Same Same but Different? A Quantitative Exploration of Voluntary Sustainability Standards in Agriculture

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Abstract: Private governance by means of voluntary sustainability standards (VSS) has become ubiquitous, especially for the governance of sustainability issues along global value chains in agriculture. As VSS have multiplied and proliferated, their commonalities and differences are not always easily discernable to value chain participants and their stakeholders. Concurrently, extant research is ambiguous on the degree of harmonization or diversification of standards currently available. Two core aspects have received particular attention: the meaning of sustainability reflected in VSS and the degree of stakeholder inclusion in standard governance. It is the purpose of this study to compare VSS from different types of standard setting initiatives regarding these two core aspects by analyzing their purported sustainability worldview and the inclusiveness of their institutional design. The quantitative exploration covers exemplars offered by inter-governmental organizations, business initiatives, non-governmental organizations as well as multi-stakeholder initiatives. The analysis finds significant ambiguity of sustainability worldviews across the sample, as well as almost universal uptake of design characteristics to enhance inclusiveness irrespective of the type of standard setting initiative. However, there are also significant differences in the way sustainability is understood among VSS offered by different standard setting initiatives.

Keywords: voluntary sustainability standards; agriculture; sustainability; global value chains; multi-stakeholder initiatives; multiplicity; sustainability worldviews; inclusiveness

1. Introduction

Economic globalization has created a system of interdependent global value chains [1–3], where production of commodities generally happens far away from the places where a given good is eventually purchased by consumers. While this system has generated many economic benefits, current production and consumption patterns far exceed the carrying capacity of the planet [4–6]. Likewise, conditions of production and terms of trade along global value chains frequently infringe on human rights, health, safety, and wellbeing [7,8]. In the absence of effective laws and regulations applicable to global value chains, private and collaborative forms of rulemaking have increasingly been deployed to address these detrimental effects of the globalized economic system on sustainability [9,10].

One of the ways in which such global rulemaking has taken place is through voluntary sustainability standards (VSS) [11–14]. Different constellations of collaboration between public and private actors [12,15] have resulted in a multiplicity of VSS [16,17] addressing all kinds of sustainability issues along global value chains [18,19]. Despite lacking central enforcement, the adoption of VSS by value chain participants has become ubiquitous [20].

Initially, VSS were primarily developed by inter-governmental organizations (IGOs), such as the International Labour Organization [21,22]. Later, non-governmental organizations (NGOs) [23,24] and organizations representing collective interests of business
[25,26] also sought to draw up rules to mandate more corporate responsibility and sustainability. In response to growing criticism of the non-inclusive nature of VSS [27] and their increasing cooption [28], multi-stakeholder initiatives (MSIs) have emerged more recently as an important vehicle for the private regulation of global corporate conduct [29–32]. These stakeholder coalitions have been hailed as more inclusive [33,34], more legitimate [35], and ultimately, more effective at standard setting [31,36–38]. Pertinent examples include the Roundtable on Sustainable Palm Oil (RSPO), the Sustainable Rice Platform (SRP), or the Ethical Trading Initiative (ETI) [39–41]. At the same time, other standard setters have begun to recognize exclusion as a problem and now seek to make their standards more inclusive without becoming full-fledged MSIs themselves [30,42,43].

In light of these developments, this study asks: Are there discernable differences between standards launched by different types of standard setters? To address this question, this study focuses on two core aspects of VSS, notably their purported sustainability worldview [44,45] and the inclusiveness of their institutional design [40,46].

These aspects are explored across a sample of 51 VSS drawn from the ITC Standards Map [47], a platform offering verified and transparent information on over 300 standards for environmental protection, worker and labor rights, economic development, quality, and food safety, as well as business ethics [47]. By comparatively reviewing the sampled VSS, this study elucidates patterns across a plethora of existing standards from different types of standard setting initiatives. On the one hand, this approach serves to assess the reliability of previous research on MSIs and their alleged advantages [35,37,48,49]. On the other hand, this study strives to contribute to the discourse on the multiplicity of VSS [16,17,29,50].

The following section provides a literature-based conceptual framework for the present study and defines the core aspects of VSS at the center of the subsequent analysis. Section 3 introduces the research design and details the data analysis methods employed. Section 4 presents the findings of the analysis, and Section 5 discusses the empirical results in the context of the scientific discourse on the multiplicity of standards.

2. Literature review

2.1. Multiplicity of Voluntary Sustainability Standards

Gilbert et al. [13] (p. 24) define VSS as “voluntary predefined rules, procedures and methods to systematically assess, measure, audit and/or communicate the social and environmental behavior and/or performance of firms”. An essential function of VSS is to define socially and environmentally desirable practices and outcomes and to make firms accountable to their stakeholders for their actions and omissions with regard to these practices and outcomes [11,19,51].

Large numbers of VSS have emerged in recent decades. For instance, the ITC Standards Map counts 314 exemplars at the time of writing, covering global value chains across 17 sectors (see https://www.standardsmap.org, accessed 5 January 2022). While many standards are sector-, product-, and/or issue-specific, others are more generic in nature [52–54]. This so-called multiplicity of standards is a challenge for value chain participants targeted by VSS but also for effective value chain governance in general [16,17].

Agriculture, arguably, is the sector which has seen the strongest proliferation of VSS [16,55,56]. On the one hand, increasing agricultural output and intensification have been major drivers of environmental degradation, land use change, and man-made climate change [55,57,58]. On the other hand, producers of agricultural products are frequently located in the global South where social and environmental regulation tend to be lacking or weakly enforced. Buyers and consumers, however, are often located in the global North, where a strong preference exists for products manufactured under environmentally and socially sound conditions [28,59]. VSS have consequently filled the governance gap between the producer and buyer/consumer ends of agricultural global value chains [60,61].
More than 50% \((n = 154)\) of recorded standards in the ITC Standards Map address this sector. This makes agriculture an ideal exemplary sector to explore VSS in detail. This study therefore draws on VSS from agriculture to enable a fruitful comparative exploration of the multiplicity of standards in existence today.

Likewise, the initiatives that develop VSS also take a variety of different forms and involve different stakeholder groups (see Table 1 below) [29,62]. Business initiatives include for-profit organizations as well as organizations exclusively representing the interests of business (e.g., business clubs and business associations). Pertinent examples are Ecocert SA, a French company specializing in sustainability certification, or the Ethiopian Horticulture Producer Exporters Association (EHPEA). In contrast, non-governmental organizations (NGOs) cover all non-profit and non-governmental organizations, except those exclusively representing business interests. Examples include Fairtrade International and Social Accountability International. The third type of standard setters is inter-governmental organizations (IGOs), such as the United Nations or the International Labour Organization. IGOs differ from NGOs in that they comprise public, inter-governmental initiatives. Especially since the 1990s, standards have been increasingly developed by multi-stakeholder initiatives (MSIs), for instance the Rainforest Alliance and the Ethical Trading Initiative.

Table 1. Types of standard-setting initiatives.

<table>
<thead>
<tr>
<th>Type of Initiative</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>Includes for-profit organizations (incl. consultancies) as well as organizations exclusively representing the interests of for-profit-organizations (such as business clubs or business associations).</td>
<td>Agricultural Industries Confederation, Ecocert SA, Amfori</td>
</tr>
<tr>
<td>International Organization (IGO)</td>
<td>Includes international, intergovernmental organizations</td>
<td>United Nations International Labour Organization</td>
</tr>
<tr>
<td>Multi-Stakeholder Initiative (MSI)</td>
<td>Includes initiatives involving two or more different types of stakeholders (such as business, civil society, governments, or international organizations).</td>
<td>Ethical Trading Initiative, Rainforest Alliance</td>
</tr>
<tr>
<td>Non-Governmental Organization (NGO)</td>
<td>Includes non-governmental and non-profit organizations (except for those exclusively representing the interests of for-profit organizations).</td>
<td>ProTerra Foundation, Social Accountability International</td>
</tr>
</tbody>
</table>

Per definition, MSIs involve multiple stakeholder groups (i.e., business, NGOs, governments, or communities affected by business operations) and “have a governance structure that mandates the participation of more than one stakeholder group in its primary decision-making body” [48] (p. 6). Proponents of MSIs hold that such initiatives are preferable to other forms of standard setting because of their potential for better representation of marginalized value chain participants [33,34], higher levels of legitimacy [35], and ultimately, more effective standards [31,36–38]. However, recent studies suggest that many MSIs are failing to deliver on this potential [39–41,48]. At the same time, other standard setting initiatives have recognized exclusion as a problem and seek to make their
standards more inclusive without becoming full-fledged MSIs themselves [30,42,43,63]. For instance, many standard setting initiatives have built multi-stakeholder advisory groups, regularly carry out stakeholder consultations, or otherwise delegate limited authority to a multi-stakeholder body.

This begs the question of whether VSS offered by different types of standard setting initiatives are in fact discernably different from those developed through other (collaborative) forms of standard setting. Previous research to this effect has largely relied on single or multiple case studies [37,42,64–67], focused on individual issues [50,58,68,69] or value chains [61,70,71], or has reviewed MSIs without direct comparison against other types of standard setting initiatives [29,31,32,35,48].

This study expands on the existing body of knowledge by focusing on two literature-derived core aspects on which VSS from different standard setting initiatives can be compared.

2.2. Voluntary Sustainability Standards and Sustainability Worldviews

First, scholarship on the multiplicity of standards suggests that the type of standard setting initiative is related to the contents and stringency of the proposed requirements of a VSS vis-à-vis potential adopters along global value chains [20,50,61,70,72]. By this logic, standards from different standard setters can differ significantly in terms of their purported sustainability worldview [44,73]. Sustainability worldviews are conceptualized as prevailing value orientations as regards sustainability that provide “a lens through which the world is seen” [73] (p. 855). In a recent study, Landrum and Ohsowski [45] suggest that such sustainability worldviews may well be controlled by “organizations providing frameworks, standards and principles that guide companies.”

However, extant research is ambiguous as to the degree of harmonization or diversification of understandings of sustainability in contemporary VSS. Some argue that since VSS are firmly rooted in existing international law, they do not create new rules or understandings of sustainability in themselves, but rather operationalize pre-existing sustainability worldviews [63,74]. In this way, a certain degree of harmonization is automatically assumed to be present among VSS. Others propose that the increasing competition of VSS within the same global value chains leads to a need for differentiation from competitors, thus leading to greater diversification of standards [16,17,75].

To examine the spectrum of sustainability worldviews prevalent in VSS, this study draws on a developmental model distinguishing five stages of corporate sustainability [44], notably: (i) Compliance—sustainability is understood to mean staying within legal and regulatory boundaries; (ii) business-centered—sustainability is understood to mean activities with financial/market value to the business; (iii) systemic—sustainability is understood to mean engaging in collaborative partnerships to influence systemic change; (iv) regenerative—sustainability is understood to mean reparation of the environmental, social, and economic damage of industrial age practices; and (v) co-evolutionary—sustainability is understood to mean humanity living in balance with nature to create the best conditions for mutual survival and flourishing. The stage model categorizes stages 1, 2, and 3 as business oriented while stages 4 and 5 are considered sustainability oriented [44].

While standard setting initiatives involving one central type of stakeholder (i.e., business, NGO or IGO) can be expected to work on the basis of a rather consistent worldview in line with their respective values, MSIs must reconcile the sustainability worldviews of multiple stakeholder groups through deliberation [41,66,76]. This study consequently hypothesizes that VSS offered by MSIs will exhibit more ambiguous sustainability worldviews than VSS developed by other types of standard setting initiatives. At the same time, MSIs and NGOs can be expected to align most strongly with the systemic stage (i.e., stage 3 of Landrum’s model) given their focus on collaboration and partnership.
2.3. Voluntary Sustainability Standards and Inclusiveness

Second, research on multiplicity of VSS suggests that the type of standard setting initiative (sometimes also termed “sponsor” [77]) influences the inclusiveness of standard design and governance [40,78,79]. Especially business-led VSS have attracted criticism for allegedly limiting their focus to issues relevant to business, rather than issues of societal and environmental relevance [9,77,80]. Some scholars have even argued that VSS in general have been coopted by businesses seeking to advance their own agendas [28,59,81]. Other types of standard setting initiatives, including NGOs and IGOs have also been criticized for lacking inclusiveness in governance [11,40] and competing for adopters at the expense of accountability, leading to a “race to the bottom” [16,17].

MSIs have been hailed as a possible solution to these perceived problems [49]. Inclusiveness has been advanced as one of the main advantages of MSIs vis-à-vis other standard setting initiatives [40,78] both in terms of the legitimacy of standard governance and in terms of effective outcomes of VSS implementation [35,40,82]. Inclusive governance is usually understood to mean equal representation and decision-making power for stakeholders so as to ensure that “decisions are derived from the preferences of the population in a chain of accountability linking those governing to those governed” [83] (p. 10). Proponents of inclusiveness as an antecedent of effective VSS outcomes stress that decisions derived from democratic procedures tend to be both correct and morally binding (or at least more so than decisions derived from other types of decision-making procedures). Democratic procedures, however, require inclusiveness to enable collective deliberation and voting [26,35].

When operationalizing inclusiveness in standard setting and governance, literature generally refers to at least one but usually several of the following: (i) Membership, i.e., stakeholders can formally participate in the organization of a standard setting initiative; (ii) participation, i.e., stakeholders are formally or informally represented in the governance of the standard [38]; (iii) decision-making power, i.e., stakeholders have formal voting rights in the central decision-making body of a standard setting initiative [26,35]; (iv) complaints mechanisms, i.e., the standard has in place documented, publicly available complaints, dispute, and appeal resolution policies that stakeholders can leverage to contest decisions [31,48]; (v) transparency, i.e., standard setting procedures are documented, outlining how stakeholders can engage in the process [72,84]; and (vi) consultation, i.e., standard setting and revisions are subject to public consultation [85].

As Ponte [85] (p. 265) notes the governance setup of contemporary VSS is expected to ensure (or at least signal) some degree of inclusiveness irrespective of the type of the standard setting initiative. Consequently, such initiatives are becoming “increasingly more sophisticated in how they facilitate formal participation of relevant stakeholders, manage deliberation and use technologies that ensure some provision of input.” It thus stands to reason that the gold standard of MSIs has diffused in some measure to other types of standard setting initiatives [63].

3. Materials and Methods

The research design presented hereafter is geared toward an open-ended exploration of the design characteristics in VSS as well as the standard setting initiatives behind them. More specifically, it aims to provide insights into the degree to which VSS differ from each other regarding their sustainability worldview and the inclusiveness of their institutional design. The data necessary for the analysis consist of (i) VSS texts extracted from the websites of the respective standard setting initiative and (ii) information on the sampled VSS extracted from the ITC Standards Map.
3.1. Description of the Sample

The sample was drawn from the VSS recorded in the ITC Standards Map, which was considered as representative of the whole population of VSS available. The following selection criteria were then applied to the population:

1. The sectoral scope was limited to VSS applicable to agriculture and to global value chains to ensure a basic level of comparability.
2. Company-specific standards were excluded to ensure comparability of the governance set-up across the sample.
3. Proprietary standards were excluded to ensure a comparable level of access to information.
4. Where a standard setting initiative offered several VSS with only minor technical adaptations, only one standard was included in the sample. For instance, the Aquaculture Stewardship Council (ASC) offers product-specific standards for pangasius, salmon, shrimps, and tilapia, which are essentially congruent but account for the specificities of culturing different species. To avoid a skewed sample, only the ASC standard for salmon was included.

The final sample covers 51 VSS, covering exemplars from all four types of standard setters (business, IGOs, NGOs and MSIs). Among the VSS included in the final sample (n = 51), 26% were developed by MSIs (n = 13), 29% were launched by business initiatives (n = 15), 31% are offered by NGOs (n = 16) and 14% were published by IGOs (n = 7). The sample (see Table 2 below) contains VSS first launched as early as the 1940s but also contains recent exemplars. As many VSS are regularly reviewed and updated, the latest available version of the standard was consistently selected.

Table 2. List of VSS sampled from the ITC Standards Map (https://www.standardsmap.org/, accessed 5 January 2022).

<table>
<thead>
<tr>
<th>Standard Name</th>
<th>Launched</th>
<th>Standard Setter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>4C Code of Conduct</td>
<td>2016</td>
<td>Ecocert SA</td>
<td>Business</td>
</tr>
<tr>
<td>ASC Salmon Standard</td>
<td>2010</td>
<td>Aquaculture Stewardship Council</td>
<td>NGO</td>
</tr>
<tr>
<td>ASEAN Guidelines for Promoting Responsible Investment in Food, Agriculture and Forestry</td>
<td>2018</td>
<td>ASEAN</td>
<td>IGO</td>
</tr>
<tr>
<td>Better Cotton Principles &amp; Criteria</td>
<td>2009</td>
<td>Better Cotton Initiative</td>
<td>MSI</td>
</tr>
<tr>
<td>BSCI Code of Conduct</td>
<td>2003</td>
<td>amfori</td>
<td>Business</td>
</tr>
<tr>
<td>Climate, Community &amp; Biodiversity Standards</td>
<td>2005</td>
<td>VCS/CCBA</td>
<td>NGO</td>
</tr>
<tr>
<td>Cotton Made in Africa</td>
<td>2005</td>
<td>Aid for Trade Foundation</td>
<td>NGO</td>
</tr>
<tr>
<td>EFI Social Standards</td>
<td>2013</td>
<td>Equitable Food Initiative</td>
<td>MSI</td>
</tr>
<tr>
<td>EHPEA Code of Practice for Sustainable Flower Production</td>
<td>2002</td>
<td>Ethiopian Horticulture Producer Exporters Association</td>
<td>Business</td>
</tr>
<tr>
<td>ETI Base Code</td>
<td>1998</td>
<td>Ethical Trade Initiative</td>
<td>MSI</td>
</tr>
<tr>
<td>EU Organic Farming</td>
<td>1991</td>
<td>European Union</td>
<td>IGO</td>
</tr>
<tr>
<td>Fair for Life Standard</td>
<td>2006</td>
<td>Ecocert SA</td>
<td>Business</td>
</tr>
<tr>
<td>Fairtrade Standard for SPO</td>
<td>1997</td>
<td>Fairtrade International</td>
<td>NGO</td>
</tr>
<tr>
<td>FairWild Standard</td>
<td>2008</td>
<td>FairWild Foundation</td>
<td>NGO</td>
</tr>
<tr>
<td>Farm Sustainability Assessment</td>
<td>2002</td>
<td>SAI Platform</td>
<td>Business</td>
</tr>
<tr>
<td>Standard / Guideline</td>
<td>Year</td>
<td>Organization</td>
<td>Type</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Feed Materials Assurance Scheme</td>
<td>2015</td>
<td>Agricultural Industries Confederation</td>
<td>Business</td>
</tr>
<tr>
<td>FEFAC Soy Sourcing Guidelines</td>
<td>2015</td>
<td>European Compound Feed Manufacturers' Federation</td>
<td>Business</td>
</tr>
<tr>
<td>FSC Principles &amp; Criteria for Forest Stewardship</td>
<td>1993</td>
<td>Forest Stewardship Council</td>
<td>MSI</td>
</tr>
<tr>
<td>GCP Baseline Common Code</td>
<td>2017</td>
<td>Global Coffee Platform</td>
<td>MSI</td>
</tr>
<tr>
<td>Global G.A.P.</td>
<td>1997</td>
<td>FoodPLUS GmbH</td>
<td>Business</td>
</tr>
<tr>
<td>IFOAM Norms for Organic Production &amp; Processing</td>
<td>1972</td>
<td>International Federation of Organic Agriculture Movements</td>
<td>MSI</td>
</tr>
<tr>
<td>International Code of Conduct for the Production of Cut Flowers</td>
<td>2006</td>
<td>ICC</td>
<td>NGO</td>
</tr>
<tr>
<td>International Water Stewardship Standard</td>
<td>2008</td>
<td>Alliance for Water Stewardship</td>
<td>MSI</td>
</tr>
<tr>
<td>ISCC EU</td>
<td>2006</td>
<td>International Sustainability &amp; Carbon Certification</td>
<td>MSI</td>
</tr>
<tr>
<td>LEAF Marque Standard</td>
<td>2003</td>
<td>LEAF Marque Ltd.</td>
<td>NGO</td>
</tr>
<tr>
<td>OECD Guidelines for Multinational Enterprises</td>
<td>1976</td>
<td>OECD</td>
<td>IGO</td>
</tr>
<tr>
<td>PEFC Sustainable Forest Management Benchmark Standard</td>
<td>1999</td>
<td>PEFC Council</td>
<td>NGO</td>
</tr>
<tr>
<td>Principles of Fair Labor &amp; Responsible Production</td>
<td>1999</td>
<td>Fair Labor Association</td>
<td>IGO</td>
</tr>
<tr>
<td>Product Carbon Footprint Certification</td>
<td>2001</td>
<td>Carbon Trust</td>
<td>NGO</td>
</tr>
<tr>
<td>Production Standard for Small-holder Farmers</td>
<td>2007</td>
<td>Bonsucro</td>
<td>MSI</td>
</tr>
<tr>
<td>ProTerra Standard</td>
<td>1999</td>
<td>ProTerra Foundation</td>
<td>NGO</td>
</tr>
<tr>
<td>RA Sustainable Agriculture Standard</td>
<td>1987</td>
<td>Rainforest Alliance</td>
<td>MSI</td>
</tr>
<tr>
<td>REDcert²</td>
<td>2010</td>
<td>REDcert</td>
<td>Business</td>
</tr>
<tr>
<td>RSPO Principles &amp; Criteria</td>
<td>2004</td>
<td>Roundtable on Sustainable Palm Oil</td>
<td>MSI</td>
</tr>
<tr>
<td>RTRS Standard for Responsible Soy Production</td>
<td>2006</td>
<td>Roundtable on Responsible Soy</td>
<td>MSI</td>
</tr>
<tr>
<td>SA8000 Standard</td>
<td>1997</td>
<td>Social Accountability International</td>
<td>NGO</td>
</tr>
<tr>
<td>SAFA Guidelines</td>
<td>2013</td>
<td>FAO</td>
<td>IGO</td>
</tr>
<tr>
<td>SBP Framework Feedstock Compliance Standard</td>
<td>2015</td>
<td>Sustainable Biomass Partnership</td>
<td>Business</td>
</tr>
<tr>
<td>Sedex Members Ethical Trade Audit (SMETA)</td>
<td>2004</td>
<td>Sedex</td>
<td>Business</td>
</tr>
<tr>
<td>SFAP Verified CO₂ statement</td>
<td>2017</td>
<td>Sustainable Farming Assurance Programme</td>
<td>Business</td>
</tr>
<tr>
<td>SOCIALCARBON Standard</td>
<td>2000</td>
<td>SOCIALCARBON</td>
<td>NGO</td>
</tr>
</tbody>
</table>
3.2. Data Extraction and Analysis

VSS texts were downloaded as PDF documents. The complete text for each VSS was used in the analysis. After collection, each PDF was saved in a database. The database was complemented by coded information on each VSS drawn from the ITC Standards Map. The Standards Map is a data collection project on VSS, originally launched in 2011 by the International Trade Centre (ITC). At the time of writing, the Standards Map covers 314 VSS addressing 17 sectors. As such, the Standards Map provides access to neutral, verified data on the institutional design of standard setting initiatives as well as on the design characteristics of VSS themselves (For more information on the methods of data collection, verification and coding, please turn to https://resources.standardsmap.org/knowledge/ (accessed 5 January 2022)). The Standards Map supplied data on the following variables: (i) original launch date of the VSS, (ii) name and URL of standard setting initiative, (iii) participation, (iv) membership, (v) transparency, (vi) complaints mechanisms, (vii) consultation, and (viii) decision-making.

The analysis progressed in three steps and was supported throughout by the MaxQDA analysis software package. First, a quantitative content analysis of all VSS texts was conducted to identify the sustainability worldviews prevalent in the sample. Based on a dictionary (the complete dictionary of keywords can be found in Table 2 in Landrum’s and Ohsovski’s article) developed using Landrum’s stages of corporate sustainability as content categories, syntactical units (keywords) associated with one of the stages were auto-coded and counted for each VSS text.

Second, the absolute and relative keyword frequencies were compared among the four types of VSS (business, IGO, NGO, MSI). Keyword counts were normalized in order to account for potential biases due to different document lengths (i.e., total word count). Absolute and relative frequencies of key words were cross-tabulated, and a Pearson’s chi square test of independence was run to determine whether there was an association between the type of standard setting initiative and the prevalent sustainability worldview.

Third, the inclusiveness of standard design and governance was tested by cross-tabulating information from the ITC Standards Map against the type of standard setting initiative. To this effect, the absolute and relative frequencies of the following binary coding were determined: (i) Can stakeholders formally participate in the governance of the standard setting initiative? (yes/no); (ii) Are stakeholders formally or informally represented in the governance of the VSS? (yes/no); (iii) Do stakeholders have formal voting rights in the major decision-making body? (yes/no); (iv) Does the standard have in place complaints mechanisms that stakeholders can access? (yes/no); (v) Are standard setting procedures documented and made publicly available? (yes/no); (vi) Are standard setting and revisions subject to public consultations (yes/no). Frequency counts were again cross-tabu-
lated, and a chi square test [86,87] run to determine whether there was an association between the inclusiveness of the VSS and the type of standard setting initiative. Since expected values fell below 5 in some instances, the robustness of the results of Pearson’s chi square test of independence was corroborated using Fisher’s exact test [88,89].

3.3. Limitations and Mitigating Measures

The research design of the present study is strictly exploratory. Its value lies in the quantification of design characteristics across a relatively large sample of VSS, and a systematic comparison between multiple VSS from different types of standard setting initiatives. However, the comparative analysis was limited to three core aspects. This does not preclude that other design characteristics may play a role as well.

In order to improve the validity and reliability of the findings, the trustworthiness of data and results was assessed in terms of credibility, confirmability, and transferability [90,91]. Credibility refers to the extent to which the results appear to be acceptable representations of the data. This was ensured by working with a trusted database, i.e., the ITC Standards Map, as well as a quality-tested dictionary [45] for the quantitative content analysis.

Confirmability testing requires the active search for potential biases in the data and its interpretation. As Pearson’s chi square test of independence tends to lose reliability when expected values fall below 5 (as was the case in some analyses), Fisher’s exact test was used to corroborate the robustness of findings in those cases [88,89].

Transferability designates the degree to which findings from one study context will apply to other contexts. Transferability was ensured by aiming to generate a maximum variety of VSS to foster a rich comparative assessment, while limiting the sample to one sector context so as to maintain a basic level of comparability. As it is likely that the design of VSS and the sustainability worldview vary depending upon specific sociocultural and political contexts, the sample explicitly covers VSS from a variety of geographical origins, also including exemplars from the global South, such as the EHPEA Code of Practice (from Ethiopia) or the ASEAN Guidelines for Promoting Responsible Investment in Food, Agriculture and Forestry (from South-East Asia). The findings should thus be applicable to a wide variety of geographical contexts. However, more work is needed to confirm the transferability of the findings of this study to sectors other than agriculture.

4. Results

This study compares 51 VSS from agriculture regarding two core aspects of their (institutional) design. First, the analysis reviewed their purported sustainability worldview as expressed in the language of the standard texts. Second, the study explored the inclusiveness of VSS governance structures as expressed through the existence of design characteristics associated with enhanced stakeholder inclusion. This section contains the results of these analyses and is followed by an interpretation of the findings in the context of standard multiplicity.

4.1. Ambiguous Sustainability Worldviews Prevail

Landrum’s [44,45] developmental stage model served as a framework for analyzing the language of VSS texts by means of a quantitative content analysis. As a general trend, most sampled VSS exhibited a very ambiguous language. However, it is notable that despite this general ambivalence, some standards have developed a distinct language profile with a clearly distinguishable primary sustainability worldview. Primary sustainability worldviews are defined as >50% of all keywords counted being associated with one stage of Landrum’s model [44,45]. A total of 25.49% (n = 13) of sampled standards exhibited such a primary worldview.
The topmost compliance focused VSS in the sample are the WIETA Standard and the UN Guiding Principles on Business and Human Rights with more than 60% of all keywords associated with stage 1 of Landrum’s model. The EU Organic Farming standard and the International Water Stewardship Standard also exhibit a strong tendency toward compliance with more than 50% of all keywords counted associated with this stage. These standards primarily understand sustainability to mean staying within legal and regulatory boundaries.

The Fair Labor Association’s Principles of Fair Labor & Responsible Production as well as the Product Carbon Footprint Certification standard by Carbon Trust show the strongest tendency toward a business-centered sustainability worldview with more than 50% of keywords counted associated with stage 2 of Landrum’s model. These VSS signal that their understanding of sustainability is centered on activities with financial/market value to the business.

More than 80% of keywords in the ETI Base Code by the Ethical Trading Initiative (MSI) are associated with a systemic sustainability worldview. Other standards that exhibit a strong tendency toward stage 3 of Landrum’s model with more than 70% of all identified keywords associated with that stage include: (i) the WFTO Guarantee System, (ii) ISCC EU, (iii) RedCert2, and (iii) the Farm Sustainability Assessment by SAI International. These standards strongly signal that they understand sustainability to mean engaging in collaborative partnerships to influence systemic change.

The strong sustainability worldviews embedded in stage 4 and 5 of Landrum’s model were relatively weakly represented among the VSS in the sample when compared to the other stages. None of the sampled standards signal through their language that they primarily understand sustainability to mean the reparation of the environmental, social, and economic damage of industrial age practices. The strongest references to such a regenerative sustainability worldview are present in the SOCIALCARBON standard (18% of keywords) and the standards of the RTRS Standard for Responsible Soy Production (16% of keywords).

Stage 5 was slightly better represented in the sample than stage 4. Yet, none of the sampled VSS signal through their language that they primarily understand sustainability to mean humanity living in balance with nature to create the best conditions for mutual survival and flourishing. Such a co-evolutionary understanding of sustainability was most strongly represented in the forestry standards offered by the Forest Stewardship Council (33% of keywords) and the PEFC Sustainable Forest Management Benchmark Standard (36% of keywords).

At the level of standard setting initiatives (see Figure 1), the analysis reveals that VSS from every type of standard setting initiative use language covering all five stages of the model. In other words, all sampled standards exhibited ambiguousness in their sustainability worldview, albeit to varying degrees. The expectation that the language of VSS developed by MSIs tends to be more ambiguous than those of other standard setters is not confirmed by the data.
However, Pearson’s chi square test of independence (see Table 2 below) indicates a strong association between the type of standard setting initiative and the sustainability worldviews represented in the language of the standard text. MSIs used significantly less language associated with compliance and business-centered worldviews than IGOs and business initiatives. NGOs had slightly higher keyword counts for these stages; however, there was no significant difference detectable between MSIs and NGOs in this regard.

As hypothesized, MSIs frequently employ language that is strongly associated with stage 3 of Landrum’s model, indicating that sustainability is often understood to mean engaging in collaborative partnerships to influence systemic change. However, NGOs and business initiatives exhibited comparable levels of keyword counts for this stage. The only standards set apart by a significantly lower keyword count associated with a systemic worldview were those offered by IGOs.

In addition, the language of VSS from all four standard setter types is primarily business oriented in nature (i.e., key words from stages 1–3 made up more than 50% of total key words analyzed). In all four groups, keywords associated with the sustainability-oriented stages 4 and 5 made up less than 20% of overall key words analyzed. VSS offered by business initiatives tended to use even less language related to stages 4 and 5 than all other types of standard setting initiatives.

4.2. Inclusiveness as Panacea?

Among the sampled VSS, all but four exemplars included at least one design characteristic associated with inclusiveness. Among the four outliers, the FAO SAFA Guidelines and SAIs Farm Sustainability Assessment are technical sustainability assessment tools, which may explain why the standard setting initiatives did not consider inclusiveness as a requirement. The remaining two did not provide responses to all questions coded in the ITC Standards Map, so it is possible that they do include other ways of enhancing inclusiveness and/or have simply not provided the requisite information.

Three of the sampled standards feature all six analyzed design characteristics for inclusiveness, notably the GCP Baseline Common Code (MSI), the Roundtable on Sustainable Palm Oil Principles & Criteria (MSI), and the UEBT Ethical BioTrade Standard (NGO). This means that two of the top performers in terms of inclusiveness are MSIs.

At the group level (see Figure 2), the findings show that many forms of participation are prevalent across the board of VSS (see Figure 2 below). About 80% of all sampled VSS \((n = 41)\) indicated that stakeholders can formally participate in the governance of the standard setting initiative. About 73% \((n = 37)\) of all sampled VSS document standard setting procedures and make them publicly available. Moreover, 67% \((n = 35)\) of VSS in the sample give formal voting rights to selected stakeholders in the major decision-making
body of the standard setting initiative. Complaints mechanisms for stakeholders were offered by 61% \((n = 31)\) of VSS. Only 47% \((n = 24)\) of sampled VSS carry out public consultations in the context of standard setting and revisions. Finally, only 8% \((n = 4)\) VSS indicated that stakeholders are included as members of the standard setting initiative and make core decisions through a general assembly.

Figure 2. Design characteristics associated with inclusiveness per type of standard setting initiative (in %).

Pearson’s chi square test of independence (see Table 3 below) failed to reject the null hypothesis. No significant association between the type of standard setting initiative and design characteristics associated with inclusiveness could be found. As some expected values fell below the threshold of \(n = 5\), Fisher’s exact test was used to compare the different types as well. This additional test revealed one significant difference between MSIs and other types of standard setting initiatives \((p(O > E | O < E) = 0.01427^*)\), notably membership. Only MSIs (and a single NGO) involved stakeholders in this capacity.

This adds evidence to the idea that design characteristics for enhancing inclusiveness are ubiquitous among all types of contemporary VSS. However, the strongest form of participation, to wit making stakeholders part of the initiative as vote-carrying members, is still the exception. Even among MSIs, only 23% \((n = 3)\) had stakeholders participate in the governance of the VSS in this way.

Table 3. Cross-tabulations of absolute and relative (in brackets) frequencies of normalized keyword counts per standard setter type, incl. Chi square value.

<table>
<thead>
<tr>
<th>Sustainability worldviews</th>
<th>MSI</th>
<th>Business</th>
<th>NGO</th>
<th>IGO</th>
<th>Total</th>
<th>(X^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 Compliance</td>
<td>945 (7.68%)</td>
<td>745 (6.05%)</td>
<td>1263 (10.26%)</td>
<td>567 (4.61%)</td>
<td>3520 (28.61%)</td>
<td>454.50 ***</td>
</tr>
<tr>
<td>Stage 2 Business-oriented</td>
<td>558 (4.53%)</td>
<td>515 (4.19%)</td>
<td>565 (4.59%)</td>
<td>701 (5.70%)</td>
<td>2339 (19.01%)</td>
<td></td>
</tr>
<tr>
<td>Stage 3 Systemic</td>
<td>1410 (11.46%)</td>
<td>986 (8.01%)</td>
<td>1583 (12.86%)</td>
<td>618 (5.02%)</td>
<td>4597 (37.36%)</td>
<td></td>
</tr>
<tr>
<td>Stage 4 Regenerative</td>
<td>147 (1.19%)</td>
<td>54 (0.44%)</td>
<td>156 (1.27%)</td>
<td>112 (0.91%)</td>
<td>469 (3.81%)</td>
<td></td>
</tr>
<tr>
<td>Stage 5 Coevolutionary</td>
<td>434 (3.53%)</td>
<td>149 (1.21%)</td>
<td>542 (4.40%)</td>
<td>255 (2.07%)</td>
<td>1380 (11.21%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3494 (28.39%)</td>
<td>2449 (19.90%)</td>
<td>4109 (33.39%)</td>
<td>1380 (11.21%)</td>
<td>12,305 (100.00%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inclusiveness</th>
<th>Participation</th>
<th>Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSI</td>
<td>13 (6.37%)</td>
<td>3 (1.47%)</td>
</tr>
<tr>
<td>Business</td>
<td>10 (4.90%)</td>
<td>0 (0.00%)</td>
</tr>
<tr>
<td>NGO</td>
<td>14 (6.86%)</td>
<td>1 (0.49%)</td>
</tr>
<tr>
<td>IGO</td>
<td>4 (1.96%)</td>
<td>0 (0.00%)</td>
</tr>
</tbody>
</table>
| Total                     | 41 (20.10%)   | 4 (1.96%)  | 7.81
### Decision-making
- 13 (6.37%)
- 7 (3.43%)
- 10 (4.90%)
- 5 (2.45%)
- 35 (17.16%)

### Stakeholder engagement
- 10 (4.90%)
- 10 (4.90%)
- 9 (4.41%)
- 3 (1.47%)
- 32 (15.69%)

### Complaints & appeal
- 10 (4.90%)
- 9 (4.41%)
- 11 (5.39%)
- 1 (0.49%)
- 31 (15.20%)

### Transparency
- 11 (5.39%)
- 10 (4.90%)
- 12 (5.88%)
- 4 (1.96%)
- 37 (18.14%)

### Consultation
- 8 (3.92%)
- 7 (3.43%)
- 7 (3.43%)
- 2 (0.98%)
- 24 (11.76%)

### Total
- 68 (33.33%)
- 53 (25.98%)
- 64 (31.37%)
- 19 (9.31%)
- 204 (100.00%)

The p-values indicate the statistical relationship between type of standard setting initiative and the other categories. *** $p < 0.001$.

### 5. Discussion

In the past decades, the continuous proliferation, diversification, and evolution of VSS has led to the emergence of veritable standards markets where standard setters compete for adopters [17,32]. At the same time, more and more standard setting initiatives are collaborating at the level of overarching principles for the institutional design of VSS [16]. Existing scholarship is divided as to whether this multiplicity of standards has resulted in a diversification or harmonization of VSS in terms of contents and design [63,74,79].

This study expands on the existing body of knowledge in two ways: On the one hand, it addresses a large sample of VSS, allowing a comparative exploration beyond individual case studies, issues, commodities, or geographic regions; on the other hand, it provides new findings on the diversity of VSS regarding two core aspects, namely sustainability worldviews and inclusiveness. In doing so, the study offers insights into the role of standard setting initiatives as well as into the stage of maturity of each individual standard.

The findings reveal that ambiguity prevails in the sustainability worldviews of VSS in existence today. All standard texts used a broad repertoire of language that spanned several, in many cases all five stages of Landrum’s model. The co-existence of these different worldviews within individual standards may be interpreted as a reflection of the general lack of agreement and continued ambiguity of the concept of sustainability, especially in the context of global value chains [6,53]. Indeed, some authors perceive a veritable “battlefield of ideas” at play, where understandings on what constitutes sustainability in global value chains is subject to “competing factions assert[ing] their own narratives about value chain relations, the role of standards and related multi-stakeholder processes.” [57] (p. 481). Whether or not such competition exists within the standard setting initiatives examined here cannot be ascertained from the data. However, this interpretation seems plausible given the results of this exploratory study.

A total of six VSS signal that they primarily understand sustainability to mean staying within legal and regulatory boundaries. This strong focus on compliance can be interpreted in at least two ways: on the one hand, it is an indication that these standards are strongly embedded in existing (international) law and reproduce the sustainability understanding contained therein [74]. This is the case for the UN Guiding Principles on Business and Human Rights as well as the EU Organic Farming standard. On the other hand, the use of compliance-oriented language may also be an indication of the highly technical, issue specific, and technocratic approach of a standard. Where a sustainability issue is well-defined and well-understood, the language of a standard itself becomes less ambiguous and is no longer subject to the lack of agreement around the concept of sustainability. This might be the case for the International Water Stewardship Standard.

A second group of five VSS signals that they primarily understand sustainability to mean engaging in collaborative partnerships to influence systemic change. Interestingly, these standards are offered by MSIs, business, and NGO sponsors, alike. This indicates that collaboration as a hallmark of sustainability is not the prerequisite of MSIs and lends credence to Ponte’s [85] assertions that VSS of all types are becoming increasingly collaborative.
As expected, MSIs and NGOs generally used more language associated with a systemic understanding of sustainability, while IGO and business initiatives tended toward compliance and business-centric language, respectively. This finding indicates that the model used in the analysis finds reliable representation in the data and may be a useful tool to be applied to other and/or larger, possibly cross-sectoral samples of VSS texts in the future.

Overall, the findings show a clear tendency toward a business-centric interpretation of sustainability across the sample. Indeed, the strong sustainability worldviews embedded in stage 4 and 5 of Landrum’s model were only weakly represented among the VSS in the sample when compared to the other stages. This finding chimes with the critical scholarship on VSS. Many authors in this stream of research [27,51,72,80] argue that business as primary stakeholder in VSS exert a strong influence on standard setting initiatives in order to focus on (i) business activities rather than sustainability impacts [6,80], (ii) a narrow value chain scope rather than an encompassing view of impact pathways beyond the direct control of business [53,92], and (iii) sustainability issues that are well-understood and measurable, at the expense of softer or emerging sustainability issues [50,63,93].

Regarding the inclusiveness of the design of VSS, the findings revealed no significant differences between VSS offered by different types of standard setters. Across the board, standard setting initiatives have adopted at least a few design characteristics that are associated with greater inclusiveness. However, in absolute terms MSIs and NGOs did exhibit the largest number and variety of design characteristics to enhance inclusiveness. Given the explicit and significant focus of these standard setting initiatives on collaboration and partnership, it is nevertheless notable that they did not perform significantly better than business initiatives in this regard. This finding supports the argument, that a harmonization regarding the institutional design of standards is underway [16,63]. The type of standard setting initiative seems to be losing relevance in light of growing expectations for all VSS to at least take some measures to signal inclusiveness [85].

The findings also suggest that inclusiveness is not or at least no longer the prerequisite of MSIs. This aligns with the findings of other studies that suggest, MSIs do not generally deliver of their promise to be more inclusive and legitimate than other types of standard setting initiatives [40,49,78]. However, the idea if making stakeholders a formal part of the standard setting initiative as members with equal voting rights in a general assembly is still a rare but notable exception, where MSIs have provided an example that may be emulated by other initiatives in the future to prevent cooptation and allegations of greenwashing [28,81].

The findings of the present study have both managerial and research implications. Given the large number of VSS in existence, standards markets have become increasingly opaque [50,53]. Consequently, navigating the multiplicity of VSS remains a perennial challenge for managers and stakeholders alike. For managers, the present study provides an overview of the plethora of existing VSS in agriculture and two possible criteria when faced with the decision of which VSS to adopt, notably sustainability worldviews and inclusiveness. In cases where clearly defined sustainability requirements exist and (quasi)legal compliance needs to be demonstrated, standards with a compliance-driven sustainability worldview may be preferable. Comprehensive approaches to tackling sustainability issues along global value chains may require a more complex and advanced understanding of sustainability—standards with a tendency toward a systemic sustainability worldview will likely be better at accommodating the needs of standard adopters in this case. If stakeholder relationships and legitimacy of sustainability efforts are central to the for an adopting firm, a more inclusive VSS may be better able to help achieve these objectives.

The findings also indicate that the ambiguity—and related complexities—surrounding the concept of sustainability is not resolved by VSS. This remains a continuing point of contention with regards to standardization in the field of corporate sustainability.
Given the heterogeneity of the global VSS landscape, some scholars see a beginning tendency toward “de-standardization,” i.e., a trend among businesses to desist from adopting VSS and instead developing their own sustainability programs [17]. However, it stands to reason that such a trend would imply even greater heterogeneity among sustainability requirements imposed on value chain participants, while stakeholders would find it ever more difficult to determine the merits of any given set of requirements. In the same vein, individual company policies on sustainability would likely struggle to achieve a level of inclusiveness and legitimacy equal to that of existing VSS.

With regard to inclusiveness, the present analysis considered all of the examined design characteristics as categorical variables, making no distinction between them as to their relative merits or effectiveness [35,38,40,65]. However, it is clear that some measures—e.g., a public consultation or an advisory stakeholder council—are easier to implement and have less formal power over decisions made with regard to standard setting and governance than others. It is likely no coincidence that membership has not been adopted more widely within the institutional design of standard setting initiatives. It is thus worthwhile to continue to study the role and effectiveness of different forms of stakeholder inclusion and their implications.

Finally, ambiguity of sustainability worldviews and the ubiquitous adoption of design characteristics for inclusiveness coincide in the present study. Unfortunately, the data do not lend itself to a clear interpretation of why this is. Future research might investigate a potential relationship between ambiguity of language, inclusiveness, and the specific commodities or value chains covered by the VSS. Such a relationship seems plausible given that the only two VSS with a high percentage of keywords in the sustainability-oriented spectrum come from forestry, while standards covering other commodities do not share this characteristic. Future research might also explore whether the total number of standards covering a given commodity has a bearing on these variables, as some studies suggest [16,71]. Ultimately, the question presents itself, whether greater ambiguity is the price we pay for greater inclusiveness? Further studies on the language and design of VSS texts across larger samples and in different sectoral contexts would likely add insights to this question.

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References


