Designing for value:
Structuring voluntary certification programs to increase stakeholder acceptance

Working Paper No. 141

CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

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Abstract

Voluntary certification programs are one type of intervention used to incentivize the commodity agricultural sector in tropical forest landscapes to reduce deforestation and improve sustainability. These programs encourage supply-chain actors to produce and source products according to agreed standards. We review the cases of the Roundtable on Sustainable Palm Oil (RSPO) voluntary certification program in Indonesia, and the Sustainable Agriculture Network (SAN) voluntary certification program for cattle in Brazil. Based on field interviews, we explore the challenges faced by these programs to simultaneously sustain the rigor of their standards and boost producer participation. Taken together, we consider that rigor and participation are the principle components of a program's sustainability impact. Given the high level of contention that often surrounds certification standards, we suggest that the other core activities (including adoption, implementation, and monitoring and enforcement) of certification programs are under-utilized places for generating benefits to producers that bypass the complex politics surrounding standards setting. We further identify a common progression from capacity building to full compliance for most producers. This trend suggests a need to design programs to maintain or increase the rigor of program standards in tandem with deliberate efforts to provide producers with additional benefits. In particular, providing benefits to producers at earlier points in their progression towards full compliance may attract additional producers to the program. Clear and objective expectations of producers at each stage in their progression towards full compliance also may benefit external stakeholders interested in tracking more granularly the progress of producers and the overall impact of certification programs.

Keywords

Agriculture; Climate change; Mitigation; Brazil; Cattle; Deforestation; Indonesia; Oil Palm; Rigor, Roundtable on Sustainable Palm Oil (RSPO); Sustainable Agriculture Network (SAN); Value-added.

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Contents

Acronyms

AMDAL	*Analisis Mengenai Dampak Lingkungan Hidup* (Bahasa Indonesian for Environmental Impact Statement)
CB	Certification body
CCAFS	CGIAR Research Program on Climate Change, Agriculture and Food Security
CSPO	Certified Sustainable Palm Oil
FPIC	Free, prior and informed consent
HCV	High conservation value
ISC	International Standards Committee
ISEAL	International Social and Environmental Accreditation and Labeling
ISPO	Indonesian Sustainable Palm Oil
P&C	Principles and criteria
RSPO	Roundtable on Sustainable Palm Oil
SAN	Sustainable Agriculture Network
WWF	World Wildlife Fund

1. Context

Oil palm cultivation and cattle ranching are closely associated with tropical deforestation and other adverse environmental outcomes (Bustamante *et al*., 2012; Walker *et al*., 2004; Wilcove & Koh, 2010). Indonesia is the world's leading producer of oil palm, and Brazil has the world's largest commercial herd of beef cattle (Bustamante *et al*., 2012; USDA, 2010). From 1990-2005, more than 50% of oil palm expansion in Indonesia resulted in deforestation (Koh & Wilcove, 2008). Similarly, Brazil slaughters over 200 million heads of cattle each year (FAO Stat, 2013), and is the largest exporter of cattle products globally. Brazil's cattle industry may be responsible for up to 70% of deforestation that occurs within the country each year (Bustamante *et al*., 2012).

Voluntary certification programs are one type of market governance intervention that has emerged in commodity sectors with high pressure on natural resources (Auld *et al*., 2008; Bass *et al*., 2001; Klooster, 2005; Steering Committee, 2012). Voluntary certification programs respond to the emergence of an alternative market based on demand for commodity products sourced with greater environmental and social sustainability (Smith & Maser, 2010; Taylor, 2005). Voluntary certification programs set minimum acceptable criteria for the production and processing of commodity products within agreed parameters of sustainable practices (Klooster, 2005). Most best management practices prescribed by voluntary certification programs target the production stage (Bitzer *et al*., 2008), since this is where the majority of threats to sustainability, including deforestation, occur (Cashore, 2004; Gulbrandsen, 2005; Overdevest, 2004). Civil society groups use compliance with voluntary certification programs to track the behavior of supply-chain actors. Consumers who wish to make more informed purchasing decisions also rely on voluntary certification programs to verify the sustainability of retail products (Tallontire, 2007).

The availability of a price premium for certified sustainable agricultural products can have a strong influence over whether a voluntary certification program is able to attract a large and diverse pool of participants who support rigorous standards (Eden, 2009; Henson & Reardon, 2005; Klooster, 2010). However, less attention has been paid to the means by which voluntary certification programs generate other benefits for participating producers as well as other stakeholders whose participation in and acceptance of the standard lend it credibility (Overdevest & Rickenbach, 2006). Other benefits include risk management, brand protection, better management practices that can lead to production efficiencies, and access to finance and new markets (Cashore *et al*., 2003; Fulponi, 2006; Overdevest & Rickenbach, 2006; Tallontire, 2007; Prakash & Potoski, 2012; Rickenbach & Overdevest, 2006; van Kooten, 2005).

This paper investigates the extent to which voluntary certification programs are designed to incentivize participation by a large number of producers. We consider incentives that may include other benefits than a direct price premium for products. We categorize the design of voluntary certification programs into four activities, based on the literature (see Gulbrandsen, 2005; Henson & Humphrey, 2010; Raynolds *et al*., 2007; Scarlat & Dallemand, 2011; von Geibler, 2013, Milder *et al*., 2014). These four activities are: standards setting, adoption, implementation, and monitoring and enforcement. Maintaining or increasing the rigor of

standards is of primary interest to many of the stakeholders outside the commodity supply chain. We review the design choices made in the other core activities (i.e., adoption, monitoring and implementation) of voluntary certification programs as possible opportunities to entice producers without compromising the rigor of the standard.

1.1. The Roundtable on Sustainable Palm Oil certification program

Concerns about severe sustainability issues associated with palm oil gave rise to a global multi-stakeholder governance initiative, the Roundtable on Sustainable Palm Oil (RSPO). The World Wildlife Fund (WWF) and Unilever organized a conference in 2003, bringing together 200 participants from 16 countries to address these concerns (RSPO, 2012). In 2004, the RSPO was officially established; its mission is to "transform markets to make sustainable palm oil the norm" (RSPO, 2012). In 2007, the RSPO certification program was launched, leveraging the existing governance structure and membership of the RSPO (RSPO, 2012). The certification program establishes a set of standards—a set of 8 principles and 39 criteria (principles and criteria - P&C)—for producing, processing, distributing, and selling sustainable palm oil. The P&C address social, environmental and economic sustainability concerns. Social sustainability commitments include requirements to compensate local communities when companies acquire their land for development. The principle of free, prior and informed consent (FPIC) governs such interactions between producers and local communities and indigenous groups. Environmental sustainability commitments include requirements to adopt better practices to maintain soil quality, control erosion, protect surface and ground water, and reduce risks associated with pest management. Producers are expected to mitigate negative impacts on biodiversity by protecting lands identified as high conservation value (HCV), in part by completing an environmental impact statement[1]. Producers also must commit to transparency and maintain compliance with applicable local and national laws and regulations. For some aspects of the standard, such as the requirement to maintain HCV areas within plantation property, RSPO principles may surpass what is required under local and national law

Other core activities of the program include verification and enforcement of certified participants. To date, the RSPO certification program has certified 50 producers and accounts for 15% of palm oil production globally (RSPO, 2012). The RSPO certification program features four chain-of-custody levels for certified sustainable palm oil (CSPO), ranging from blends of certified and non-certified CSPO to a fully segregated product (RSPO, 2011).

1.2. The Sustainable Agriculture Network certification program for cattle

Formed in 2001, the Sustainable Agriculture Network (SAN) is a coalition of independent non-profit conservation organizations whose aim is to promote the social and environmental sustainability of agricultural activities by developing high global standards and awarding the Rainforest Alliance seal for agricultural commodities such as coffee, cocoa, banana, fruits, chili, flowers, palm oil, and tea (Sustainable Agriculture Network, 2010). The SAN Sustainable Cattle Production System Standard (hereafter, SAN cattle certification program)

[1] In Indonesia, environmental impact statements are known as an AMDAL (*Analisis Mengenai Dampak Lingkungan Hidup*).

was launched in 2010. The SAN cattle certification program combines the Sustainable Agriculture Standard (10 principles and 99 criteria used for all SAN agricultural commodities; created in 2008) and the Sustainable Cattle Production System Standard (additional 5 principles and 36 criteria, specifically relevant to cattle) (Sustainable Agriculture Network, 2010). Additional SAN standards include the Chain Of Custody Standard to certify non-producer actors such as slaughterhouses, Group Certification Standard to encourage community or co-op based certification and empower smallholder farmers, and the Climate Module to reduce greenhouse gas emissions (SAN, 2011).

The goal of the SAN cattle certification program is to elevate the environmental and social sustainability of the cattle supply chain. The standards address environmental and social responsibility, including topics such as cattle management, pasture and soil management, animal welfare, and carbon footprint reduction. The standards require strict, annual audits and strive for continuous improvement. As of April 2014, three farms and one slaughterhouse have been certified under the SAN cattle certification program (Sustainable Agriculture Network, 2010). The three farms— all owned by the same company—are now under a single group certification standard. The group scheme in the Sustainable Agriculture Network adds 23 criteria; to receive this certification, all member farms of a group administrator have to comply with the standards.

2. Methods

We conducted semi-structured interviews in Indonesia and Brazil with key stakeholders in the palm oil and cattle supply chains, respectively, over a six-week period in each country (June-July 2013 in Indonesia; July-August 2013 in Brazil). We conducted interviews with actors from the state sector, civil society (local and international NGOs), and market sector (producers, processors, and retailers), as well as program staff from the two standards. Please see. Please see Appendix 1 for a full list of interviewees. In Indonesia, we interviewed 30 individuals and stakeholder organizations in the cities of Jakarta and Bogor and provinces of Riau (Kuantan Singingi and Pelalawan districts) and West Kalimantan (Pontianak and Sanggau districts), in English and Bahasa Indonesia. Site visits were made to two RSPO-certified oil palm plantations in Sumatra and to both certified and non-certified growers, including smallholders, in West Kalimantan (Fig. 1).

In Brazil, we interviewed 24 individuals and stakeholder organizations in the states of São Paulo (in the cities of Piracicaba and São Paulo) and Mato Grosso (Cuiabá, Tangara da Serra, Alta Floresta, and Sinop) (Fig. 1; Appendix 1). Most interviews were conducted in Portuguese. Site visits were made to one SAN-certified farm (Fazenda São Marcelo) and two non-certified farms in Mato Grosso (Fig. 1).

Questions addressed interviewees' perceptions of voluntary certification; financial and logistical issues related to adoption and implementation; the role of non-supply chain stakeholders and their influence on producers; the market for certified sustainable versions of the commodity product; and opinions about the design and structure of the program.

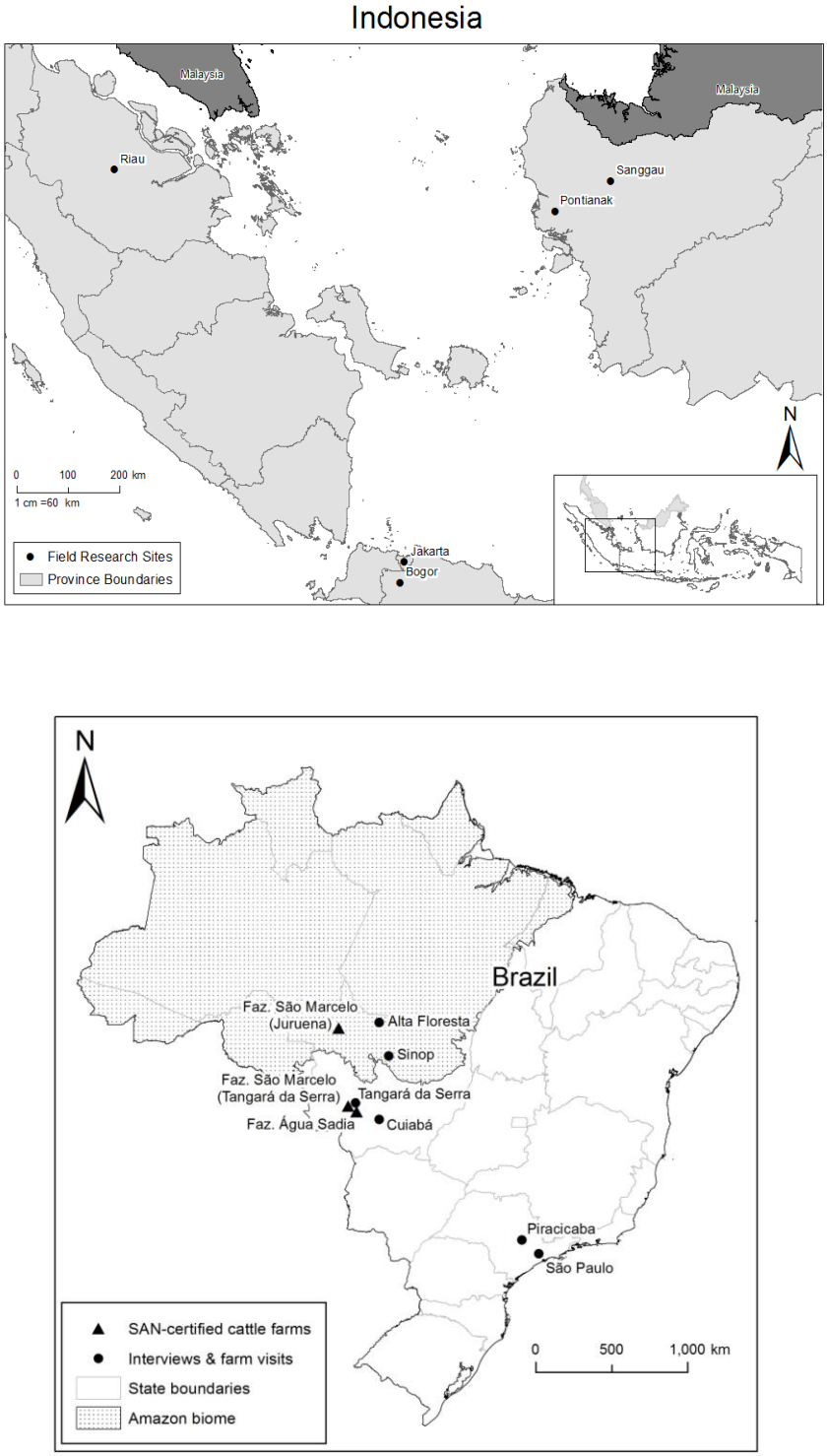

Figure 1. Location of field research sites and interviews conducted in Indonesia and Brazil (adapted from Alves-Pinto *et al*. 2013).

3. Results

The design of the certification activities (standard setting, adoption, implementation, and monitoring and enforcement) offers a number of opportunities for certification programs to provide benefits to producers without undermining the rigor of standards.

3.1. Standard setting

Standard setting refers to the development of principles, criteria, and indicators for guiding participants toward enhanced sustainability in their practices. Standards are used to link the actions of individual participants to the aggregate contributions that the voluntary certification program as a whole has on sector-wide sustainability.

3.1.1. Governance

Certification programs establish rules about which actors are empowered to direct the agenda of the program and set standards through their governance structures. In many cases, program designers and managers must consider how existing external market relationships, such as those between retailers and producers, influence the internal dynamics of the program. The degree of influence producers have over standards can dictate participation rates and the rigor of the standards. In turn, the governance structure of programs influences their perceived legitimacy by different stakeholders.

The RSPO certification program is governed by the RSPO itself, which is a multi-stakeholder group. Members of the RSPO fall into seven categories of stakeholders: oil palm growers, palm oil processors or traders, consumer goods manufacturers, retailers, financial institutions, environmental NGOs, and social NGOs, though not all membership categories are represented proportionately (RSPO, 2012). Members have voting rights in the General Assembly (RSPO, 2012). A subset of the members is tasked by the Executive Board to design the P&C, and then all members can vote to approve them.

The governance structure for the SAN certification program for cattle is similar in that it has members that make up a General Assembly, an executive committee, and a secretariat. Once every five years the standards are re-evaluated in a public consultation, where all interested parties and stakeholders can participate. The same process occurs during the development of the standards. Unlike the RSPO, the SAN is not organized as a roundtable, but rather as a consortium of civil society organizations. The International Standards Committee (ISC) provides input into determination for the SAN standards, including those for the SAN cattle certification program. The ISC is comprised of 12 elected independent members who are international experts and represent various stakeholder categories: academic, invited environmental NGOs that work in the agricultural sector, producer, technical, government, and industry (Sustainable Agriculture Network, 2010).

The two certification programs take differing approaches to determining who can influence the programs' directions. Although a diverse group of stakeholders are represented in RSPO deliberations and decision-making, environmental and social NGOs have argued that the program standards reflect the disproportionate influence of a minority of market-sector stakeholder groups and are consequently not as rigorous as they ought to be. As a result, RSPO approves standards that are in close alignment with what industry actors consider to be

realistic in terms of cost and practicality. However, NGOs tend to emphasize the limits of this approach for making progress towards more rigorous environmental and social performance goals, such as aggressive reductions in greenhouse gas (GHG) emissions. In contrast, the SAN cattle program's standards are more strongly influenced by a consortium of conservation NGOs. This has led to a standards-setting process with emphasis on high environmental and social standards. The program is widely accepted by civil society stakeholders as rigorous, but participation is still low. It could be that the SAN cattle program's low participation rates are the result of its newness, but some supply-chain actors believe that the SAN cattle program does not reflect realistic potential capabilities, interests, or priorities of small and medium-sized producers, since they are far from being able to comply with the SAN criteria. Some producers continue to struggle to comply with national laws, which are less rigorous that the SAN standards.

3.1.2. Sustainability standards

P&C provide the details of a voluntary certification program's standards, and are based on an overall set of goals for what the program is designed to accomplish in terms of influencing sustainability in the sector. In general, producers favor standards that are less rigorous. The large producers we interviewed had complex, expansive operations that become more difficult to certify if the standards are very rigorous. Small producers tend to lack the resources, capacity, and know-how to implement very rigorous standards. At both ends of the size spectrum, producers were interested in capturing additional market share and learning the operating efficiencies that are built into the standards, but only to the extent that the upfront costs and commitments were not too steep. Meanwhile, standards that are perceived as weak, lack the support of civil society groups and consumers, calling into question for potential participants the value of participating in the certification program. Therefore, ideally P&C should set standards that reach a level of rigor that is considered credible to external stakeholders, while allowing producers who have achieved certification to maintain a positive return on their investment. The relative proportions of practicality and rigor vary depending on the openness of the governance structure and which actors play a dominant role in the program (McDermott *et al*., 2013).

Palm oil producers must follow the P&C in order to achieve RSPO certification for each plantation. To ensure long-term financial sustainability, producers must develop a business plan with a minimum three-year outlook. Each criterion identifies indicators, 45% of which are compulsory. Failure to comply with compulsory indicators results in major nonconformities, which prohibit the issuance of a certificate (RSPO, 2007). In cases where a producer owns or operates many plantations or subsidiary companies, a single plantation or subsidiary can be certified as having met the P&C, as verified by an auditor, even if other plantations have not yet met the standard (RSPO, 2013). The P&C of the RSPO certification are more widely accepted by producers, but also are often challenged by social and environmental NGOs who do not believe the standards are rigorous enough to have significant environmental or social impact.

The standards of the SAN cattle certification program address a wide range of sustainable farm management issues. In Brazil, the SAN cattle certification program is more stringent in most categories than national laws. For example, the program requires producers to go beyond the national Forest Code (law no. 4.771) that governs forest conservation. To become

certified, a farm must comply with at least 50% of the criteria of each principle and 80% of the total criteria, including all critical criteria. Only when all producers and processors throughout the chain are certified do they become authorized to use the Rainforest Alliance Certified™ seal on their products. The P&C of the SAN certification program for cattle are rigorous and would likely change the practices of producers towards greater sustainability, but are perceived by producers as difficult to achieve.

3.2. Adoption

The adoption of a program by producers is critical to its success. The program administrators we interviewed confirmed that they made conscious decisions about which types of producers and buyers to target during the initial stages of their respective programs. For instance, the achievement of certification by producers who were previously unable to meet the standards, as is often the case for small- and medium-scale producers, is more impactful in terms of sustainability outcomes. But the journey for this type of producer towards compliance is often complex and can encounter financial constraints, as certification can be expensive. The administrators in some programs develop alternative requirements and special "group certifications" after the launch of a standards program. This delayed focus on small- and medium-sized players speaks to the ways in which standards programs are designed first and foremost for larger players, as well as the genuine nuances and complexities to engaging other actors who comprise only a small portion of the market share. Existing market relationships also favor the early participation of large producers. Large retailers often are the first to support voluntary standards because of the pressure NGOs and consumers place on them. In addition to choices about when to recruit the various producer classes, program designers may be faced with the situation that each class of producers demands different enticements in exchange for their participation.

Large producers may be targeted early because they often represent a major portion of the market share for a commodity product, and their production processes often are already aligned closely with the best management practices required by certification programs. This producer class also tends to have the financial and information resources to implement new practices (Bernstein & Cashore, 2007; Cashore, 2004; Taylor, 2005; Fig. 3). Securing the participation of small producers can have the advantage of elevating the sustainability of a producer class that typically has more room for improvement in sustainability. However, whichever producer class is pursued first, increasing the diversity of participant types to capture the full spectrum of producers minimizes the risk that a program's agenda is undermined by the priorities or exit of a few large participants (Taylor, 2005).

Programs based on intensification and land sparing as a route to greater sustainability may offer such non-monetary benefits for participation as enhanced management and operations. The RSPO-certified firms we interviewed emphasized that the program offered a total management system for operating profitable and efficient plantations. Alternatively, companies operating internationally may use certification to standardize and coordinate complex, geographically diverse operations. More progressive producers embrace certification because it aligns with their existing core sustainability values that may not otherwise have been recognized by external stakeholders. Achieving certification also helps to highlight "sustainability hotspots," or areas of concern within the industry, so that

producers can efficiently expend the resources they commit to sustainability. Finally, potential members are attracted to the program because it creates opportunities to access export markets, such as in the United States and Europe, and because the program's best practices are increasingly demanded by financing institutions as a precondition for lending.

The SAN cattle certification program initially strategically targeted cattle farms and slaughterhouses with existing commitments to sustainability. The Brazilian NGO member of SAN, Imaflora (*Instituto de Manejo e Certificação Florestal e Agrícola*), reached out early in the development of the program to Fazendas São Marcelo, one of the most socially and environmentally progressive farms in Brazil. Fazendas São Marcelo joined the program because the management and sustainability practices enabled them to reduce their operating cost and business risks, and the certification could yield a slightly higher sale price for their product. Moreover, the owner of Fazendas São Marcelo was known as being very progressive and thus saw certification as a strategy for getting ahead in the market. Prior to achieving certification, Fazendas São Marcelo had previously been certified for organic production and had adopted a corporate policy committed to no deforestation; both factors were helpful to the company as it sought SAN certification. For the certified slaughterhouse Marfrig, the cost and infrastructure needed to become SAN certified was relatively low, and SAN cattle certification positioned the company to enter premium beef markets, both domestically and internationally. Imaflora continues to pursue other large farms as participants in the SAN cattle certification program, but progress is slow – in part because producers are unwilling to expend resources and change their practices to achieve the program's rigorous requirements without a strong signal of consumer demand for certified sustainable beef products.

If producers already have best practices in place prior to certification, their compliance costs are relatively low. In both the RSPO and SAN cases, motivation is greatest for large producers who have the resources to adopt a comprehensive sustainability management strategy and whose activities are also the most visible to civil society groups. Large producers are better able to overcome technical barriers to implementation because of the additional financial resources they can commit to the certification process. Meanwhile, producers who stand to benefit the most from certification struggle to adopt sustainability standards due to capacity constraints.

3.3. Implementation

The threshold for achieving certification varies depending on the rigor of the P&C and the rules of the program pertaining to implementation of the standard. Implementation requirements and the time-scale for producers to achieve certification are likely to affect program participation rates. The RSPO certification program features a (quasi-official) progression, with membership status in the roundtable acting as an intermediate milestone before actors achieve full certification. Membership status confers many of the privileges of full certification, including affiliation with the program and participation (e.g. voting rights) in the governance and administration of the program. The SAN cattle certification program awards certification after the rancher has fulfilled a minimum requirement of P&C for every unit of production under its management (Sustainable Agriculture Network, 2010). It is easier to distinguish sustainable from non-sustainable products in programs with no intermediate steps (e.g., membership before certification), but such programs also delay the moment at

which producers can redeem benefits from their efforts. This may have negative consequences for the participation of producers who would be motivated by near-term benefits.

Oil palm producers must become members of the RSPO roundtable before any of their plantations become fully certified. Member producers have to set time-bound plans to be certified by an RSPO-approved third-party certification body (CB) (RSPO, 2012). The time-bound plan is a pledge that demonstrates a producer's intent to certify all of its plantations before a specified year. Even if the majority of the subsidiaries are able to achieve certification with relative ease, one or two with outstanding land conflicts or particularly problematic environmental practices can delay the entire certification process. In such cases, the parent company must revise its time-bound plan, and the CB must approve all changes. However, this multi-phase approach also benefits participants since members can, for example, vote on P&C revisions before they achieve full certification.

The SAN cattle certification program requires full certification before producers are allowed to place the Rainforest Alliance Certified™ seal on their products, and the SAN does not have a governance entity analogous to the RSPO roundtable within which producers can participate. In addition to an individual certification, the SAN offers group certification, through which a number of farms (whether under the same owner or same community) can seek certification collectively. Group certification lowers the cost per production unit, but also poses risks to the group since if one entity is not compliant, all entities will be considered non-compliant. The JD group, which operates Fazendas São Marcelo and other farms, has received group certification.

While the RSPO certification program allows individual subsidiaries to be certified in the interim while a producer works to gain certification for all of its subsidiaries, the SAN cattle certification program does not have this provision. This restriction may dampen the willingness of new producers to join the SAN cattle certification program. Meanwhile, leading conservation NGOs question the RSPO program's credibility because participants can achieve certification before all of their units of production are in compliance with standards.

3.4. Monitoring and enforcement

Certification programs are able to successfully translate goals into outcomes by developing auditing procedures to track participant progress towards the fulfillment of their sustainability commitments. The auditing procedure implemented by CBs creates a monitoring mechanism to determine whether producers are faithfully executing the principles behind the standards. Enforcement occurs if producers fail to comply. Successful completion of these two components of the program verifies that standards are being met and that the final certified products are distinguishable from non-certified counterparts.

The auditing procedures for both certification programs were similar in that they included third-party assessors. The credibility of audits is central to the legitimacy and credibility of certification programs. The governing body accredits these independent assessors, and only accredited CBs can conduct audits. While strict, quantifiable assessment methods using templates and checklists provide accurate and precise information about participants' efforts; they also create opportunities for producers to limit their fulfillment of standards to pro forma treatments of the P&C. This can be problematic for instance, when dealing with local

communities, when a more in-depth and considered engagement is more appropriate. Potential conflicts of interest also arise since producers are responsible for funding the assessments conducted by the CBs.

Distinguishing sustainable products from their non-sustainable counterparts is challenging, especially when there are no quality attributes to differentiate sustainable versions of the product. Voluntary certification programs 're-qualify' the value of products based on the sustainability of production processes, as opposed to innate differences such as taste, size, or hardiness (Buller & Morris, 2004). Consumer confidence in the declared sustainability of a producer or product is thus dependent on verification mechanisms to ensure strict compliance (Guthman, 2007).

In the RSPO certification scheme, CBs are responsible for enforcement. They assess whether participants are compliant and then report their findings and any major nonconformities to the roundtable. The RSPO's complaint system is available to both internal and external stakeholders to report participants' suspected noncompliance (RSPO, 2012). Failure to address minor nonconformities can result in the RSPO elevating the issue to a major nonconformity and may lead to suspension and permit revocation if not resolved in a timely manner (RSPO, 2007). However, civil society groups have criticized the RSPO's enforcement mechanism for a lack of transparency, delays in initiating investigations, and weak consequences for noncompliant participants (Greenpeace, 2013). Rather than restrict themselves to the RSPO system many of these groups have chosen to pursue redress in other forms, such as consumer awareness campaigns, boycotts, and direct engagement with producers.

In the SAN cattle certification program, independent CBs track the sustainability performance of producers via a cycle of one full audit followed by two annual less-exhaustive audits. After three years, the producer must undergo a full audit again. The CBs encourage producers to strive for continuous improvement with respect to the number of criteria achieved. Each country's CB either conducts the audit itself or contracts with an authorized third party to complete the audit. The CB does not provide recommendations or technical assistance about the changes needed for producers to meet the criteria, but can clarify the criteria and whether they have been met.

The main challenge of enforcement is that strict rulings often are at odds with the interest of the program to achieve scale by maintaining and expanding the pool of participants. Programs are loath to revoke certification at the risk of diminishing already limited or fragile participant buy-in, but they must also maintain their commitments to enforcement to the extent necessary in order to satisfy external stakeholders as to their credibility.

4. Discussion

Voluntary certification programs seek to maintain the rigor of sustainability standards while increasing participation from commodity producers. These two factors are amongst the primary drivers determining the sustainability impact of a program compared to a business-as-usual scenario in which the program did not exist. Design of the activities (standards setting, adoption, implementation, monitoring and enforcement) that comprise a voluntary

certification program offer, to different extents, opportunities to provide benefits to stakeholders. These opportunities to provide benefits to stakeholders can balance the often-competing goals of rigor and scope. In lieu of a price premium, which is often unavailable in many voluntary certification programs (Klooster, 2006), program designers can structure the activities of the program to generate non-monetary benefits for its participants. At its core, offering incentives to secure participation relies on an exchange of benefits between the various stakeholders in a program: a demonstrated commitment to the standards of the program is needed to satisfy civil society groups and consumers, and in turn, the bestowal of certification secures for participants benefits such as market access and risk protection.

Precisely what kinds of benefits compliant producers gain depends on the specific activities of the program and how they are designed. The RSPO certification program has created an intermediate stage in membership that allows producers to participate in the program before they are fully certified. This means that benefits to producers, such as access to RSPO meetings, begin to accrue at an earlier stage – producers are recognized for their commitments prior to full compliance. Our interviews led us to conclude that choices about how to incentivize participation often are independent of decisions by program managers about how to maintain the rigor of standards. In our conversations with industry and civil society stakeholders, tensions about the program tended to revolve around compliance with the P&C and the underlying rigor of the standards themselves. We suspect that the RSPO system yields more benefits to producers because producers are active in the program rather than due to a concerted effort by program designers to balance competing stakeholder interests. Thus, the benefits available to RSPO-affiliated producers reflect their attempts through the governance structure of the program to mollify compliance challenges, from pushing for phased compliance to more lenient grievance systems. To be sure, producers also seek more relaxed P&C; however, lowering standards has its limits in terms of credibility. We suggest that, for instance, securing a more lenient grievance structure can net a similar result as lowering the standard.

Conversely, the SAN program limited producer involvement in governance. Before the SAN program awards certification, producers must comply fully with rigorous standards set without their involvement. This dynamic reflects both the dominance of NGOs in the governance of the program as well as the theory of sustainability impact – that specific sustainability outcomes depend on the summation of producers adhering closely to standards as originally formulated. Broad producer participation only matters if collectively they can achieve the sustainability impact envisioned by the program designers as an outcome of following specific practices. Providing producers with benefits and other enticements for their participation matters little if compliance with standards is compromised or otherwise delayed. However, as we suggest, support for rigorous standards is underwritten with increased benefits to participants. Therefore, significant gains in sustainability for these programs are most likely to result when there is a deliberate increase in benefits to producers. Thoughtful design of the non-standard setting activities of the program is one avenue for providing these benefits to participants while still securing the kinds of commitments to rigorous standards that support overarching program goals for sustainability.

4.1. A benefits framework for the design of certification programs

Significant sustainability impact stemming from a large number of producers adopting rigorous social and environmental standards is the goal of voluntary certification program design. For their compliance, producers are awarded certification, for which they may receive a range of monetary and non-monetary benefits. We wish to call attention to the role design plays generating these private benefits to producers, who, in turn, may be more likely to adopt rigorous standards, resulting in a greater sustainability impact. The SAN cattle certification program functions in this manner: certification is awarded only after the producer meets the standards requirements. In such cases, benefits are tied directly to the fulfillment of best practices. This choice to delay the award of private benefits until there is full and verified compliance is unsurprising; it is easier for programs to distinguish sustainable from non-sustainable producers and their products (Buller & Morris, 2004; Prakash & Potoski, 2012). Still, fewer producers are able to participate when standards are high. In the most rigorous programs, the benefit to producers must be that much greater if they are to participate, and incrementally more so the further away they are from compliance.

Program administers can choose to set lower standards in order to boost participation, but this is a suboptimal outcome. Low standards lack credibility and legitimacy, making the program vulnerable to competitors and criticism from civil society groups and their constituents. Low standards may even persist in the marketplace simply because consumers lack the ability to distinguish readily between voluntary standards and the plethora of eco-labels (Muradian & Pelupessy, 2005). Programs that find success despite a perceived lack of rigor can be expected to have fewer pressures to continuously improve their standards (Muradian & Pelupessy, 2005).

Some programs use their design to mitigate this potential conflict between maintaining rigor and boosting participation. Meeting the standards is often a lengthy and complex process that requires significant capital investment. The RSPO program is able to generate additional benefits for participants by turning compliance away from a binary designation to something closer to a progression in which the attainment of intermediate stages is recognized and rewarded. In such programs, attending trainings, instituting monitoring protocols, and declarations to fulfill the standards are all acknowledged and may even confer privileges reserved only for fully certified producers in other programs.

Involving producers in activities beyond compliance with the standards can provide additional opportunities to generate benefits for producers. The RSPO certification program draws heavily on the roundtable, using membership to provide near-term benefits to participants. Membership in the roundtable is considered a gateway to certification. It gives participants a voice in governance and other deliberations, and many external stakeholders recognize membership as akin, or at least generally related to, certification, albeit inaccurately. The RSPO certification program also permits companies to become certified even while some of their estates and mills are awaiting official recognition from the CB. In these cases, companies are required to develop and seek approval for a time-bound plan to achieve full certification of all their operations. At intermediate points before full compliance, producers are able to capture a range of non-monetary benefits from compliance with best practices and ancillary administrative requirements, including a full-fledged sustainability management system, opportunities for product marketing, first-mover advantage in markets,

access to finance, access to technical information, risk management, and the use of an eco-label to distinguish their products from non-sustainable counterparts (Overdevest & Rickenbach, 2006; Tallontire, 2007; van Kooten *et al*., 2005).

4.1.1. Producer progression to achieve the sustainability goals of standards programs

Based on our findings, we identified a common trajectory that producers follow towards compliance with a voluntary certification program. Participants begin by building capacity and seeking technical assistance from consultants, civil society groups, and researchers. In a second phase, producers are general participants: they make efforts to achieve certification, but not every action leads directly to the achievement of the sustainability goals of the standards program. Only in the climax phase can participants make the advancements in their practices that feed into the broader sustainability impact of a voluntary certification program on its commodity sector.

Whether this progression from capacity building, to participation, to contribution to sustainability is acknowledged explicitly varies with each voluntary certification program. Under a more straightforward program, such as the SAN cattle certification program, the steps taken (e.g., outlay of capital, building capacity, and seeking technical assistance) by would-be participants to meet standards occur without official acknowledgement by external stakeholders. Therefore participants who are in the earlier phases of achieving certification cannot recoup the full benefit from their efforts towards compliance. Producers in the intermediate phase may learn about best practices that increase yield and improve production. However, if an assessor finds that a producer's efforts do not meet the requirements of the P&C, even if only for one of its production units (in the 'participation' phase of the sustainability maturation trajectory), the entire certification can be delayed. Still, the benefits gained from improved practices may have positive returns such as increased productivity, regardless of the awarded certification.

Under the RSPO-type certification program, the program's coupling with the industry roundtable is important to its potential to attract participants. The progression from member to certified company in the RSPO certification program ideally tracks the general progression of participants from capacity building, to participation, to contributing to the program's impact. However, a producer's participation in the RSPO does not necessarily have to conclude with full certification. Member producers can interact with civil society groups in less adversarial settings, giving them the opportunity to learn about and strategically position themselves in response to known sustainability "hotspots." Since membership in the roundtable is at best seen as movement in the right direction and often confused with the achievement of certification, producers may benefit from the vagueness of membership status to quell pressures from their critics. The mechanisms for enforcement and airing grievances against members and certified producers is handled directly by the RSPO, which may provide producers with the leniency they believe is appropriate while in the early stages of compliance. In recognition of the complexities of certifying a diverse set of operational units across multiple jurisdictions, producers are also permitted to establish a time-bound plan for when they will achieve full certification. The shelter of general membership in the RSPO is a principle element in attracting producers who could not justify certification if there were not recognized stages for "capacity building" and "participation."

Multiple intermediate stages and ways of marketing the program can serve to attract additional participants, but that diversity of interest in participation also has the potential to obscure the purpose of the program and the role of producers in it. For example, participants who view the RSPO's P&C as a management system primarily may lose sight of the core sustainability mission to reduce deforestation. Their commitment to continuous improvement may be difficult to secure if future updates to the standard diverge from their original motivation for joining the program. Meanwhile, the SAN cattle certification program may attract a more limited spectrum of potential participants because it is marketed solely as sustainability standard, but producers may have more understanding of its purpose as well as a common rationale amongst producers for why they chose to participate, which can make support for future updates less controversial. These differences between the SAN cattle certification program and RSPO certification program may reflect their core constituencies: civil society actors drive SAN cattle certification, while RSPO certification is considered an industry-led program.

4.2. Programmatic goals and credibility

Efforts to entice producers to participate in voluntary certification programs must be balanced with maintaining program credibility. For the SAN cattle certification program, producer participation is equivalent to certification and means full compliance with the standards required by the program. Participation in the RSPO certification program is not so straightforward. The program's support for alternative endpoints short of full certification tends to obscure the fact that a number of producers are not able to achieve certification (or contribute to the sustainability impact of the program). Sustainability-conscious consumers, financial institutions, and civil society groups have argued that the pairing of the RSPO certification with its roundtable leads to confusion over the actual progress toward sustainability of participating producers.

The complication is that the overall goals of the program may become disconnected from whatever benefits producers and external stakeholders, such as civil society groups, gain from participating in the program. The RSPO certification program is an offshoot of the industry-led RSPO roundtable, and emphasis is placed on recruiting producers to become members, whether or not they ultimately achieve full certification. High participation rates in the roundtable would be considered a success given the overall organizational goal to engage stakeholders to initiate a dialogue about sustainability in the sector. It is not surprising that the RSPO program lacks clear mechanisms for moving producers through that final "phase transition" to full certification. In this light, a decision by the RSPO to maintain an internal grievance process is perfectly defensible; an internal grievance system is more likely to result in reprimands rather than outright dismissals of noncompliant producers, but also serves to keep more of industry in the forum for conversations about sustainability in the sector (Jacobson 2013).

Despite varying goals and institutional histories, the civil society groups who lend credibility and legitimacy to voluntary certification programs are broadly similar. Most civil society groups have limited allegiance to particular programs. In fact, they often view voluntary certification standards as one tool among many for achieving greater sustainability in the sector. Under resource constraints, civil society groups may withdraw their support for the program rather than invest scarce time and resources in verifying the status of individual participants or working to fortify the program.

Conclusion and recommendations

A focus on benefits to participants suggests that producers seek full certification—what is asked of them by external stakeholders—so long as there is sufficient benefit for doing so. Programs that seek to maintain less stringent sustainability standards or lower their rigor as a way to attract producers may find quickly that they are at an impasse: lower standards undermine the program's credibility for civil society groups and other external stakeholders. Based on our research findings, we identify opportunities to provide incentives for producer participation without lowering the rigor of the standards within the principle activities of standards programs (standards setting, adoption, implementation, and monitoring and enforcement). For example, the obstacles and high initial costs for producers to comply with standards suggest that design choices aimed at balancing rigor and participation should focus specifically on ways to acknowledge intermediate stages of participation in ways that are credible to external stakeholders.

Each certification program studied is challenged in its own way to make credible design choices that acknowledge producer efforts at earlier stages. The SAN cattle certification makes no distinctions between producers at varying levels of compliance with the standards. The program is challenged by its programmatic goals and institutional history to find additional and earlier opportunities to provide incentives to would-be participants while still maintaining the overall credibility of the program. The RSPO certification program provides participants with opportunities to participate at earlier points in the certification process and rewards efforts that other programs may regard as ancillary to certification. The challenge for the RSPO certification program is to develop clear and objective benchmarks for what is expected of producers at the intermediate points of participation, and to identify mechanisms to compel producers to continue to a point of full compliance with the standards.

To successfully improve or create new programs, rigor of standards and benefits to participants must be considered simultaneously, as a coupled approach may offer the greatest opportunity to improve participation while maintaining credibility of the rigor of the standards. Incentives to producers should be advanced to the extent possible deliberately and in conjunction with the setting of higher standards. Also, introducing well-defined expectations about what producers must accomplish at particular milestones may help to reconcile the interests of the program as it interacts with both participants and civil society groups. More specificity about what is required of participants at these intermediate horizons (e.g. membership in the roundtable or time-bound plans) may decrease ambiguity about the efforts of participants. Producers can use intermediate points of verification to satisfy NGOs about their progress towards sustainability, introduce their products to additional markets, and justify the costs of certification. For instance, more objective and clearly-articulated benchmarks would circumvent issues some civil society groups have raised about the actual degree of conflict between the HCV area model and Indonesian law that allows the government to reclaim land designated for production but that is lying fallow, arguing that producers have established the dispute to avoid having to honor the results of a HCV assessment. NGOs may benefit from the ability to assess impact more granularly and more frequently as part of their efforts to benchmark progress toward sustainability.

Appendix 1: List of interviews

Table 1: Interviews conducted in Indonesia and Brazil

Interviewee role in the organization	Organization	Organization sector
Indonesia		
Researcher/Director of Agribusiness at Surya University	Indonesian Center for Agriculture Socio Economic and Policy Studies, Ministry of Agriculture	University
Researcher	Bogor Agricultural University (IPB)	University
Deputy Director - Market Transformation	WWF	NGO
Global Coordinator for Palm Oil		
Palm oil campaigner for Greenpeace Southeast Asia	GreenPeace	NGO
Palm Oil Project Manager	Zoological Society of London (ZSL)	NGO
	Sawit Watch	NGO
Project Officer	Forest Peoples Programme (FPP)	NGO
Senior Policy Advisor	Forest Peoples Programme (FPP)	NGO
Officer	AMAN	NGO
	LBBT	NGO
	YPSBK	NGO
Head of Campaign and Advocacy Department	WALHI	NGO
National Coordinator	*Serikat Petani Kelapa Sawit* (SPKS/Palm Oil Farmer's Union)	Association
Indonesia Director	RSPO	Roundtable
	Indonesia Palm Oil Association (GAPKI)	Industry Organization
Consultant	Daemeter Consulting	Consulting
HCV Consultant	Tropenbos	Consulting
	Sucofindo	Certification Body
RSPO Scheme Manager for ASEAN	British Standards Institute Group (BSI)	Certification Body
	PT Sai	Certification Body
PR, R&D, General Manager, Technical Manager	Anonymous	Producer/MNC
Deputy Head, Sugar Cane Division	Anonymous	Producer/MNC
Chief Operating Officer,		
Vice President, Corp Affairs	Anonymous	Producer/MNC
Local funding manager	Anonymous	Producer

Owner, Sustainability manager	Anonymous	Producer
Plant manager	Anonymous	Producer
Head of Environment, Health & Safety	Anonymous	Producer
Independent smallholder	Anonymous	Producer/non-certified/smallholder
-	Anonymous	Producer/non-certified/
-	Anonymous	Producer/non-certified
Global Product Specialist - Environmental, Social & Trade Standards, Sustainable Business Advisory Department	International Finance Corporation (IFC)	Banking
Brazil		
Agricultural Certification	Imaflora	NGO/SAN certifier
Executive Director	Imaflora	NGO/SAN certifier
Agricultural Certification	Imaflora	NGO/SAN certifier
Cattle and Agriculture Political-Economics Analist	ICV	NGO
Executive Coordinator	ICV	NGO
Project Manager	ICV	NGO
Sustainable Municipality Coordinator	ICV	NGO
Sustainable cattle analyst	ICV	NGO
Researcher	Amigos da Terra	NGO
Conservation Program Analyst	WWF	NGO
Sustainable Harvests Coordinator	The Nature Conservancy	NGO
Technical Manager	Fazendas São Marcelo	Producer
Manager	Fazendas São Marcelo	Producer
Human Resources Analyst	Fazendas São Marcelo	Producer
Producer	-	Producer
Producer	-	Producer
Producer	Fazenda Salto das Nuvens	Producer
Producer and President of the Sindicate	*Sindicado dos prodtores de Alta Floresta*	Producer
President of Animal Protein sector	AC Agromercantil	Producer
Sustainability sector	Marfrig	Slaughterhouse
Quality Guarantee	Marfrig	Slaughterhouse
Marfrig Club	Marfrig	Slaughterhouse
Marfrig Club	Marfrig	Slaughterhouse
Supervisor of Sustainability	Marfrig	Slaughterhouse
Sustainability Director	JBS	Slaughterhouse
Manager	Carrefour	Retailer

Sustainability Director	Walmart	Retailer
Sustainability Manager	Walmart	Retailer
Latin America Protein Director	McDonalds	Restaurant
Executive Director	Beef Exporters Association - ABIEC	Association
Technical Assistant	Beef Exporters Association - ABIEC	Association
Marketing Specialist Range and Pastures	Dow	Industry
Institutional Relations	Dow	Industry
Executive Coordinator	GTPS	Roundtable
Director	Acrimat	Producer Association
Post-Doctoral and FSC auditor	FEA/Imaflora	Researcher/Auditor
Environmental Analist	IBAMA	Government
Researcher	Embrapa	Government
	Secma 1	Government
	Secma 2	Government

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