

3 CRITERIA DEVELOPMENT, IMPLEMENTATION AND CONFORMITY ASSESSMENT

The processes related to criteria development, implementation and conformity assessment can significantly impact participatory governance, responsiveness to local needs and conditions, and the cost-effectiveness and overall integrity of an initiative. Overall we have seen a convergence toward the use of more localized standard-setting processes, as well as of third-party monitoring tools that minimize the potential for conflict of interest. More specifically, of the initiatives reviewed:

- 38 per cent offer distinct criteria for small-scale producers and producer groups; two offer distinct criteria in addition to group certification.
- 68 per cent offer group certification, revealing that group certification is increasingly being offered as a tool for enhancing accessibility for smaller producers while simultaneously reducing costs.

- 69 per cent provide nationally distinct standards, while 56 per cent report having localized indicators, suggesting a growing recognition of the importance of regional differences in pursuing broader sustainable development objectives.

While the identity of voluntary standards is largely defined by their criteria, their ultimate credibility is primarily dictated by their ability to implement and enforce those criteria. In this section, we consider four principles related to the development and implementation of sustainability criteria: subsidiarity, conformity assessment, traceability and continual improvement.

3.1 VOLUNTARY STANDARDS AND LOCAL INTERESTS: THE PRINCIPLE OF SUBSIDIARITY

The principle of subsidiarity suggests that centralized rule-making and implementing organizations should only perform those tasks that cannot be performed effectively at a more intermediate or local level.¹ This principle is closely linked with the idea of participatory governance, which posits that local interests and needs can best be represented through local participation, and it is considered the goal of sustainable development itself.² By ensuring that criteria-setting and implementation are customized to local contexts and capacities, voluntary standards can be responsive to the needs and interests of stakeholders in multiple nations and regions.

BOX 3.1 GROUNDING THE GREEN ECONOMY: THE PRINCIPLE OF SUBSIDIARITY

Standards have a role to play in translating global priorities to local conditions. The diversity of conditions (economy, geography, industrial and legal infrastructure, social rules, and safety nets) faced by agricultural producers around the world suggests that the equal application of identical standards may not always be effective for maximizing sustainable development outcomes or consistently linking sustainable consumption with sustainable production. Accurate mapping of standards to local contexts is an integral function of voluntary standards that seek to integrate sustainable development goods into the pricing mechanism. Implementing the principle of subsidiarity through the development of localized standards can help ensure that a standards system more accurately internalizes the costs of sustainable production and thereby more efficiently promotes the development of a green economy.

Within the field of sustainability standards, the appropriate degree of subsidiarity hinges on an assessment of trade-offs between costs and benefits. Additional costs associated with implementation of the principle of subsidiarity include the costs associated with developing and managing multiple standards, potential confusion among consumers and other users, and inequities created by different sets of standards.

On the one hand, development and adoption of multiple standards incurs additional transaction costs that consumers must eventually absorb. On the other hand, giving equal legitimacy to different criteria risks providing an unfair advantage to some stakeholders over others, thus generating the potential for market distortions and inconsistent compliance with globally defined criteria.

The SSI tracks voluntary standard application of the principle of subsidiarity through indicators measuring the development of regionally specific standards and indicators, and the use of local auditors in the verification process (see Table 3.1). Forestry standards and most multisector standards³ show the greatest attention to the principle of subsidiarity, a reflection of their particularly diverse supply bases. In contrast, some newer, single-sector initiatives show less attention to the principle of subsidiarity, reflecting a possible trend toward the minimization of transaction costs across global supply.

TABLE 3.1 IMPLEMENTING THE PRINCIPLE OF SUBSIDIARITY: KEY INDICATORS.

	1972 IFOAM	1987 SAN/RA	1993 FSC	1997 GLOBALG.A.P.	1997 Fairtrade	1997 ETP	1999 PEFC	2002 UTZ	2004 RSPO	2005 BCI	2005 CmiA	2006 RTRS	2006 4C Association	2007 RSB	2008 Bonsucro	2012 ProTerra
Regional standard development	✓	✓	✓	✓	✓		✓	✓	✓			✓		✓	✓	
Localized indicator development		✓	✓	✓			✓	✓	✓			✓		✓		✓
Local auditors engaged in the verification process	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

1 See, for example, "Principle of Subsidiarity" of the Winnipeg Principles (IISD, 1994).

2 See Rio Declaration Principles 10 and 20–23 (United Nations, 1999).

3 There are exceptions to this observation: Fairtrade and IFOAM are the only two multisector initiatives showing coverage across two rather than all three of the SSI principle of subsidiarity indicators; RSB, RSPO and RTRS are single-sector initiatives (outside of the forestry sector) that illustrate full coverage of all SSI principle of subsidiarity indicators.

3.2 SMALLHOLDERS

One of the reasons commodities are considered critical stepping stones for development is the direct link commodity production can have with family livelihoods and incomes, particularly in the developing world. However, global commodity markets also have a tradition of leaving smallholders exposed to market volatility and livelihood insecurity.

One of the major sustainability challenges in commodity production therefore relates to enabling increased benefits to smallholder producers. Although definitions of smallholders vary by commodity and country,⁴ smaller production units, as a rule, tend to face higher overall transaction costs, reduced marketing capacities, limited access to efficient production technologies and, correspondingly, reduced access to international markets.

To the extent that voluntary standards typically imply additional requirements and processes, they also have the potential to introduce new barriers to market entry, which may be particularly problematic for the smaller units of production. Although a multi-pronged strategy will typically be required to address these challenges,⁵ one way of reducing these barriers is to allow for

producers who are not otherwise organized into an official producer organization to undertake certification as a group. The design of standards systems tailored to the smallholder producer context also represents an important instrument for ensuring smallholder inclusion in global supply chains.

Table 3.2 shows how the different initiatives handle smallholder producers. Across the initiatives reviewed, the newer, single-sector initiatives (with FSC as the exception) tend to offer distinct standards for small-scale producers and producer groups. More mature, multisector initiatives typically target small-scale producer and producer groups with one all-encompassing standard. Alternatively, the differences between small-scale and large-scale producers within different commodity sectors can be a factor in determining whether or not a separate standard for smallholders is warranted. Other initiatives may make additional exceptions for smallholder producers, as in the case of Fairtrade, which further accommodates for smallholders by extending the certificate period from three years to six years for “small licensees” (FLO-CERT, 2013).

Group certification is offered by 11 of the 16 organizations reviewed and provides a means for reducing the auditing burden on both producers and standards bodies by setting requirements for internal management systems at the local level.⁶ The ISEAL Common Requirements for the Certification of Producer Groups (ISEAL, 2008) provides a set of common criteria for ensuring consistency and credibility of auditing processes involving producer groups using internal management systems.

4 As noted by HLPE (2013), “There are a number of different definitions of ‘smallholder agriculture’ and each definition carries implications for the measurement of the number of smallholders. Definitions also guide our understanding of the investment needs of smallholders. A discussion on definitions is therefore neither trivial nor academic, but has real implications for policies and impacts on livelihoods.” The report further notes, “The definition of ‘smallholder agriculture’ cannot be rigid or ‘one size fits all’: there are many variations in each specific context at the regional, national and local levels, and also over time as economies transform. Classifications of smallholder agriculture based only on farm size can be misleading. A smallholding is ‘small’ because resources are scarce, especially land, and using it to generate a level of income that helps fulfil basic needs and achieve a sustainable livelihood consequently require [sic] a high level of total factor productivity, requiring in turn a significant level of investment” (p. 10). See also International Finance Corporation (2013).

5 Some of these strategies could include technical assistance, price premiums, supportive policy, cost/benefit sharing schemes, organizational development and so on. See, for example, Potts (2007).

6 The potential for reduced transaction costs, combined with increased predictability and consistency among systems, provides the rationale for the ISEAL Common Requirements for Producer Groups (ISEAL, 2008).

TABLE 3.2 REQUIREMENTS FOR SMALLHOLDER PRODUCERS.

	1972 IFOAM	1987 SAN/RA	1993 FSC	1997 GLOBALG.A.P.	1997 Fairtrade	1997 ETP	1999 PEFC	2002 UTZ*	2004 RSPO	2005 BCI**	2005 CmiA	2006 RTRS	2006 4C Association	2007 RSB	2008 Bonsucro	2012 ProTerra
Separate standards for smallholders			✓					✓	✓		✓			✓		✓
Group certification	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓			

* UTZ standards for smallholders vary per commodity. For cocoa there are two separate documents—one code for estates and another for organized groups of smallholder producers. For tea and coffee there is currently only one document for both estates and smallholders, but the requirements for both differ.

**Although the BCI standard is the same for smallholders and large farms, the standard stipulates additional requirements for large farms. BCI offers group certification for “producer units.” Each producer unit is made up of 3,500 smallholder farmers or 100 medium farms.

BOX 3.2 ENABLING THE GREEN ECONOMY: THE ROLE OF SMALLHOLDER SUPPORT SYSTEMS

The growing trend toward rapid adoption of sustainability standards across mainstream markets has necessarily meant targeting larger-scale suppliers to mainstream markets as a way of ensuring sufficient standard-compliant supply. In Section 4 we highlight a trend toward concentration of standard-compliant supply in select production zones with a more developed infrastructure for export and international trade.

As vehicles for stimulating investment in sustainable production, voluntary standards have an imperative to enable the widest possible access to markets, particularly among those most in need. As such, smallholders represent a particularly critical target for voluntary standards in specific agricultural markets with significant smallholder supply.⁷ Within the agriculture sector as a whole, with an estimated 525 million small farms operating worldwide and approximately 404 million of those consisting of less than two hectares, promoting sustainable practices throughout the small-farm sector has the potential to play a significant role in contributing to food security, poverty reduction and reduced greenhouse gas emissions (UN Environment Program, ITC, & International Centre for Trade and Sustainable Development, 2012). However, smallholders commonly face systemic barriers to either the adoption of sustainable practices

or entry into (international) sustainable markets, due to a lack of capacity or access to capital for investing in infrastructure. Therefore, linking technical assistance and finance to standards compliance that enables poorer smallholders to access markets offers important vehicles for ensuring the voluntary standards proactively enable uptake among those most in need, and in many cases, it may represent a prerequisite for such standards achieving their objectives in promoting a green economy. Some exemplary initiatives targeted at facilitating systemic investment into sustainable supply chains include:

- The Sustainable Commodity Assistance Network (SCAN), which operates as a global platform for building concerted multi-program, multi-commodity technical assistance aimed at promoting better access to sustainable markets for more marginalized producers (SCAN, 2013).
- The Finance Alliance for Sustainable Trade (FAST), which operates as an association of social lenders and other stakeholders seeking to enable access to finance for sustainable producers in the agriculture sector (FAST, 2013).
- The Sustainable Trade Initiative/Initiatief Duurzame Handel (IDH), which represents one of the largest public–private partnerships dedicated to enabling the implementation of sustainable supply chains. IDH offers matching funds to private investment aimed at implementing sustainable practice and can result in investment in infrastructure at the local level (IDH, n.d.-b).

7 In the coffee and cocoa sectors, for example, it is estimated that most producers are smallholders (Lewin, Giovannucci & Varangis, 2004; WCF, 2012a).

3.3 CONFORMITY ASSESSMENT

One of the hallmarks of contemporary sustainability standards is the application of third-party monitoring and enforcement processes. Increasingly sophisticated auditing and verification tools have allowed privately managed supply chains to make significant advances in terms of the credibility and transparency associated with market claims. In a context where consumers are also expecting market claims to be verified, a determination of the degree of conformity to a given initiative's criteria through an assessment of actual practices on the ground represents a critical and often defining instrument applied by voluntary standards. The 16 initiatives reviewed use a wide range of conformity processes; however, some notable observations include:

- All initiatives⁸ report that a third party performs external audits. Among the initiatives reviewed, there is a wide range of audit combinations and frequencies.
- 75 per cent of the initiatives reviewed were either ISO 17065⁹ compliant or apply an accreditation process, emphasizing credibility as a primary driver in the voluntary sustainability standard sector.
- 75 per cent of the initiatives require certification either on a yearly basis or in combination with annual surveillance audits, and random field checks if certification validity spans over two or more years.

8 BCI also relies on recommendations from first- (self-assessment) and second-party audits.

9 ISO 17065 replaced ISO 65 in 2012 and sets quality and independence requirements for certification bodies. It offers an internationally recognized instrument for assessing the strength of the conformity assessment process. ISO 17065 (as with ISO 65) applies only to certification (Lazarte, 2012).

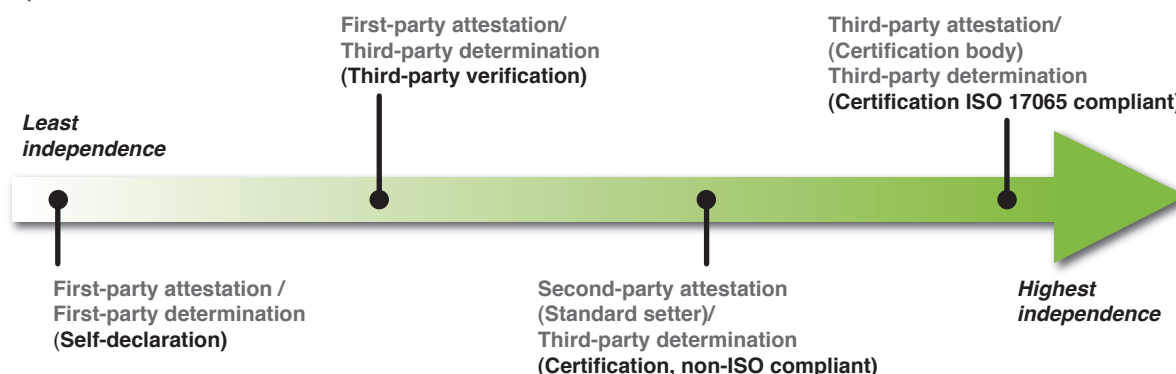
- Verification, rather than certification, is the primary conformity indicator found in some newer initiatives, pointing to a possible trend toward lower-cost, mainstream market uptake.
- A separate Chain of Custody standard is managed by 62 per cent of the initiatives reviewed.
- 44 per cent of the initiatives reviewed currently have formal monitoring and evaluation systems that operate above and beyond the conformity assessment process. At the time of publication nearly half (seven) of the initiatives were in the process of working toward compliance with ISEAL's Impacts Code.¹⁰

According to International Organization for Standardization (ISO) guidelines EN/ISO/IEC 17000:2004 (ISO, 2004), the main distinction between conformity assessment approaches depends on the type of entities involved in "determining" and "attesting" to a given organization's compliance with the standard.

Figure 3.1 shows a continuum in the degree of separation between the manufacturer of a product and claims of conformity assessment. In *theory*, the higher the level of independence, the lower the risk that commercial interests can influence the nature of the claims made. Increased independence, however, may come at a higher cost, which must be absorbed by the supply chain in some form, and may even lead to greater reliance on specific industry players for revenue generation. This can negatively impact the overall competitiveness, and possibly even the credibility, of the system.

10 ISEAL's Impacts, Code specifies general requirements for the development and implementation of monitoring and evaluation programs by social and environmental standards systems (ISEAL, 2012b).

FIGURE 3.1 DEGREE OF INDEPENDENCE OF CONFORMITY ASSESSMENT PROCESSES (FROM MOST TO LEAST DEPENDENT).



Self-declaration consists of first-party determination and first-party attestation, which is to say that the producer of the product makes the claim that certain standards are being met. In an effort to substantiate claims, a producer may seek to have an independent third party verify (e.g., make a determination of compliance) that its claims are indeed based on true facts. Second-party attestation is similar to third-party verification, with the exception that rather than the producer making the claim of compliance (based on a third-party determination), the standard setter makes the actual claim of compliance. Third-party attestation refers to the case where a body independent of both the producer and the standard setter makes both the determination of compliance as well as the attestation of compliance. While both second-party attestation and third-party attestation are forms of certification, only third-party attestation is deemed sufficiently independent to qualify as ISO 17065 compliant.¹¹

¹¹ ISO 17065 replaced ISO 65 in 2012, and sets quality and independence requirements for certification bodies. It offers an internationally recognized instrument for assessing the strength of the conformity assessment process. ISO 17065 (as with ISO 65) applies only to certification (Lazarte, 2012).

Table 3.3 shows the types of conformity assessment indicators used by the various initiatives. Certification remains the predominant form of conformity assessment across the initiatives reviewed; however, some newer initiatives (BCI, CmiA, 4C Association and ETP [ETP, 2011b]) are placing greater focus on verification and self-assessment as vehicles for allowing broader and more rapid entry into initiative supply chains. Verification-based processes can help improve access to sustainable markets while involving lower costs, but may also be subject to greater risk of non-compliance (see Box 3.3).

Another manner by which standard setters ensure the independence of the conformity assessment process is by having accredited inspectors carry out the certification process. Table 3.3 illustrates that the majority of initiatives (12) apply ISO 17065-compliant certification processes, with half of those initiatives further applying accreditation processes, all of which emphasize credibility concerns as drivers in the voluntary standards sector.

TABLE 3.3 CONFORMITY ASSESSMENT INDICATORS.

	1972 IFOAM	1987 SAN/RA	1993 FSC	1997 GLOBALG.A.P.	1997 Fairtrade	1999 PEFC	2002 UTZ	2004 RSPO	2005 BCI	2005 CmiA	2006 RTRS	2006 4C Association**	2007 RSB	2008 Bonsucro	2009 ETP	2012 ProTerra
Verification									✓	✓		✓			✓	
Certification†	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	✓		✓
Accreditation‡	✓	✓	✓			✓		✓			✓			✓		
ISO 17065 or 17021 compliant	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	✓		✓

*Sources: Data provided directly by the voluntary sustainability standards.

** 4C Association reports that all 4C verifiers must be ISO / IEC Guide 65 accredited (A. Bruestle, 4C Association, personal communication, December 2013).

† Procedure by which a third party gives written assurance that a product, process or service conforms to specified requirements (ISO/IEC Guide 2).

‡ ISO defines accreditation as “third party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks” (ISO/ IEC 17000:2004) (ITC, 2013a). For SAN, see SAN (2010a).

Although other initiatives use verification processes in addition to certification, for the purpose of this table verification is referenced only when used similarly to certification, whereby a third-party audit results in a licence.

BOX 3.3 GUARANTEEING THE GREEN ECONOMY: THE ROLE OF CONFORMITY ASSESSMENT AND PUBLIC POLICY

The value of standards in enabling a green economy is directly linked to the trust that they are able to build in the marketplace. Conformity assessment plays a critical role in ensuring that claims are accurate representations of practices on the ground and, as such, that the market can appropriately integrate specific practices into the pricing mechanism. Conformity assessment processes can even be regarded as tools for building the capacity of the market to “communicate” market information more accurately, thereby enabling more efficient market interaction (see Box 1.1).

One of the challenges voluntary standards face is the additional burden of integrating not only any costs associated with more sustainable production practices, but also the costs associated with bringing more credible and accurate information to the marketplace. One of the hallmarks of voluntary standards development over the past two decades has been the use of third-party monitoring and enforcement processes. However, different standards apply different conformity assessment systems, giving rise to different cost and (presumably) risk parameters. The process of verification is typically less costly than certification, often relying on some degree of self-assessment, and on existing documentation rather than on-site visits. Lower-cost conformity assessment may open the market to a wider range of producers and buyers, but may also lead to greater risk of error or reduced credibility on the marketplace.

Standards are thus faced with a delicate balancing act between ensuring sufficient depth of conformity assessment to protect the trust they rely upon and keeping costs to a minimum so that they can remain attractive options in the free market. Regardless, it is not entirely clear whether the market alone can determine the correct balance between risk and credibility: it is precisely the *inability* of the market to accurately transmit production information that establishes the need for standards in the first place. Standards and conformity assessment processes can help push the market toward greater transparency and efficiency, but they cannot be expected to correct for information-related market imperfections entirely on their own.

This context raises the question of whether, and to what degree, governments should be involved in setting rules for credible conformity assessment, or for financially supporting credible conformity assessment processes. Governments typically regulate claims in the marketplace through competition policy and affiliated regulations. Claims of organic certification are already subject to regulation across many markets, but such rules do not typically extend to broader sustainability initiatives. Recognition of the systemic role of standards in improving market efficiency provides an argument for the systemic support of credible conformity assessment processes among voluntary standards. (See Section 15 for an outline of some of the ways policy might be used to support more credible conformity assessment.)



Audits play a central role in most conformity assessment processes. Voluntary standards apply a diversity of audit types, depending on the risk parameters and practices being verified. The four most prominent audit types applied by sustainability standards are self-assessments, verification audits, certification audits and surveillance audits.

In self-assessments, producers assess their own performance against specific criteria and are then required to submit the report to the standard-setting body. Self-assessments are often followed up by a verification audit.

Verification audits vary in their objectives and processes. They can sometimes be conducted in order to determine whether or not producers have reliable systems in place for monitoring and controlling their sustainability performance. Verification audits can also operate similarly to certification processes whereby a licence (rather than a certificate) is issued following a third-party audit (4C Association, BCI and ETP use verification audits in this manner). Verification audits further operate as a benchmarking process leading to certification, exemplified by ProTerra's processes.

Certification audits are conducted by a certification body gauging the producer's performance against specific criteria. A certificate confirms the producer's compliance. Typically, there are three types of certification: first-party, second-party, and third-party certification. First-party certification involves a single company or stakeholder group developing its own standards, analyzing its own performance and reporting on compliance. Second-party certification is when an industry, trade association or NGO develops a set of standards. It is a business-to-business arrangement, with internal auditors or external certifiers verifying and reporting on compliance usually with an interest in the product. Third-party certification is voluntary and uses an accredited external, independent certification body uninvolved in the standard setting process (FAO, 2011a).

Surveillance audits typically occur between re-verification or recertification audits. These types of audits are conducted to verify and monitor the ongoing fulfillment of the standards as well as to identify any corrective actions necessary in order to maintain compliance.

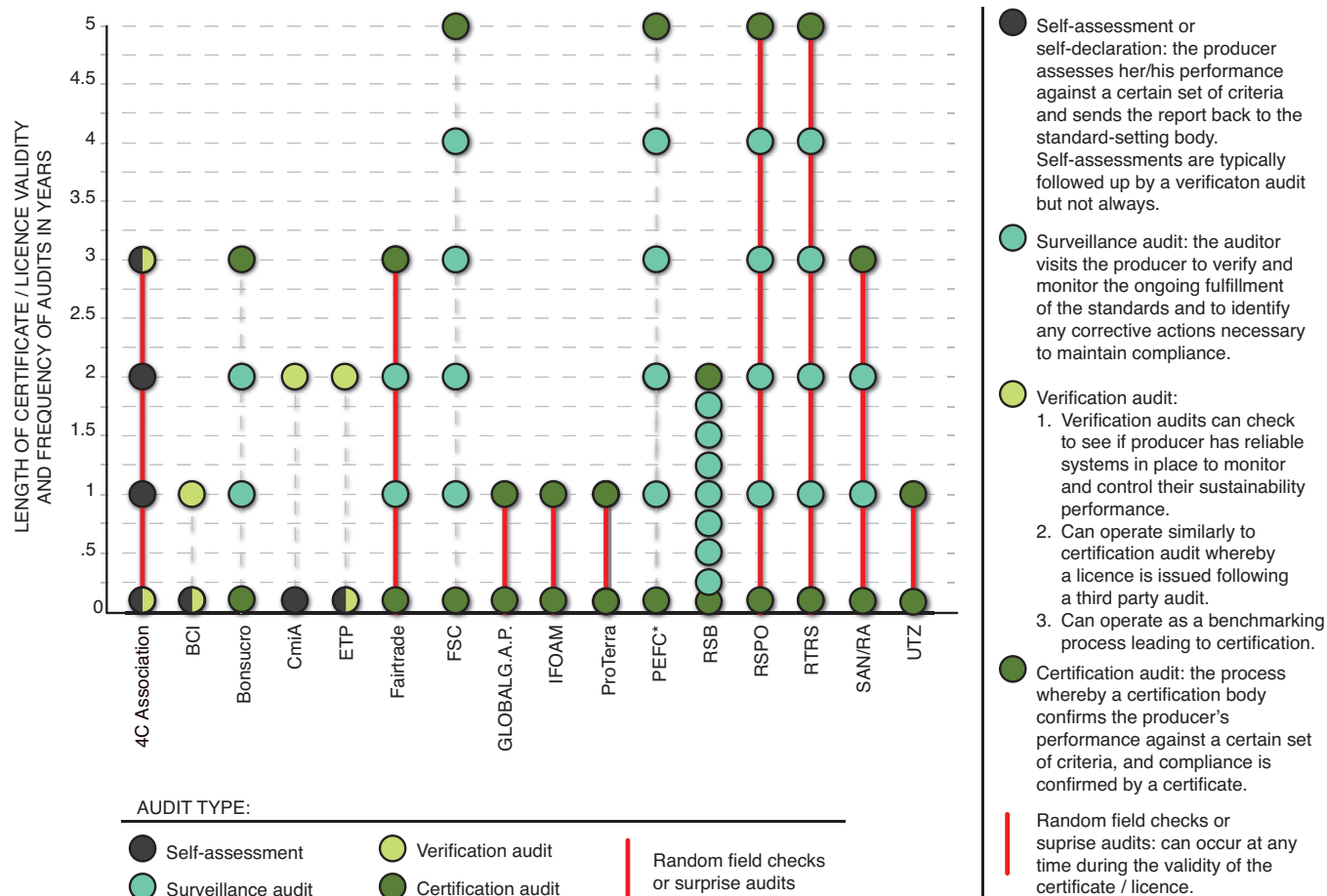
Some voluntary sustainability initiatives further require producers to undergo random field checks or surprise audits that can occur at any time during the licence or certificate validity period. These checks further monitor ongoing compliance with the standard.

3.3.1 Audit Types and Frequency

Figure 3.2 shows the wide range of different audit combinations, which include certification, verification, surveillance, self-assessments, and random field checks or surprise audits, as well as the frequency of audits used by the initiatives covered in this review. Each set of coloured circles extends to varying lengths and indicates the duration in years of certificate or licence validity for each voluntary standard. The colours of each circle represent the type of audit conducted at that point during the validity period (e.g., green circles represent certification audits, yellow represent verification audits, and so on).



FIGURE 3.2 CONFORMITY ASSESSMENT PROCEDURES AND FREQUENCY.



*PEFC, 2007;

Although the certification validity period for PEFC is indicated here at five years, re-certification can also occur every three years depending on which ISO standard is used at the national level (T. Arndt, PEFC, personal communication, January 2014).

All 16 initiatives reviewed require, at a minimum, the application of audits conducted by an independent third party. The degree of cost and rigour of the conformity assessment process hinges on the validity period of the licence or certificate as well as the types and number of additional interim audits/checks performed throughout the licence/certificate validity period.¹² The initiatives reviewed perform a number of different types of audits during their compliance periods (see Box 3.4). Fifteen of the initiatives

require an initial certification or verification¹³ audit to enter into the “compliant” supply chain. Initiatives using certification processes perform, at a minimum, annual surveillance audits if certification validity extends past one year. Many conformity assessment procedures required by the voluntary standards reviewed are

¹² The substantive scope of the audit process also plays a critical role in determining cost and rigor. For example, most audit procedures focus on audit processes related to crop production, but some (Rainforest Alliance, for example) will include all processes within the farm boundaries in their audits. Still others may include impact indicators as part of their audit process as a means of feeding the continual improvement cycle.

¹³ Verification processes can act either in place of or in parallel with certification processes. 4C Association, BCI, CmiA and ETP use verification processes in place of certification. ProTerra, for example, uses both verification and certification in its conformity assessment process.

adjusted according to the specifics of each case: the higher the risk assessed, the more frequent the audits.¹⁴

Among the 16 initiatives reviewed, nine apply random field checks or surprise audits during their certification periods. Some initiatives, such as Fairtrade, FSC, PEFC, RSPO and SAN,¹⁵ also conduct random field checks on a case-by-case basis. Some voluntary standards also recognize other initiatives' assessments in their auditing processes. For example, if a producer holds a valid SAN/RA, UTZ or Fairtrade certificate, ETP requires no additional audit. BCI, on the other hand, is an initiative that also relies on recommendations from first- (self-assessment) and second-party audits. During each growing season, for example, BCI conducts second-party credibility checks through BCI country managers and implementing partners.

FSC, PEFC,¹⁶ RSPO and RTRS all offer the longest certification validity, at five years, after which time the producer must apply for recertification. Four of the initiatives (GLOBALG.A.P., IFOAM,¹⁷ ProTerra and UTZ) require recertification every year. The 4C Association,¹⁸ BCI, CmiA and ETP's initial approvals are based on self-declaration, thereby decreasing the potential that heavy verification requirements could prevent access to markets for the most marginalized producer groups. All except CmiA require a follow-up verification audit after submission of the self-assessment (indicated by the half circles in Figure 3.2, which represent both self-assessment and verification).

3.3.2 Traceability

Traceability systems help ensure the integrity of claims made on the market by providing accountability between standard-compliant products produced and sold.¹⁹ Four basic traceability systems are used in commodity production and trade for ensuring that claims about practices match actual marketing claims. They are:

Book and claim:²⁰ Where a certificate of sustainability is granted based on the application of sustainable practices and volume of product produced, but certification is completely decoupled from the product and is transferable on the market.

Mass balance: Where the amount of compliant product sourced and sold by each supply chain actor is tracked, but where the compliant product does not need to be sold with the certificate.

Segregation: Where compliant products are segregated at all stages of the supply chain, and only compliant products are sold as compliant products.

Identity preservation: Where the product is individually identified, physically separated, and tracked and documented at each stage of the supply chain.

A number of factors determine the appropriateness of one system over another; these include the market (mainstream or differentiated), the value proposition of the investor (unrestricted market access or direct trade linkages), and the product specifically (whether or not it is conducive to identity preservation). By reducing the degree of physical separation and the continuity of certificates being sold with the actual product, the potential for economies of scale and reduced transaction costs is maximized. Alternatively, the opportunities for creating differentiated (de-commodified) markets by maintaining direct links between products and producers is reduced through "non-identity" accounting-based traceability systems.

As voluntary standards move into the mainstream, there appears to be a modest trend toward increased use of lower-cost bulk traceability systems such as book and claim and mass balance, and a reduced use of identity preservation, as Table 3.4 demonstrates. Among the initiatives reviewed, we see newer initiatives using book and claim (RSPO and Bonsucro). Older initiatives tend to use all three models of identity preservation, segregation and mass balance, whereas some new initiatives seem to be moving toward applying fewer CoC models.

14 For example, BCI licensing periods can range from one year to three or five years depending on performance. Similarly, RSB typically certifies case by case, using a risk-based approach to determine the frequency of their field audits. Depending on degree of risk, audits can occur as often as quarterly during RSB's two-year certification period, and in some very high-risk cases (Risk Class 6), audits can occur monthly. Although they are typically on a two-year cycle, the frequency of CmiA's self-declaration and verification audits can vary depending on the situation. ProTerra also determines the frequency of their verification audits case by case; however, if the start-up phase involves multiple years, the verification visits occur annually.

15 SAN/RA-accredited certification bodies annually select a group of operators to receive non-programmed (surprise) audits, selected primarily on risk and performance record.

16 The maximum period for re-assessment audit is five years for both forest management and Chain of Custody certifications (see PEFC, 2007 for forest management and PEFC, 2013 for CoC).

17 Annual assessments apply to members accredited against the IFOAM standards as well as all members of the IFOAM family of standards.

18 The 4C Association's verification period is three years; however, depending on the degree of risk, re-verification may be required annually.

19 Traceability is closely related to the types of claims that can be made on a package. Typically, a given initiative will specify rules for labelling based on the Chain of Custody system used (as well as the percentages of standard-compliant inputs present). Although 4C Association, BCI, ETP, GLOBALG.A.P. and RTRS do not use on-package labelling, all have policies on content requirements for trading up the supply chain. All of the other standards reviewed have requirements for on-package labelling but apply different rules based on the specific products with which they work. Appendix IV provides specific information on these voluntary standard labelling policies.

20 Also referred to as "certificate trading."

TABLE 3.4 CHAIN OF CUSTODY INDICATORS.

	1972 IFOAM	1987 SAN/RA	1993 FSC	1997 GLOBALG.A.P.	1997 Fairtrade	1999 PEFC	2002 UTZ [†]	2004 RSPO	2005 BCI [‡]	2005 CmiA [§]	2006 RTRS	2006 4C Association [§]	2007 RSB	2008 Bonsucro	1997 ETP	2012 ProTerra
Separate CoC standard		✓	✓	✓		✓	✓	✓	✓		✓		✓	✓		
Identity preservation	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓			✓
Segregation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Mass balance		✓	✓	✓	✓*	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Book and claim								✓			✓			✓		

* The objective of mass balance is to ensure that Fairtrade producers have received the applicable Fairtrade Minimum Price and Fairtrade Premium, and it is applicable to cocoa, cane sugar, juice and tea operators with no physical traceability (the ability to follow a specific Fairtrade product all along the supply chain and through all stages of production and processing) (Fairtrade, 2011a).

† BCI only offers segregation up to ginner level (direct correspondence with BCI).

† UTZ applies the system of mass balance to cocoa but not to coffee, tea or rooibos.

‡ CmiA's application of identity preservation and segregation Chain of Custody models is optional (as noted by CmiA to SSI).

§ 4C Association applies identity preservation and segregation at the unit level, but not for shipping, roasting, manufacturing and so on. The model of mass balance is also applied; however, the licence/certificate must be passed on with the coffee up to final buyer level (SSI direct communication with 4C Association).

The application of Chain of Custody (CoC) traceability criteria provides additional assurances that compliant products are appropriately accounted for in the marketplace. As Table 3.4 reveals, 10 of the 16 voluntary standards reviewed adhere to a separate standard that defines the principles, criteria and indicators of the CoC.

The application of these CoC models can also vary across commodities (i.e., a single-standard system may apply different CoC models based on the commodity, as with Fairtrade and UTZ) as well as along different segments of the supply chain (i.e., a single standard may apply different CoC models to different stakeholders along the supply chain, as with 4C Association). Others, such as CmiA, still allow users to choose which form of CoC they want to use. The use of multiple CoC models provides standard setters with enhanced flexibility to meet the specific needs of potential clients and stakeholders. Within the market, however, each of these accounting systems is designed to produce one common result: for every amount of compliant product sold, an equal amount of compliant product is produced.

3.3.3 Continuous Improvement

Sustainable markets more generally, and voluntary sustainability standards in particular, are a young and highly dynamic field. Just as new initiatives are coming onto the market at a constant pace, so too are existing initiatives undergoing continual modification to more effectively achieve their objectives. The degree to which a given institution implements formal continuous improvement processes can provide an indication of the organization's ability

to learn and adapt to market and field conditions, not to mention changing technology and the processes related to sustainable development more generally.

Arguably, one of the first steps in adopting a systemic approach to continual improvement is to understand a system's varying impacts over time and across regions. The application of a formal monitoring and evaluation system across an initiative's programs is an essential tool for achieving this objective. Both ISEAL, through its Impacts Code, and ISO, through its management standards, offer formal guidelines for monitoring program performance over time. The Committee on Sustainability Assessment (COSA), on the other hand, offers a unique database for allowing standard-setting bodies and other stakeholders to monitor and manage supply chain sustainability over time, as a basis for understanding areas where continual improvement might be needed or possible (see Box 3.5).

Seven of the initiatives²¹—BCI, Bonsucro, Fairtrade, FSC, PEFC, SAN/RA and UTZ—report having formal monitoring and evaluation systems (ITC, 2013b). However, an additional seven report that they are in the process of acquiring compliance with the ISEAL Impacts Code. PEFC continues to monitor ISEAL activities for potential benefits over and above the ISO/IAF structure the initiative is currently following.

21 At the time of publication, Bonsucro's monitoring and evaluation had just been formalized following ISEAL requirements (Fairtrade, 2011b; FSC, n.d.-a; UTZ, 2012). PEFC's formal monitoring and evaluation system is in the form of mandatory standards revisions on a five-year basis (T. Arndt, PEFC, personal communication, December 2014).

Voluntary standards systems commonly require the adoption of continual improvement measures across their production units. Standard-setting bodies are now beginning to apply similar approaches to the management of the standards systems themselves—and they are increasingly supported by a growing set of global tools to do so.

ISEAL Impacts Code

The ISEAL Impacts Code provides general requirements for the development and implementation of monitoring and evaluation programs by social and environmental standards systems. The code requires that the standards systems:

- Identify and engage relevant stakeholders.
- Define the intended change resulting from their activities.
- Monitor their activities in an ongoing process using systematic collection of data through specified indicators.
- Routinely evaluate their activities through the analysis of their collected data in order to assess the impacts of their standards.
- Implement continuous learning and improvement mechanisms to improve the standard system as well as to inform strategic planning.

Through these processes, the ISEAL Impacts Code provides a framework for the standards system to refine its theory of how change is expected to happen in order to more closely meet the desired impact.

For more information see http://www.isealalliance.org/sites/default/files/PO41_ISEAL_Impacts_Codev1.0.pdf.

ISO Management System Standards

Some standards included in the ISO family of metastandards are management system standards. These standards provide a model to follow when setting up and operating a management system (a set of procedures an organization requires in order to meet its objectives).

All ISO management system standards are based on the principle of continual improvement. An organization or company assesses its current situation, sets objectives and develops policy. From there, it takes action to meet those objectives, and then results are measured. The resulting information allows for the effectiveness of policies and actions to be continually reviewed and improved.

Although one may typically think of ISO management standards as applicable to the manufacture of physical goods, they have direct applicability to the body of standard setters as well. The adoption and integration of ISO management standards by voluntary standards could provide a strong platform for implementing continual improvement over time.

Examples of ISO management standards are ISO 50001 Energy Management, the ISO 14000 family—Environmental Management—and the ISO 9000 family—Quality Management.

For more information see <http://www.iso.org/iso/home/standards/management-standards.htm>.

COSA

The Committee on Sustainability Assessment is a collaborative initiative born out of the UNCTAD/IISD Sustainable Commodity Initiative that aims to provide a global framework for the impact assessment and continual improvement of voluntary standards and other supply chain initiatives. COSA was established to address the multiplying challenges facing standards-setting bodies, private sector actors and policy-makers in managing the various supply chain approaches available to them toward the most effective outcomes possible.

COSA has evolved well over a hundred useful indicators to measure sustainability at the economic, social and environmental dimensions and helps organizations to work with as few as five to

streamline their efforts. The advantage of the COSA system is that it can be used for simple, low-cost performance monitoring that is useful on an everyday basis in a supply chain or project. This can also be linked directly to more robust (scientifically credible) impact assessment using the same approach.

To date, the COSA system has been applied in the cocoa and coffee sectors across nearly 20,000 farms, amassing more than 15 million data points. It currently represents the most extensive set of data available to the public on the impacts of supply chain sustainability initiatives in the agricultural sector. For more information, visit <http://thecosa.org>.

3.4 GOVERNANCE SYSTEMS

Capacity for self-determination is not only a human right, but a cornerstone of sustainable development (IISD, 1994; United Nations, n.d.; UN Sustainable Development, 1992). The literature on global value chain analysis reveals both the challenge and the importance of governance as a basis for securing prosperity among the poorest of the poor (see, e.g., Gereffi, 1994; Manning, Boons, von Hagen & Reinecke, 2012; Raikes, Jensen & Ponte, 2000). One of the compelling features of voluntary standards over time has been their ability to step outside of the box of traditional state and institutional lines of decision making, allowing for the creation of novel governance regimes that reach across supply chains and national jurisdictions. The stakeholder-focused approach to standards governance has allowed standards to achieve new levels of participatory governance, often reaching from the smallest units of production to major multinationals, but is also challenged with the prospect of ensuring inclusiveness, transparency, equity and due process at the global level. Our review of existing practice reveals that:

69 per cent of the initiatives have external stakeholders involved in decision making in the standard-setting process.

94 per cent are member-based organizations; however, some initiatives' membership consists of select NGOs²² or national initiatives.²³

Stakeholder representation is diverse. Industry and the private sector are a dominant force at the board level in 56 per cent of the initiatives surveyed. NGOs and civil society are the dominant force in 25 per cent of the initiatives. Producers are a dominant force in the board level governance of only 6 per cent of the initiatives, but do hold an equal or near-equal share of representation across 31 per cent of the initiatives.

Voluntary sustainability standards are opening supply chain decision making to developing country stakeholders, with significant developing country representation at the board level; nevertheless, developed country stakeholders continue to constitute the majority of board members among the initiatives surveyed.

Voluntary standards are becoming more inclusive with their processes for developing country stakeholders, with most of the initiatives surveyed providing complaints processes in languages other than English, and 100 per cent accepting complaints and disputes through more informal means (up from 40 per cent in the *SSI Review 2010*).

BOX 3.6 DEMOCRATIZING THE GREEN ECONOMY: THE MEMBERSHIP MODEL AS A BASIS FOR PARTICIPATORY GOVERNANCE

The membership model is the dominant form of governance used among the voluntary standards surveyed. Membership eligibility and the powers associated with membership can have significant implications for how the initiative is governed. The most direct form of member integration and ownership occurs when members have full voting and decision-making powers through the annual general meeting and board elections. All of the member-based organizations covered in our review report having some degree of voting members and thus operate as democratically run organizations. Moreover, all of the initiatives surveyed allow for international membership, thereby providing a sort of supra-jurisdictional democracy. One of the achievements of voluntary standards has been their ability to provide meaningful representation to core constituencies (supply chain stakeholders) across national jurisdictions.

However, it is clear that any given organization cannot plausibly offer "direct" representation to all of the stakeholders in a given supply chain, nor can organizations owe "equal" representation to all possible stakeholders. Finally, ensuring an adequate level of openness in governance without sacrificing efficiency and relevance in the market represents a fundamental challenge for voluntary standards. Although larger and more open membership models maximize participatory governance, this may not be feasible for an organization with limited resources for managing an international membership. The costs associated with bringing international members to meetings to take part in strategic decisions can multiply rapidly. Moreover, the additional transaction costs associated with international, member-based governance can lead to reduced flexibility and efficiency in operating in the market.

The distribution of membership fees can also have significant impacts on stakeholder representation and voice. All of the initiatives surveyed charge some sort of fees to their members. While membership fees are often a critical element in maintaining financial sustainability, there is a general trend toward keeping membership fees for lower-income members (typically producers and non-governmental organizations [NGOs]) at a lower rate in order to allow for broader membership from these stakeholder groups. However well-intentioned (and necessary) such efforts may be, organizations that rely significantly on membership fees for their revenues may be required to orient decision making toward those members that are most important in terms of revenue generation in order to maintain financial viability (see Figure 2.9, Section 2.3.5).

22 SAN's membership consists primarily of southern NGOs and civil society organizations.

23 PEFC restricts membership to national forest certification systems and international stakeholder members; however, PEFC notes that accepting nationally based organizations would violate the subsidiarity principle and put PEFC in competition with its own members (SSI correspondence with PEFC).

3.4.1 Executive Decision Making

The internal management structure of a sustainability standard plays a role similar to the executive powers in public government. The day-to-day implementation of the sustainability initiative stems from executive decision making and includes matters of general management, market development, training, transaction processing, and monitoring and enforcement of compliance. The highest management authority in most member-based organizations typically rests with the general assembly, but for practical matters, the board of directors is usually the highest level of executive management for “hands-on” decision making. A board of directors or similar entity²⁴ governs all 16 of the initiatives covered in this report. However, governance structures do indeed vary among the different voluntary sustainability initiatives.²⁵

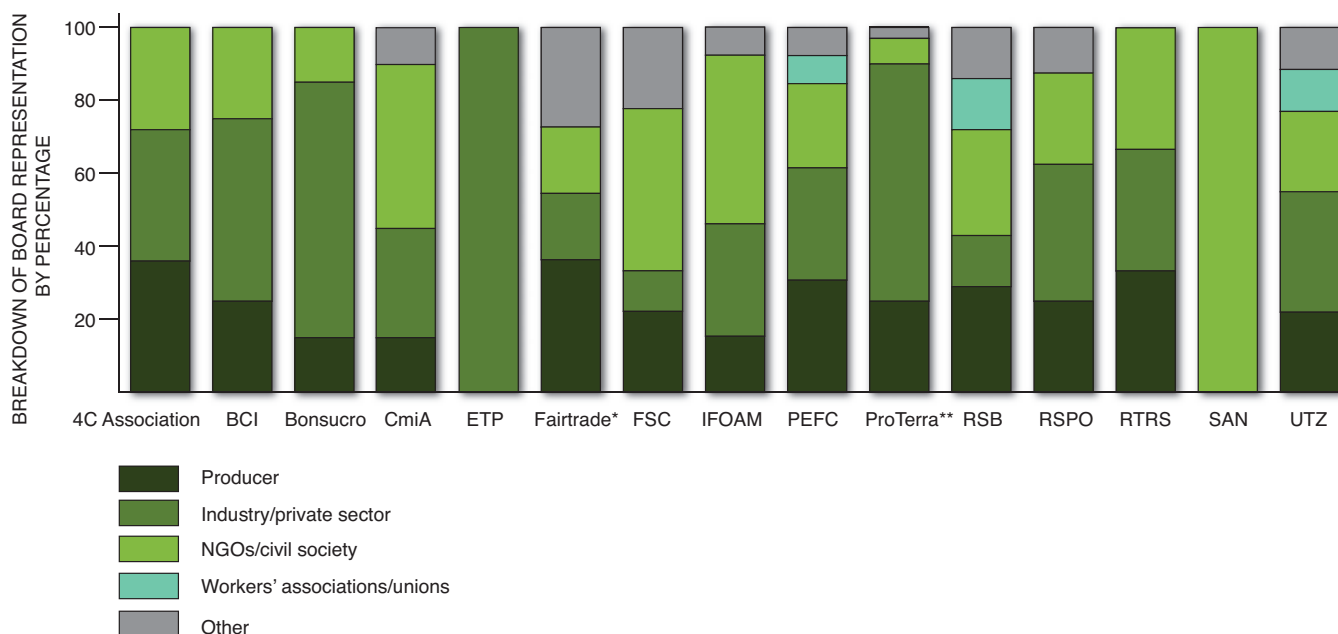
- 24 Paralleling the operations of the board of directors is the council of the 4C Association and the executive team for UTZ Certified. Note that in the case of PEFC, the General Assembly functions as a board typically does in other organizations.
- 25 For example, UTZ’s supervisory board holds the highest management authority, similar to a General Assembly. PEFC is different in that its General Assembly makes almost all decisions, and therefore holds face-to-face general assemblies on a yearly basis, as well as multiple general assembly postal ballots annually (as noted in SSI correspondence with PEFC).

Board representation provides an indication of potential ownership, buy-in and participation of stakeholder groups in the day-to-day management of an organization. In the context of a global economy, where consumer and private sector demand in the developed world often drive supply chain decision making, one of the key challenges for participatory governance has been to find mechanisms for empowering stakeholders upstream in global supply chains to participate in downstream supply chain management decisions.

With this in mind, Figure 3.3 shows the current distribution of stakeholder roles in the supply chain across the initiatives reviewed in this report. The categories of “producer,” “industry/private sector,” “NGOs and civil society,” “workers’ associations and unions,” and “other” have been used to provide a *general picture* of the distribution of stakeholders on an initiative’s board. It is important to note that the categories are not entirely exclusive of each other, with many variations among them. Producer representatives may also have interests in industry or NGOs, for example.²⁶

- 26 An organization’s structure can further complicate these categories. For example, “foundations” differ from “associations” in that in foundations, individual board members can represent different organizations, which themselves can include multistakeholder constituencies. ProTerra exemplifies this distinction.

FIGURE 3.3 BOARD REPRESENTATION BY STAKEHOLDER ROLE IN SUPPLY CHAIN.²⁷



*36 per cent of Fairtrade’s board is made up of market-facing organizations that can include private sector groups or NGOs working to build Fairtrade markets. For the purpose of this graph this category was split between industry/private sector and NGOs/civil society.

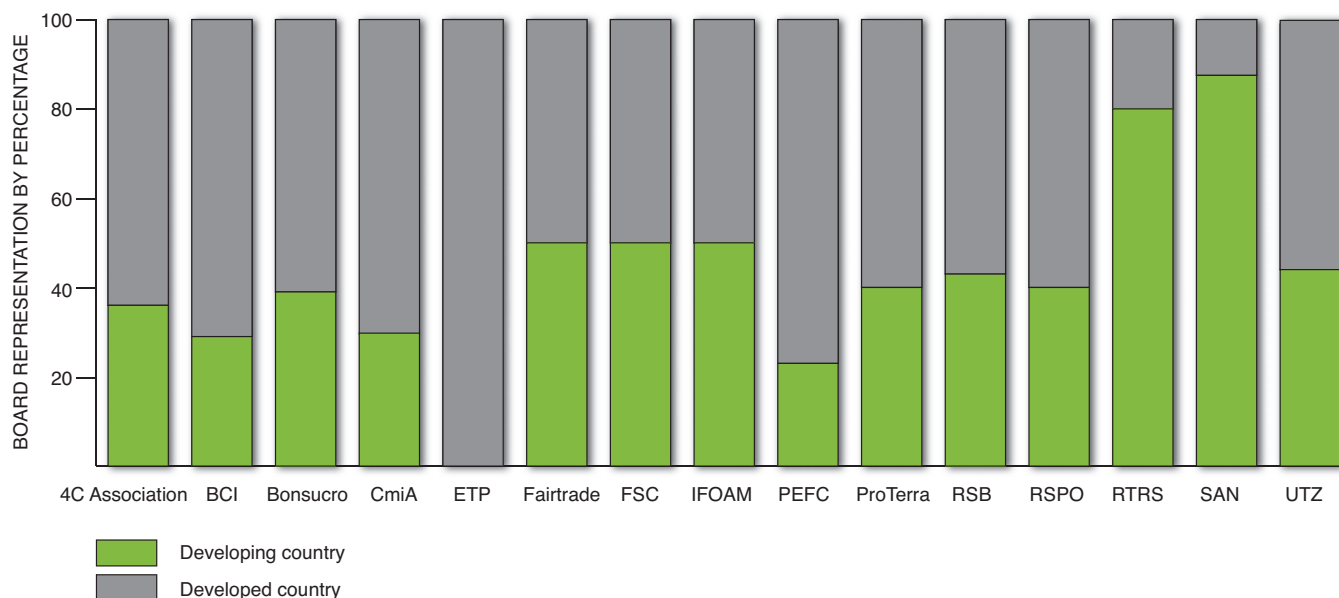
**ProTerra’s breakdown is the average of the total of ABRANGE, ARGE Gentechnik Frei, and VLOG member associations’ stakeholder representation.

27 No data available for GLOBALG.A.P.

Figure 3.3 shows that overall, industry and the private sector continue to play a prominent role in over half the initiatives reviewed. Five of the initiatives show that NGOs and civil society representatives have a prominent or equal presence on the board, with Rainforest Alliance's agricultural standard-setting board for the SAN/RA certification system (SAN) standing out as consisting entirely of NGO representatives.²⁸ 4C Association, Fairtrade, PEFC, RSB and RTRS show the largest presence of producer representation on their boards.

Voluntary sustainability standards are offering an increasingly important place for developing country stakeholders in supply chain decision making. Developed country stakeholders do, however, continue to maintain majority representation for almost all of the systems reviewed (see Figure 3.4). The Rainforest Alliance standard-setting board (SAN) and RTRS represent the exceptions, with 87.5 per cent and 69 per cent, respectively, of their board members representing developing countries.²⁹

FIGURE 3.4 BOARD REPRESENTATION BY GEOGRAPHICAL LOCATION (DEVELOPING/DEVELOPED COUNTRIES)³⁰



BCI: As defined by IMF (2012) and the World Bank (2012). FSC's ratio changes annually: of 9 board members, 4 or 5 are from North or South. From 2014, FSC's Board will consist of 12 members (4 per chamber) with equal North/South representation (SSI correspondence with FSC; see FSC, n.d.-b).

GLOBALG.A.P.: information unavailable.

SAN: See SAN (2010b).

ProTerra: The ProTerra Certification Program is still filling out its governance structure. See ProTerra (2013) for the membership of each of the three organizations represented on the board of governors. For Figure 3.3, ProTerra's constituencies were aggregated and then averaged.

28 For the purposes of this review, we consider representation on SAN, the standard-setting body affiliated with Rainforest Alliance and responsible for setting and implementing Rainforest Alliance agriculture standards. Rainforest Alliance itself has an independent board with a different makeup altogether consisting of 22 members representing a wide range of industry sectors including food supply chains, the financial sector, dispute resolution, and the legal sector, as well as NGOs (Rainforest Alliance, 2013c).

29 12.5 per cent of the Rainforest Alliance's board comes from the United States.

30 Information is provided by voluntary standards directly unless otherwise indicated. No data available for GLOBALG.A.P.

3.4.2 Legislative Decision Making

Opening the rule-making process to all stakeholders that may be held accountable to such rules presents sustainability initiatives with the potential to mirror democratic institutions. However, at both a practical and political level, initiatives face several challenges in opening their rule-making processes to stakeholders at the international level.

On a practical level, cost increases exponentially with the number of stakeholders included. Moreover, heavily multistakeholder decision-making procedures could lead to reduced efficiencies in an initiative's ability to adjust to market conditions quickly—one of the attractive features associated with private initiatives.

At the political level, it is unclear whether equal voice for all stakeholders in the legislative process is appropriate, particularly when rules apply only to a specific segment of the supply chain. Perhaps more importantly, however, each initiative has a distinct mission or markets that they target within the broader pursuit

of sustainable development, and these variables distinguish stakeholders and their associated level of decision-making authority. Therefore, while sustainable development is a concept that must speak at some level to the needs of *all* stakeholders, individual initiatives are often designed with the needs of specific stakeholders in mind.

While it is not possible, based on available data, to determine the precise makeup of stakeholder participation in the legislative process of each initiative, the SSI measures the degree to which a given standard includes external (i.e., non-member) stakeholders in their rule-making processes. Table 3.5 illustrates that the majority of the initiatives reviewed (12 out of 16) engage stakeholders significantly in the standard-setting process.³¹

³¹ ProTerra has a stakeholder council and opens its standard up for public consultation on a yearly basis (ProTerra, 2012).

TABLE 3.5 EXTERNAL PARTICIPATION IN RULE-MAKING PROCESSES FOR VOLUNTARY STANDARDS.³²

	4C Association	BCI	Bonsucro	CmiA	ETP	Fairtrade	FSC	GLOBALG.A.P.	IFOAM	PEFC	PROTERRA	RSB	RSPO	RTRS	SAN/RA	UTZ †
Stakeholder participation on boards and committees		✓		✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Stakeholder consultation in standard-setting processes	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Stakeholder decision making in standard-setting processes		✓		✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓

† Participation of stakeholders: The Standards Committee and Product Advisory Committees provide the fora for stakeholders along the value chain, from producers to buyers to be involved and influence the operations of UTZ Certified (UTZ, 2013).

³² Some information extracted from ITC Standards Map (ITC, 2013b) and also provided directly from standards bodies.

3.4.3 Judicial Decision Making

Adjudication is intended to deal with disputes between stakeholders during the standard implementation process. Since systems are presumably designed to minimize such disputes in the first place, the development and management of adjudication processes may be regarded as a sort of secondary activity for standard-setting bodies more focused on monitoring and enforcement processes. Nevertheless, a sound dispute resolution process is key to ensuring that due process supports decision making, and it therefore provides an important pillar in ensuring the credibility and strength of the overall conformity assessment and governance process of any initiative. As noted in Table 3.6, most of the initiatives reviewed have publicly available policies and procedures on dispute settlement. Only a small minority (25 per cent) report having independent dispute settlement bodies, signalling an ongoing risk for perceived conflict of interest in dispute processes throughout the industry more generally.

While most standards provide publicly available policies on dispute settlement processes, only 31 per cent provide an independent dispute settlement body. Ten of the 16 initiatives permit both local and informal complaints, indicating a specific effort toward making dispute resolution accessible to marginalized groups across the standards reviewed.³³ Given the costs associated with formally independent bodies, there may be particular hope for more creative dispute settlement bodies and processes, such as the RSPO dispute settlement facility (see Box 3.7).

33 At the time of this report, Fairtrade was in the process of implementing procedures for workers to launch complaints through informal means.

TABLE 3.6 DISPUTE SETTLEMENT INDEX FOR VOLUNTARY SUSTAINABILITY STANDARDS REVIEWED IN THIS REPORT.³⁴

	4C Association	BCI	Bonsucro	CmiA	ETP	Fairtrade	FSC	IFOAM	PEFC	ProTerra	RSB	RSPO	RTRS	SAN/RA	UTZ
Existence of independent dispute settlement body	✓						✓	✓	✓						✓
Public access to policies and procedures for complaints	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Complaints and dispute resolution procedures available in languages other than English §	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓†	
Ability to launch complaints at the local level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Complaints accepted through informal means		✓			✓		✓	✓	✓	✓	✓		✓	✓	✓

† Rainforest Alliance, 2013a.

§ It is perhaps worth noting here that there are various levels of disputes concerning different issues such as certification decisions and standard setting. These complaints occur at both the national and international level. At PEFC, for example, the availability of different languages with respect to disputes is distinguished between international activities (English), endorsement decisions (English), PEFC members (local languages as well as English for international) and certification decisions (local language).
GLOBALG.A.P.: Information unavailable.

34 Some information extracted from ITC Standards Map (ITC, 2013b) and also provided directly from the standards bodies.



BOX 3.7 MEDIATING THE GREEN ECONOMY: MANAGING DISPUTES AND THE RSPO DISPUTE SETTLEMENT FACILITY

Standards set principles and rules for sustainable production and practices, and in so doing, they establish the parameters of a green economy. However, disputes over the interpretation and application of standards systems inevitably arise. Part of ensuring the sustainability of voluntary standards systems entails the implementation of due process through appropriate dispute settlement procedures.

Because disputes can arise between any set of parties in the supply chain, including the standard-setting body itself, it is important that objectivity (both perceived and actual) in the application of the core principles of due process is preserved. The establishment of an independent dispute resolution body represents one of the ways of ensuring the independence of dispute resolution more generally (in the same way that courts are designed to be independent of government in most democracies). However, within the context of supply chain processes that must be funded by market actors, independent institutions may be too costly or time-consuming to implement.

With this in mind, the RSPO's dispute settlement facility represents a creative effort to provide for principles of fairness and due process while keeping cost and bureaucracy to a minimum by focusing on supporting mediation as a first step in the dispute resolution process. Although not formally independent, the RSPO dispute resolution facility allows parties a place to formally resolve disputes based on a process of mutual consent and negotiation. If the parties fail to reach agreement, they have the option of using the more formal and legalistic RSPO Complaints System, which takes precedence in such cases. By providing mediation services, the RSPO is able to eliminate the need for most cases to ever go through its complaints system.

3.4.4 Public Disclosure

In order to play an effective role in the governance of sustainability initiatives, stakeholders must have sufficient information about the characteristics, processes and impacts of those initiatives. Public disclosure of systems and financial data therefore represents an important tool for enabling effective participatory governance. At the same time, the geographic, cultural and linguistic diversity of the stakeholder base can make effective communication with stakeholders extremely time and resource intensive for international organizations.

The SSI's Public Disclosure Index is based on seven parameters and provides a high-level measure of the degree to which key information is available online for different initiatives. Although 50 per cent of the initiatives reviewed provide online access to 75 per cent or more of the information included in the SSI Public Disclosure Index, pointing to a general effort toward ensuring easy access to

decision and management processes, it is nevertheless notable that only half of the standards reviewed provided online access to independently audited financial statements. This is a rather surprising result given the stated public objectives maintained by virtually all of the initiatives reviewed and the corresponding importance of revenue streams in determining overall capacity and activities along the supply chain.

Public disclosure is a value closely aligned with standard-setting processes, as is exemplified by the high degree of documentation made available to the public online by the standards reviewed (see Table 3.7). Meeting minutes and records as well as audited financial statements are the notable exceptions, and therefore represent important opportunities for improving public engagement in the development and implementation of standard-setting processes.

TABLE 3.7 AVAILABILITY OF DOCUMENTS AND DECISIONS ONLINE.³⁵

Type of information	Information detail	4C Association	BCI	Bonsucro	CmiA	ETP	Fairtrade	FSC	GLOBALG.A.P.	IFOAM	PEFC	ProTerra	RSB	RSPO	RTRS	SAN/RA	UTZ
Decision makers	List of board members	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	List of committee members	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Decisions	List of compliant enterprises	✓					✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	Certification decisions			✓			✓	✓	✓		✓	✓	✓	✓	✓		
Documents	Committee meeting minutes and records		✓						✓					✓	✓		
	Standard-setting and review procedures	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Independently audited full financial statements	✓					✓	✓		✓	✓	✓			✓	✓	
	Annual report	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ [#]	✓

35 Some information extracted from ITC Standards Map (ITC, 2013b) and some provided directly from the standards bodies.

[#] SSI data: Rainforest Alliance, 2011 (independently audited full financial statements); Rainforest Alliance, 2012 (financial summary in annual report, policies and procedures for complaints).

4C: The list of committee members is in reference to technical committee members and Mediation Board members (4C Association, 2013c; 2013e). See 4C Association (2013a) for list of compliant enterprises.

BCI: Although BCI makes complaints and dispute resolutions available online, the initiative has not received any official complaints since its inauguration (SSI correspondence with BCI).

Fairtrade: Fairtrade's website provides an annual statistical report with aggregated figures for complaints, appeals and allegations, as well as for certification decisions.

FSC: All ca. 1300 FM/CoC certification decisions are publicly online (including CARs/follow-up) (SSI direct communication with FSC).

RSB: RSB (2011a).

RTRS: RTRS "committee members" refers to the Task Force Brazil and the Pesticides' Use Working Group (SSI correspondence with RTRS).

SAN/RA: The list of the International Standards Committee is available online (A. de Freitas, SAN/RA, personal communication, December 2013).

UTZ: UTZ makes lists of some committee members available online, but not members of all committees. UTZ will begin publishing independently audited full financial statements online in 2014 (SSI correspondence with UTZ Certified).

3.5 SSI CONTENT AND CRITERIA COVERAGE

The rules or criteria associated with a given standard represent the core identity of the initiative. Notwithstanding the consensus on the broad definition of sustainable development (Brundtland Report [United Nations, 1987] and Agenda 21, Rio Declaration [UN Sustainable Development, 1992]) significant diversity of opinion remains as to how sustainable development is best implemented in any given case.

All voluntary standards, to one degree or another, seek to leverage market forces as a vehicle for promoting sustainable development objectives. An initiative's criteria can be seen as defining the organization's "brand identity" and so forms the basis of its market approach. This backdrop explains the wide diversity of standards initiatives as well as the continued (and growing) multiplicity of initiatives within and among sectors.

Although the initiatives reviewed vary in their specific areas of focus and the commodity sectors in which they operate, some general trends can be observed:

- On average, older multisector initiatives show broader and deeper social, environmental and economic content and criteria coverage than do newer, single-sector initiatives.
- Indicators that have achieved the greatest degree of consensus, such as labour rights and occupational health and safety standards that fall within the framework of the International Labour Organization convention, tend to illustrate more robust coverage than those that are more difficult to determine.
- Single-sector initiatives reveal significantly higher coverage of community involvement issues than do multisector initiatives; conversely, multisector initiatives show significantly higher coverage of gender and human rights issues than do single-sector initiatives.
- Environmental issues related to management and reduction of energy use and greenhouse gas emissions reveal the most opportunity for further development across all voluntary standards reviewed.

Generally, there are two types of standards with respect to content and criteria coverage: process-based standards and performance-based standards. A performance-based standard sets requirements for actual outcomes to be achieved rather than requirements for practices. A process-based standard sets requirements for practices that must be undertaken, but not for actual outcomes that must be achieved. These types of standards focus on compliance or progress with recommended or required "best" practices, rather than on the results of those practices, and they do not set criteria for the performance of the management system. That said, however, it is difficult to draw a clear distinction between the two types of standards, since many process-based standards also contain performance-based requirements.³⁶

The vast majority of the initiatives reviewed in this report use process-based standards. The predominance of process-based standards across the agriculture and forestry sectors reflects

the potential variability of outcomes that might be considered sustainable depending on the local conditions where production occurs. Sustainable development may most accurately be defined by the adoption of sustainable management practices rather than by the attainment of any specific fixed outcome. There are, of course, exceptions to this general observation, where specific activities or outcomes are deemed as *de facto* unsustainable, if not by all stakeholders (as in the case of forced labour), then at least by a group of stakeholders (such as in the use of genetically modified organisms, or GMOs).

The adoption of process-based approaches, however, is also subject to its own challenges, notably in relation to the consistency of impact or results found across diverse scenarios of standards application. While localized standard-setting or adaptation processes can help reduce this uncertainty, ongoing monitoring or impact assessments are likely to be essential elements in maintaining the meaningfulness of process-based standards over the longer term.

Regardless of whether a standards system is performance based, process based or a mix of the two, criteria alone, although an *indication* of expected outcomes, will never be sufficient for assessing the achievement of specific impacts.³⁷ The relationship between criteria and actual outcomes is almost always complex, and implementation of any given criteria can lead to unexpected results. Weak implementation or enforcement mechanisms, for example, can leave the best-designed criteria short on desired outcomes.

It is therefore critical to note that our review of the content and criteria across initiatives can only shed light on the orientation of a given initiative and does not suffice as a proxy for actual impacts.

Moreover, this is all the more the case given that the SSI's indicator analysis is limited to criteria explicitly contained in the standard's *global* documents, and not those implemented at either the regional level or referenced through national law. A number of initiatives in this review do incorporate systems for identifying and enforcing criteria at the local and national level that go beyond those specified at the global level.³⁸ Similarly, some initiatives may reference compliance with national law in lieu of specifying requirements, with the understanding that such legal requirements are part and parcel of the standard itself.³⁹ Our content and criteria analysis only considers specific criteria within a given standard, and does not take into account the referential inclusion of regulatory instruments.

³⁶ Bonsucro, FSC and PEFC all contain a higher-than-average number of performance-based requirements.

³⁷ The Sustainable Commodity Initiative's COSA initiative offers one example of an initiative expressly designed to address the question of the field-level sustainability impacts of voluntary sustainability standards. The level of data available on impacts at present is insufficient to report in a systemic manner. However, the SSI does envision reporting on impacts once a more systemic and reliable information base is available.

³⁸ For example, FSC, GLOBALG.A.P., PEFC, and RSB are affiliated with or manage a complex set of national and regional standards.

³⁹ Note that this applies specifically to PEFC, where reference to compliance with North American legislation covers many of the basic social and environmental indicators in the SSI set.

3.5.1 Methodology

The SSI's content and criteria indicators and indices represent an attempt to capture the most pressing issues related to supply chain sustainability across commodities, production systems and production regions. Most importantly, they are designed to capture what matters most to global stakeholders with respect to the sustainability performance and orientation of voluntary initiatives.⁴⁰ However, it is important to note that working from a limited set of indicators, the actual applicability or appropriateness of a given

SSI index will vary depending on the specific commodity sector or standard in question, for example, the lack of genetic modification in the palm industry.⁴¹ In an effort to distinguish between different types of requirements and enable a sense of criteria coverage and depth, we have adopted a point scale based on the degree and speed with which full compliance is required by a given initiative (see Figure 3.5).

⁴⁰ The full set of SSI indicators, including the content and criteria indices, were developed with the oversight of the advisory panel to the 2010 *SSI Review*. These indicators were subsequently integrated directly into the ITC T4SD standards map database and represent the backbone of the ITC's global framework for tracking standards-related data and information (ITC, 2013b).

⁴¹ With this in mind, the SSI is committed to reviewing and revising its indicator set over time through ongoing collaboration with standard-setting bodies and other stakeholders.

FIGURE 3.5 DEGREE OF COVERAGE METHODOLOGY.



Degree of Coverage	Requirement	Rating
Critical	Must be met as a precondition to participate in the standard (at the time of the first audit).	5
Short term	Must be adhered to over the certification process in the short term (up to one year after the first audit).	4
Medium term	Must be adhered to over the certification process in the medium term (1–3 years).	3
Long term	Must be adhered to over the certification process in the long term (3–5 years).	2
Recommendation	Criteria exist but are not binding (no timeline).	1
Not covered	No requirements.	0

Once each criterion is converted into the five-level sustainability rating system, results are aggregated accordingly on a scale of 0 to 100 per cent. Three separate analyses are applied to interpret results and overall trends:⁴²

- **Global indices analysis** examines criteria coverage according to various indices. The primary focus of this analysis is to identify the overall coverage according to the core sustainability indices along each social, environmental and economic sustainability dimension.
- **Single-sector versus multisector analysis** compares content and criteria coverage of single-sector commodity initiatives with that of multisector commodity initiatives across the 16 standards surveyed. The focus of this analysis is to determine if the extent of coverage across the social, environmental and economic SSI indices varies between single-sector and multisector initiatives. Since multisector initiatives tend to be older, and have therefore had more time to develop their standards, it is interesting to investigate this comparison as well as the possible explanations of these findings.

⁴² Note we also provide a commodity-by-commodity breakdown of SSI index coverage in Appendices V, VI and VII.

- **Indicator-specific analysis** examines criteria coverage according to the individual indicators that make up the indices. The primary focus of this analysis is to identify the disparities evident in disaggregated data that may not be fully reflected in an overall aggregate index analysis. This analysis helps provide an understanding of which criteria are most common and which are the least developed across the initiatives and sectors examined.

It is important to note that the SSI's indicator analysis is a comparison tool for evaluating where standards lie on the continuum of social, environmental and economic content and criteria coverage. The analysis is not intended to delineate "good" versus "bad" performance. While we recognize that there will be a natural tendency to regard more complete coverage as "better," this may not necessarily be the case. To the extent that more stringent criteria also represent a higher bar for producers to cross, increased competitiveness may decrease the accessibility of sustainable markets to those most in need, thereby restricting the ability of such initiatives to promote poverty reduction objectives among the most marginalized producers. As our review of the market trends reveals (see Section 4), this remains a major concern for initiatives moving forward.



3.5.2 The SSI Criteria

The SSI social criteria provide a high-level overview of the degree to which each voluntary sustainability initiative addresses key issues related to social sustainability at the levels of community, household and workplace. These indicators place great emphasis on UN and International Labour Organization (ILO) human and labour rights documents. See Appendix I for an explanation of each social index and accompanying indicators. Figure 3.6 presents the social indicators and index categories selected.

The SSI core environmental criteria cover a series of key environmental sustainability factors at the site of production or extraction to underscore the significance of this stage in commodity production. See Appendix I for an explanation of each environmental index and accompanying indicators. The SSI environmental indices and their indicators record the degree of compliance specified by a standard with respect to the categories shown in Figure 3.7.

The SSI core economic criteria record the degree of compliance specified by a standard with respect to the categories shown in Figure 3.8 (see Appendix I for an explanation of each economic index and accompanying indicators).

FIGURE 3.6 SSI SOCIAL INDICES AND INDICATORS.

Criteria dimension	Index category	Indicators
SOCIAL	Human rights	1. Education 2. Medical care 3. Housing and sanitary facilities
	Labour rights	4. Equal remuneration 5. Freedom of association 6. Collective bargaining 7. Non-discrimination 8. Worst forms of child labour 9. Forced labour 10. Minimum age
	Gender	11. Gender in governance 12. Women's labour rights 13. Women's health and safety
	Health and safety	14. Safety at work 15. Healthy work conditions 16. Access to safe drinking water at work 17. Access to sanitary facilities at work 18. Access to medical assistance at work 19. Access to training
	Employment conditions	20. Treatment of contract workers 21. Transparency of employment practices 22. Written contracts for employees 23. Timely payment of wages 24. Maximum number of working hours
	Employment benefits	25. Paid leave (sick/maternity and/or paternity) 26. Pension and security benefits
	Community involvement	27. Community consultation 28. Local hiring
	Humane treatment of animals	29. Humane treatment of animals

FIGURE 3.7 SSI ENVIRONMENTAL INDICES AND INDICATORS.

Criteria dimension	Index category	Indicators
Environmental	Soil	1. Soil conversion (erosion prevention) 2. Soil quality maintenance
	Biodiversity	3. Habitat set-asides 4. Flora densities/diversity 5. Prohibition of conversion of high conservation value land
	GMO prohibition	6. Prohibition of genetically modified organisms
	Waste	7. Waste disposal 8. Waste management 9. Pollution
	Water	10. Water practices in scarcity (dependencies) 11. Water use in management plan 12. Water reduction criteria 13. Wastewater disposal
	Energy	14. Energy-use and management 15. Energy reduction
	Greenhouse gas	16. Greenhouse gas accounting 17. Greenhouse gas reductions 18. Soil carbon sequestration
	Synthetic inputs	19. Integrated pest management 20. Enforcement of a prohibited list 21. Complete prohibition of synthetics

FIGURE 3.8 SSI ECONOMIC INDICES AND INDICATORS.

Criteria dimension	Index category	Indicators
Economic	Economic	1. Minimum wage 2. Living wage 3. Premiums 4. Written contracts between buyers and sellers 5. Product quality requirements

3.6 SSI INDICES ANALYSIS

3.6.1 Social Indices Analysis

Figure 3.9 illustrates the total average coverage for each SSI social index. Below it, Table 3.8 disaggregates the results to illustrate the coverage of criteria by each of the standards reviewed. The indices are presented from the highest degree of coverage to the lowest.

FIGURE 3.9 AVERAGE COVERAGE OF SSI SOCIAL INDICES AMONG ALL 16 VOLUNTARY SUSTAINABILITY INITIATIVES.⁴³

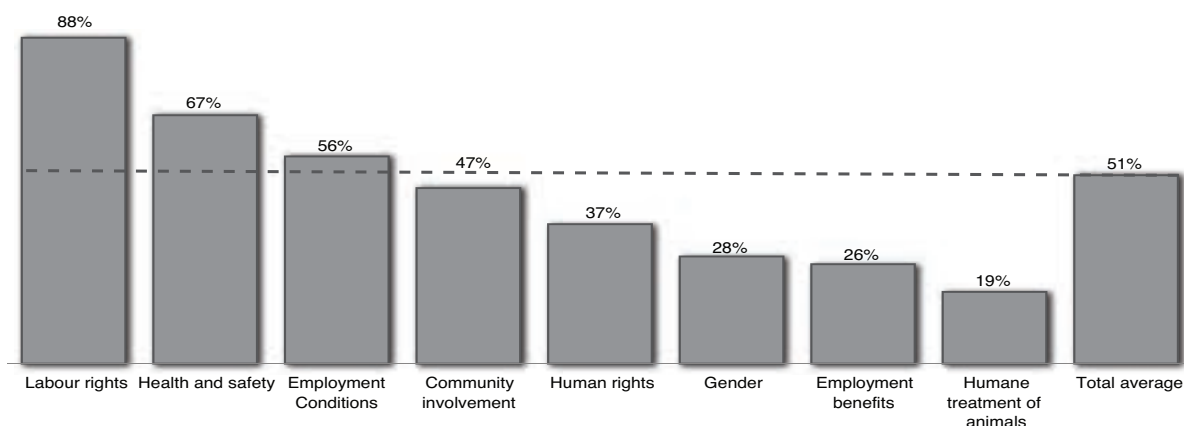


TABLE 3.8 AVERAGE COVERAGE OF SSI SOCIAL INDICES FOR EACH VOLUNTARY SUSTAINABILITY INITIATIVE.

	Labour rights	Health and safety	Employment conditions	Community involvement	Human rights	Gender	Employment benefits	Humane treatment of animals	Total average
SAN/RA	100%	80%	80%	90%	80%	53%	90%	100%	84%
RTRS	100%	80%	92%	80%	67%	67%	50%	NA	76%
RSB	100%	83%	80%	100%	100%	67%	0%	NA	76%
Fairtrade	91%	100%	100%	0%	67%	73%	80%	NA	73%
ProTerra	83%	50%	76%	90%	27%	0%	80%	NA	58%
UTZ	100%	93%	84%	0%	93%	33%	0%	NA	58%
IFOAM	86%	53%	80%	0%	20%	67%	0%	100%	51%
RSPO	97%	87%	36%	90%	0%	7%	40%	NA	51%
ETP	89%	87%	44%	0%	20%	40%	60%	NA	48%
GLOBALG.A.P.	20%	100%	20%	0%	33%	20%	20%	100%	39%
FSC	100%	50%	0%	100%	0%	0%	0%	NA	36%
PEFC	100%	50%	0%	100%	0%	0%	0%	NA	36%
4C Association	83%	37%	40%	0%	47%	27%	0%	NA	33%
CmiA	60%	30%	48%	50%	40%	0%	0%	NA	33%
Bonsucro	100%	40%	32%	50%	0%	0%	0%	NA	32%
BCI	94%	47%	76%	0%	0%	0%	0%	NA	31%

Note: the criterion humane treatment of animals is only applicable to three of the 16 standards; therefore, all other standards list "NA" for "not applicable."

⁴³ Social criteria coverage only reflects specific matches with the SSI indicators and should not be understood to suggest a given initiative's entire treatment on a specific sustainability topic.

The labour rights index earns the highest coverage across all social indices, with 14 of the initiatives illustrating higher than 80 per cent coverage, and seven initiatives reporting 100 per cent coverage. This result is a reflection of the broad international consensus regarding acceptable labour practices as specified under the ILO core conventions, which form the basis of this index.

The initiative revealing the least coverage on labour rights is GLOBALG.A.P., a fact explained in part by its substantial reliance on local labour laws and enforcement systems for meeting major social sustainability objectives.⁴⁴

Overall, SAN/RA, RTRS and RSB show the highest average coverage across the SSI social indices. Seven of the initiatives surveyed register less than 40 per cent coverage across the group of social indices. In some cases, this is explained by a strict focus on the most important and globally agreed social norms. In other cases, references to national law allow initiatives to integrate more culturally specific requirements without making such requirements explicit in the global standard.⁴⁵ National standard interpretations result in more applicable standards among varying country contexts, in recognition that, as in most everything, one size does not fit all.

Coverage of the human rights index is relatively low among initiatives. RSB, UTZ and SAN/RA reveal the most coverage of this criterion, with RSB as the only initiative illustrating 100 per cent coverage. Five of the initiatives reviewed report no coverage at all for this index. Human rights, as a general rule, depend on broader cultural and geopolitical factors that are not directly controlled by the supply chain. The relatively low coverage among the initiatives arguably points to a lack of consensus on how far into the community supply chain responsibilities extend.

Similarly, little emphasis overall is placed on the gender and employment benefit indices. More than half of the initiatives (nine) reveal no requirements related to the SSI employment benefit index in their standards. The gender index also illustrates significantly lower than average coverage across the initiatives reviewed, with six of the initiatives reporting no SSI gender criteria requirements. However, SAN/RA, Fairtrade and ProTerra illustrate much higher-than-average coverage for the employment benefits index; likewise, Fairtrade, RSB, RTRS and IFOAM show higher-than-average coverage

for the gender index, pointing to the potential for advancement in these indices.

Social sustainability is a core pillar of a green economy. The scope of criteria coverage observed among existing initiatives reflects an inherent tension in the ability of supply chain actors to promote social sustainability. While there is clear consensus that standards can and should play a role in protecting negative rights related to employment itself, the role of standards and their ability to proactively influence broader access to community-level or positive rights reveals less agreement among the different initiatives.

It is worth pointing out, however, that even where standards do not explicitly require the protection of certain positive or community rights, the broader economic benefits or access to technical assistance enabled by participation in a voluntary sustainability standard might nevertheless be expected to have important impacts on the provision of these rights. These potential impacts are not, of course, adequately captured by our criteria analysis.

3.6.2 Environmental Indices Analysis

More than half (11) of the initiatives have an average SSI environmental coverage of 50 per cent or more, with IFOAM and SAN/RA reporting higher than 70 per cent average coverage. All of the seven initiatives with lower than average coverage across the environmental criteria are newer initiatives that were established after the year 2000—signalling a trend toward lower coverage among more recent initiatives. Table 3.9 depicts the average score across all SSI environmental indices based on the initiatives (and corresponding criteria) in existence at a given point in time, showing a clear trend toward reduced overall coverage over time.⁴⁶ The downward trend in coverage is inversely proportional to average hectareage certified per initiative over time,⁴⁷ pointing to an apparent trade-off between market share and the depth of criteria coverage. Moreover, all but one of the initiatives with less than 50 per cent average coverage are single-sector initiatives (see single-sector versus multisector analysis below). Importantly, these trends parallel the growing trend toward mainstream uptake across initiatives, and point to a broader issue related to the balance between market actors and the standard-setting process itself (see Figure 3.11).

44 For example, the initiative has designed a social standards extension to GLOBALG.A.P. certification called GRASP (GLOBALG.A.P. Risk Assessment on Social Practice). Where national legal requirements for employment conditions are more stringent, local legislation overrides GRASP. However, if national legislation is either non-existent or less stringent, GRASP provides the minimum compliance criteria for good social management. GRASP's social criteria covers factors such as number of working hours as well as minimum wage and age, and therefore covers indicators across SSI's social and economic criteria.

45 Although local or regional standards typically must always adhere to the bottom line established by global standards, regional standards can go beyond the global minimum requirements; both PEFC and FSC, for example, often provide more stringent regional standards for social sustainability in developing country applications. The *SSI Review 2014* was not able to reflect the diversity exhibited by many different regional versions and therefore does not always fully represent the extent of actual criteria applied on the ground.

46 Of the 16 initiatives reviewed, 9 were established after 2000. 78 per cent of these (seven of the nine) report having less than 55 per cent coverage across the SSI environmental criteria. In contrast, none of the initiatives established before 2000 reported less than 55 per cent average coverage.

47 For initiatives where data are available.

Figure 3.10 illustrates the total average coverage for each SSI environmental index. Below it, Table 3.9 disaggregates the results to illustrate the coverage of criteria by each standard. The indices are presented from highest degree of coverage to lowest.

Figure 3.10 shows that the highest coverage among the initiatives reviewed along the environmental spectrum is found in the soil index, with 7 of the 16 initiatives reporting 100 per cent coverage. One possible explanation of this is the intimate link between soil

quality and productivity for virtually all agricultural commodities. In this sense, soil protection and maintenance—more so perhaps than many other environmental practices—are more directly linked to the private interests of farmers and manufacturers themselves. Indeed, the other categories of waste, synthetic inputs and water, which score “above average” for their coverage across all initiatives, arguably bear a similarly direct link with productivity.

FIGURE 3.10 AVERAGE COVERAGE OF SSI ENVIRONMENTAL INDICES AMONG ALL 16 VOLUNTARY SUSTAINABILITY INITIATIVES.⁴⁸

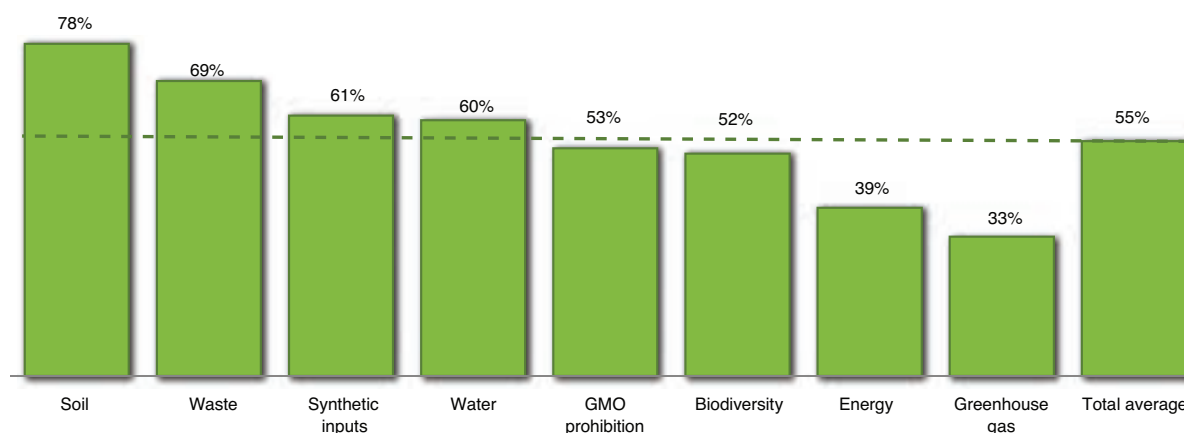


TABLE 3.9 AVERAGE COVERAGE OF SSI ENVIRONMENTAL INDICES FOR EACH VOLUNTARY SUSTAINABILITY INITIATIVE.

	Soil	Waste	Synthetic inputs	Water	GMO prohibition	Biodiversity	Energy	Greenhouse gas	Total average
IFOAM	100%	100%	100%	100%	100%	100%	100%	67%	96%
SAN/RA	80%	60%	60%	70%	100%	93%	80%	47%	74%
ProTerra	90%	87%	67%	80%	100%	27%	40%	67%	70%
RSB	100%	100%	40%	85%	0%	67%	50%	100%	68%
PEFC	100%	67%	67%	75%	100%	100%	0%	0%	64%
ETP	100%	100%	67%	100%	0%	33%	100%	7%	63%
FSC	100%	100%	67%	25%	100%	100%	0%	0%	61%
Fairtrade	60%	53%	53%	50%	100%	60%	60%	47%	60%
GLOBALG.A.P.	100%	100%	67%	100%	0%	73%	20%	0%	58%
RTRS	100%	100%	60%	45%	0%	67%	0%	60%	54%
RSPO	40%	87%	60%	30%	NA	33%	40%	67%	51%
UTZ	80%	33%	60%	95%	0%	13%	60%	0%	43%
Bonsucro	90%	53%	0%	20%	0%	33%	40%	60%	37%
4C Association	20%	27%	47%	30%	100%	13%	40%	0%	35%
CmiA	30%	20%	67%	15%	100%	0%	0%	0%	29%
BCI	60%	20%	100%	25%	0%	20%	0%	0%	28%

Note: There is no genetic modification in the palm oil sector; therefore, RSPO lists “NA” (not applicable) for the GMO prohibition index.

⁴⁸ Environmental criteria coverage only reflects specific matches with the SSI indicators and should not be understood to suggest a given initiative’s entire treatment on a specific sustainability topic.

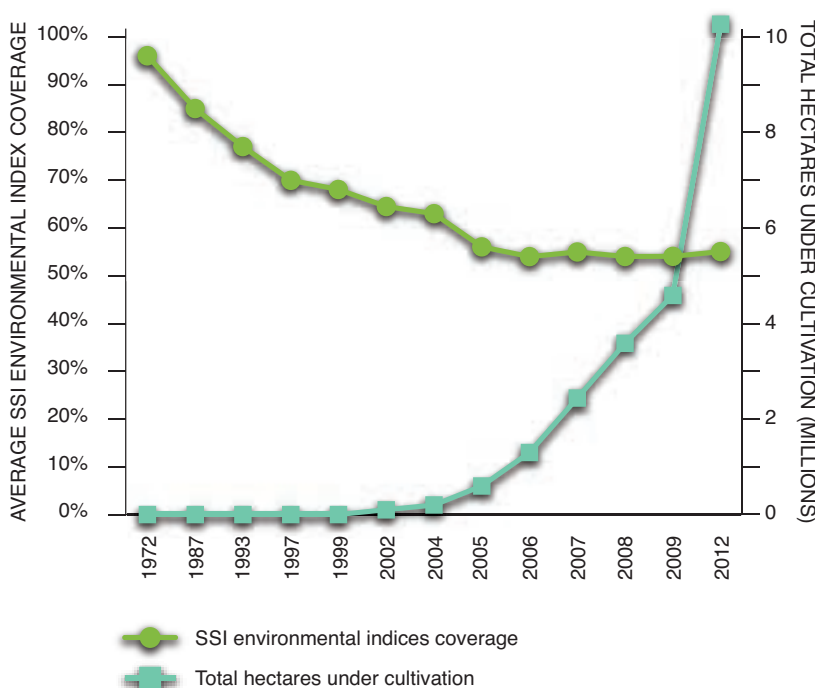
Other noteworthy observations revealed by our analysis include:

- Notwithstanding the global recognition of climate change and greenhouse gas emissions as a major sustainability issue, particularly for the agricultural and forestry sectors, only six of the standards reveal higher than average coverage of the SSI greenhouse gas index, with seven requiring no compliance at all. RSB is the only initiative demonstrating 100 per cent coverage of all three SSI greenhouse gas indicators.⁴⁹

49 Note that the SSI greenhouse gas index measures explicit criteria related to greenhouse gas reduction. Other sustainable agriculture practices (such as soil maintenance and the proper management of synthetics) may have equally or more important implications for actual greenhouse gas emissions depending on the production system of concern.

- Although the energy index has the second-lowest average coverage across initiatives, three initiatives, ETP, IFOAM and SAN/RA, illustrate significantly higher than average coverage of this SSI index, with ETP and IFOAM requiring 100 per cent compliance.
- Exactly half of the initiatives surveyed include a prohibition on GMOs, reflecting the controversial nature of genetic modification in popular society and among scientists.
- The SSI's biodiversity index shows diverse coverage across the initiatives; however, half of the initiatives still report significantly lower than average coverage, with all but one having a single-sector focus.

FIGURE 3.11 AVERAGE ENVIRONMENTAL INDEX COVERAGE BY YEAR COMPARED WITH TOTAL NUMBER OF HECTARES CERTIFIED OVER TIME.⁵⁰



Sources: Average environmental indices coverage: ITC, 2013b; Total hectares under cultivation: Bonsucro, 2013d; A. Bruestle, 4C Association, personal communication, February 6, 2013; FLO, 2012; C. Guinea, Rainforest Alliance, personal communication, February 18, 2013; S. Johnston, BCI, personal communication, December 2, 2013; C. Kaut, CmiA, personal communication, April 11, 2013; Nestlé Nespresso Corporate Communications, personal communication, September 26, 2013; J. Rijkenberg, UTZ Certified, personal communication, March 19, 2013; E. Servat & S. Fadika, Rainforest Alliance, personal communication, March 13, 2013; The Textile Exchange, 2013; IISD, H. Willer, FiBL, personal communication, August 26, 2013; S. Yaacob, RSPO, personal communication, April 15, 2013; B. Zeehandelaar & F. Cativiela, RTRS, personal communication, February 28, 2013.

50 Years indicated represent date of establishment of each initiative (see Figure 2.1). Although established in 1997, ETP launched its own standard called the ETP Global Standard in 2009, which included key environmental provisions. For the purpose of this graph, ETP begins in 2009 rather than 1997. SSI environmental coverage over time was calculated by taking the average coverage across each standard that was active each year between 1972-2012 (see Table 3.9). Standard-compliant area harvested from 2008 to 2012 was calculated by totalling all area harvested data collected across the standards and commodities covered in this review. For preceding years, area harvested estimates were based on reported production volumes and yield data collected from the SSI (Potts et al., 2010) and FAO (2013).

BOX 3.8 SELLING THE GREEN ECONOMY: THE MARKET FOR RULE-MAKING

From a green economy perspective, the declining trend in average coverage of environmental criteria may point to growing market pressure to define sustainability for voluntary standards. As increasingly powerful actors become active participants in the development and implementation of voluntary sustainability standards, it is possible that these actors are placing growing pressure on initiatives to define reduced levels of coverage in order to accommodate their supply chains. Even the most democratic processes may be influenced either explicitly or implicitly by the potential for market interest, which may in turn lead standard setters to seek reduced criteria coverage.

Whether or not this is actually the case cannot be determined from these data, but it does point to an inherent tension faced by voluntary standards that, on the one hand, seek a principled basis for ensuring the application of sustainable practices, but on the other hand, rely on the buy-in and ownership of the very organizations they attempt to regulate. This potential conflict of interest also points to a role for public authorities in monitoring and regulating voluntary claims associated with sustainability.

BOX 3.9 REGULATING THE GREEN ECONOMY: THE CASE OF GMOS

The potential impact of GMOs on the environment and human health has proven to be one of the more controversial issues in society today. Differing perspectives on the appropriate role of GMOs has similarly divided stakeholders in the development of voluntary standards as well. Our review of 16 leading standards in the agriculture and forestry sectors reflects this division rather clearly, with exactly half the standards permitting the use of GMOs and the remaining seven standards prohibiting them.⁵¹

In some sectors, such as cotton, the use of GMOs has enabled substantial reductions in the total use of pesticides (ISAAA, 2012). However, the promise of more efficient pesticide use has been challenged lately through the increasing use of herbicides, as well as the emergence of herbicide-resistant weeds, associated with GMO production (Benbrook, 2009).

An increasingly important issue for standards seeking to provide the market with non-GMO products, however, is the decreasing availability of non-GMO seed in sectors where GMO production has become the predominant form of production (e.g., cotton and soybeans) (see Sections 9 and 12.). The growing challenge facing non-GMO standards in securing their supply base comes as a direct result of the interconnected

nature of the environment and all agricultural systems within it.⁵² Fundamentally, the GMO experience points to one way in which different production systems (even different standards) may impact the ability of other production systems (e.g., other standards systems) to achieve their desired objectives.

Where sustainability is a contested concept, governments will have a role in ensuring that stakeholders have the freedom to pursue their competing visions of sustainable development. The GMO case reveals a clear example where the free implementation of voluntary standards is unlikely to be a sufficient tool for managing competing visions of sustainable production. To the extent that GMO production has the capacity to prevent others from accessing non-GMO production, government may have to establish regulations and programs to protect non-GMO seed stock and production at both the domestic and international levels.

⁵¹ There is no genetic modification in the palm oil industry; therefore, RSPO is not included in this comparison.

⁵² More recently there have been reports of premiums being offered for non-GMO products as a means to ensure the continued availability of non-GMO seeds. For example, the Brazilian Association of Non-GMO Grain Producers (ABRANGE) has explicitly linked premiums with non-GMO production (Personal communication, John Fagan, ProTerra, January 2014).

Figure 3.12 illustrates the total average coverage for each SSI economic index. Below it, Table 3.10 disaggregates the results in order to illustrate the coverage of criteria by each of the voluntary

sustainability standards reviewed. The initiatives are listed from the highest degree of coverage to the lowest.

FIGURE 3.12 AVERAGE COVERAGE OF SSI ECONOMIC INDICES AMONG ALL 16 VOLUNTARY SUSTAINABILITY STANDARDS.⁵³

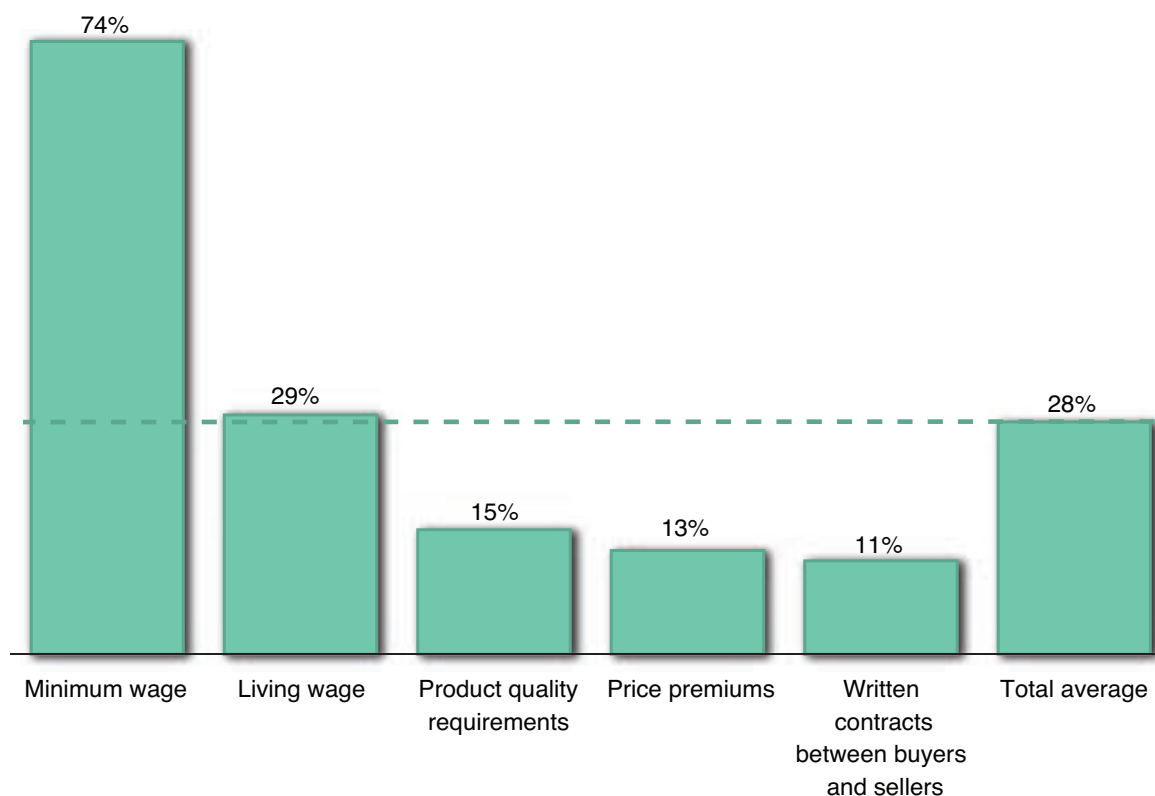


TABLE 3.10 AVERAGE COVERAGE OF SSI ECONOMIC INDICES FOR EACH VOLUNTARY SUSTAINABILITY STANDARD.

	Minimum wage	Living wage	Product quality requirements	Price premiums	Written contracts between buyers and sellers	Total average
Fairtrade	100%	40%	0%	100%	100%	68%
IFOAM	100%	100%	100%	0%	0%	60%
RSPO	100%	100%	0%	0%	80%	56%
UTZ	100%	0%	0%	100%	0%	40%
ETP	100%	100%	0%	0%	0%	40%
RTRS	100%	100%	0%	0%	0%	40%
Bonsucro	100%	0%	80%	0%	0%	36%
CmiA	60%	0%	60%	0%	0%	24%
ProTerra	100%	0%	0%	0%	0%	20%
RSB	100%	0%	0%	0%	0%	20%
SAN/RA	100%	0%	0%	0%	0%	20%
BCI	60%	0%	0%	0%	0%	12%
4C Association	40%	0%	0%	0%	0%	8%
GLOBALG.A.P.	20%	20%	0%	0%	0%	8%
FSC	0%	0%	0%	0%	0%	0%
PEFC	0%	0%	0%	0%	0%	0%

⁵³ Economic criteria coverage only reflects specific matches with the SSI indicators and should not be understood to suggest a given initiative's entire treatment on a specific sustainability topic.

3.6.3 Economic Indices Analysis

Overall, economic criteria display the lowest degree of coverage across the three pillars of sustainability. Virtually all initiatives would say that this is not a reflection of a lack of concern for the economic sustainability of producers, but rather is due to a widely held belief that economic sustainability is fundamentally founded on free market interaction. For those holding this view, the absence of economic criteria might be considered an indicator of an initiative's commitment to promoting long-term economic sustainability.⁵⁴

Having said that, it is also widely recognized that inherent disparities in market authority and bargaining power are commonplace in commodity supply chains and that, as a result, explicit criteria can be a tool for assisting more equitable free-market interaction. The SSI's economic indices attempt to capture recognized pressure points where criteria may have additional effects on normal market interactions.

The most common economic criteria used among the standards surveyed are those related to the enforcement of national minimum wage requirements, with 10 of the 16 reporting 100 per cent coverage on this index. The high degree of coverage in the minimum wage category is, as with ILO core labour standards in our social criteria analysis, an area where there is clear international consensus on the importance of this criterion as a basic component of supply chain sustainability.⁵⁵

The living wage index reveals the second-highest coverage across the initiatives reviewed; however, coverage drops dramatically from that of minimum wage. IFOAM, RSPO, ETP and RTRS all show 100 per cent coverage of this indicator. All other initiatives require no coverage of living wage in their standards, except for Fairtrade and GLOBALG.A.P., at 40 per cent and 20 per cent, respectively. Although there is no generally accepted definition or agreed methodology for calculating a "living wage," the term is usually premised on "meeting the basic needs essential to an acceptable standard of living" and is generally estimated to be considerably higher than minimum wage in many developing countries (Anker, 2011).

Other highlights emanating from the review of economic criteria include:

- Fairtrade is the only initiative with criteria covering all aspects related to contractual transparency between buyers and sellers. Although RSPO reports high coverage, the remaining initiatives have no criteria covered by the SSI's "written contracts between buyers and sellers" index.
- Price premiums illustrate the second-lowest average coverage across all 16 voluntary sustainability initiatives, with only Fairtrade and UTZ covering this index, although the requirements specified vary considerably. The minimum pricing specified by Fairtrade is based on product type and location, while UTZ allows for negotiation of the final premium between buyer and seller. Although not considered a premium per se, CmiA presents the producer with the potential of eventually receiving a dividend, but only after a certain level of sales has been achieved (International Finance Corporation, 2013).
- Stipulations of product quality also demonstrate low coverage among voluntary sustainability initiatives, with only IFOAM (100 per cent), Bonsucro (80 per cent) and CmiA (60 per cent) requiring compliance with these SSI indices.

As a general rule, newer baseline standards do not specify criteria covered in the SSI economic indices much beyond criteria related to minimum wages. In the absence of such requirements, a considerable weight is placed on the ability of standards to deliver real and meaningful economic impacts. To date, however, there are very little data on the economic impacts associated with the adoption of voluntary sustainability standards more generally, let alone the newest among them (Blackman & Naranjo, 2010; ITC, 2012). This represents a major area where ongoing, science-based objective and comparable research is needed. Moreover, in light of the reliance on the ability of standards to bring "economic success" through indirect means, it is also imperative that initiatives build feedback loops through continual improvement systems that can help ensure that economic benefits are delivered as part of the adoption package.

⁵⁴ It is also worth noting that in a context where multiple and major commercial actors are part of the rule-making process, national anti-trust legislation may prevent the discussion of and agreement on certain economic parameters (such as pricing) (see Potts, 2004).

⁵⁵ As noted above, even standards without explicit minimum wage requirements typically incorporate such requirements by requiring compliance with domestic regulations as part of the standard.

The economic benefits that voluntary sustainability standards can bring to compliant producers are one of the major purported benefits of these standards. While Fairtrade is unusual among voluntary sustainability standards in its effort to ensure such benefits by explicitly building them into the requirements of its standard, all standards are premised on their ability to influence markets in a manner that, among other things, offers greater benefits to producers in the supply chain.

One of the reasons voluntary sustainability standards have resisted including explicit economic criteria is an underlying understanding that voluntary standards should work through markets, rather than dictating markets directly. Indeed, many economists would argue that formally establishing economic

requirements could largely be a futile endeavour, on the expectation that the market would correspondingly make adjustments to counterbalance any such requirements.

Regardless of one's perspective on the role of standards in setting the terms of specific economic outcomes, an argument, in line with the debate over sustainability standards more generally, can be made concerning the relevance of building tools or criteria that enhance market transparency. Providing producers with regular and real-time access to accurate market information and clear contractual terms is a key building block not only for enabling producers to negotiate sustainable livelihoods, but also for ensuring a stable supply base for buyers.



3.7 SINGLE-SECTOR VERSUS MULTISECTOR INITIATIVE ANALYSIS

3.7.1 Social Indices

Figure 3.13 compares the coverage of SSI social indices across the single-sector and multisector initiatives reviewed. Below it, Table 3.11 shows the disaggregated results in order to show the coverage by each voluntary sustainability initiative within these categories.

FIGURE 3.13 AVERAGE COVERAGE OF SSI SOCIAL INDICES ACROSS SINGLE-SECTOR AND MULTISECTOR INITIATIVES.

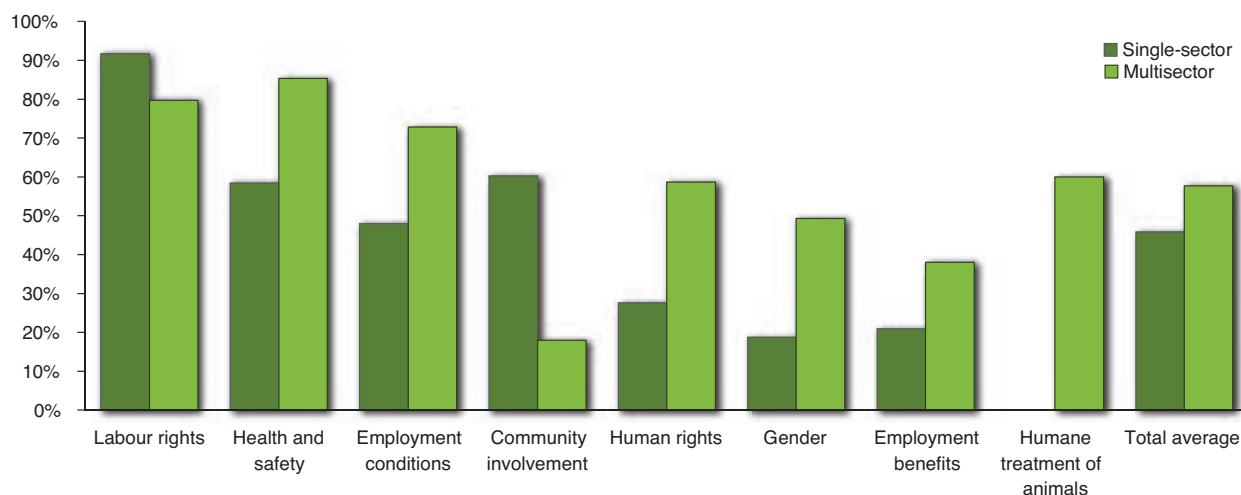


TABLE 3.11 AVERAGE COVERAGE OF SSI SOCIAL INDICES BY SINGLE-SECTOR AND MULTISECTOR INITIATIVES.

	Labour rights	Health and safety	Employment conditions	Community involvement	Human rights	Gender	Employment benefits	Humane treatment of animals	Total average
Single-sector	91%	58%	48%	60%	27%	19%	21%	NA	40%
RTRS	100%	80%	92%	80%	67%	67%	50%	NA	76%
RSB	100%	83%	80%	100%	100%	67%	0%	NA	76%
ProTerra	83%	50%	76%	90%	27%	0%	80%	NA	58%
RSPO	97%	87%	36%	90%	0%	7%	40%	NA	51%
ETP	89%	87%	44%	0%	20%	40%	60%	NA	48%
FSC	100%	50%	0%	100%	0%	0%	0%	NA	36%
PEFC	100%	50%	0%	100%	0%	0%	0%	NA	36%
4C Association	83%	37%	40%	0%	47%	27%	0%	NA	33%
CmiA	60%	30%	48%	50%	40%	0%	0%	NA	33%
Bonsucro	100%	40%	32%	50%	0%	0%	0%	NA	32%
BCI	94%	47%	76%	0%	0%	0%	0%	NA	31%
Multisector	79%	85%	73%	18%	59%	49%	38%	60%	61%
SAN/RA	100%	80%	80%	90%	80%	53%	90%	100%	84%
Fairtrade	91%	100%	100%	0%	67%	73%	80%	NA	73%
UTZ	100%	93%	84%	0%	93%	33%	0%	NA	58%
IFOAM	86%	53%	80%	0%	20%	67%	0%	100%	51%
GLOBALG.A.P.	20%	100%	20%	0%	33%	20%	20%	100%	39%

The relatively low level of coverage on the gender index is one of the most striking features of the coverage of social indicators. Close to half of the initiatives have no criteria that are considered in the SSI gender index. Although revealing significantly higher coverage than the single-sector initiatives, multisector standards still report below average (51 per cent) coverage, at 49 per cent.

Considerable evidence suggests that women are critical resources and change agents for sustainable development. For example, some research suggests that investment in girls' education can yield significant economic returns, possibly yielding higher returns than any other development spending (Goodman, 2013). Other research suggests that women are typically more inclined toward sustainable consumption in both developed and less developed countries than men, and are therefore fundamental in transforming household consumption practices (MacEachern, 2013). Finally, increasing economic autonomy among women has been linked to improved household sustainability (Fernandez, 2010).

The SSI gender indicators measure requirements related to the "positive rights" of women. Requirements related to the promotion of women in management positions, as well as the explicit recognition of gender-specific labour and health-and-safety rights, can play a role in ensuring that women are welcomed into the workforce on a more equitable basis, allowing for greater autonomy and voice in both economic and household decision making. The particular promise of such rights in promoting sustainable development objectives suggests a potential role for deepening gender-related commitments across standard-setting bodies more generally.

On average, multisector initiatives require more stringent compliance across the SSI social criteria than do single-sector initiatives (61 per cent and 46 per cent, respectively).

These results may have many possible explanations, although one of the more noticeable characteristics of most of the sector-specific initiatives is their explicit objective of enabling uptake of sustainable practices into mainstream markets. In many cases mainstream concerns may be hard-wired into the design and implementation of a given initiative through the inclusion of mainstream players on key committees and boards. In such cases, one can expect a high priority to be placed on cost-effectiveness and efficiency, perhaps explaining the trend toward lower requirement levels. Ensuring access to mainstream markets also increases the primacy of preventing supply disruptions, which may also drive content and criteria coverage downward in an effort to maximize access to standard-compliant markets. This can be a particularly important concern in markets where significant supply comes from smallholder production, such as in coffee, cotton and tea.

3.7.2 Environmental Indices

Aside from issues related to waste and greenhouse gas, the multisector initiatives demonstrate broader criteria coverage requirements across all remaining SSI environmental indices.⁵⁶ With respect to the SSI waste and greenhouse gas indices, both sectors reveal equal to almost equal coverage, with the greenhouse gas index revealing the fewest coverage requirements across both sectors.

The largest disparity is revealed when comparing the water and energy indices, where initiatives that cover multiple commodities demonstrate significantly more stringent requirements for compliance on some or all of these indicators.

As noted in Section 2.3.4 (Figure 2.6), single-sector initiatives are rapidly taking dominant positions in mainstream markets. Reduced coverage of environmental criteria may provide part of the explanation as to how and why single-sector initiatives have managed to take major market shares over a short period of time.⁵⁷

⁵⁶ It should be noted, however, that a number of single-sector initiatives illustrate comparable average environmental coverage with multisector initiatives, specifically ProTerra, RSB, ETP, FSC and PEFC.

⁵⁷ It would be simplistic to regard the rapid expansion of single-sector initiatives as the sole result of reduced criteria coverage. Other major factors driving the rapid growth of single-sector initiatives include early buy-in and ownership of major supply chain actors as well as low-cost implementation systems.

Figure 3.14 illustrates the coverage of SSI environmental indices across the single-sector and multisector initiatives reviewed. Below it, Table 3.12 shows disaggregated results to show the coverage by each voluntary sustainability initiative within these categories.

FIGURE 3.14 AVERAGE COVERAGE OF SSI ENVIRONMENTAL INDICES ACROSS SINGLE-SECTOR AND MULTISECTOR INITIATIVES.

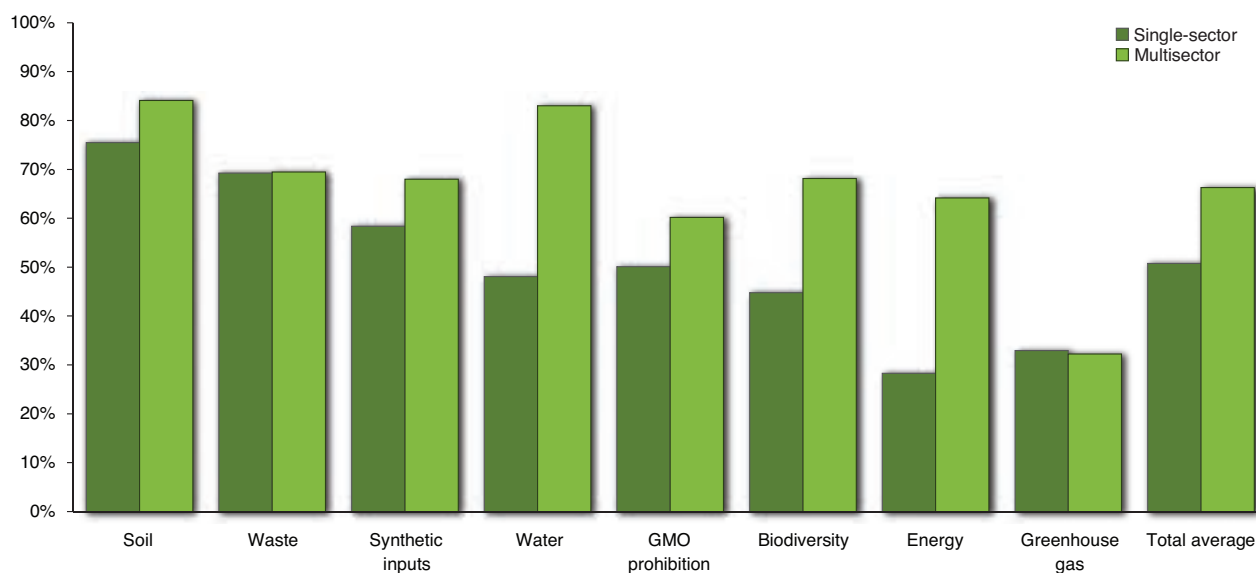


TABLE 3.12 AVERAGE COVERAGE OF SSI ENVIRONMENTAL INDICES BY SINGLE-SECTOR AND MULTISECTOR INITIATIVES.

	Soil	Waste	Synthetic inputs	Water	GMO prohibition	Biodiversity	Energy	Greenhouse gas	Total average
Single-sector	75%	69%	58%	48%	50%	45%	28%	33%	51%
ProTerra	90%	87%	67%	80%	100%	27%	40%	67%	70%
RSB	100%	100%	40%	85%	0%	67%	50%	100%	68%
PEFC	100%	67%	67%	75%	100%	100%	0%	0%	64%
ETP	100%	100%	67%	100%	0%	33%	100%	7%	63%
FSC	100%	100%	67%	25%	100%	100%	0%	0%	61%
RTRS	100%	100%	60%	45%	0%	67%	0%	60%	54%
RSPO	40%	87%	60%	30%	NA	33%	40%	67%	51%
Bonsucro	90%	53%	0%	20%	0%	33%	40%	60%	37%
4C Association	20%	27%	47%	30%	100%	13%	40%	0%	35%
CmiA	30%	20%	67%	15%	100%	0%	0%	0%	29%
BCI	60%	20%	100%	25%	0%	20%	0%	0%	28%
Multisector	84%	69%	68%	83%	60%	68%	64%	32%	66%
IFOAM	100%	100%	100%	100%	100%	100%	100%	67%	96%
SAN/RA	80%	60%	60%	70%	100%	93%	80%	47%	74%
Fairtrade	60%	53%	53%	50%	100%	60%	60%	47%	60%
GLOBALG.A.P.	100%	100%	67%	100%	0%	73%	20%	0%	58%
UTZ	80%	33%	60%	95%	0%	13%	60%	0%	43%

Figure 3.15 illustrates the coverage of SSI economic indices across the single-sector and multisector initiatives reviewed. Below it, Table 3.13 shows disaggregated results to show the coverage by each voluntary sustainability standard within these categories.

FIGURE 3.15 AVERAGE COVERAGE OF ECONOMIC INDICES ACROSS SINGLE-SECTOR AND MULTISECTOR INITIATIVES.

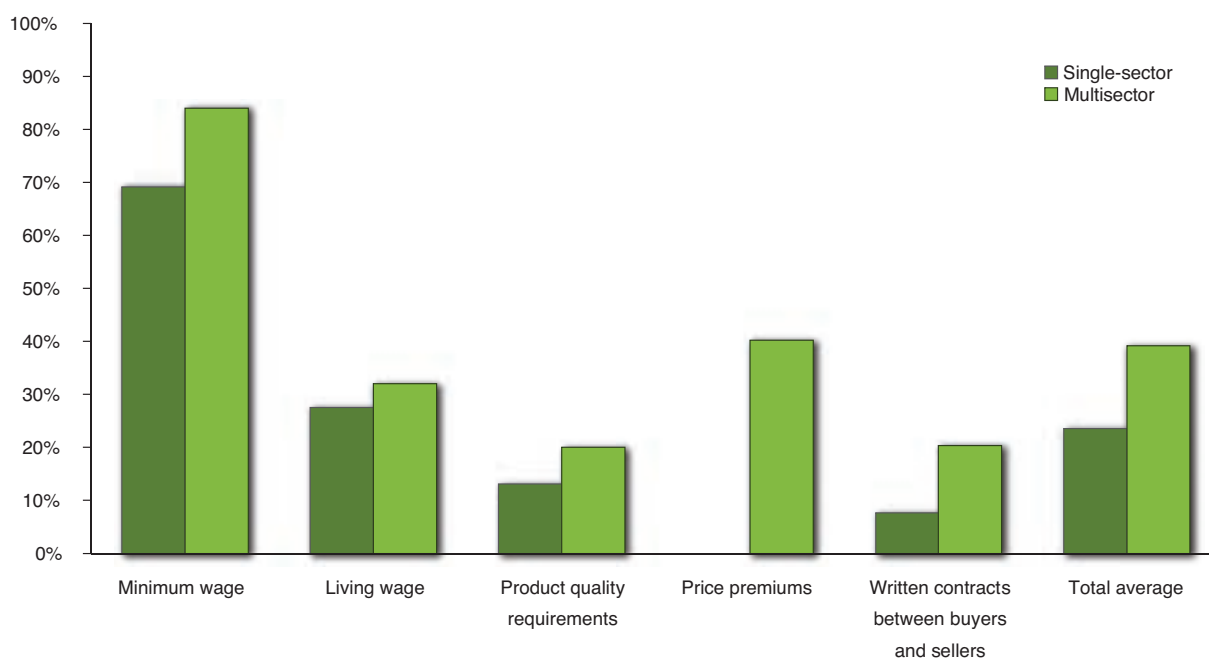


TABLE 3.13 AVERAGE COVERAGE OF SSI ECONOMIC INDICES BY SINGLE-SECTOR AND MULTISECTOR INITIATIVES.

	Minimum wage	Living wage	Product quality requirements	Price premium	Written contracts between buyers and sellers	Total average
Single-sector	69%	27%	13%	0%	7%	23%
RSPO	100%	100%	0%	0%	80%	56%
ETP	100%	100%	0%	0%	0%	40%
RTRS	100%	100%	0%	0%	0%	40%
Bonsucro	100%	0%	80%	0%	0%	36%
CmiA	60%	0%	60%	0%	0%	24%
RSB	100%	0%	0%	0%	0%	20%
ProTerra	100%	0%	0%	0%	0%	20%
BCI	60%	0%	0%	0%	0%	12%
4C Association	40%	0%	0%	0%	0%	8%
FSC	0%	0%	0%	0%	0%	0%
PEFC	0%	0%	0%	0%	0%	0%
Multisector	84%	32%	20%	40%	20%	39%
Fairtrade	100%	40%	0%	100%	100%	68%
IFOAM	100%	100%	100%	0%	0%	60%
UTZ	100%	0%	0%	100%	0%	40%
SAN/RA	100%	0%	0%	0%	0%	20%
GLOBALG.A.P.	20%	20%	0%	0%	0%	8%

3.7.3 Economic Indices

Multisector initiatives also show more stringent requirements across the SSI economic indices. Overall, however, economic indicators are sparse among the majority of initiatives, whether single or multisector. For example, multisector and single-sector initiatives, on average, report 20 per cent average or less coverage of the SSI written contracts between buyers and sellers index, a reflection of a general absence of criteria. Similarly, both types of initiatives display relatively low and comparable coverage along the product quality index.

The one exception to this general explanation relates to the minimum wage index, which reveals higher than average coverage across both single- and multisector initiatives, due to the near-universal inclusion of minimum wage requirements among all

initiatives.⁵⁸ Multisector initiatives also report modestly broader coverage across the living wage index

Price premiums occur as a requirement found only in the multisector initiatives reviewed, and even then, only two of the initiatives require compliance. As single-sector initiatives move toward mainstream market uptake, premiums could become less essential and be replaced with other incentives deemed more valuable over the long term, such as access to training. BCI, for example, explicitly avoids premiums to enable the scheme to enter mainstream markets (International Finance Corporation, 2013).

⁵⁸ Although standards can go beyond the global minimum requirements, the SSI Review 2014 was not able to reflect the diversity of economic coverage exhibited by many different regional versions in the forestry sector.



3.8 INDICATOR ANALYSIS

The following analysis provides a snapshot of the overall coverage of specific indicators across the 16 initiatives reviewed. On the one hand, this analysis provides an understanding of which issues are driving the agenda in agroforestry and commodity supply chain initiatives. On the other hand, the indicator analysis provides an indicator-specific tool for benchmarking coverage among initiatives. Finally, identification of indicators with low coverage may point to

areas that are either less relevant to supply chain sustainability or that, for one reason or another, merit further attention to enable broader coverage in the future.

3.8.1 Social Indicator Analysis

Table 3.14 shows the list of SSI social indicators, from the highest coverage to the lowest coverage among the initiatives reviewed.

TABLE 3.14 SSI SOCIAL INDICATORS, FROM HIGHEST TO LOWEST COVERAGE ACROSS 16 VOLUNTARY SUSTAINABILITY STANDARDS REVIEWED.

Index	Indicator	Indicator Score	# of VSSs that scored 100%
Labour rights	Freedom of association	95%	15
Labour rights	Forced labour	94%	14
Labour rights	Minimum age	93%	14
Health and safety	Healthy work conditions	91%	12
Labour rights	Non-discrimination	89%	14
Labour rights	Worst forms of child labour	89%	14
Labour rights	Collective bargaining	88%	12
Health and safety	Access to training	73%	7
Health and safety	Safety at work	71%	8
Health and safety	Access to safe drinking water at work	69%	8
Labour rights	Equal remuneration	68%	9
Employment conditions	Treatment of contract workers	61%	4
Employment conditions	Written contracts for employees	56%	4
Community involvement	Community consultation	55%	8
Employment conditions	Maximum number of working hours	54%	6
Employment conditions	Timely payment of wages	54%	5
Employment conditions	Transparency of employment practices	53%	7
Health and safety	Access to sanitary facilities at work	50%	5
Health and safety	Access to medical assistance/insurance at work	46%	5
Human rights	Housing and sanitary facilities	41%	4
Human rights	Medical care	41%	4
Community involvement	Local hiring	39%	3
Gender	Women's labour rights	35%	4
Gender	Women's health & safety	30%	3
Human rights	Education	29%	2
Employment benefits	Leave days (incl. maternity/paternity leave)	29%	2
Employment benefits	Pensions and security benefits	24%	2
Gender	Gender in governance	20%	2
Humane treatment of animals	Humane treatment of animals	19%	3

ILO core convention requirements (freedom of association, abolition of forced labour, minimum age, no discrimination, worst forms of child labour and collective bargaining) are explicitly written into the organizational documents of most initiatives. This is a reflection of the near-universal consensus, both among nations and the public more generally, on the unacceptability of violations on such core labour issues. The average coverage of these indicators for all standards reviewed scored among the highest of all 29 social indicators.

The UN Declaration of Human Rights incorporates the health and well-being of the individual and the family, specifically the provision of access to education, medical care, housing and sanitary facilities. However, the housing and sanitary facilities, medical care and education indicators all reveal lower than 50 per cent coverage among all standards reviewed. The relatively lower coverage of these indicators is arguably explained by perceptions that access to these rights is not strictly determined by, or the responsibility of, international supply chains alone.

Gender indicators of women's health and safety and women's labour rights are on par with the above noted low human rights coverage. Second only to humane treatment of animals,⁵⁹ gender governance receives the lowest coverage of all SSI social indicators among the 16 standards reviewed.

59 Humane treatment of animals is only applicable to three of the 16 initiatives reviewed.

3.8.2 Environmental Indicator Analysis

Table 3.15 shows the list of SSI environmental indicators, from the highest coverage to the lowest among all voluntary sustainability standards reviewed.

The 16 standards converge strongly on coverage of the indicator requiring enforcement of a prohibited list of synthetic inputs, with an overall coverage of 88 per cent. The second synthetic inputs indicator, integrated pest management, drops 20 per cent in coverage among the voluntary sustainability standards reviewed. The third indicator, complete prohibition of synthetics, reveals the lowest coverage among all indicators, at 18 per cent.

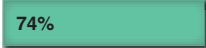




The three indicators that make up the greenhouse gas index—greenhouse gas reductions, greenhouse gas accounting and soil carbon sequestration—rank among the lowest of all 21 environmental indicators. Given the global consensus on both the importance of climate change and the role of agriculture and forestry as sources of greenhouse gas emissions, this represents an area for significant development among the voluntary standards reviewed.

Some biodiversity (flora densities/diversity and habitat set-asides) and energy (energy reduction) indicators also reveal markedly low coverage among the standards reviewed.

TABLE 3.15 SSI ENVIRONMENTAL INDICATORS, FROM HIGHEST TO LOWEST COVERAGE ACROSS 16 VOLUNTARY SUSTAINABILITY STANDARDS REVIEWED.

Index	Indicator	Indicator Score	# of VSSs that scored 100%
Synthetic inputs	Enforcement of a prohibited list	88%	15
Soil	Soil conversion (erosion prevention)	78%	7
Water	Water use in management plan	76%	9
Waste	Waste management	75%	10
Soil	Soil quality maintenance	69%	9
Waste	Waste disposal	69%	8
Synthetic inputs	Integrated pest management	67%	7
Biodiversity	Prohibition of conversion of high conservation value land	61%	10
Waste	Pollution	51%	7
GMO prohibition	Prohibition of genetically modified organisms	50%	8
Water	Water practices in scarcity (dependencies)	48%	7
Energy	Energy-use and management	48%	3
Water	Water reduction criteria	46%	4
Water	Wastewater disposal	46%	6
Biodiversity	Flora densities/diversity	44%	6
Biodiversity	Habitat set-asides	42%	5
Greenhouse gas	Greenhouse gas reductions	40%	4
Greenhouse gas	Greenhouse gas accounting	31%	4
Energy	Energy reduction	26%	2
Greenhouse gas	Soil carbon sequestration	21%	2
Synthetic inputs	Complete prohibition of synthetics	18%	3

TABLE 3.16 SSI ECONOMIC INDICATORS, FROM HIGHEST TO LOWEST COVERAGE ACROSS 16 VOLUNTARY SUSTAINABILITY STANDARDS REVIEWED.

Indicator	Indicator Score	# of VSSs that scored 100%
Minimum wage	74% 	10
Living wage	29% 	4
Product quality requirements	15% 	1
Price premiums	13% 	2
Written contracts between buyers and sellers	11% 	1

3.8.3 Economic Indicator Analysis

Table 3.16 shows the list of SSI economic indicators, from the highest coverage to the lowest among all voluntary sustainability standards reviewed.

Minimum wage is the only indicator within the economic index that illustrates a higher than 50 per cent coverage across initiatives. Specification of the requirement to pay living wages (above and beyond minimum wage) drops significantly at 29 per cent coverage. Written contracts between buyers and sellers shows only 11 per cent coverage among the standards reviewed, with only one initiative requiring 100 per cent compliance with this indicator.

3.9 REFERENCES

- 4C Association. (2013a). *4C verified producer groups*. Retrieved from [4c-coffeeassociation.org: http://www.4c-coffeeassociation.org/about-us/verified-producer-groups.html](http://www.4c-coffeeassociation.org/about-us/verified-producer-groups.html)
- 4C Association. (2013c). *Mediation board members*. Retrieved from <http://www.4c-coffeeassociation.org/about-us/our-governance/mediation-board-members.html>
- 4C Association. (2013e). *Technical committee members*. <http://www.4c-coffeeassociation.org/about-us/our-governance/technical-committee-members.html>
- Benbrook, C.M. (2009). *Impacts of genetically engineered crops on pesticide use in the United States: The first thirteen years*. The Organic Center, November. Retrieved from http://www.organic-center.org/reportfiles/13Years20091126_FullReport.pdf
- Blackman, A., & Naranjo, M.A. (2010). *Does eco-certification have environmental benefits? Organic coffee in Costa Rica* (Working paper). Washington, DC: Resources for the Future.
- Eden, S., & Bear, C. (2010). Third-sector global environmental governance, space and science: Comparing fishery and forestry certification. *Journal of Environmental Policy and Planning*, 12(1), 83-106. doi:10.1080/15239081003626000
- Ethical Tea Partnership (ETP). (2011b). *The Ethical Tea Partnership global standard*. Retrieved from <http://www.ethicalteapartnership.org/resources/publications/download-info/etp-global-standard/>
- Fairtrade Labelling Organizations (FLO). (2012). *Monitoring the scope and benefits of Fairtrade*, fourth edition.
- Fernandez, R. (2010). Women's rights and development. In *World development report 2012: Gender equality and development*. Milan, Italy: Fondazione Eni Enrico Mattei Research. Retrieved from http://www.wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2010/11/03/000334955_20101103062028/Rendered/PDF/576270WDR0SecM1e0only1910BOX353773B.pdf
- Food and Agriculture Organization of the United Nations (FAO). (2011a). *Private standards and certification in fisheries and aquaculture* (FAO Fisheries and Aquaculture Technical paper 553). Retrieved from <http://www.fao.org/docrep/013/i1948e/i1948e.pdf>
- Forest Stewardship Council (FSC). (n.d.-b). *Governance*. Retrieved from <https://ic.fsc.org/governance.14.htm>
- Gereffi, G. (1994). The organization of buyer-driven global commodity chains: How U.S. retailers shape overseas production networks. In G. Gereffi and M. Korzeniewicz (Eds.), *Commodity Chains and Global Capitalism*. Westport, CT and London: Praeger.
- Goodman, D. (2013). Adolescent girls at the tipping point of sustainable development. *Powerful synergies: Gender equality, economic development and environmental sustainability*. Retrieved from UN Development Programme website: http://www.undp.org/content/dam/undp/library/gender/f_PowerfulSynergies2013_Web.pdf
- HLPE. (2013). *Investing in smallholder agriculture for food security. A report by the High Panel of Experts on Food Security and Nutrition of the Committee on World Food Security*, Rome. Retrieved from FAO website: http://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_Reports/HLPE-Report-6_Investing_in_smallholder_agriculture.pdf
- Initiatief Duurzame Handel (IDH). (n.d.-b). *The Sustainable Trade Initiative*. Sustainable Trade Initiative/Initiatief Duurzame Handel. Retrieved from <http://www.idhsustainabletrade.com/>
- International Finance Corporation. (2013). *Building a roadmap to sustainability in agro-commodity production*. Retrieved from http://www.aidenvironment.org/media/uploads/documents/201310_IFC2013_Building_a_roadmap_to_sustainability_Phase_I_report.pdf
- International Monetary Fund (IMF). (2012). World economic outlook: Growth resuming, dangers remain. Retrieved from <http://www.imf.org/external/pubs/ft/weo/2012/01/pdf/text.pdf>
- International Organization for Standardization (ISO). (2004). *Conformity assessment – Vocabulary and general principles*. Retrieved from http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=29316
- International Social and Environmental Accreditation and Labelling Alliance (ISEAL). (2008). *Common requirements for the certification of producer groups* (PO35). Retrieved from http://www.isealliance.org/sites/default/files/ISEAL_Common_Rqmts_for_Producer_Group_Cert_PO35_V1_Novo08.pdf
- International Social and Environmental Accreditation and Labelling Alliance (ISEAL). (2012b). *Standard-setting code*. Retrieved from <http://www.isealliance.org/our-work/defining-credibility/codes-of-good-practice/standard-setting-code>
- International Trade Centre (ITC). (2012). *When do private standards work? Literature review series on the impacts of private standards*. Retrieved from http://www.standardsmap.org/uploadedFiles/Common/Content/standards_Map/publications/When%20do%20Private%20Standards%20Work%20-%20Part%20IV%20for%20web.pdf
- International Trade Centre (ITC). (2013a). *Glossary*. Retrieved from <http://www.intracen.org/training/glossary/>
- International Trade Centre (ITC). (2013b). *Standards map*. Retrieved from <http://www.standardsmap.org/>
- Lazarte, M. (2012). *New ISO/IEC standards to increase confidence in audits and certification*. Retrieved from ISO website: <http://www.iso.org/iso/news.htm?refid=Ref1657>
- Lewin, B., Giovannucci, D., & Varangis, P. (2004). *Coffee markets: New paradigms in global supply and coffee markets supply and demand*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=996111

- MacEachern, D. (2013). Women, consumption and sustainable development. In *Powerful synergies: Gender equality, economic development and environmental sustainability*. Retrieved from UN Development Programme website: http://www.undp.org/content/dam/undp/library/gender/f_PowerfulSynergies2013_Web.pdf
- Manning, S., Boons, F., von Hagen, O., & Reinecke, J. (2012). National contexts matter: The co-evolution of sustainability standards in global value chains. *Ecological Economics*, 83, 197-209.
- Potts, J., van der Meer, J., Daitchman, J., Carlile, L., Earley, J., Kenney, K., ... Holmes, D. (ed.). (2010). *The State of Sustainability Initiatives review 2010: The state of sustainability and transparency*. Winnipeg: IISD.
- Raikes, P., Jensen, M.F., & Ponte, S. (2000). Global commodity chain analysis and the French filiere approach: Comparison and critique. *Economy and Society*, 29(3), 390-416.
- Rainforest Alliance. (2011). *Financial statements June 30, 2011 and 2010 with independent auditors' report*. Retrieved from http://www.rainforest-alliance.org/sites/default/files/about/annual_reports/financial-statement-2011.pdf
- Rainforest Alliance. (2012). *Rainforest Alliance 2012 annual report*. Retrieved from http://issuu.com/rainforest-alliance/docs/annualreport_2012?e=3062032/2530718#search
- Sustainable Agriculture Network (SAN). (2010a). *Accreditation*. Retrieved from <http://sanstandards.org/sitio/sections/display/17>
- Sustainable Agriculture Network (SAN). (2010b). *SAN board of directors*. Retrieved from <http://sanstandards.org/sitio/subsections/display/42>
- Sustainable Trade Initiative (IDH). (n.d.-b). *The Sustainable Trade Initiative*. Initiatief Duurzame Handel/Sustainable Trade Initiative. Retrieved from <http://www.idhsustainabletrade.com/>
- The Textile Exchange. (2013). *2012 farm & fiber Report 2012*.
- United Nations. (1987). Report of the World Commission on Environment and Development: Our common future. Retrieved from http://conspect.nl/pdf/Our_Common_Future-Brundtland_Report_1987.pdf
- UN Environment Programme (UNEP), International Trade Centre (ITC), & International Centre for Trade and Sustainable Development. (2012). *Green economy and trade opportunities*. Draft for discussion.
- The World Bank. (2012). *World development indicators*. Retrieved from <http://data.worldbank.org/data-catalog/world-development-indicators/wdi-2012>
- World Cocoa Foundation (WCF). (2012a). *Cocoa market update*. Retrieved from <http://worldcocoafoundation.org/wp-content/uploads/Cocoa-Market-Update-as-of-3.20.2012.pdf>