ability to draw upon management experience from Growers, resulting in poor data collection and record keeping, which in turn limits the cooperatives' ability to identify and mitigate weaknesses in their production processes (Mahmud et al. 2010; Marjon et al. 2013). This knowledge gap, preventing

effective management and economies of scale through integrated production and division of labour, could provide an explanation as to the remaining yield gap between SSHs and ISHs.

Table 11 - Income/ha (€), Incremental income/ha, and incremental price premium from yield increase (12%)

	Baseline yield/ha	Incremental yield from BMP	Total yield/ha	Income/ha	Incremental income/ha	Incremental price premium/ha
SSH	17.70	2.12	19.82	2,877.64	308.32	13.87
ISH	11.00	6.16	17.16	1,668.56	598.73	26.94

Held in congruence with the FFB price of €145.16/ton, the increased yields for SSHs correspond to an annual increase in income in the range of €308.32-770.80/ha, implying a corresponding increase in attained price premiums of €13.87-34.69/ha, depending on the increase in productivity.

Table 12 - Income/ha (€), Incremental income/ha, and incremental price premium from yield increase (30%)

	Baseline yield/ha	Incremental yield from BMP	Total yield/ha	Income/ha	Incremental income/ha	Incremental price premium/ha
SSH	17.70	5.31	23.01	3,340.12	770.80	34.69
ISH	11.00	8.14	19.14	1,861.12	791.30	35.61

The monetary gain for ISHs increase more rapidly, due to their steeper increase in productivity. ISHs experience an annual incremental income in the range of €598.73-791.30/ha, along with a corresponding increase in the realised price premium in the range of €26.94-35.61, depending on the increase in productivity.

It should be noted that the estimates above are average annual incomes based on the full effect of implementing BMP at various types of SH farms, in the plateau-phase of oil palm cultivation. However, such gains are not attainable from the onset, as the effects of BMP may take between 6-12 months to materialise and up to four years before they take full effect (Reitberg 2016). Furthermore, it should be kept *in mente* that while the productivity increase range of 12-30 % allows for considerable variation in the financial benefits of certification, a positive relationship has been established between BMP and yield increases, denoting an approximate yield increase of 24 % when following BMP (Molenaar et al. 2013). Consequently, it seems likely that increases of roughly 30 % should materialize from the full implementation of the P&C prior the planting of oil palm.

5.1.4 Total financial benefits from RSPO certification

The total financial benefits to SHs from RSPO certification are attributable to three parameters. First, the premium price paid for higher quality FFB, which is assumed to materialise from RSPO certification, where BMP *inter alia* should result in a subsequent improvement of FFB quality. This premium is based on the baseline income of the two categories of SHs, as it stems from an improvement of existing production. Second, the incremental income stemming from increased productivity and, third, the incremental price premium realised through this increased quantity.

Table 13 - Financial benefits; SSH; income/ha (€)

	Yield increase	
	12%	30%
Price premium	115.62	115.62
Incremental income	308.32	770.80
Incremental price premium	13.87	34.69
Total	**437.81**	**921.10**

Based on these three parameters, SSHs additional income falls between €437.81-921.10/ha, depending on the realised increase in yields. The most substantial part of the incremental income stems from increased quantities of FFB.

Table 14 - Financial benefits; ISH; income/ha (€); regular premium

	Yield increase	
	12%	30%
Price premium	48.14	48.14
Incremental income	598.73	791.30
Incremental price premium	26.94	35.61
Total	**673.82**	**875.05**

ISHs experience an increase in additional income in the range of €673.82-875.05, depending on the realised increase in yields. Although incremental income from productivity increases, and the corresponding incremental price premiums, grow at a much steeper rate than the corresponding incomes of SSHs, the growth seems insufficient to close the initial income gap.

Table 15 - Financial benefits; ISH; income/ha (€); GreenPalm premium

	Yield increase	
	12%	30%
Price premium	21.23	21.23
Incremental income	598.73	791.30
Incremental price premium	21.23	21.23
Total	**641.19**	**833.76**

In addition to not being able to close the income gap, some ISHs might be unable to market their CFFB to a mill, thus necessitating certificate trading via the GreenPalm programme, in order to realise price premiums, reducing the additional income received from RSPO certification to fall within the range of €641.19-833.76.

5.2 Costs of certification

The costs of certification cover a range of activities, which can be roughly divided into compliance, transaction and opportunity costs (Lee et al. 2011). However, as noted by Lee et al. (2011), certification is an ongoing process of compliance. This assertion carries with it the implicit inference that compliance costs are not a lump sum to be invested in order to attain certification standards prior to the inaugural audit, but rather a series of costs incurred over time, in order to maintain compliance subsequent to certification. Furthermore, the structure of the RSPO, stipulating certification audits every five years and annual surveillance audits, makes transaction costs longitudinal as well. Thus, it would be more appropriate to separate the costs into upfront cost, covering the initial compliance and transaction costs required to achieve certification, and recurrent costs, reflecting the continual investment necessary to maintain certification. Opportunity costs are excluded from the analysis for the time being, as they will be taken into account in the NPV analysis in section 5.3.

5.2.1 Upfront costs

The upfront costs of RSPO certification pertain to:

- Documentation and materials,
- Training and organisation,
- Land assessment (including HCV and SIEA), and
- The certification process itself

Documentation and materials covers the price of setting up documentation of farm management to prove compliance to the standard, pertaining to principle one of the RSPO (Reitberg 2016; RSPO 2013a). Furthermore, it covers the acquisition of group certification documents for the cooperative, hardware acquisitions necessary to implement an Internal Control System (ICS), which is required for group certification of SHs, as well as materials and facilities needed to bring the SHs up to the RSPO standard (RSPO 2009; RSPO 2010; RSPO 2013a).

Table 16 - Documentation and materials costs; avg. cost/ha (€); based on Reitberg (2016)

	SSH	ISH
Farm documentation	1.27	32.44
Group certification doc.	0.91	2.69
Hardware, ICS	3.11	2.73
Materials and facilites	1.29	-
Total	**6.57**	**37.85**

Training and organisation includes organising and training of the cooperatives' SHs in the ICS, training pertaining to the BMP, including training in farm management practices, environmental sustainability, operational health and safety, and financial literacy as required by the RSPO (RSPO 2013a).

Table 17 - Training and organisation costs; avg. cost/ha (€); based on Reitberg (2016)

	SSH	ISH
Organising ICS	0.91	21.46
Training	11.74	89.28
ICS	1.43	24.92
BMP	1.65	9.37
Env. Sustainability	2.56	12.80
OHS	2.19	13.84
Financial lit.	0.27	15.15
Cont. improve.	3.64	13.20
Adminstration	1.59	8.29
Total	**14.24**	**119.02**

Land impact assessment costs relate to the costs associated with the assessment of social and environmental impacts (SEIA) of oil palm cultivation (RSPO 2013a). SSHs are required to conduct full SEIA, documenting all the social and environmental impacts of all the cooperatives operations

(RSPO 2009). ISHs are subject to less strict requirements; in that they merely need to document environmental impacts when replanting or expanding smallholdings (RSPO 2010).

Table 18 - Land assessment costs; avg. cost/ha (€); based on Reitberg (2016)

	SSH	ISH
EIA (incl. HCV assessment)	22.96	2.03
SIA	34.92	5.46
Total	**57.88**	**7.49**

The certification process covers the range of activities undertaken in relation to achieving formal certification, including internal assessments of compliance, pre-audit by a CB, corrective action costs, the certification audit, and RSPO membership fees, as membership is required for certification (Wangrakdiskul & Yodpijit 2013).

Table 19 - Certification process costs; avg. cost/ha (€); based on Reitberg (2016)

	SSH	ISH
Internal assessment	3.64	9.20
RSPO fee	-	0.52
Pre-audit	-	6.21
Corrective action	3.65	9.81
Cert. audit	12.11	15.25
Total	**19.39**	**40.98**

The total upfront costs of RSPO certification for SSH and ISH respectively amount to €98.08 and €205.35. This discrepancy is primarily driven by high documentation costs and steep training costs for ISHs, whom also face higher costs with regards to the certification process itself. These differences can in part be explained by the fact that ISHs usually are less well-organised than SSH (see section 5.1.3), which necessitates larger investments to organise the cooperative. This lack of organisation becomes a double-edged sword, serving both to decrease the productivity and increase the costs of ISHs.

The discrepancy in costs is somewhat lessened by the steep land assessment costs of SSHs, who are not exempt from a comprehensive land assessment on par with that of an industrial estate. However, the cost gap between SSHs and ISHs is further widened by the fact that SSHs are not certified themselves, but are covered by the certification of the Grower to which they are tied, which exempts them from a range of costs associated with the certification process (RSPO 2013a).

It should be noted that in the data of Reitberg (2016), upon which the above cost estimates are based, some ISHs included land assessment costs under farm documentation costs. Consequently, these costs might be slightly misrepresented in the above. However, the overall average cost/ha should reflect the total costs associated with RSPO certification.

5.2.2 Recurrent costs

The recurrent costs of RSPO certification covers the annual costs of maintaining certification. These can roughly be divided into group- and individual costs. Recurrent group costs include the RSPO fee, the cost of annual surveillance audits and, once every five years, the cost of a certification audit (Reitberg 2016). At the individual level, recurrent costs pertain to agricultural inputs, labour, and fees, e.g. for membership of the cooperative (Reitberg 2016).

5.2.2.1 Recurrent group costs

Every five years, the RSPO certification is due for renewal (RSPO 2007a). Certification audits amounts to €12.11 on average for SSHs and €15.25 on average for ISHs (see section 5.2.1). While SSHs are covered by the membership fee of their respective Growers, they still must submit to external auditing.

Beall (2012) collected quotations from registered CBs, pertaining to the cost of the certification process. While some variation occurred with regards to the price of certification audit itself, there was a convergence around €11,000, with respect to the annual surveillance audit. The quotation was for a SH group with a combined area of 1,790 hectares, corresponding to a recurrent cost of €6.15/ha[13].

Membership fees for SHs at the RSPO varies, depending on the size of the SH cooperative. Groups with a combined area of less than 1,000 hectares among their members are subject to a €250 annual fee, while groups with a combined area of 1,000-1,999 hectares are subject to a €1,000 membership fee per annum. Groups exceeding a combined area of 2,000 hectares, a subject to an annual membership fee of €2,000, on par with regular members (RSPO 2016b). Fees are waived for SSHs, who are covered by the membership of their Growers (Reitberg 2016). The ISH cooperatives covered in the study by Reitberg (2016), all covered a total land area less than 1,000 hectares. Correspondingly, the annual membership fee computes to an average of €0.52/ha.

[13] 11,000/1,790=6.15

The annual recurrent group costs are estimated at €6.67/ha for ISH and €6.15/ha for SSH. Every five years, these costs increase to €15.77/ha and €12.11/ha, for SSH and ISH respectively, as the annual surveillance audit is replaced by a certification audit.

5.2.2.2 Recurrent individual costs

At the level of the individual farm, recurrent costs can either increase or decrease as a consequence of certification, depending on the agricultural practices employed prior to certification (Reitberg 2016). For instance, Molenaar et al. (2013) found that every SH plot in their study (n=1,509) showed signs of nutrient deficiency, signalling a subpar application of fertilizer. This was due to fertilizer being applied incorrectly or in insufficient quantities, necessitating either increased investments in fertilizer to increase the dosage or in development of proper management practices and training of labour (Molenaar et al. 2013).

Table 20 - Recurrent costs at individual farm level; avg. cost/ha (€); based on Reiberg (2016)

	SSH	ISH
Herbicides/pesticides	-7.50	-26.00
Fertilizers	50.50	49.33
Labour	0.00	18.00
Cooperative fee	N/A	202.00
Total	**43.00**	**243.33**

The average recurrent costs among the two categories of SHs reflect these realities. ISHs face a larger reduction in herbicide and pesticide costs, signifying the implementation of BMP, in the form of more targeted application of pesticides, where ISHs in particular are prone to over-application of herb- and pesticides prior to certification (Brandi et al. 2013).

The cost of fertilizers is increased by roughly the same amount, which does not correlate with the findings presented above. A possible explanation could be that Reitberg's (2016) data, included a cooperative of ISHs, which became SSHs as a part of the certification process. This group showed significant reductions in fertilizer costs, whereas the other SSH groups only saw limited reductions, if any, in fertilizer costs. Finally, ISHs face a cooperative membership fee, which serves to finance the training and extension services (e.g. weighing of FFB, transportation to a mill, maintenance of infrastructure, and the group's management plan) that are usually offered to SSH by the Grower, to which they are tied (Brandi et al. 2013).

5.2.3 Total costs of certification

In the first year of RSPO certification, SSHs and ISHs face upfront costs of €98.08 and €205.35 respectively. The SHs then enter into five year cycles of recurrent costs, starting with a four-year term exhibiting annual recurrent costs of €49.15 for SSHs and €250[14] for ISHs. On the fifth year of the cycle, the SHs are due for recertification, triggering a higher cost, due to the costs of the certification process. It should be noted that the certification costs are lower than the upfront costs of the certification process, as the recurrent costs assumes compliance with the RSPO standard subsequent to certification, eliminating the costs of internal audits, corrective action, etc. Therefore, the recurrent cost merely increase to €55.11 and €259.10[15] for SSHs and ISHs respectively.

5.3 Net present value of certification

Having estimated the total financial benefits and costs of sustainability certification to SSHs and ISHs respectively, one could assume that the financial improvement to SHs' livelihood from such certification to fall within the range of €388.66-871.95 per annum for SSHs and €391.19-625.05 per annum for ISHs respectively, and that certification would be beneficial to farmers (see appendix B). However, one should to take the opportunity cost of capital, i.e. the pay-offs that SHs could realize by investing in something other than their oil palm plots, as well as the time value of money into account (Brealey, Myers and Marcus 2012). This assessment is achieved by computing the net present value (NPV) of the investment.

The present value (PV) of an investment, is defined as the price that will satisfy both a buyer and a seller of a project at a given point in time (Brealey, Myers and Marcus 2012): In this case, the PV would then denote the incremental price that SHs would be able to realise per hectare through certification, if selling their farms. PV is found by discounting the future cash flows stemming from certification by the appropriate discount rate, which in turn denotes the opportunity cost of capital, by reflecting the realisable returns on investments of comparable risk (Brealey, Myers and Marcus 2012). NPV adds the costs of the project, i.e. certification, to PV. The IFC estimates the discount rate for oil palm investments at 15 % (Molenaar et al. 2010). Applying this discount rate to the cash flows attainable over the lifecycle of an oil palm planting and taking the various phases of the oil palm's yield into account (see section 4.2.1), the NPV for SSHs fall within the range of €808.87-2.106.19, depending on the attained level of productivity increase. For ISHs who sell their CFFB to

[14] 43+6.15=49.15 and; 243.33+6.67=250.00
[15] 43+12.11=55,11 and; 243.33+15.77=259.10

a mill, the NPV of certification falls within the range of €217.58-757.76 depending on the attained level of productivity increases, whereas ISHs, who sell their CFFB through GreenPalm, the NPV of RSPO certification falls within the range of €130.00-646.92 (see appendix B).

Table 21 - NPV (€) by Sh type and yield increase

SH/productivity increase	12%	30%
SSH	808.87	2,106.19
ISH	217.58	757.76
ISH; GreenPalm	130.00	646.92

While no investment exhibits a negative NPV, meaning that RSPO certification is a profitable investment for every type of SH, the value is considerably higher for SSHs, who exhibit in the range of 178-522 %[16] higher NPVs from certification than ISHs, reflecting that the higher nominal yield increases, and the corresponding incremental income, for ISHs is insufficient to offset the disadvantage from bearing the costs of certification without the aid of a larger Grower. Consequently, the RSPO could be said to favour the inclusion of SSHs over ISHs, with regards to financial gains.

5.4 Implications for governance

The favourable business environment for SSH vis-à-vis ISH, carries with it certain implications for the governance of the link between Growers and SHs in the GVC for CSPO, which are examined in the following.

The complexity of the information and knowledge required for a transaction between firms to take place is rather high under the RSPO. Groups of SHs who seek sustainability certification will need to set up a range of support-, quality-, and management systems, to organize internal audit structures and compliance mechanisms, and to demonstrate the reliability of these measures to external auditors and stakeholders (Hidayat et al. 2015). Consequently, knowledge of BMP is of paramount importance in achieving sustainability certification (Brandi et al. 2015). Yet, SHs often lack this knowledge and require external assistance to acquire it (Feintrenie et al. 2010; Hidayat et al. 2015). It has been estimated that it would take 5-10 years to set up effective systems on par with those required for RSPO certification; an assessment which reflect the high complexity of the

[16] (808.87-130.00)/130.00=5.22 and (2,106.19-757.76)/757.76=1.78

knowledge involved (Verburg 2009). It should be noted that ISHs face a somewhat lower complexity than SSHs, due to the simplified P&C requirements (RSPO 2010).

The ability to codify and transmit information between parties seems to be rather high as well. This is reflected in that SSHs exhibit much higher levels of coordination and efficiency than ISHs. SSHs use specialised division of labour, coordinate harvest and transport of FFB, and collaborate to ensure infrastructural maintenance and improvement, whereas ISH cooperatives tend to quit certification, due to the high workload involved in setting up efficient organisations (Brandi et al. 2015). This indicates that the Growers are fairly able to codify and transmit information to their SSHs, e.g. through training in BMP.

The capabilities of the suppliers in relation to the level of capabilities required for the transaction seems to be rather low in the GVC for CSPO at the link between SHs and Growers, as producers have been found to prefer either to set up their own SSHs or negotiate with existing plantations, rather than engage with ISHs (Pichler 2013). As a consequence of this apparent lack of capacity, its becomes easier for SSHs than for ISHs to become certified under the RSPO.

Held in congruence, the three determinant variables for governance indicates that this particular link in the GVC should be governed in a Captive manner, i.e. that governance should be characterised by one-way dependencies of suppliers, high levels of supplier monitoring, and high costs of switching for suppliers (see section 3.1.1). While some of these characteristics do seem to be in place in the governance of the SHs under the RSPO, in that suppliers of CFFB often face a monopsonistic buyer-base (see section 5.1.1) that *de facto* prevents ISHs from switching buyers, Growers are also required to document that they dedicate and expend resources towards the training and certification of their SSH, and they are contractually bound to purchase the CFFB of their tied SSHs (RSPO 2013a; Hidayat et al. 2015). This distribution of gains does not correspond with the Captive mode of governance, wherein the asymmetric distribution of power between the buyer and its supply-base would foretell a distribution of gains skewed towards the buyer, in this instance towards the Grower. Furthermore, the inclusion of SSHs in the certificate of the Grower is reminiscent of the Vertical Integration mode of governance, in that the SSHs are not recognised as an independent unit under the auspices of the RSPO. The explanation for this discrepancy might be found in the notion that other actors, external to this particular link in the GVC, but able to exert

influence upon the institutional framework in which this link is embedded, might leverage said influence to indirectly control the governance of the GVC for CSPO.

6 Underlying power relations at the RSPO

The previous chapter ascertained that the RSPO advances a business environment, which is more responsive to the participation of SSHs, in that the institutional setup promotes a mode of governance at the Growers-SH link, which is financially more beneficial to SSH than ISH. However, this mode of governance place an extraordinary financial burden on Growers, who are made responsible for the certification of their supply base, with no guarantee that they will be able to unload their CSPO, due to relatively low market uptake, leaving producers with an increased financial burden and no security that the investment will result in amplified revenues to cover the incremental expense.

The GVC approach, as proposed by Gereffi, Sturgeon and Humphrey, constitutes an aggregation of inter-firm linkages, wherein a narrow conceptualisation of power limits the scope of the analysis to the power relations between the individual firms at that particular link in the GVC (see section 3.1.1). Such a conceptualisation of power seems inadequate in explaining the identified mode of governance, thus necessitating a broadening of the scope, to encompass the institutional framework wherein the GVC of CSPO is embedded and a wider range of actors capable of influencing the mode of governance at any particular link in the chain. In understanding the emergence of this mode of governance, it becomes necessary to examine the institutional setup of the RSPO itself and the power relations underpinning the governance of the organisation.

The following moves the analysis beyond the vertical dimension of the GVC approach and conduct a horizontal analysis of how various stakeholders seek to influence the RSPO, which interests are most strongly represented in the standard and, by extension thereof, which actors lead governance of the GVC for CSPO. Special attention is given to the invisible exercise of power, operationalised by the conceptualisation of three faces of power (see section 3.2), in order to address whether the RSPO might function as a means of indirect governance of the GVC for certain actors.

This chapter is divided into three sub-chapters, the first of which examines the legislative governance of the RSPO, i.e. how the standard is linked to other standards and actors, and how the organisation is governed. In examining this, special attention is given to how the RSPO was established and which actors were involved in setting the rules of the organisation. The purpose of this section, is to discover the dominant interests, if any, embedded in the basis of the organisation, which could indicate lead actors in the governance of the GVC for CSPO.

The second sub-chapter examines the executive governance of the RSPO, i.e. which tools and mechanisms are brought to bear, to advance and ensure the implementation of the standard. This section concerns itself with the mechanisms and proposed mechanisms, which could affect the Grower-SH link, namely the issue of reducing GHG emissions, the division of SH certification costs along the GVC and the issue of CSPO uptake and premiums, which carries implications for the distribution of gains along the GVC.

The third sub-chapter analyses judicial governance, which represents the manner in which compliance with the RSPO standard is monitored, assessed and enforced. The object of interest in this section is the means of conflict resolution within the RSPO, i.e. the Dispute Settlement Facility (DSF) and Complaint Panel (CP). Specifically, the manner in which these organs operates, the manner in which judgement is exacted, and the possible penalties involved with dissention, and how these aspects reflect the balance of power between interest within the RSPO.

6.1 Legislative governance

6.1.1 The formation of the RSPO

The following section examines the legislative governance of the RSPO, i.e. who makes the rules and how. A particular focus is attributed to the role played by the SCC and the ENGOs in the formation of the RSPO, and the manner in which the SCC were able to implement their own sustainability standards as the cornerstone legislation of the RSPO, maintaining an arm-length control of other actors in the GVC.

The RSPO was jointly founded by the WWF and Unilever in 2004, as a non-profit organisation under the Swizz Civil Code, but work on the roundtable was initiated already in 2001. The WWF was concern over the large deforestation caused by a rapidly expanding palm oil industry in the 1970-1990s and approached the consultant ProForest for advice on establishing a business co-operation model for sustainable palm oil and ProForest helped set up a preparatory meeting for a roundtable in 2002 (RSPO 2002). The meeting was attended by 16 stakeholders in the palm oil industry, representing Processors and Traders, Manufacturers, Retailers, Financial institutions, encompassing the sectors that would come to compose the SCC of the RSPO (RSPO 2002).

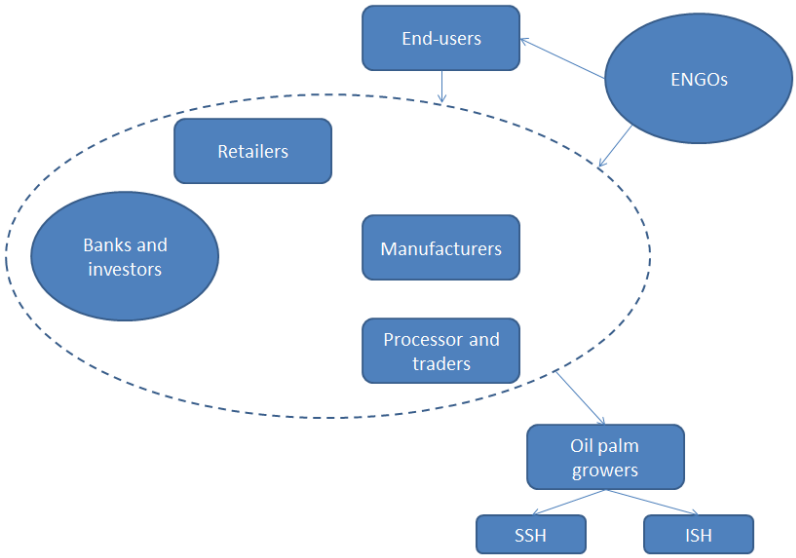
The preparatory meeting defined the purpose of the RSPO as a market-based approach to ensure sustainability in the palm oil industry and set the strategy for the dissemination of the standard, the

role to be played by various stakeholders in the initiative, and how controversy between actors were to be handled (RSPO 2002; Djama & Daviron 2010). In this regard, the role of Growers was a particular point of contention, as the ENGOs were in favour of limiting RSPO membership to downstream actors in the EU, mirroring the structure of Forest Stewardship Council (FSC), which set up by ProForest in 1994 (RSPO 2002; FSC 2016). The SCC argued that a purely European initiative would exert little influence over the GVC as a whole, because a significant proportion of palm oil is consumed in the developing economies of India and China (see section 4.2.2). Therefore, it was argued that "the palm oil round table should not become an activity that is driven by European interests only. Palm oil producers should be the 'custodians' […] of the standards for sustainable palm oil" (RSPO 2002, p. 14). This insistence on the inclusion of the growers in the RSPO, reflects a knowledge of the strong structural position of the Growers in the GVC, underpinned by the relative importance of India and China vis-à-vis the EU in the GVC for CPO.

Prior to the preparatory meeting, the downstream actors Migros and Unilever had independently commenced development of sustainability standards for palm oil, in light of the negative campaigns stressing the palm oil industry's environmental impacts in the late 1990s (RSPO 2002; Pichler 2013). It was argued that a cross-industry consensus on sustainability could apply pressure to Growers for compliance and allow downstream actors to dictate the terms of participation in the GVC (Nikoloyuk et al. 2009). The formulation of the specific P&C of the RSPO did not commence until the Growers, embodied by the Malaysian and Indonesian industry organisations MPOA and GAPKI, joined the organisation in 2004 (Schouten & Glasbergen 2011). A Criteria Working Group (CWG) was established, with the objective of developing the P&C for the RSPO by 2005, i.e. in approximately one year, and with merely two physical meetings during that time (Djama & Daviron 2010). The compact format of the CWG necessitated the neutralization of controversy, if the deadline was to be upheld. Therefore, the role of the CWG was mostly to comment on the proposals submitted by ProForest, rather than submitting their own ideas, making it less of a debate between conflicting parties and more of an assessment of the operationality of the proposed P&C. Thus, the incorporation of Migros' and Unilever's standards into the RSPO was ensured (Djama & Daviron 2010; Cheyns 2011). The ENGOs were able to influence governance in the GVC for palm oil by implementing sustainability standards through the Manufacturers and Retailers of products containing CPO and derivatives, while the SCC were able to establish themselves as the lead actors

in the GVC for CSPO, by interjecting their own sustainability standards into the entry barriers for CFFB cultivators and millers.

Figure 4 - Implementing standards in the GVC for CSPO



6.1.2 Review of the Principles and Criteria

The following section examines the process and outcome of the review of the RSPO P&C, which highlights important mechanisms related to the influence of the NGOs upon the governance structure of the GVC for CSPO, through an indirect application of power against the lead actors of the chain.

The P&C is the central piece of legislative governance in the RSPO, defining the technicalities of the standard and what constitutes sustainable palm oil. It has been the subject of much debate within the RSPO, especially between Growers and NGOs, on a range of issues, including GHG emissions reduction, development on peatland, human- and labour rights. These differences of opinion become particularly evident, during the review and adoption of the revised P&C in 2013 (Adnan 2013).

The revised P&C contained several additions pertaining to the abovementioned issues. For instance, the NGOs lobbied for the inclusion of Free, Prior and Informed Consent (FPIC), which was added to the criteria related to land rights in the revised P&C (namely criteria 7.5 and 7.6), while specific plans and targets for GHG emission reduction were included in criteria 5.7, increasing the entry barriers to participation in the GVC for CSPO (RSPO 2007b; RSPO 2013a). Given that NGOs

account for a mere 3.56 % of RSPO membership (see section 4.1), they seem to have had a disproportionately large influence on the revised P&C. This point seems to be further underscored by the reaction of the Growers to the revised P&C, alleging that it constitutes "technical tariff in the guise of sustainability", that RSPO stakeholders are "overly concerned about the environment (Adnan, 2013). The Growers seems particularly cantankerous with the NGOs, whom they ostracize as the least important stakeholder group, unconcerned with the well-being of oil palm growers, which seems to indicate the disproportionate influence of the NGOs in the review process the P&C.

One explanation of this heavy thumbprint left by the NGOs on the revised P&C, could be that it has been difficult to involve the Growers in its development from the onset. While the P&C primarily relates to the Grower constituency, it was challenging to engage Growers to participate in the formulation of the orginal P&C (Hospes 2011; RSPO EB 2005a). Although this unwillingness to participate does not constitute a deficiency of instrumental power per se, it does signal a reluctance to devote the resources necessary to constructively engage in formulating the P&C. As the GA can only vote on the proposed resolution, and not on amendments to the resolution proposed at the GA, this reluctance to engage in the process of developing the proposed P&C, could offer an explanation to the heavy imprint the NGOs made on the resolution.

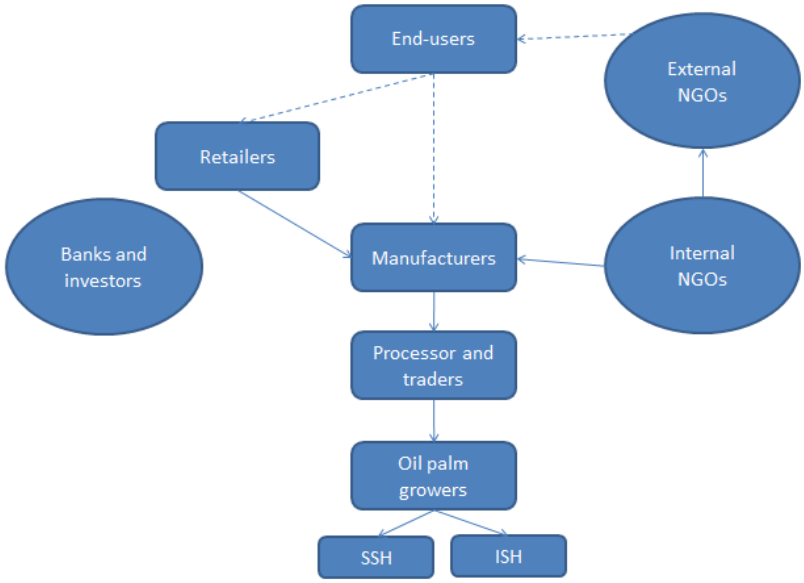
The low dedication of instrumental power to pursue interests on behalf of the Growers cannot account entirely for the disproportionate influence of the NGOs, as these are often faced with resource constraints in their involvement with the RSPO themselves (RSPO EB 2005b; RSPO EB 2006c; RSPO SHWG 2012). However, the NGOs have found a way to mitigate this resource deficiency, by pooling their resources and relying on a few NGOs to be members of the RSPO and advance the broader interest of the NGO community as a whole, allowing the NGOs to apply both internal and external pressure to other interest groups in the RSPO during negotiations (Liswanto 2016; Schouten & Glasbergen 2011, Nikoloyuk et al. 2009).

As noted by Pesqueira and Glasbergen:

> "The political influence of NGOs is enhanced by their ability to transform claims in ways that enable them to gain legitimacy from hegemonic discourses and their capacity to organise within networks or network like structures" (2013, p. 2).

In this regard, it is paramount to consider that stakeholder interaction does not occur in a vacuum, but is shaped through previous encounters that enables actors to secure support from allies, which is crucial to effective intervention in private governance (Pesqueira & Glasbergen 2013). I.e. the fact that NGOs are adept at organising and operating in network like structures bestows them some instrumental power, in that they possess a trait which can be employed strategically to influence the votes of other actors within the RSPO. This relates to the internal/external pressure strategy mentioned above, which enables the internal NGOs to participate in negotiations with the industry, while external actors devote their resources towards procuring evidence for the arguments of the internal NGOs or towards campaigning on the issue to raise public awareness. This in turn allows the NGOs to put pressure on the lead actors of the GVC, by targeting their costumers, thus exerting indirect discursive power over the SCC. For instance, the NGOs where able to secure the support of the SCC, by having external NGOs target the subsidiaries of downstream actors in the EU with negative campaigns against palm oil (Nikoloyuk et al. 2009).

Figure 5 - Application of internal/external strategy by NGOs



The second part of Pesqueira and Glasbergen's assertion of the sources of NGO power in private governance, stems from the adoption of hegemonic discourse. This is reflected in the substitution of SH representation within the RSPO towards NGOs[17]. While SHs formally are categorised as Growers in the RSPO, they have had difficulty raising awareness of their own issues and priorities,

[17] It should be noted that NGOs does not represent smallholders per se. Rather, every constituency represents what they believe to be smallholder interests (Cheyns 2011).

such as land rights (Cheyns 2011). This difficulty arises from what Cheyns (2011) labels as a difference of language, meaning divergence between the data that is accepted as the basis for an argument, and the manner in which it is presented. SHs typically employ micro-level, or anecdotal data, whereas the remaining members of the RSPO refers to macro data, such as global and national statistics. Thus, SHs are often dismissed at the General Assemblies as either being unconstructive or simply off-topic (Cheyns 2011). In this regard, NGOs have been successful in transforming personal attachments into "options", i.e. to adopt the managerial language of the industrial members (Cheyns 2011). This tendency is reflected in the fact, that while the proposed resolutions of the NGOs at the Gas generally impose increased administrative burdens on Growers and the SCC, they are often framed as initiatives that will limit exposure to financial risk at a minimum price, i.e. in terms of cost-effectiveness, adopting the neoliberal discourse employed by the Growers and SCC (RSPO GA 2008; RSPO GA 2013).

The discursive powers of the NGOs can be discerned in that they generally achieve a rather high level of support for their resolutions at GAs (see Appendix C). On average, NGOs achieve 62 % support for their resolutions at the General Assembly, whereas the SCC have achieved an average support of 60 % and the Growers received an average support of 42 %. In addition, the average support for the NGOs is decreased by a pair of significant outliers, one of which was a proposal to intervene in the development on a plantation that was not a part of the RSPO and another, which was a resolution to phase out paraquat, a pesticide for which there exist no viable alternative (RSPO GA 2008; RSPO GA 2012). Cleansing for these outliers, yields an average support for the proposed resolutions of the NGOs of 68 %.

Finally, it should be noted that the reviewed P&C was not the just a product of the NGOs and SCC. While certain contentious parts were included in the P&C, they were (to some extent) made to accommodate the Growers. For instance, the reduction of GHG emissions was made mandatory, but postponed until 31st of December 2016, due to the technical difficulties of GHG emission reduction and the scientific uncertainties of climate change (RSPO 2013a). As the Growers had threatened to quit the RSPO if the reduction of GHG emissions was made mandatory, this compromise indicates on olive branch to the Growers, due to their structural position in the GVC (Nesadurai 2013).

6.2 Executive governance

6.2.1 Greenhouse gas emissions

The issue of GHG emissions caused by oil palm cultivation has been a point of contention within the RSPO from the onset of the organisation. GHG emissions in oil palm cultivation primarily stem from land conversion and land clearance by fire (Danielsen et al. 2008; Gibbs et al. 2008; Fargione et al. 2008). Consequently, the issue is of particular importance to SHs, who often face constraints on the amount of available land and use burning as a cheap method of land clearance (Brandi et al. 2013). The following section analyses the mechanisms put in place to tackle GHG emissions in the palm oil industry, following the thread of the GHG discussion in the RSPO to its culmination with the introduction of RSPO+, which carries significant implications for the governance of the GVC for CSPO. The object of the analysis is the influence of the various interest groups engaged in the RSPO upon these mechanisms shape and the sources of power to the particular interest groups.

GHG emissions and their reduction has been a matter of contention within the RSPO from the onset. While the objective of GHG reductions was included in the original P&C of 2007, the relevant criterion (5.6.) was vaguely worded, stating merely that:

> "Plans to reduce pollution and emissions, including greenhouse gases, are developed, implemented and monitored" (RSPO 2007b, p. 26).

Further indicators to the criterion merely states that an assessment must be conducted on all polluting operation, in order to identify pollutants and emissions, and that plans to reduce these should be implemented (RSPO 2007b). Thus, the RSPO originally did not specify any threshold values for GHG reduction. Indeed, the preamble to the original P&C expressly stated that the further research was needed, in order to ascertain all the issues related to GHG emissions, assess their relevance to the palm oil industry, and, if necessary, develop particular indicators related to GHG emission reductions (RSPO 2007b). The ENGOs objected to this reservation, positing that the research and development of further indicators related to GHG emissions was superfluous, as such indicators had already been developed by third parties and could be adopted by the RSPO. This assertion was refuted by the Growers, stating that the existence of indicators did not necessarily imply scientific consensus on the matter and that further research would be needed, if Growers were to commit to reducing GHG emissions (RSPO GA 2007). Thus, the Growers advanced a discourse predominant among market actors in climate change regulation, positing that climate change and

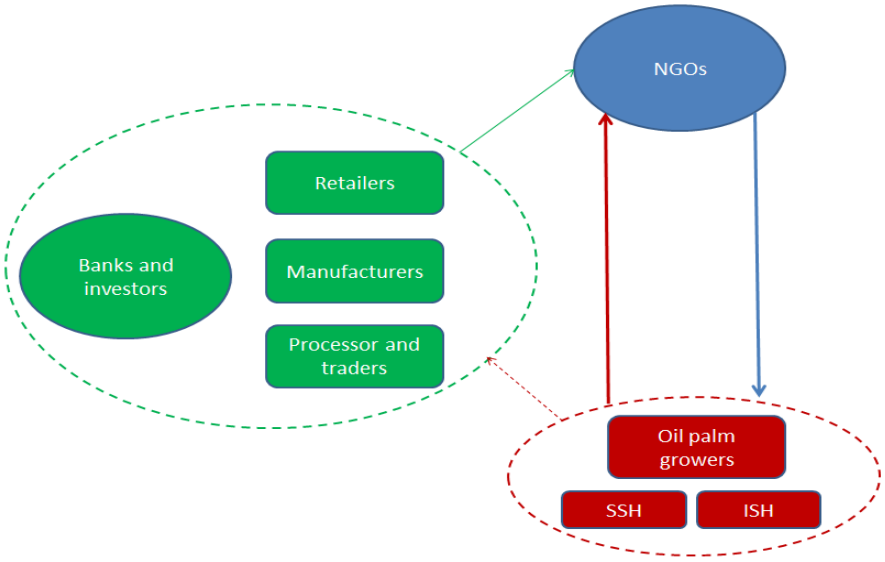
the effect of GHG emissions were uncertain and that more time and flexibility was needed in implementation (Falkner 2010). Nevertheless, their arguments alone were insufficient to sway the other interest groups and some firms ended up threatened to leave the RSPO, if GHG reductions were made mandatory (Nesadurai 2013). Leveraging their structural power, in that no effective decisions can be reached without the consent of the Grower constituency, to whom the P&C relates, the Growers were initially able to effectively block the inclusion of a governance mechanism in the form GHG emission targets.

The discussion was raised again in the EB in 2008, where the SCC proposed to accelerate the implementation of GHG emission reduction requirements to the P&C (RSPO EB 2008). This proposal could possibly had been spurred by the EUs announcement of the 2020 Climate and Energy package, incl. the Renewable Energy Directive (EU RED), purporting a goal of 20 % GHG emission reductions in the EU by the year 2020. While various economic sectors were affected differently by the Climate and Energy package, all were subjected to specific reduction targets. For instance, a 10 % decrease in GHG emissions relative to 2005 levels was imposed upon economic sectors not included under the EU Emissions Trading System, including agricultural products, while biofuels became subject to 30 % GHG reductions (EU COM 2008; EU 2009). It is possible that these initiatives applied external pressure to the SCC, who are primarily based in the EU, to push for the adoption of more stringent GHG emission reduction requirements in the RSPO (Nesadurai 2013).

While it was agreed to accelerate the process, the Growers later renewed the discussion by requesting that the research period on GHG emissions in relation to the palm oil industry was extended by five years, and advised "for the RSPO to be cognisant of the needs of grower members to encourage their involvement" (RSPO EB 2009a, p. 5) , implicitly levelling the threat of Growers leaving the RSPO. The ENGOs opposed the request, stating that further research was not needed (RSPO EB 2009a). As neither side was able to sway the others, the SCC, proposed an evolutionary- rather than a revolutionary approach to solving the issue (RSPO EB 2009a). The evolutionary approach was ultimately incorporated into the P&C in 2013, where it was "recognised that these significant emissions cannot be monitored completely or measured accurately with current knowledge and methodology [and] that it is not always feasible or practical to reduce or minimise these emissions" (RSPO 2013a, p. 30). The Growers were granted until the end of December 2016 to implement measures to mitigate GHG emissions (RSPO 2013a). The demarcation point of this

result seems that the implicit threat of the Growers abandoning the RSPO, pertaining to the structural power of the Growers. A point that is further underscored by the appeal from the SCC to the ENGOs to "engage constructively […] rather than antagonise the growers" (RSPO EB 2009, p. 5a).

Figure 6 - Equal application of discursive power (solid line) between Growers/NGOs is circumvented through the application structural power (dashed line) to the SCC, which add their discursive power to the Growers'



In 2009, the RSPO was deemed unsuitable to cater to European markets for sustainable biofuels under the EU RED, due to insufficient requirements on GHG emissions and documentation on land use change. Thus, the SCC proposed the formation of an RSPO+, as a voluntary addition to regular RSPO certification (RSPO EB 2009b; RSPO EB 2010a). The proposal was initially rejected by the other interest groups, due to a concern that RSPO+ would cannibalise the existing standard (RSPO EB 2009b). By 2015, only the Growers sustained their opposition to the suggestion, which they agreed to retract, contingent on certain criteria, including that the RSPO must not become an inferior standard to RSPO+ and that uptake of RSPO+ CSPO should be monitored and reported (RSPO EB 2015). These demands signal a concern among the Growers that RSPO+ would constitute an arms-length approach for the SCC to impose a new de facto standard, implementing governance mechanisms on issues, which the Growers had previously resisted as being overzealous, such as GHG emission reductions (Adnan 2013). The SCC acquiesced to the demands of the Growers, and consensus was reached on the implementation of RSPO+. As previously, the threat that Growers would leave the RSPO, insofar as RSPO+ became mandatory, seems to have been the

decisive factor in the negotiations, bearing further evidence as to the structural power possessed by the Growers (RSPO SHWG 2015). The implementation of RSPO+ divided the RSPO into a two-tier certification standard, with a higher standard pertaining to CPO intended for bioenergy (2013b). At the time of writing, this dual standard is in the process of being extended into a voluntary additional certification scheme, available to the GVC in its entirety (RSPO 2016e). Despite Grower demands that RSPO+ should not replace regular certification, these voluntary additions to the standard, make up *de facto* market barriers to entry into the EU markets, as GHG reductions are required for sustainable products under the EU Climate and Energy package. Thus, the SCC were able to introduce a parallel certification system, through the application of structural power stemming from their home markets, while waiting for the GHG emission requirements to take effect under regular RSPO certification.

6.2.2 Distribution of gains

As outlined in chapter 5, the cost of SH certification is carried either by the ISH cooperative or the Grower, in the case of SSHs. Levin et al. (2012) estimated that the total certification costs for Growers fell within the range of €9.66-70.07/ha (Levin et al. 2012). Meanwhile, premiums for certified products has largely failed to materialise, averaging at €1.93/MT CSPO from 2011-2015 (see section 5.1.2). With an average yield of 4 MT CSPO/ha for plantations and an increased yield in the range of 0.42-1.23 MT CSPO/ha[18] for tied SSHs, this corresponds to an average incremental income of €8.54-10.09/ha[19] from certification for Growers (see sections 2.4.1.1 and 5.1.3). Thus, Growers are often unable to recover the costs of RSPO certification. The non-emergence of price premiums for CSPO signifies a distribution of gains in the GVC skewed towards the SSC, who obtain CSPO at a relatively low cost. Since the inception of the RSPO, Growers have, unsuccessfully, sought to do away with this distribution of gains.

In 2005, the Growers requested that the implementation of the P&C was postponed, due to the high costs association with implementation, including the cost of preparing SSHs for certification (RSPO EB 2005c). The SCC maintained that members of the RSPO were required to implement the P&C and that any organisation or company, who joined the RSPO, must be committed towards this goal (RSPO EB 2005c). It was argued that implementation of the P&C would not only increase costs, but also generate incremental income from improved productivity (RSPO EB 2005c). While this

[18] 2.12*0.2=0.42 and; 6.16*0.2=1.23
[19] 9.66/4=2.42 and; 70.07/4=17.52

assertion might be true for SHs, as shown in chapter 5, the effect of certification on corporate plantations were less definite, as many corporate plantations were already operating with practices on par with, or very close to, the BMP advocated by the RSPO (Levin et al. 2012). Consequently, the productivity gains from implementing said BMP should be negligible and the incremental income from productivity gains stem from the increased yield of tied SSH, insofar as the incremental palm oil produced is off-taken by SCC actors. However, the Growers accepted the market-based logic that better practices would increase productivity and profits by extension, illuminating the discursive power of the SCC, which made them capable of maintaining an arms-length control over the implementation of the P&C in producing countries (RSPO EB 2005c).

This arms-length control seems to have been maintained in face of prolonged resistance from Growers over the years. At the 5th General Assembly (GA5) in 2006, the Growers suggested that downstream actors in the GVC should cover the costs of auditing, certification and verification for Growers. This resolution was defeated by the SCC, with reference to the anti-trust laws of the EU, which would not allow such a scheme, highlighting the structural power of the SCC, stemming from their home markets (RSPO GA 2006).

In 2009, the Growers put forth a resolution at the 6th General Assembly (GA6), aimed at establishing a mechanism to spread the cost of SH certification along the GVC, so that the SCC would bear a share of these costs (RSPO GA 2009). The resolution passed with overwhelming support, counting 140 votes for, 11 abstaining and merely one vote against it (RSPO GA 2009). The mechanism took the form of the RSPO Smallholder Support Fund (RSSF), which was proposed to the EB by the SCC in 2011 (Liswanto 2016; RSPO EB 2011b). The RSSF can finance up to 100 % of the certification audit and the first annual surveillance audit for SHs, as well as 50 % of the preparation costs leading up to certification, and is applicable to both cooperatives of ISHs and Growers seeking to certify their SSHs (RSPO SHWG 2013a). The fund is financed via 10 % of RSPOs income from the sale of CSPO through GreenPalm and 50 % of any other profits the RSPO might realise in a given year, such as membership fees (RSPO 2016c). Thus, it is debatable whether the RSSF actually spreads the costs of SH certification. While it could be argued that the use of membership fees to finance SH certification spreads cost along the value chain, this model also constitutes a proportional increase in Growers share of these costs. Furthermore, using income from the sale of CSPO to cover certification costs, makes the contribution of downstream actors towards SH certification contingent upon the uptake of CSPO. Hence, it cannot be said that the RSSF

actually spreads the cost of SH certification along the GVC. Rather, the mechanism seems to constitute another example of the market-based logics, from which the SCC draw their discursive power. This assertion seems to be further underscored by the assertion that the capacity of the RSSF in its current form will never be sufficient to cover the needs of ISHs seeking to enter the GVC for CSPO, primarily because ISHs lack the capacity to apply for RSSF financing (SHWG 2012; RSPO SHWG 2013b). Faced with this criticism levelled at the RSSF, the SCC retorted that the mechanism was not meant to certify SHs *en masse*, but rather to ensure that finance would be available to financially viable certification projects, employing the market-based logic that sustainability must be economically feasible (RSPO SHWG 2013b).

In 2012, it was proposed by the NGOs to offer SHs a fixed OER for their CFFB, which was above the average OER for the industry, in order to attract ISHs to RSPO certification through higher income (RSPO SHWG 2012). The growers objected to this decision, arguing that OER should be based on real rates, in order to enable continual improvement in line with RSPOs eighth criterion (RSPO SHWG 2012). This protest led to the adoption of a hierarchy of OERs in 2014, where the real OER would be applied if available, followed by national average OER, and finally by RSPO standard OER (RSPO SHWG 2014). The adoption of this hierarchy of OER, indicates an exertion of discursive power by the Growers, who, in employing a market-based logic for improving OER and income through RSPO certification, were able to convince the other interest groups that standard rates offering a higher initial price on CFFB (to be paid by the Growers) would be detrimental to SHs' incentives to apply for certification, for instance if the RSPO standard rate would be lower than the average national OER (Liswanto 2016). In this, the Growers were able to resists a mechanism that would have shifted the distribution of gains at the Grower-SH link in favour of the SHs.

6.2.3 Excess supply of CSPO

One of the main areas of contention within the RSPO, has been the low uptake of CSPO in the downstream activities of the GVC. As outlined in chapter 5, the uptake of CSPO thus far has not exceeded roughly 50 % of production capacity, which in turn affects the profitability of RSPO certification, by limiting the premium attainable through market-based mechanisms, thus skewing the distribution of gains along the GVC in favour of the SCC (see section 5.1.2). Generally, this conflict has taken the form of a dichotomy, where Growers, including SHs, seek to predict and ensure market demand for CSPO, while the SCC do not see the need for a two-tier market, where

certified products are awarded premiums over non-certified products, because CSPO is the only viable option for downstream actors operating in the EU, due to the demands of their customer base.

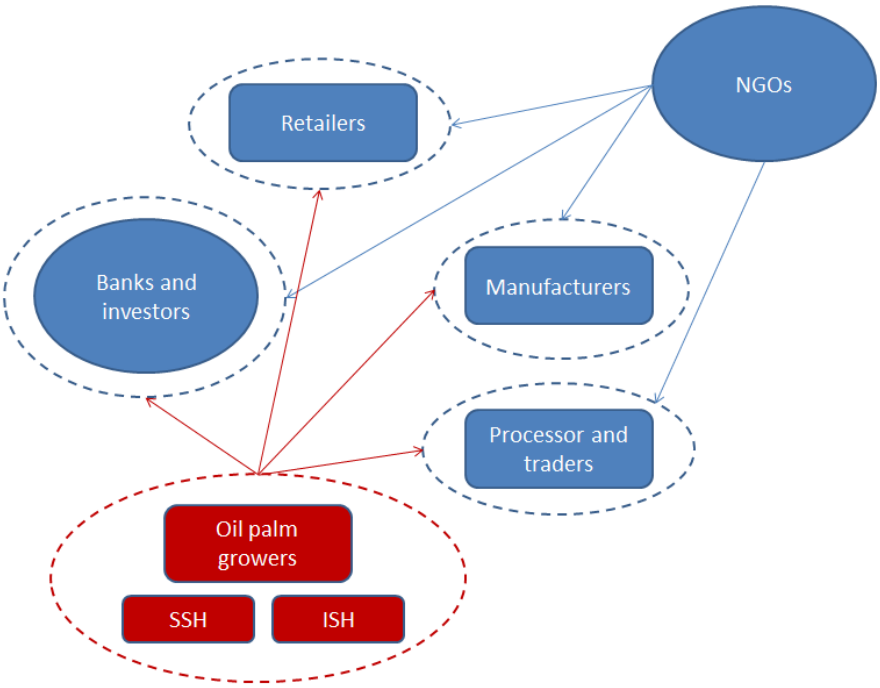
This dichotomy became apparent with the adoption of the P&C at GA4 in 2007, which marked the initiation of CSPO production. The SCC proposed GreenPalm, as a market-based mechanism that could act as a clearing house for the supply and demand of CSPO without reinvesting in industrial infrastructure, i.e. to continue business as usual, without the need to take physical possession of CSPO and reconfigure supply chains (RSPO EB 2007). While the Growers agreed with this market-based logic advanced by the SCC, the NGOs expressed scepticism with regards to this market structure, namely its potential for double-counting (RSBO EB 2007). The SCC counter-argued that the sale of CSPO was about to commence and that it would be advantageous for the RSPO to endorse one system, rather than allow a free-for-all market, where no control measures could be implemented (RSPO EB 2007). By framing GreenPalm as a market-based mechanism, in line with the neoliberal logic predominant in the global climate change regime (Falkner 2010), and as a means of exerting control over the free market by introducing a single platform for free market operations, the SCC were able to facilitate consensus in the EB and implement GreenPalm, signifying a certain degree of discursive power, which enabled the SCC to govern the manner in which CSPO trade would be conducted, and avoid making investment to restructuring the supply chains to accommodate sustainability requirements.

As it became evident that market demand for CSPO did not materialise, a joint resolution was put forth by the Growers and the SNGOs at GA5 in 2008, proposing that RSPO members should specify targets for CSPO production and/or uptake, with time-bound plans on how to achieve said targets, and that these targets should be followed up by publicly available Annual Communications on Progress (ACOP) reports (RSPO GA 2008). The resolution passed with 88 votes for, 8 votes against and 33 voters abstaining, corresponding to roughly 68 % of RSPO members being in favour and merely 0.6 % against, signifying a wide support for the proposal (RSPO GA 2008). However, despite the apparent support for publishing set targets for CSPO, ACOP reports have yet to take off within the RSPO (Schouten & Glasbergen 2011; Pesqueira & Glasbergen 2013).

The debate over accountability for the SCCs in the RSPO system continued through 2009, and at the 7th General Assembly (GA7) in 2010, the Growers proposed a certification system for downstream operations, on par with the P&C applicable to Growers and SHs, raising the entry

barriers for downstream actors seeking to enter the GVC for CSPO (RSPO GA 2009, RSPO GA 2010). The Growers argued that there was a need to verify the progress of sourcing RSPO among the SCC actors, since Growers carried the costs of certification and were unable to recover these costs, because market uptake has failed to materialise, causing price premium to remain low (RSPO GA 2010; RSPO EB 2010b). The NGOs supported this proposal, but the SCC refuted the claims, arguing that their respective value chains were too complex to certify, that they could not force their suppliers to comply with RSPO, and that they were already verifying their uptake through the GreenPalm platform (RSPO GA 2010). The resolution passed with 99 votes for, 68 against, and 20 abstaining, corresponding roughly to 53 % support for the proposal and 36 % against (RSPO GA 2010). The coalition of Growers and NGOs accounted for 70 of the 187 RSPO members present at GA7, equal to roughly 38 %. Correspondingly, 62 % of the present members belonged to the SCC. Votes are cast secretly at the GA, which makes it difficult to ascertain which actors voted which way (RSPO GA 2010). However, as the proposal related to the imposition of more stringent demands on the SCC, it is likely that the end result of the vote was a result of internal division within the SCC, who would otherwise have been able to block the proposal through their majority at GA7.

Figure 7 - Growers and NGOs apply pressure to a divided SCC



6.3 Judicial governance

The RSPO did not originally include any mechanisms for conflict resolution, these were introduced at the behest of the SCC in 2006, with support from the Growers (RSPO EB 2005a; RSPO EB 2006a). The SCC proposed a Code of Conduct (CoC), which would govern the behaviour of RSPO members, particularly with regards to anti-trust guidelines, prohibiting the discussion of minimum prices on CSPO (RSPO 2005a). I.e. the CoC would prohibit the discussions of mechanisms that could redirect the distribution of gains away from the SCC, for instance through minimum prices on CFFB and CSPO. In 2005, the grower company PT Musim Mas, was targeted by negative campaigns from external NGOs, which alleged that the company was in breach of the RSPOs P&C and should have its membership terminated (Schouten & Glasbergen 2011). In light of these allegations, the Growers pushed for the adoption of damage control measures in the CoC, which could prevent reputational damage to the Grower community (RSPO EB 2005d). The SCC conceded this point, suggesting that a 'gentleman's agreement' could be incorporated into the CoC, in order to ensure that critique and conflict resolution would mainly be kept internal in the RPSO (RSPO EB 2005d).

Later, a formal Complaints System was established (RSPO *undated*). This system was composed of two entities; the DSF and the CP (RSPO *undated*). Any conflict must be sought resolved within the framework of the DSF prior to making a formal complaint regarding the conduct of an RSPO member before the CP (RSPO *undated*).

The DSF institutionalises the so-called "gentleman's agreement" of the CoC, providing a mechanism which exists to mediate and promote negotiation between parties, before issues escalate into a formal complaint against an RSPO member (RSPO 2012). The DSF constitutes a mediation mechanism, rather than arbitration, thusly each party to the grievance claim must agree to the proposed resolution (RSPO 2012). Furthermore, the costs of filing a complaint under the DSF, are borne proportionally by the involved parties (RSPO 2012). If consensus on a resolution to the conflict, or progress towards such a resolution that is acceptable to both parties, cannot be reached within a year, then the case can be brought before the RSPO Complaints Panel (CP) as a formal complaint (RSPO 2012). This quiet approach to conflict resolution in the RSPO, could be attributed to the structural power of the Growers, whose consent on the EB was needed to implement the proposed CoC. The Growers originally joined the RSPO to counter critique of their practices by external parties, such as ENGOs, and on numerous occasions has sought to impose rules aimed at

maintaining critique and discussion within the RSPO (Schouten & Glasbergen 2011; RSPO GA 2009; RSPO GA 2012). In that the Complaint System requires grievances to be sought resolved through the DSF prior to making a formal complaint, the mechanism constitutes a limiting factor to the internal/external strategy of the NGOs, thereby limiting their exertion of indirect discursive power over lead actors in the GVC in relation to the settlement of disputes.

The CP is comprised of five members, drawn from the representatives to the ENGOs, SNGOs, Growers, and SCC on the EB (one from each group), as well as an RSPO member, who is not appointed to the EB (RSPO *undated*). An individual CP is convened for each particular complaint and potential conflicts of interests are assessed prior to the appointment of panel members, ensuring that complainants, defendants, or their subsidiaries and business partners, are not represented on the CP, while every stakeholder interest remains present (RSPO *undated*). The CP is mandated by the EP, which is formally charged with resolving disputes and complaints within the RSPO. Consequently, the *modus operandi* of the CP is to deliberate on the nature of the complaint and decide on a resolution by consensus. If consensus cannot be reached in the CP, the case is conferred to the EB (RSPO *undated*). The end product of the deliberations should be a proposal for an action plan, formulating steps to be taken by either party to resolve the dispute and provide sustainable solutions to the core issues of the conflict. Thus, the role of the CP is to provide resolutions not unlike those that might be achieved through use of the DSF. The distinguishing factor being, that the complaint is made public. Only insofar as a member is proven to have "committed or omitted to act in a way that is serious grounds for termination, that member would be required to take action to remedy or resolve the situation to the satisfaction of the [EB]" (RSPO *undated*, p. 4). However, it is neither defined what might constitute serious grounds for termination nor what said actions could entail (RSPO *undated*). The Complaints System of the RSPO constitutes an *ad hoc* dispute settlement mechanism, whose only means of enforcement is the expulsion of members, found to be in breach of the P&C or the CoC.

The only possible sanction within the RSPO Complaints System is the termination of RSPO membership, which is often not invoked, as the RSPO is dependent upon membership for its own legitimacy as a sustainability scheme for the industry (Siagian 2008). As purported by the SNGOs: "there is a higher likelihood of continued poor business practices and disregard for other stakeholders' demands if dissenting members are expelled from the RSPO" (Pesqueira and Glasbergen 2013, p. 300). This apparent deficiency in sanctioning methods, reflects a privileged

position for business interests within the RSPO, as operations in breach of the RSPO rules are seldom penalised (Pichler 2013). For instance, approximately 50 % of RSPO members submit the ACOP reports required by the CoC (RSPO EB 2011a). Correspondingly, 50 % of RSPO members should be in breach of the CoC and these transgressions largely remain without penalty to the transgressors (Pesqueira & Glasbergen 2013). Thus, the Complaints Systems reflect the structural power of Growers, whose acceptance of the decisions of the CP is crucial to the effectiveness of the scheme.

Yet, the CP does confer some power to other constituencies, such as the NGOs, who have been able to intercede successfully on behalf of SHs vis-à-vis Growers on numerous occasions, especially pertaining to the issue of land rights (see for instance Richardson 2010; Khor 2013; Nesadurai 2013). Growers interject against the Complaints System that it transcends the voluntary nature of the RSPO, in that it ascribes land rights to SHs that are more stringent than those of relevant national legislations (RSPO EB 2006a). These rights pertain to criteria 2.2, 2.3, 6.4, 7.5, and 7.6 of the P&C, which held in congruence recognise that SHs may hold legitimate customary rights to land titles, which are not recognised by the national legislation (RSPO 2013a; Teoh 2010). Growers have complained that settlements are sought in such cases, due to indirect pressure applied through the RSPO, from external NGOs targeting the subsidiaries of SCC actors in Europe, when the complaint is made public under the CP (RSPO EB 2006b). Held in congruence with the internal/external strategy of the NGOs, the Complaints System seems to be receptive to the discursive power of the NGOs, in that they are able to apply pressure to members of the CP to sway members their way once a complaint is made public.

7 Discussion

The following chapter discusses the findings of this thesis, the merits and limitations of the employed approach vis-à-vis other studies in the field, and the theoretical implications that can be drawn from the findings of this thesis. It concludes by suggesting areas for further research, based on critique levelled at the RSPO in advancing sustainability in the palm oil industry.

The livelihood approach is a commonly used framework in the examination of SH in the GVC for CSPO/CPO (see for instance Rist et al. 2010; Brandi et al. 2013; Hidayat et al. 2015). In this approach, the resource base available to SHs to improve their livelihoods are measured on an array of capitals, including financial-, physical-, human-, natural-, and social capital (DfID 1999; Utting 2009; Scoones 1998). The cost-benefit analysis conducted in chapter 5 of this thesis, approximates the financial capital improvements to SSHs and ISHs respectively, yet excludes important factors, such as access to finance. The planting of oil palm requires substantial upfront costs, which are exacerbated by the lifecycle characteristics of the oil palm, which does not yield FFB before its fourth year (Brandi et al. 2013). This necessitates the adoption of long-term finance for SHs, which can be difficult for SHs to obtain, due to a lack of collateral (Brandi et al. 2015). For instance, Molenaar et al. (2013) found that a mere 57 % of SHs in their sample held the formal land titles required as collateral to obtain finance from a credit institution. In addition, Hidayat et al. (2015) found that 59 % of SSHs experienced an increase in access to finance subsequent to RSPO certification, whereas 66 % of ISH did not see an increase in access to finance. Finally, Growers are obliged to provide finance to tied SSHs under the RSPO (Marjon et al. 2013). Consequently, including the issue of credit and finance would arguably have skewed the results of the cost-benefit analysis further in favour of SSH inclusion in the RSPO.

The remaining capitals are of a more qualitative nature. While the increase in certain resource bases, such as physical capital, are readily quantifiable, in the nominal value of that proper storage facilities for fertilizers and chemicals required by the RSPO are relatively straightforward to measure, their practical application spill over to other areas, such as human health and safety, which are more difficult to measure qunatitatively (RSPO 2013). These capitals need to be estimated qualitatively and *ex post*, because the effects of RSPO certification on these resources will only be discernable subsequent to certification. Often these effects can take several years to fully materialize (Reitberg 2016). Taking a point of departure in the livelihood approach could have enabled this thesis to achieve a broader overview of the total benefits to SHs from certification, in

that it would include aspects such as improved health, eco-system services, social infrastructure, as well as more opaque aspects of livelihoods, such as the psychological impacts of transitioning from independence to being a de facto wage-earner, in the case of ISH cooperatives converted into SSHs as part of the certification process (Rist et al. 2010). In not taking this approach, but rather focusing on the *ex-ante* expectations of the SHs prior to certification, this thesis contributes to the existing literature by examining an existing differential in the distribution of gains in the GVC for CSPO, in the Grower-SH link, shedding light upon the institutional structures, which might account for the observed limited certification of ISH. Furthermore, it is recognised that the conclusions of this thesis does not provide an exhaustive account the underlying mechanisms causing the puzzling distribution of gains at the Grower-SH link. For instance, Levin et al. (2012) found that a contributing factor to Growers seeking RSPO certification, was reducing social conflict between plantations and SHs, which could have significant impacts upon the profitability of plantations, as a four day disruption of operations due to social conflict implies potential losses of up to €960,000[20], a prospect that could cause Growers to mitigate that risk through RSPO certification.

The finding that the institutional framework provided by the RSPO favours SSHs is puzzling, in that the revised GVC theory, as developed by Gereffi, Humphrey and Sturgeon (2005), seems insufficient to provide a theoretical account for the distribution of gains at the Grower-SH link in the GVC for CSPO (see section 3.1.1). While GVC analysis does acknowledge the potential impact of the institutional environment, in which a GVC is embedded, upon the governance of the chain, its focal point remains the vertical, inter-organisational dynamics of the GVC. The result is a narrow conceptualisation of power in-between firm actors, which largely ignore the influence of non-firm actors on the overall governance of the GVC (Bair & Palpacuer 2015).

The ability of more conventional approaches to commodity chains, such as World Systems theory and the GCC approach, to address this issue is debatable. World Systems theory concerns itself with the international distribution of labour, which forms the global economic system (Bair 2005). The focal point of the approach lies in the examination of the manner in which commodity chains generate and reproduce stratified and hierarchical world systems of production between, but beyond the confines of, nation-states (Bair 2005). Thus, World Systems theory constitutes a largely historical approach to commodity/value chain analysis, wherein the object of investigation is the global construction of capitalism itself, rather than its constituent parts, such as specific GVCs and

[20] USD 1,056,000*(1/1.1) = EUR 960,000

much less particular linkages in such chains (Bair 2005). While such an approach could be useful, for instance in examining the apparent North-South divide in the GVC for CSPO, it neither seems suitable nor capable of providing viable explanations to the mechanism underlying the puzzling setup at the Grower-SH link.

Arguably, the inherently narrow conceptualisation of power in the GVC framework could arguably be mitigated by reverting to the original GCC approach formulated by Gereffi and Korzeniewicz (1994). However, the dyadic conceptualisation of governance as either producer- or buyer-driven, relates to the characteristics of the industry, omitting the various stakeholders surrounding the chain (Gereffi and Korzeniewicz 1994). This carries two implications. First, the dichotomy denotes that either buyers or producers will be the lead actors in the GVC, depending on the value-adding activities of the particular industry, and that the remaining actors in the GVC occupy a captive position vis-à-vis the leading actor(s). However, this account of power relationships between actors seems insufficient, in that occupying a leading position in the GVC "does not necessarily mean that buyers have automatic power over their suppliers. The unequal distribution of power only signifies the greater degree to which one party […] may influence the conduct of others" (Tokatli 2007, p. 2). Due to this implication, the dyadic approach to governance promoted in GCC theory seems inadequate in explaining the power of Growers relative to the SCC, which has enabled them to decrease or postpone proposed entry barriers, for instance during the review of the P&C in 2013, and even to impose barriers to entry upon the SCC in 2014. Second, the distinct focus on the characteristics of the industry, omits stakeholders surrounding the GVC, who might possess the ability to impact governance structures in the industry, from the analysis. Consequently, the approach seems unable to effectively analyse the power relationships underpinning industrial governance regimes in the multi-stakeholder initiatives that have emerged since the turn of the century (Bitzer et al. 2008; Beall 2012).

The Separation of Powers approach solves these issues, as the approach opens up the analysis to include actors external to the value chain itself and directs attention to the exercise of power by the associated stakeholders (Tallontire et al. 2011). In their application of the approach, Tallontire et al. (2011) devotes special attention to the invisible exercise of power, corresponding to the discursive face of power in the conceptualisation of Fuchs (2007). The inclusion of this conceptualisation of the exercise of power, enabled the analysis to detect the indirect influence exerted by NGOs through the internal/external strategy, which applied pressure to lead actors in the SCC through their

costumer-base. However, it would have been unable to capture the exercise of power stemming from market structure, which characterise Grower involvement in the RSPO. By operationalising the approach using the conceptualisation of Three Faces of Power, the analysis become more nuanced, allowing for a deeper understanding of the power relationships that underlie the governance regime for the GVC of CSPO.

The emergence of multi-stakeholder initiatives and private governance arrangements, such as the RSPO, is often attributed to the absence power of the nation-states relative to MNCs, especially with regards to transnational issues, including sustainability and climate change (see for instance Wahl & Bull 2013; Beall 2012; Djama et al. 2011). In this regard, the RSPO has been criticised for not applying a sufficiently strict framework to promote sustainability in the palm oil industry, to the detriment of environmental conservation and the efforts to mitigate climate change (see for instance McLaughlin 2011; Richardson 2010; Laurance et al. 2010). However, others have argued that the implementation of sustainability standards should take the overall impact of the standard into consideration, rather than merely considering the sum of its constituent parts, e.g. the severity of its sustainability requirements (Wormslev et al. 2016). Thus, while the criticisms levelled at the RSPO do seem to carry some merit, in that the RSPO, for instance, does not require GHG reductions from its members thus far, they should be weighed against the relative success of the RSPO. Since its inception in 2004, the RSPO has achieved a market share in terms of production of 21.9 % in 2015. For comparison, the more strict FSC, has attained a market share of 8 % in terms of production in 2015, since its inauguration in 1994 (FSC 2015). Consequently, the overall sustainability impact of the RSPO could be larger than that of the FSC. Future research might examine this issue by conducting comparative analysis of the relative and actual impacts of sustainability standards, in order to assess the appropriateness of the evolutionary vis-à-vis the revolutionary approach to sustainability.

8 Conclusion

This thesis set out to explore how the institutional setup of the RSPO incentivise SSH and ISH respectively to seek certification, and how these incentives impact the governance structure at the Grower-SH link in the GVC for CSPO. The objective of the thesis was informed by the increased global awareness of the unsustainable practices in oil palm cultivation over the past decades, which contributed to the emergence of the RSPO in 2004, and the structural importance of SHs in the GVC for CPO, who account for approximately 35-40 % of global palm oil production. The distinction between SSH and ISH was caused by their separation in the institutional setup of the RSPO, wherein they are ascribed a different set of responsibilities and requirements, which might impinge upon the mode of governance found at the Grower-SH link.

As studies, have found that the primary motivation of SHs engaged in oil palm cultivation is financial gains, the institutional setup was subjected to a cost-benefit analysis, aggregating the costs and benefits of RSPO certification to average SHs already involved in oil palm cultivation. The financial benefits of certification, including market access/structure, price premiums on certified products, and productivity increases, were assessed and contrasted to the costs of certification, including upfront- and recurrent costs. Finally, the result was subjected to an NPV analysis, in order to determine the value of RSPO certification to SHs over the lifetime of an oil palm planting, taking opportunity costs and the time value of money into account.

The results of the NPV analysis showed that SSHs realised a financial gain from RSPO certification in the range of €808.87-2,106.19 over the 25 years of an oil palm plantings lifecycle, whereas the NPV of RSPO certification for ISHs fell within the range of €130.00-757.76, depending on a range of parameters, including market access, attained price premiums on CFFB, and the realised level of productivity increase. Neither type of SH experienced negative NPVs in any scenario, indicating that RSPO certification would be a better investment than the available alternatives to both types of SH. However, the NPV of RSPO certification for SSHs was found to be 178-522 % higher than the best and worst possible outcomes available to ISH. This difference in the attainable NPV is underpinned by a wide array of parameters. First, the monopsonistic market structure facing SHs in oil palm cultivation is biased towards ISHs, in that Growers tend to favour SSHs in times of low demand for FFB. This bias is further exacerbated by the institutional setup of the RSPO, wherein Growers are obliged to purchase the produce of their tied SSH. While virtual trading of CFFB has been made available to ISH, which allows them to circumvent the need for physical transactions

with certified buyers to attain premiums. However, the uptake of CSPO in end-user markets has been insufficient to produce substantial premiums, which can offset the observed market bias. Second, ISHs have been found to be less efficiently organised, and to use inputs of a lower quality than SSHs, resulting in a productivity differential between SSHs and ISHs prior to RSPO certification. While the BMP stipulated in the RSPO P&C results in steeper productivity increases for ISHs than SSHs, these are insufficient to close the existing gap. Third, the upfront costs of certification are generally steeper for ISHs than for SSHs, due to the aforementioned deficiencies in organisation and production methods. A fact that is aggravated by ISHs lack of extensions services and support, which Growers are obliged to offer to tied SSHs under the RSPO. Finally, SSHs does not constitute formally independent units under the auspices of the RSPO. Thus, they are covered by the certification of their Grower, which exempts them from a range of costs associated with certification. Given these differences, the institutional setup of the RSPO could be said to favour the inclusion of SSH over ISH in the GVC for CSPO, by providing an institutional setup which confers higher financial incentives to, and is more supportive of, SSH.

This institutional setup carries with it important implications for the governance of the GVC in the link between Growers and SHs. The complexity of information and knowledge required for a transaction to take place between firms is rather high under the RSPO. As is the ability to codify and transmit information between parties, while the capabilities of the supplier, i.e. the SHs, seems to be rather low. Consequently, conventional GVC analysis would predict that the Grower-SH link should be governed in a Captive manner, reflecting a governance structure characterised by one-way dependencies, high levels of supplier monitoring, and high switching costs for suppliers, i.e. SHs. While some of these characteristics seems to be fulfilled, the distribution of gains that would normally correspond to such a governance structure fails to materialise, in that Growers are required to finance SSH activities and purchase CFFB of their SSHs. This in turn translates to a distribution of gains in the link, which is skewed in favour of the supplier, i.e. the SHs, which does not correlate with the Captive mode of governance. Thus, conventional GVC analysis, with its focus on inter-firm linkages, seems insufficient in providing a theoretical explanation for the mode of governance observed at the link.

As a consequence of this discrepancy between theory and findings, the analysis was expanded to include a wider range of actors in the GVC, in order to examine the power relationships underpinning the institutional setup in the GVC for CSPO. These actors were loosely grouped in

three distinct interest coalitions; the SCC, representing the downstream actors of the GVC; the Growers, representing the upstream actors of the GVC; and the NGOs, who, while formally external to the GVC, possess the ability to influence the institutional framework wherein it is embedded, through their membership of the RSPO.

The analysis found that while the RSPO was established at the initiative of the NGOs, the SCC were able to imprint their own sustainability standards onto the P&C of the RSPO, by setting the terms of CWG, tasked with developing said P&C. Thus, the SCC were able to dictate entry barriers to Growers seeking to participate in the GVC for CSPO, signalling that the leading interests, or actors, of the GVC could be found in the SCC. This conclusion is further underscored by four points. First, the fact that the SCC, through the exertion of structural power, were able to impose a voluntary additional standard, in the form of RSPO+, which would govern access to the EU markets. Given that the lion's share of CSPO is sold in said markets, this voluntary addition to the RSPO serves as a *de facto* increase of the entry barriers imposed on Growers engaging in the GVC for CSPO, by introducing required GHG reductions as well as documentation of land use and –conversion, which the Growers had previously resisted. Second, through the application of discursive power, the SCC were able to govern the manner in which CSPO were to be traded, ensuring that SCC actors would not be required to invest in the reconfiguration of supply chains to accommodate physical trade in CSPO, thus tilting the distribution of gains in the GVC in their favour. Third, through the application of discursive power founded in market-based logics, the SCC has been able to withstand numerous attempts by the Growers to reconfigure the distribution of gains in the GVC. Finally, through an application of structural power stemming from their home markets, the SCC were able to impose a CoC in the RSPO, which prohibited the discussion of minimum prices, further strengthening the distribution of gains in favour of downstream actors.

While a picture emerges of the SCC being the leading interest coalition of the RSPO, one should be cognisant of the fact that this does not bestow absolute power unto the coalition. Indeed, the role of leading actor merely confers a privileged position vis-à-vis other actors in the GVC, who compete for influence over the governance of the GVC. In this regard, it should be kept *in mente* that power is not a resource, which can be stockpiled and spend at will, but a dynamic process. This assertion carries two implications. First, the lead actor might not always be able to impose their will upon other actors in the GVC. Second, other actors might in certain situations be able to exert influence over the lead actor. Thus, the Growers were initially able to resist pressure from the SCC and the

NGOs to implement GHG reduction targets in the P&C. This was done through the use of structural power, conferred to the Growers by the structure of the international market for CPO and CSPO, where increasing demand for CPO in India and China provide the Growers with the ability to 'vote with their feet', and leave the RSPO. Moreover, the Growers to resisted attempts to reconfigure the distribution of gains at the Grower-SH link further in favour of the SHs, through the use of discursive power. Finally, through the application of discursive power and with help from the NGOs, the Growers were able to impose entry barriers upon the SCC, in the form of a certification system for downstream actors.

The NGOs have been able to impart a heavy thumbprint on the governance of the GVC for CSPO, through their influence upon the GVCs institutional setup, embodied in the RSPO. This influence stems from a strategy designed to bypass the limitations on instrumental power faced by the NGOs. This strategy involves a two-fold application of discursive power, where NGOs internal to the RSPO engage in negotiations, seeking to persuade the other interest coalitions, while external NGOs apply discursive power to the end-users in EU markets, thus applying indirect pressure on the lead actors in the GVC. Consequently, a picture emerges showing the SCC as the lead actors of the GVC, imposing entry barriers upon the Growers and guarding the distribution of gains. However, through the application of indirect power, the NGOs are able to exert a certain degree of influence over the SCC. The NGOs originally initiated the RSPO to counter the unsustainable practices in oil palm cultivation, which has become apparent over the past decades. As SHs are structurally significant in the cultivation of oil palm, accounting for 35-40 of global production, their inclusion is paramount to the success of RSPO in making the industry sustainable. The puzzling mode of governance observed in the Grower-SH link could be explained by the underlying power relationships of the RSPO outlined above, in that SCC and NGOs promote an agenda of increased sustainability of the industry, and are able, to a certain extent, to impose their will upon the Growers.

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Appendix A – Price premiums from GreenPalm

The data on price premiums was extracted from GreenPalm (2016c) and converted from USD to EUR, applying the exchange rate of USD 1.1/EUR 1, as outlined in section 2.4.1.1. The additional three months on every year, marked by '*', denotes a period available Traders and Processers, Manufacturers, and Retailers to balance the books, insofar as they have bought too many/few CSPO certificates relative to their realised palm oil consumption that year (GreenPalm 2016c).

Month/year	2011	2012	2013	2014	2015	2016
January	5.34	4.25	2.89	3.31	4.38	4.37
February	6.60	2.16	2.37	2.75	3.42	3.28
March	4.27	1.97	2.02	2.52	2.28	2.53
April	3.00	1.84	1.96	2.29	1.86	2.11
May	2.95	1.71	2.00	1.98	1.47	1.71
June	1.63	1.75	2.00	1.76	1.17	1.11
Juli	1.05	1.82	2.17	1.58	0.85	1.61
August	0.65	2.55	2.73	1.42	0.83	2.15
September	0.57	2.88	2.41	1.31	0.78	1.81
October	0.32	2.59	2.49	1.08	0.67	-
November	0.90	1.53	2.42	0.86	0.36	-
December	1.16	2.21	2.20	0.64	0.25	-
January*	1.60	2.08	1.31	0.55	0.38	-
February*	0.95	2.06	1.09	0.27	0.27	-
March*	0.79	1.43	1.64	0.10	1.42	-
Average	2.12	2.19	2.11	1.49	1.36	2.30
Total average						1.93

Appendix B – NPV analysis

Assumptions		
Recurrent cost	*SSH*	*ISH*
Normal	-49.15	-250.00
Cert. Year	-55.11	-259.10
Discount rate*	15%	15%
Growth/yr. in Yield-Building Phase	33%	33%
Decrease/yr. in Decline Phase	8.34%	8.34%
***Based on Molenaar et al. (2010)**		

	SSH 12 %	SSH 30 5	ISH 12 %	ISH 30 %	ISH 12 %; GP	ISH 30 %; GP
Year	CF	CF	CF	CF	CF	CF
0	-98.08	-98.08	-205.35	-205.35	-205.35	-205.35
1	-49.15	-49.15	-250.00	-250.00	-250.00	-250.00
2	-49.15	-49.15	-250.00	-250.00	-250.00	-250.00
3	-49.15	-49.15	-250.00	-250.00	-250.00	-250.00
4	-49.15	-49.15	-250.00	-250.00	-250.00	-250.00
5	89.37	248.85	-36.74	29.66	-47.51	16.04
6	239.81	558.78	194.72	327.53	173.18	300.28
7	388.66	871.95	423.81	625.05	391.19	583.76
8	388.66	871.95	423.81	625.05	391.19	583.76
9	388.66	871.95	423.81	625.05	391.19	583.76
10	382.70	865.99	414.71	615.95	382.09	574.66
11	388.66	871.95	423.81	625.05	391.19	583.76
12	388.66	871.95	423.81	625.05	391.19	583.76
13	388.66	871.95	423.81	625.05	391.19	583.76
14	388.66	871.95	423.81	625.05	391.19	583.76
15	382.70	865.99	414.71	615.95	382.09	574.66
16	388.66	871.95	423.81	625.05	391.19	583.76
17	388.66	871.95	423.81	625.05	391.19	583.76
18	388.66	871.95	423.81	625.05	391.19	583.76
19	388.66	871.95	423.81	625.05	391.19	583.76
20	382.70	865.99	414.71	615.95	382.09	574.66
21	352.14	795.11	367.60	552.05	337.70	514.20
22	318.66	724.68	316.08	485.14	288.67	450.45
23	287.98	660.12	268.85	423.81	243.73	392.01
24	259.85	600.95	225.57	367.60	202.54	338.45
25	234.07	546.72	185.89	316.07	164.79	289.36
NPV	808.87	2,106.19	217.58	757.76	130.00	646.92

*GP = GreenPalm

Appendix C – Support for RSPO interest coalitions the General Assembly

Data was extracted from the minutes of RSPO General Assemblies 1-10; excludes resolutions set forth by the Secretariat to the RSPO.

NGOs	For	Against	Abstain	Total votes	Relative support	Year
Funding for project	40	5	46	91	44%	2006
staggered terms for EB members	79	8	4	91	87%	2006
Annual progress communications	88	8	33	129	68%	2008
3rd party verification of new plantings	80	0	6	86	93%	2008
Halt development in Leuser ecosystem	38	30	61	129	29%	2008
Moratorium on land clearance in Bukit Tigapuluh	64	29	58	151	42%	2009
Establish WG for existing plantations on peatland	95	4	22	121	79%	2009
HCV in non-primary forests	114	61	12	187	61%	2010
All members submit time-bound plans	239	92	18	349	68%	2012
End the use of Paraquat	106	226	12	344	31%	2012
Clearer separation of roles in DSF	147	57	12	216	68%	2013
Transparency in concession boundaries	145	68	3	216	67%	2013
Average support					61%	

Supply chain constituencies (SCC)	For	Against	Abstain	Total votes	Relative support	Year
CSPO ambasador	16	21	0	37	43%	2004
Code of Conduct	66	9	19	94	70%	2006
Committe on Biodiversity	69	14	8	91	76%	2006
Require the presence of all constituencies to reach quorum at GA	130	211	6	347	37%	2012
Electronic/internet voting at GA	157	55	4	216	73%	2013
Average support					60%	

Growers	For	Against	Abstain	Total votes	Relative support	Year
Buyers pay for cert.	21	56	14	91	23%	2006
Reduced fee for growers up to 499 ha	81	17	3	101	80%	2007
Develop mechanism to ensure CSPO is bought*	66	57	29	152	43%	2009
Indirectly involved members must promote CSPO	61	64	27	152	40%	2009
Establish mechanism to spread cost of smallholder cert.	140	1	11	152	92%	2009
Establish system to spread cost of NPP	62	60	30	152	41%	2009
Protocol for P&C amendment	52	60	40	152	34%	2009
Rotating presidency	62	64	26	152	41%	2009
Formal process for P&C review	85	60	42	187	45%	2010
Establish WG to review structure of EB; ensure balance	104	66	17	187	56%	2010
Certification system for supply chain	99	68	20	187	53%	2010
Proportionate representation by weightage at GA	101	239	6	346	29%	2012
GA elect president**	95	248	4	347	27%	2012
Amend statutes to remove ambiguity in governance	97	246	4	347	28%	2012
Moratorium on certification**	44	296	6	346	13%	2012
Create TNC constituency	132	208	1	341	39%	2012
Amend CoC: Members must abstain from association with critics of CSPO	46	145	25	216	21%	2012
Average support					42%	

*Adopted after recount

**Three votes were spoilt

Appendix D – Interview: Liswanto, Darmawan

Hello.

Hello mr. Darmawan, this is Nicolaj Skou.

Yeah.

Hi. Thank for taking the time to speak with me.

Oh, yeah, yeah…

Is this a bad time?

Hello?

Hello? Can you hear me?

Can you wait a second? I need to fix my… headboard?

Sure.

Hello?

Hello.

Ah, yeah

So, it's working now?

Yeah.

Okay... Well, good morning and thank you for taking the time to speak with me. First of all, I should inform you that I will be recording this conversation because I will be required to submit written transcripts with my thesis. I hope that is okay with you?

Okay, yeah.

Of course you are welcome to state if you wish some elements of our conversation to be off the record, I will omit those from the transcript and if you wish to remain completely anonymous, I can arrange that as well.

Okay.

Is that acceptable to you?

Yeah, yeah.

Okay, thank. So, I'm investigating the conduciveness of the RSPO for Smallholder participation with special attention to the financial impacts from certification and why the standard has assumed the current form it has. This means that our conversation to will primary relate to the reasons behind various proposals concerning smallholders in the RSPO and their acceptation or rejection. So now that we've covered the basics, I think we're ready to proceed, unless there is anything you would like to interject, if you have any time constraints we should take into consideration or something like that?

Uhm… yeah. I have about an hour.

An hour?

Yeah.

That should be sufficient.

Okay.

So first, could you tell me a little bit about yourself and the work you do pertaining to the RSPO?

I have been a formal member of the smallholder working group (SHWG), representing Flora Fauna International as a member of RSPO. And also served formerly as alternate member on the Board of Governors of RSPO.

Okay…

Also, representing an NGO and then a refiner, Titian. I represented a Titian because I had a position of program director at the time. And then I changed to FFI and FFI joined RSPO in 2007. I think that is all.

That all? Okay. So you've been around in the RSPO system. That actually leads very nicely to the next question I have. How much and how are smallholders represented in the work of the RSPO? In general and in the SHWG?

Actually, RSPO has a.. what… a mechanism, yeah, to set up the working group, task force. There will sufficient representatives to the working group and member of task force. I think the easiest then of how active is the representative during the meeting or attending the meeting – there is issues. So, I forget the numbers, but for example for the task force for national interpretations, the RSPO regulations {?} that there is three smallholder representatives that be a member of the task force. So… I think there is already in the Code of Conduct, something like that, and a mechanism that the RSPO is already setting the compositions of the working groups or a task force or even the committees.

Okay. And who are the smallholder representatives? Are they smallholders themselves or are they representatives from large organisations?

Uhm... There is variations on that. Like in SHWG there is representatives from the smallholders themselves, but also, they is, are, representing the smallholders, but actually they are NGOs or an association of the smallholder, like in the case of Indonesia.

In 2013, the SHWG discussed to form a smallholder constituency within the RSPO, in line with for instance Environmental NGOs, but decided against it. Do you remember why?

Which one? In 2013… in.. in which? Constituency on what?

A smallholder constituency. So, an interest group within the RSPO, in line with, for instance Environmental NGOs or Growers and Millers. But it was decided against. It was just if you remember why that was?

I do not remember of that. If there is a resolution, I think it is mostly about the flooding issues.

The what issues?

I don't remember this. Is this a resolution or just a discussion within a RSPO working group or task force?

It was just a discussion in the SHWG.

Aha, in 2013?

Yes.

Let me check. I think I still keep some meeting… A constituency means that there is a representative of the smallholder or what? Or membership?

In membership.

In the membership? I think, mostly about the issue of the membership, within the RSPO, the discussion as far as I am aware, is about the… what we call a membership fee. There is a proposal to waive membership fee, but it's not acceptable. The RSPO at the time, had the reason that the membership fee for a smallholder is already… is the lowest one, compared to the other membership category. So it's not objecting the smallholder become a member, but in fact, there is a member from smallholder group.

That actually brings me to another point, because at some point, also in 2013, the EB suggested a two-tier fee structure for smallholders, where smallholders with less than 1,000 hectares in their group in total would pay €250 and above that would pay the full membership fee of €2,000. Ob…

Sorry, you are breaking up.

Okay, can you hear me now?

I think I may have a poor connection… Can you repeat that?

Yeah. Also in 2013, the EB suggested a two-tier fee structure for smallholders, where a smallholder group with less than 1,000 hectares in total would pay €250 and above that they would pay the full membership of €2,000. Obviously, that is not the fee structure that's in place today, so I was just wondering how that come to be, why this proposal was rejected and the intermediate fee of €1,000 was introduced?

There is an issue of… what.. not only the definition of the smallholder, but also the land right issues as well. It's different within countries. Fx. in Indonesia a single smallholder can only have a maximum of 2 ha of land. They cannot have more than 2 ha, that's the regulations here. And then if we look at, on the ground, the smallholder, oil palm smallholder only have maybe between of… mostly, we can see less than 2 ha actually, per plantation, per family. On the other hand, there is, like in Latin America, one person can have maybe a 500 ha, something like that, or more than that, so […] a group. We are talking about a group, not individual?

Yes.

The size of plantation first depend on the number of the group members, second also will depend on the regulation of the country, the right to have or to own land, which is different within countries. In this case we need to have more clearly defined what actually we want to call smallholders. Is it proper to say that a person with, say 50 ha of land, is a smallholder? Or maybe we should categorize them as part of the outgrower?

Okay.

So, I think we should categorise them as outgrowers, because most of the categories say that if you have more than 100 ha with the good supply chains' certificate, then you have actually a good business in oil palm. So actually, we need to distinguish between a smallholder group and an outgrower group to define that.

So for instance the smallholder you mentioned with the 50 ha, he would be considered an outgrower and not a smallholder?

Oh yeah, yeah.

Initially, the task force on smallholders considered doing a specific P&C document for smallholders, but ended up doing adaptations of the original standard. Do you know why this was done? Why they abandoned the idea of a specific P&C?

No, I think that […] now we have […] group certificates instead, specifically for smallholder and that meanings that group certification there would be… as long as I'm aware… there is some exceptions for the smallholder to be waived for certain criteria and indicators pertaining to the P&C, because some indicators actually is not applicable for the smallholder themselves.

Okay…

So, I myself think that it become critical in the group certifications saying this criteria and this indicator is not applicable for the smallholder, actually, we are thinking for the specific P&C for the smallholders. You don't need to fill up to some specific P&C document, which is actually delineating some indicators from the original one. Why?

Well, that is a very good point.

Well, it depends on how… certain indicators are just not applicable, that's all.

Okay. So, this actually leads us to my next point, which is the simplified HCV procedure for smallholders. I stumbled upon a comment in one of your meeting minutes, that it should be applicable to both independent and scheme smallholders, but in the final document it specifically states that schemes smallholders are to conduct regular HCV assessments.

Yes, yes.

Do you know why it was not made applicable to scheme smallholders?

Because the scheme smallholder should be the responsibility of the company.

Of the company?

Yeah, so the HCV assessment of the scheme smallholder should be part of the HCV assessment of the company.

Okay and that was the main argument for…

Yes. Yes, because it separates responsibility of the company, because the schemed smallholders are actually planting in the area of company plantations, so they are part of the concession of the company, so you cannot differentiate between the company and the scheme smallholder, because they are in one landscape. In one area, in one landscape, so it should be part of the HCV assessment by the company. So the schemed smallholder area will be part of the HCV assessment area for the company as well.

Okay. Do the companies agree with that argument?

Yes. Yes, because it clearly says so in the P&C and in the other decisions as well.

Originally, smallholder were exempt from doing HCV assessments, due to the high technicality of it. Why was this changed?

Why did we introduce the simplified one, you mean?

Yeah, why did you introduce the simplified HCV procedure for smallholders, when originally they were exempt from doing these assessments?

Because there is some cases that independent smallholders are… where they were the reason behind occupying or clearing primary forest, or even occupied the national park in the case of Indonesia.

So, {?} can we accept or certify oil palm plantations who illegally planted inside the national park? So, I think that there is importance that before a smallholder group, an independent one, before they are making an expansion or breaking up new planting, or new oil palm plantations, we should conduct the HCV assessment. But we are aware that they cannot do the full HCV assessment, considering that maybe they only have, say less than 1,000 ha per group, that's one thing, and the second, also the issue is that if… Okay, we conduct 1,000 ha, that is the HCV assessment area, and this assessment area actually belong to say two or three families, and then because of this the families cannot plant oil palms in their area so who will we compensate then?

I don't know, who would be? The smallholder or the group?

That's the idea, yes, but it would be depend on the other members they have willing to share or not. So there is a […] so to helping them we, RSPO, agreed to have a simplified one. Actually, the simpler one just want to make sure that RSPO helping the smallholder be aware that there is a high risk, medium risk and low risk area, for them, for the smallholder, to clear the area and plant oil palm. That's the beginning. So that is why in the simplified one there is a categorize step first. So when the plantation area or planted plantation area is in low risk area, then we think that there is no need to conduct a full assessment of HCV, but just have a simplified one. As long as we focus… The assessment is not simplified, the result is not simplified, the method for the identification is.

Okay…

So it is for the simplified HCV assessment we focus on what we call "focus species", which is actually FTS species

Sorry?

Rare and threatened species.. Rare, threatened and endangered species.

Okay.

We focus on them. Why we focus on them? Because that means that if we follow the FTS meaning that this is still good forest habitat there as well.

So, it seems that this is sort of a compromise. Some smallholders argue that the RSPO standard places unfair requirements on them and that this dampens smallholder certification. What is your response to that?

I fell out. What? Sorry.

Some smallholders have argued that the RSPO standard place unfair requirements on them and that this dampens smallholder certification. Would you agree with that statement?

I think with the previous certification system, I would say yes. But I don't think with the new, group certification one, because before it said a lot of… to get a certification a smallholder should also apply similar requirements with company or even mills and to get a certification smallholders should follow at least five or six documents or requirements, not requirements but a guideline of procedures, which is too much for the smallholders. That is why the new group certification is actually become a more simplified one and become one document only to be followed.

Yes, but is that document… Has it been further simplified, the standard itself, isn't it just the document that has been simplified? Has the requirements on smallholders changed?

Yes.

At one of the inaugural meetings of the RSPO only 7/200 participants voted for the inclusion of land rights in the P&C. They were included though, in the final P&C. There are over 10 criteria pertaining directly to land rights. Do you know how this came to happen?

You mean that there is no vote for the inclusion of land right in the inaugural meeting? And only 7 votes for that but in the P&C… The land rights is part of the P&C?

Yes.

I think it would be different, because of the mechanism of preparing P&C. In RSPO there is technical ad hoc teams and also there is a committee, there is a standard and specifications standing committee. This committee members is actually all but a couple of members, as you are aware this is representing from the grower, from the smallholder, from all member categories. So, this committee makes it possible to debate or review the P&C. So I think, yeah, there would be a case that here for resolution related with land rights. Say you were a messenger about the land right, but in the discussion on developing the P&C there would be a lot of issue and compromise. But in principle, the land right issue is actually… you cannot avoid that, because in P&C, you are aware that the criteria and principles comply to the law? So, I believe that any single country has regulation on the land right issues.

At the general assembly in 2009, the RSPO passed a resolution that a mechanism should developed to spread the cost of smallholder certification along the value chain. Do you know how this was implemented?

Thing is that , in how it's implemented, we, after the resolution, SHWG proposed to have what we call Smallholder Support Fund, and that is approved by the Board of Governors. The support fund actually to support the smallholder to go for certification. The result is coming out, some smallholders groups now is already getting certification, because of the support from the fund. The issue is that how we expand this scheme more widely. There is still issues. Because it also depend on the proposal that they submit. It is also an issue of the capacity of the NGOs or Civil society to assist the smallholders to be ready for certification. Before I left the SHWG, because I am not working with them anymore, there was still discussion to preparing a strategy to expand smallholder membership and also to expand the smallholder certifications.

You mentioned that this mechanism took the form of the RSSF. As far as I've understood, that fund is financed through a portion of the membership fees and from donations, fx. from GreenPalm, from CSPO sales. How is this spreading the cost? As far as I understand, the company who has contracts with the scheme smallholders still have to pay the cost of certification and the remainder of the value chain will only have to pay, if they buy the CSPO that comes from the smallholder FFB.

You are breaking again.

Okay. My question is: with this finance structure of the RSSF, how that is spreading the costs along the value chain, because it seems that the cost is only being spread if the CSPO is being bought and there is a problem of low market uptake? Why was this mechanism chosen?

Yes, the amount of the fund will be dependent on the amount of CSPO sales, but as you are aware, actually the uptake of the CSPO is never a 100 %. It is only about 50 %, something like that, 50-60%, so whenever the production should increase then I think 50 or 60 % will be sold under the RSPO scheme, that meaning s that every single ton will be 1 USD donation for smallholder. So I don't that there is a huge risk of that. The issue is how we properly spend the fund to support the smallholder to get certified. And then how these certified smallholder can be part of the supply chains within the RSPO. I don't think the source of the funding will be an issue, because it will be millions of dollars per year.

With regards to the supply chain, currently the growers are responsible for smallholders certification. In your opinion, should or could that responsibility be extended across the supply chain?

The grower is responsible for the scheme smallholder, but not for the independent smallholder, except if there is a willingness, but it is not an obligation. But the growers have obligation to be responsible for the schemed smallholders. Although some grower may be also helping independent smallholders, as this one company in the case of […] with regards to technical agronomy and the use of fertilizer. They help this group to be ready for certification, they give technical assistance, proper equipment, etc.

Back in 2012, the SHWG discussed that CBs did not have sufficient knowledge about the smallholder guidelines and whether the CBs would need extra accreditation in order to certify smallholders. Do you know what happened in this regard?

I remember that the RSPO secretariat is… maybe training, or something like that, on smallholder certifications, so they are more aware that there were these applicable and not applicable parts. But 2012 is also… there was a lot of different document to be followed for smallholder certification. And then I believe that even smallholder themselves were really confused how to follow that. And for sure, there is an issue of CBs in general within RSPO. Last year, RSPO suspended two or three CBs, something like that. Yeah, there is some issues on that in general.

The next is a bit more of a technical question, really. In 2014, it was decided that there should be a hierarchy on the oil extraction rate of FFB, where you would use first the real extraction rate, then national averages and finally an RSPO standard rate, if none of the others were available. Prior to that, it had been discussed to use a standard extraction rate in order to attract smallholders to certification. Could you elaborate a little bit on the process that led to this introduction of a hierarchy?

Oil extraction rate will depend on the quality of the FFB, the quality of the technology used by the mills, or the {?} system of the mill. And each country, like Indonesia, is has own their own regulations . Malaysia they have own regulations. So, actually the easiest to attract the smallholders to be certified. So we cannot just give a premium in OER. Say they follow the extraction rate for Indonesia, which is mostly above 30, something like that, say that the smallholder in Indonesia is using the rate issued by the government. Malaysia is following the rate issued by Malaysia

government. There would be no interest, because why should they get certified, there is no premium? And then the other issue is also that there is a lot of different equations to measure the rate as well. So I think, I am not involved in the discussion, but I think that RSPO will be coping with the this number, because rates would not be the proper numbers for attracting smallholders.

Thank you. With regards to tier structures for fees, back in 2007, at the general assembly, it was suggested that tiered fees should also be introduced for NGOs, because the current fees structure place limits on NGO participation in the RSPO. Is that something that you can recognize, being the representative of an NGO yourself?

Yeah, actually, we raised the issue, but I think most of the NGOs are not really… To push to have reduced the fee, the membership fee for the year. It would be raising the opportunity for NGOs to be joining, because the rate is… Because of the member ship fee… but I don't think it's actually an issue for the NGOs, because the NGO member group can still get key communication or discussions with non-member NGOs. It's not really an issue actually. All this will depend on what is the intention of this NGO becoming a member. If the intention of become a member is to improve sustainability, to improve the smallholder, or the issue of human rights or the issue of land right, or something like that, I think the non-member can talk with the member NGO, so membership should be if you want to further a specific issue, so that you are actually the messengers. An example, FFI, when we applied for the RSPO, actually we did not apply an environmental NGO, we apply a social NGO. Why we apply that? Because at that time we think that only social NGO, from Indonesia, who work on the ground, become a member of RSPO […] So that happened, and when RSPO is reviewing their membership, they were aware that FFI is not actually a social NGO, it should be environmental, so in 2012 they said everybody cannot be sitting as social NGO. So that all, I think it is not really important to be a member, because you can use the existing members to carry your message.

Thank you. We are now going back to economics. Sorry, we are jumping a little bit around. Some studies have shown that the most consistently profitable standards with regards to smallholders, are those that set minimum prices for certified product, for instance Fair Trade on coffee. And most smallholders expect a premium from certification. Do you know if such a thing as a minimum price for FFB has ever been considered in the RSPO?

Yeah, although it is not a decision yet, but there is a discussion on a minimum price, yes. And then for smallholder, actually there is a premium, I think they get two dollars.

Is that a rule or is it a guideline?

I forget if it is a rule or guideline, but if I am not mistaken, in every report from RSPO, there is always a two dollar for smallholder.

How is the discussion going on a minimum price, then?

Some people thinking that e careful setting a minimum price, because there would be a potential breach of trade law, or something like that, in certain countries, in European trade law. It is mostly an issue with the traders and the SNGO category of members, because they say that as a trader they should be careful with the trade law. But for the smallholders in the case of Indonesia, an independent smallholder group in Indonesia, getting a certificate or in the preparation stage to get a certificate, they should apply a certain good agricultural practices, and the result is that the productivity, per hectare, is improved. All the smallholder group that certified has actually improved productivities, even up to 100 %, increasing from 10 to 20 ton per hectare.

What is the actual proposal for the minimum price that you mentioned? How is it proposed that it be structured. Is it a cap minimum price?

Yes, it is a cap. There is a proposal, but there is no number yet. We are just discussing the idea. As far as I remember we have not discussed the actual price number, but we still discuss if its applicable or not.

Oh, I just looked at the clock, and it seems that we are fast running out of time. But I also think that we have covered a lot of the topics that I wanted to discuss. So unless there is anything else that you believe I should be aware of, then…

Uhm…

Yes?

I think not, I just want to mention that the only way of getting the certification is not about the issue of the premium price. There is proof on the ground , that smallholder, or even growers, that

get certification, they improve productivity, per unit land. If the grower and smallholder try to comply with the P&C, actually this mean that you will improve productivity. It is as simple as that.

Mr. Darmawan, would it be alright if I contact you again, for instance via e-mail, if further questions arise or if some points should need clarification?

Yeah, sure. Just drop me an e-mail.

Okay, thank you and thank you very much for your time. Goodbye.

Goodbye.

List of abbreviations

BMP	Good agricultural- and Best Management Practices
CB	Certification Body
CFFB	Certified Fresh Fruit Bunches
CPO	Crude Palm Oil
CSPO	Certified Sustainable Palm Oil
EB	Executive Board
EU	European Union
EU RED	European Union Renewable Energy Directive
FFB	Fresh Fruit Bunches
FSC	Forest Stewardship Council
GA	General Assembly
GA4	4th General Assembly
GA5	5th General Assembly
GA6	6th General Assembly
GA7	7th General Assembly
GCC	Global Commodity Chain
GVC	Global Value Chain
HCV	High Conservation Value
ICS	Internal Control System
IFC	International Finance Corporation
ISH	Independent Smallholder
KER	Kernel Oil Extraction Rate
MNC	Multinational Corporation
MT	Metric Ton
NGO	Non-governmental organisation
NPV	Net Present Value
OER	Oil Extraction Rate
P&C	Principles and Criteria
PKO	Palm Kernel Oil
PV	Present Value
RSPO	Roundtable on Sustainable Palm Oil

SCC	Supply Chain Constituencies
SEIA	Social and Environmental Impact Assessment
SH	Smallholder
SHWG	Smallholder Working Group
SSH	Scheme Smallholder
WG	Working Group
WWF	World Wildlife Fund