2020

Communicating Audit Results

A DESK STUDY ON CURRENT PRACTICE AND EMERGING TRENDS

PREPARED BY: JESSICA GRILLO AND ELIZABETH KENNEDY

This document has been prepared by Jessica Grillo of Heartwood LLC and Elizabeth Kennedy of Conservation Data Solutions for Fairtrade International.

The authors would like to thank Fairtrade International staff who contributed to this report and the external stakeholders who graciously agreed to be interviewed and share their own learning.

Table of contents

Acronyms

BCI	Better Cotton Initiative
CLMRS	Child Labour Monitoring and Remediation System
ESG	Environmental, social and governance
FI	Fairtrade International
GCP	Global Coffee Platform
GHG	Greenhouse gas
GIS	Geographic information system
GIZ	German Agency for International Cooperation
GRI	Global Reporting Initiative
HRDD	Human rights due diligence
IDH	Dutch Sustainable Trade Initiative
IISD	International Institute for Sustainable Development
ISEAL	International Social and Environmental Accreditation and Labeling
LEAF	Linking Environment and Farming
MEL	Monitoring, evaluation and learning
MSC	Marine Stewardship Council
RSPO	Roundtable on Sustainable Palm Oil
RTRS	Roundtable on Responsible Soy
SAN	Sustainable Agriculture Network
SDG	Sustainable Development Goal
VSS	Voluntary sustainability standard
WASH	Water sanitation and hygiene

Key Terms

Assurance process: The entire process of assuring that certified operations meet and maintain the requirements of certification. This process includes, but is not limited to, auditing.

Audit: An examination of records along with physical verification of those records, aimed at providing assurance that certified entities and their members are meeting the criteria necessary to achieve and maintain certification. Audits are often differentiated from monitoring & evaluation in that audits serve as checks on performance rather than deep investigations to draw out new insights (as in M&E). *(However, as the report will show, in some cases audits are evolving to provide more detailed information.)*

Audit results: The results from an audit.

Reach reporting: Reporting on the organization's size and scope of influence, including geographies, commodities and populations with which it works, as well as its influence in terms of market share, volumes it produces, numbers of people, etc.

Compliance reporting: Reporting on audit results using binary check-list data only. In other words, the data does not provide information beyond confirmation that a certified entity is or is not meeting a criterion. The reporting is typically presented as numbers or percentages of certified units in compliance or out of compliance. The data is sometimes disaggregated by geography and commodity with the help of reach data, and may be reported as a snapshot in time or as trends over time.

Output reporting: Reporting on additional data, collected during the audit process, which provides information about specific practices that certified units have adopted to achieve a criterion, or knowledge they have gained through certification. In other words, output reporting requires that auditors collected additional data, beyond just the binary check-list. *(the term output is consistent with commonly used definitions of outputs in the Theories of Change.)*

Outcome reporting: Reporting on additional data, collected during the audit process, which provides information about the higher-level outcomes of certification. In other words, output reporting requires that auditors collected additional data, beyond just the binary check-list. Outcomes are typically the result of outputs or other outcomes. *(the term outcome is consistent with commonly used definitions of outcomes in the Theories of Change.)*

I. Introduction

Attention to sustainability issues is increasingly becoming more integrated into day to day decision making of consumers, companies, governments and the financial sector. Issues related to human rights, the environment and anti-corruption are main streaming into how we choose what we wear and eat as individuals, while businesses are striving to set and achieve targets demonstrating the ethical implications of their operations. We are witnessing uptake of science-based targets (think climate change and greenhouse gas emission targets) and new collaborations to bring together and cross-check disparate data sources to support robust decision making. Voluntary sustainability standards (VSS) have for a number of years been a key mechanism for demonstrating environmental, social and governance compliance. As stakeholders improve their approach to defining and demonstrating sustainability, VSS compliance frameworks are evolving to aid this shift.

Considering these and other dynamics, Fairtrade International (FI) commissioned this research to better understand trends in how VSS and other sustainability initiatives are using their audit data to report results. The purpose of this research is to ***support FI in meeting the needs of the Fairtrade system and align its reporting with stakeholder expectations both internally and externally***. The outputs are intended to inform future monitoring, evaluation and learning (MEL) activities and be incorporated into reporting approaches where effective for Fairtrade.

This report is structured into four subsequent sections. Section II outlines the methods undertaken to generate insights. The results, section III, is broken into four themes, including an overview, findings by the types of audit results communicated by VSS, lessons on audit results reporting from companies, and linking to the Sustainable Development Goals (SDGs). We then explore several emerging trends and new innovations in section IV. In section V we summarize and discuss learning from the review and provide recommendations. Throughout we use tables to summarize findings and include case studies to highlight examples. The report also includes two annexes. The first is a summary of VSS audit results reporting by thematic area, and the second is a suggested action proposal.

II. Research Methods

Approach

The research team took a practical approach in order to meet the need for FI to apply learnings in quick time and communicate audit results as part of its overall MEL system. The study included investigation of the following, as detailed in FI's Terms of Reference:

1. best practices among VSS, and trends in use of audit information for sustainability reporting that targets companies, funders and wider audiences;
2. best practices regarding communications associated with audit data sets by VSS *and* others (e.g., companies, donors);
3. trends and opportunities which Fairtrade may wish to leverage in order to optimize the use of audit data (including risk analysis) for MEL, reporting and positioning; and
4. best practices related to integration of audit results into MEL reporting.

The primary focus for this research was on relevant information in the public domain, and which addresses integration of audit results into reporting. For this reason, desk-research was the main method of data collection. Following the desk research, 45 min interviews were conducted with three separate organizations to fill information gaps and learn more about their experiences and insights regarding communication of audit results.

Research questions

The following guiding question served to frame the overall research:

Guiding Question: How are organizations communicating results using audit data?

i. How are organizations communicating/reporting results through the use of audit data?
ii. What are the focuses / thematic areas (e.g., livelihoods, gender, etc.)?
iii. How are organizations aligning their communication of audit results with the SDGs?
iv. How are organizations aligning communication of audit results with the Human Rights Due Diligence (HRDD) framework?[1]
v. Are organizations using risk-based approaches, and if so how? (e.g., using audit data to report on risk, *or* assessing risk to prioritize analysis and reporting from audit data)
vi. What innovative / unique elements are beginning to emerge?
vii. Is the audit data being used in ways other than reporting on results or risk, and if so how?
viii. How is audit data being used in conjunction with other data to draw deeper meaning?

Research typology and compilation of sources

The criteria used to select organizations for the external scan were, **a.** that they represent organizations of different types (VSS, companies, corporate platforms and research/best practice organizations), and **b.** that they were likely to report using audit data or (in the case of research institutions/platforms) provide guidance on reporting with audit data.

32 organizations were thoroughly scanned for **a.** communication of audit results and **b.** thematic areas reported on with audit data. The organizations were then categorized into 4 buckets (see Table 1):

1. VSS reporting with audit data;
2. Companies reporting with audit data;
3. Organizations not reporting with audit data, but providing insights on trends; and
4. Organizations not reporting with audit data nor demonstrating trends.

The organizations that did indeed use audit data for reporting, and/or present useful trend information, were identified for deeper-dive analysis to capture details about their communication of audit results and identify important trends and lessons for reporting on audit results more generally.

[1] Note that the research found minimal references to the HRDD framework, beyond general statements about adherence to the UN Principles on Business and Human Rights, and nothing specifically related to its application for communicating audit results.

Table 1: Typology of organizations reviewed

VSS reporting with audit data	Companies reporting with audit data	Organizations **not** reporting on audit data, **but** providing insights on trends	Organizations **not** reporting **nor** demonstrating trends
Linking Environment and Farming (LEAF) Marque	Tiffany & Co	Aluminum Stewardship Initiative	German Agency for International Cooperation (GIZ)
Rainforest Alliance	SEDEX	Sustainable Agriculture Network (SAN)	UTZ
Marine Stewardship Council (MSC)	Mars	International Social and Environmental Accreditation and Labeling (ISEAL) Alliance	Global Gap
Bonsucro	Pepsico	Global Infrastructure Basel	Roundtable on Responsible Soy (RTRS)
Better Cotton Initiative (BCI)	Nestlé	World Resources Institute	Theo Chocolate
GoodWeave	Shell	World Cocoa Foundation	Root Capital
Roundtable on Sustainable Palm Oil (RSPO)		Global Reporting Initiative (GRI)	Rabobank
Textile Exchange		Dutch Sustainable Trade Initiative (IDH)	
Verra		International Institute for Sustainable Development (IISD)	
		Global Coffee Platform (GCP)	

III. Results

A. Overview

The research revealed a range of communications among VSS regarding audit results, including a number of innovations that are making it easier for VSS to deliver value from audit data. In some cases, as demonstrated below, VSS are finding new ways to leverage audit processes to gather information and report on higher-level results (i.e., outputs and outcomes beyond compliance to stated criteria). These findings are presented in the first part of the results section. Among companies, much of the communication around audit results is related to their own direct operations. While some companies also report supply chain results, much of this reporting appears[2] to be drawn from other forms of monitoring, evaluation and research data. However, corporate reporting holds valuable lessons that could be applied or adapted for FI and VSS in general. These lessons from the private sector are discussed in the second part of the results section. The third part discusses the role of the SDGs and provides examples of how VSS and others are incorporating these into their reporting.

B. Types of Audit Results Reporting by Voluntary Sustainability Standards

[2] It is difficult to determine whether audit data is being used or not in these instances, but because business reporting on supply chain outcomes are presented as cases studies, and not portfolio-wide, we expect that other forms of research and M&E are the primary data sources.

Among VSS, communication of audit results broadly falls into four categories – Reach[3], Compliance, Output and Outcome. Reach and compliance reporting are by far the most common. This type of results communication relies on organizational information and simple audit checklists. For the purpose of this research, in order for an audit-result communication to be categorized as an output or outcome communication, it had to provide additional information beyond the specific language of the standard's criteria. This would have required that additional information (beyond a binary checklist) be collected during the audits, or that auditors verified additional information that was submitted directly to the VSS by certified units through self-reporting.

If the additional information captured during the audit process is used to communicate specific knowledge gained by certified members, or specific practices that they employed in order to comply with a generalized criterion, it was categorized as output reporting. Case study #3 provides a good example of this. If the additional information captured during the audit process was used to communicate a higher-level outcome resulting from compliance or outputs (e.g., net GHG emissions), it was categorized as outcome reporting. Tables #5 and #6 list *all* of the outcome communications found among VSS during the course of this study.

This section of the report discusses the four categories – reach, compliance, output and outcome - in more detail, providing concrete examples of each. The reader can find more information on VSS-specific compliance, output and outcome type reporting in Annex 1.

Table 2: Categories of audit-results communications among VSS

Type	Description	Thematic areas	VSS reporting
Reach	Size and scope of the VSS influence, including spatially, geographically, demographically, and by volume commodity, population and market share	VSS Reach	All
Compliance	Results of binary data on compliance and non-compliances (i.e., yes/no checklists), including counts (numbers and percentages) and actual compliance scores	Livelihoods; forced labour; land rights; biodiversity/natural resource conservation; chemical use/management	Rainforest Alliance; LEAF; Bonsucro; MSC; Verra
Output	Results that communicate additional information (beyond compliance) about specific knowledge gained and practices adopted by certified units in order to meet a certain criterion	Child labour; enterprise resilience; biodiversity/natural resource conservation; gender	MSC; BCI; LEAF
Outcome	Results that communicate additional information (beyond compliance) on higher-level outcomes of certification	Livelihoods; child labour; gender; biodiversity/natural resource conservation; chemical use/management;	Bonsucro; MSC; LEAF; RSPO; BCI; Verra; Goodweave

i. Reach Reporting

[3] While reach information is not *derived* from audits, it is important for the audit process and aids the communication of audit results by providing information about the context and scope to which they apply. We therefore briefly cover them here.

All sustainability standards report on their reach. While reach reporting is not *derived* from audit data, it is important for orienting audit results, identifying potential risks and signaling available supply of certified product. Reach reporting describes the size and scope of a sustainability standard's influence, including spatially, geographically, demographically, and by volume, population and market share. Several sustainability standards are now using simple static or interactive map visualizations to better represent reach figures geographically. ASI, for example, is using geolocation data to link users with summary audit data for that location[4]. RSPO and others have used reach data compellingly to represent trends over time or cross-sectionally by comparing regions or other categorical themes. Case study #1 outlines how RSPO has made these data more useful on their impacts page and in their 2019 Impact Update report.

Case study #1: Making the most out of Reach data and reporting, RSPO

RSPO uses a variety of tools to communicate on their reach data. Information is represented on their Impacts page[5] using maps, charts, tables and graphs to share a variety of business intelligence insights. Infographics, narrative, and trends over time are instrumental in their communications, as well as relating audit results to other information to derive deeper meaning and understanding beyond a simple statistic or statement. They also provide all their base data as an Annex and so have a level of transparency that is not seen in other sustainability standard communications about audit results.

Opportunities and Risks

Using reach data creatively to communicate scope and sector influence over time or geographically can enhance their value for decision making. Companies are often seeking up-to-date information on supply of certified commodities for managing volumes and risks within their supply chains. Reach data combined with audit data tells business where reported audit results can be found, and the potential size and scope of those results. This level of transparency offers a mechanism and an opportunity for businesses to become partners in risk management and mitigation[6]. Timely, transparent information on supply and supply chain risks can also drive uptake in sourcing certified commodities and support company participation in mitigating and better managing certain supply chain risks with targeted technical assistance of other types of investment. Sector and trade initiatives, such as IDH, also use reach information by VSS to inform analysis and reporting on the uptake of sustainable practices

[4] ASI geolocation information linked to audit reports, last accessed 8 April 2020. https://aluminium-stewardship.org/asi-certification/map-of-asi-certifications/

[5] RSPO impacts webpage, last accessed 31 March, 2020. https://rspo.org/impact

[6] Business participants in the VIA project expressed this desire for more transparent information and partnership around risk management and mitigation. https://www.isealalliance.org/get-involved/resources/initiative-summary-breaking-through-barriers-communicating-impact

(including by standard) in different commodities and countries. For example, in 2018, IDH reported on the estimated production of sustainable cocoa as a percentage of total cocoa production, based on the reach of the UTZ, Rainforest Alliance and Fairtrade schemes combined[7]. Similar reporting is done for other commodities.

ii. Compliance Reporting

Compliance Reporting is the simplest form of audit results communication. This type of reporting relies on data generated through a binary check list, noting whether an operation is or is not compliant with specific criterion in the sustainability standard. There are two main ways in which VSS analyze and communicate results with binary compliance data – *counts* and *scores*.

Counts

This is the most common way in which standard systems report on compliance. It includes counting the number or percent of:

a) certified operations that comply with a given criterion;
b) land area that is in compliance;
c) the number or percentage of non-compliances;
d) the number of suspensions; and
e) the number of corrective actions taken in response to non-compliances.

Scores

Another way to report with binary compliance data is to report the compliance scores that certified units, or groups of certified units, received during audits. The research found one example of this type of reporting, by Rainforest Alliance. In its 2018 impacts report (which uses the 2010 SAN Standard[8]), Rainforest Alliance calculated and reported average compliance scores by commodity and geography. Case study #2, below, provides a more detailed description of this reporting, and an example of the graphic used for communication[9].

With both counts and scores, compliance can be reported for a single time frame or analyzed to show changes in compliance over time. Table 3 provides examples for each form of compliance reporting.

Table 3: Examples of reporting using absolute numbers and percentages[10]

Form of reporting	*Example*	Example VSS
COUNTS		
Percentage of certified operations that comply	Percent of certified businesses recording soil organic matter	LEAF
Land area in compliance	Percentage of areas defined internationally or nationally as legally protected, or classified as	Bonsucro

[7] The urgency of action to tackle tropical deforestation: Protecting forests and fostering sustainable agriculture, last accessed 23 April 2020: https://www.idhsustainabletrade.com/publication/the-urgency-of-action-to-tackle-tropical-deforestation/
[8] Rainforest Alliance now uses the Rainforest Alliance Standard, which has been through two revisions as of 2020.
[9] 2018 Rainforest Alliance Impacts Report, last accessed on April 7, 2020: https://www.rainforest-alliance.org/impact-studies/impacts-report-2018
[10] Links to relevant documents for each Standard listed for tables in this report are provided in the Excel table, Annex 1

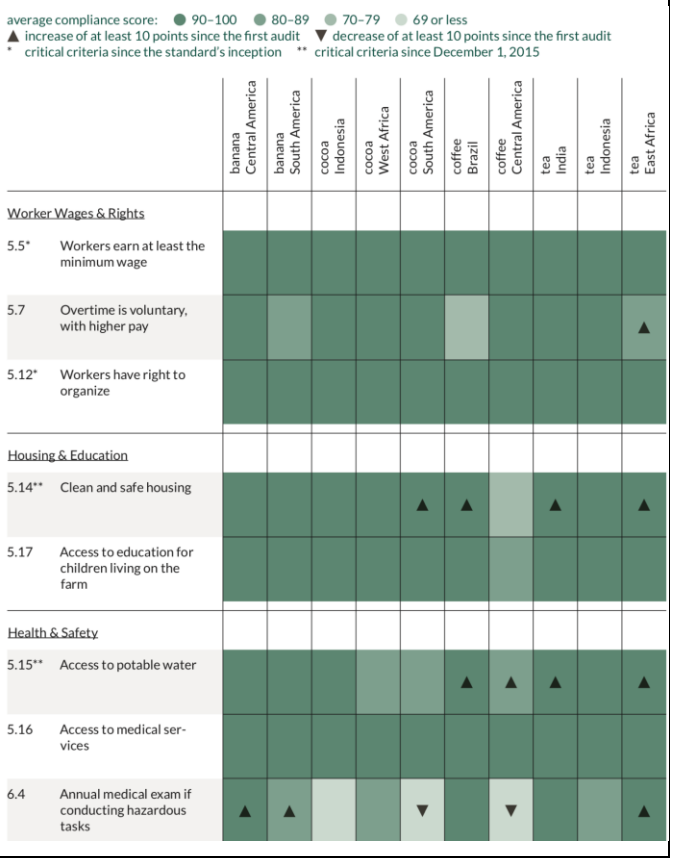
	High Conservation Value, planted to sugarcane after the cutoff date	
Percentage of non-compliances	Percentage of certified fisheries required to make at least 1 improvement to maintain certification	MSC
Number of suspensions	Amount of Verified Carbon Unit retirements[11] per year and over time	VERRA
Number of corrective actions	# of completed conditions, by principal	MSC
SCORES		
Average compliance score	Change in average compliance score, since first audit, among certified cocoa producers in South Africa on the 'clean and safe housing' criterion.	Rainforest Alliance *(see case study #1)*

Case study #2: Rainforest Alliance reporting on compliance scores by commodity and geography

Rainforest Alliance provides a good example of an organization attempting to make the most from its binary compliance data. In its 2018 Impacts Report, Rainforest Alliance reported on compliance with a selection of 41 of the criteria in the 2010 SAN Standard. Rather than give simple aggregated number of compliances and non-compliances, the organization calculated an 'average compliance score' for each commodity in each geography. They then categorized the score into one of four scoring groups: 90-100; 80-90; 70-79; and 69 or less. Each group was then color coded with different shades of green. The results are displayed visually, as demonstrated in the table to the right. The table indicates change in average compliance scores over time by using up or down arrows. The up arrow indicates an increase of at least 10 points since the first audit. The down arrow represents a decrease of at least 10 points since the first audit. Where there is no arrow, no change has occurred which is greater than or less than 10 points.

It is worth noting that Rainforest Alliance's new 2019 Standard includes significant updates, which will influence future audit processes and change how they communicate results in the future.

Excerpt of Rainforest Alliance Audit Results Reporting from its 2018 Impacts Report



Opportunities and risks

Compliance reporting represents a simple way to report on audit results, and is particularly useful when checklists/binary compliance data (i.e., yes, compliant ***or*** no, not compliant) is the only data available.

[11] The VCS uses the word *retirements* to indicate certified units that have been suspended or eliminated from the system

However, this approach also presents some risks, particularly on issues for which auditing has been criticized as insufficient for measuring performance. VSS have come under scrutiny when certified operations, assumed to be in compliance with critical criteria, have been found by other organizations to be insufficiently performing. For example, recent collaborations on child labor[12] remediation in West Africa have, in part, been a response to growing concern that zero tolerance criteria on child labour (and yes/no compliance reporting) has been ineffective.

iii. Output Reporting

The second type of audit-results communication is output reporting. Output reporting goes a step further than basic compliance reporting by providing additional detail about the unique knowledge and practices of certified units. In other words, this type of reporting requires that additional audit information be collected and recorded – beyond a binary checklist – about **new knowledge gained or specific practices adopted by the certified operations in order to meet certain criteria**.

One way that VSS report on outputs is by capturing information, through the audit process, on the different practices that certified units use to achieve criteria, and reporting the numbers or percentages of operations that apply each practice. Another approach is to report on the types of corrective actions or improvements that certified units are taking when audits determine that they are out of compliance, or when they need to demonstrate continuous improvement as part of the certification requirements. Other VSS are reporting specific measurements, such as yield, number of on-farm trees, or area of on-farm habitat. Better Cotton Initiative, for example, reports on the amount of harvested cotton in tonnes per hectare[13] [14].

During the research, we found two occasions where VSS collected data through the audit process on specific knowledge gained by certified members as a result of certification (see table 4). In both cases, the VSS reported the percentage of individuals that demonstrated accurate or appropriate knowledge. This would have required that individuals respond to questions which tested their knowledge, either through in-person interviews or virtual questionnaires[15].

It can be difficult to differentiate output reporting from compliance reporting, especially when criteria in sustainability standards are written as practices. The key difference is that in compliance reporting, VSS are simply communicating numbers of compliances or non-compliances (binary, yes/no), whereas in output reporting, they are adding detail about ***how*** they complied or ***what*** knowledge they gained through certification. LEAF[16] provides one of the best examples of the difference between compliance reporting and output reporting, as illustrated in case study #3. Table 4 provides additional examples for each form of output reporting.

---

[12] https://cocoainitiative.org/our-work/our-work/supply-chain/

[13] BCI Farmer Results 2017-18 Crop Season, last accessed April 23, 2020: http://stories.bettercotton.com/2017-18-Farmer-Results/#2017-18-Farmer-Results-ZRXOl1bgy8

[14] This was not considered outcome reporting because yield by itself does not represent a *sustainability outcome*. Instead, it is considered here as a form of reporting on intensification practices or yield-improvement practices (an output). The research found only two instances of yield reporting, by BCI and Bonscuro respectively

[15] The research did not investigate exactly how audit data was collected, and therefore cannot say whether the auditor asked the questions directly or verified information that was collected by someone else or self-reported. Nor was it clear during the desk study whether these were applied to smallholders or only large farms.

[16] The LEAF 2019 Global Impacts Report, last accessed on April 7, 2020: https://s3-eu-west-1.amazonaws.com/leaf-website/annual-reports/LEAF-Global-Impacts-Report-2019-FINAL-Low-Res.pdf.

Case study #3: Example of output reporting and how it differs from compliance reporting, LEAF

LEAF's audit-results communications include both compliance and output reporting. At first glance, the difference between the two may not be evident. This is because the LEAF Marque Standard includes criteria on practice *categories*, for which different operations may choose contextually-relevant practices to achieve compliance. For some of these practice categories, LEAF gathers additional information to report on specific practices adopted by certified units (i.e., the output). For example:

Compliance reporting:

The example to the left, from LEAF's 2019 Global Impacts Report, is considered compliance reporting based on the definition used for this study because "waste management best practices", as written, is a specific criterion of the LEAF Marque Standard.

Output reporting:

While the LEAF Marque standard includes criteria on water quality and safety, there is *no specific criterion* on managing reservoirs. The example to the right is therefore considered output reporting, because it provides added detail about a specific practice used by some certified operation to meet water quality and safety criteria.

Table 4: Examples of output reporting

Form of reporting	Reporting example	Example VSS
Practices	# of improvement actions taken by certified fisheries, by type of improvement action (e.g., research, management improvements, etc.)	MSC
	Percentage of certified businesses that have one or more type of renewable energy generation on farm	LEAF
Knowledge	Percentage of farmers who can accurately differentiate between acceptable forms of children's work and hazardous child labour	BCI
	Percent of staff on certified businesses that have appropriate awareness of Integrated Farm Management	LEAF

Opportunities and risks

Output reporting represents an evolution from basic compliance reporting. Not only does output reporting provide audiences with greater detail,in some cases, practices or groups of practices, can be linked to results, such as reduced risks. For example, certain types of hiring practices are known to

reduce the risk of forced labour[17] [18]. However, among many VSS audiences and users, output-based reporting is still less preferable to outcome reporting. The primary risk, then, is that certain audiences may feel that output reporting does not go far enough.

iv. Outcome Reporting

Outcome reporting is defined for this study as 'reporting that is focused on the higher-level sustainability results of certification'. Several VSS report sustainability outcomes using audit information. Like output reporting, outcome reporting requires that additional audit information be collected and recorded. In many cases, outcome reporting is also reflective of new ways of recording and/or leveraging audit data. The study found two main ways in which VSS report outcomes using audit data:

1. Self-reported data (including records) that is 3rd party verified as part of the certification requirement
2. Linking audit data to external data

Self-reported data that is 3rd party verified

The research found several VSS reporting on outcomes based on self-reported data that is 3rd party verified. One way of doing this is for auditors to record information from the farm or group records that they regularly review during the course of an audit, such as worker records, chemical application records, management plans, etc. Another way of doing this is through a certification and assurance model that requires certified entities to deliver to the VSS a completed self-reporting template, which is then verified by accredited 3rd party auditors. This enables the VSS to directly collect outcome information upfront, based on pre-established indicators, while helping auditor prioritize key areas for auditing. An example of this approach is provided in case study #4. Table 5 provides the full list of outcome indicators found during this desk research, by thematic area, that rely on some form of self-reported data. More detail on these indicators is included in Annex 1.

Table 5: Outcome reporting by VSS, combining self-reported data with verification

Thematic area	Outcome indicator	VSS
Child labour	Number of children rescued from exploitation	Goodweave
	Age of worker	Bonsucro
Livelihoods	Ratio of lowest entry level wage including benefits to minimum wage and benefits required by law ($/$)	Bonsucro
Health & safety	Lost time accident frequency	Bonsucro
Biodiversity & conservation of natural resources	Net greenhouse gas (GHG) emissions for sugar	Bonsucro
	Net water consumed per unit mass of product	Bonsucro
	Volume of water used for irrigation, per hectare of cotton cultivated	BCI
	Average habitat area on certified businesses	LEAF
	Tonnes of carbon and GHG removed from the atmosphere	VERRA

[17] Sustainable Agriculture Network project webpage, last accessed 28 March 2020. https://www.sustainableagriculture.eco/blog/blueprintproject

[18] Verité Fair Hiring Toolkit, last accessed on April 7, 2020: http://helpwanted.verite.org/helpwanted/toolkit

	Hectares of high conservation value (HCV) area set aside and managed by RSPO members within their certified concessions	RSPO
	Hectares of HCV area under New Planting Procedure	RSPO
Chemical use and management	Kg active ingredient of agrochemical applied per hectare per year	Bonsucro
	Kg active ingredient of banned agrochemical applied per hectare per year	Bonsucro
	Ratio of fertilizer nitrogen and phosphate applied to fertilizer nitrogen and phosphate recommended by soil or leaf analysis	Bonsucro
	Volume of synthetic fertilizer applied in kilograms per hectare of cotton cultivated	BCI
	Volume of active pesticide ingredient applied in kilograms per hectare of cotton cultivated	BCI
Enterprise resilience	Mill overall time efficiency	Bonsucro

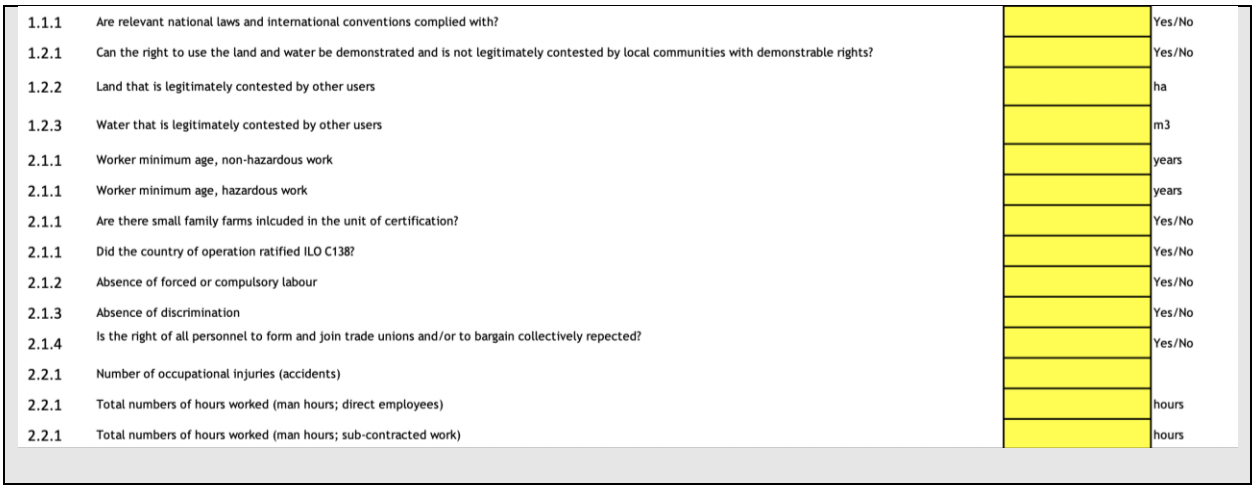
Among the VSS reviewed during the desk research, Bonsucro had the most comprehensive, publicly available, self-reporting tool which captures detailed information on the performance of certified operations. The following case study provides a snapshot of the tool.

Case study #4: Self-reporting + verification enables greater outcome reporting for Bonsucro

The Bonsucro Sustainability Standard Metrics Calculator[19] is an excel-based data collection and analysis tool designed to support demonstration of compliance with the Bonsucro Production Standard. These **data are self-reported** by the producers and mills and aggregated at the mill level as a requirement of certification. The tool allows producers and mills to input performance data for each of Bonsucro's indicators toward defined sustainability goals. It includes simple yes/no questions as well as more detailed questions about workers, farming practices, and conservation. Accredited, third party auditors verify the self-reported data in the tool. This system provides Bonsucro the means to demonstrate outcomes as part of its communication about audit results.

Snapshot of a portion of Bonsucro's Sustainability Standard Metrics Calculator

[19] Link to Bonsucro Calculator, last accessed 26 March, 2020. http://www.bonsucro.com/bonsucro-connect/



1.1.1	Are relevant national laws and international conventions complied with?		Yes/No
1.2.1	Can the right to use the land and water be demonstrated and is not legitimately contested by local communities with demonstrable rights?		Yes/No
1.2.2	Land that is legitimately contested by other users		ha
1.2.3	Water that is legitimately contested by other users		m3
2.1.1	Worker minimum age, non-hazardous work		years
2.1.1	Worker minimum age, hazardous work		years
2.1.1	Are there small family farms inlcuded in the unit of certification?		Yes/No
2.1.1	Did the country of operation ratified ILO C138?		Yes/No
2.1.2	Absence of forced or compulsory labour		Yes/No
2.1.3	Absence of discrimination		Yes/No
2.1.4	Is the right of all personnel to form and join trade unions and/or to bargain collectively repected?		Yes/No
2.2.1	Number of occupational injuries (accidents)		
2.2.1	Total numbers of hours worked (man hours; direct employees)		hours
2.2.1	Total numbers of hours worked (man hours; sub-contracted work)		hours

Linking audit data to external data

The research found that some VSS report on outcomes by linking their audit or reach data with external, 3rd party data. One way they do this is to link audit data on practices or outcomes with scientific evidence that shows a close correlation between those practices and outcomes and higher-level results. MSC, for example, links its output data on practices to scientific research to draw conclusions about higher-level outcomes, as shown in case study #5[20]. VERRA leverages external data on car emissions to report on how the combined outcomes of avoided GHG emissions and tons of carbon removed from the atmosphere equate to 'cars taken off the road'[21]. Another way of doing this is by linking reach data, such as area of certified production, to external data such as satellite imagery, third party production data and/or price data. Rainforest Alliance, for example, use satellite imagery to report on the hectares of conservation area associated with its certification system[22]. Table #6 shows all of the outcome indicators found among VSS during the desk research which clearly link audit/reach and third-party data.

Table 6: Outcome indicators reported by VSS, linking to 3rd party data

Thematic area	Outcome indicator	VSS
Livelihoods	Net income earned per hectare from producing the cotton crop	BCI[23]
Biodiversity & conservation of natural resources	# of improvements that benefited a. marine mammals, b. sharks and ray, c. marine reptiles; d. habitats; and e. seabirds;	MSC
	Hectares of conservation area	Rainforest Alliance
	VCU equivalents in 'cars taken off the road	VERRA

[20] MSC Global Impacts Update 2019, last accessed on April 7, 2020: https://www.msc.org/docs/default-source/default-document-library/what-we-are-doing/global-impact-reports/msc-global-impacts-update-2019.pdf?sfvrsn=15813b9b_6

[21] Data and Insights, VCS Quarterly Update, Issue #1December 2019, last accessed on April 23, 2020: https://verra.org/datainsights/december-2019/

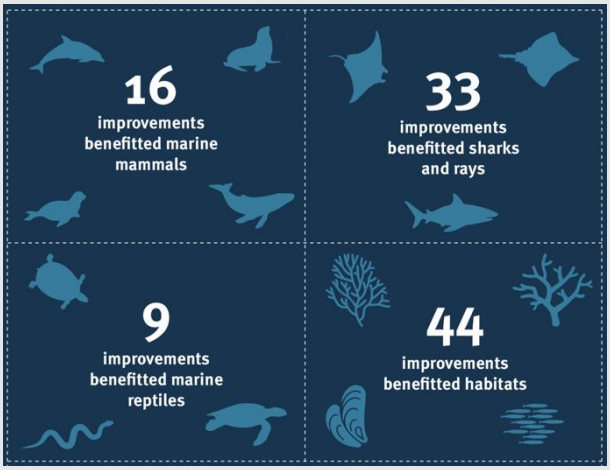
[22] 2018 Rainforest Alliance Impacts Report, last accessed on April 7, 2020: https://www.rainforest-alliance.org/impact-studies/impacts-report-2018

[23] BCI has a methodology, which includes collecting data from control farmers. While certified units provide this data, it is unclear whether they collect the control data themselves or work with a 3rd party. http://stories.bettercotton.com/2017-18-Farmer-Results/#2017-18-Farmer-Results-ZRXOl1bgy8

	Tonnes of CO2 equivalent savings from avoided land clearance, peat avoidance and conservation area sequestration	RSPO

Case study #5: Linking audit data to external research, example from MSC

Academic research plays an important role in the MSC's certification system, including its communications about audit results. In its Global Impacts Update 2019, MSC combined output data on specific improvement actions taken by certified entities with third-party research. Here, MSC reports on the correlation between improvement actions and benefits to marine species and habitats. In its report, MSC references the scientific evidence and literature that supports this correlation between the actions and results.



Opportunities and risks

The examples above, and in Annex 1, illustrate how third-party data can be leveraged and combined with audit data to report on higher-level outcomes. It is worth noting that this type of reporting is still limited, and very little is yet reported on smallholder livelihoods. This may be due to the additional challenges and level of effort associated with verifying results among smallholders. However, new innovations, technologies and research – such as geospatial data, blockchain, and resiliency data – may open up new opportunities in the future. Because outcome reporting is still limited and fairly new, the full range of opportunities and risks is yet to be seen.

C. Lessons on Audit Results Communication from Companies

Companies, particularly public, multi-national companies, are accustomed to reporting on their performance. Sustainability reporting is becoming increasingly common as companies strive to meet growing public demand for accountability (e.g., environmental social and governance [ESG] reporting); adhere to emerging procurement and other government policies (e.g., UK Modern Slavery Act); and demonstrate progress toward internationally agreed upon frameworks (e.g., HRDD). The SDGs likewise provide motivation and guidance for corporate reporting. To help accomplish this, many companies are aligning with global reporting standards like the GRI Standards (e.g., Shell).

While companies are increasingly reporting on sustainability, much of this is buried in extensive, sometimes hard to locate, reporting documents. Detailed reporting is largely focused on their own direct operations, and to a lesser degree on their supply chains. While much of the corporate reporting reviewed for this study offered minimal value, there were notable exceptions. Some companies have demonstrated greater transparency in their reporting, while others provide examples of how to innovate behind checklists or surveys. The following are key lessons drawn from the desk review of corporate reporting, which focused on the following six companies: Nestlé, Mars, PepsiCo, Tiffany & Co, Shell and SEDEX *(note the research found nothing significant from SEDEX, beyond basic reach reporting)*.

The desk review of company reporting identified 4 main lessons:

1. Walk the talk – reporting on internal human resource performance
2. Report on environmental footprint – demonstrate results across the supply chain
3. Engage communities – generate insight and solutions simultaneously
4. Report on traceability – report on the middle, as well as both ends of supply chains

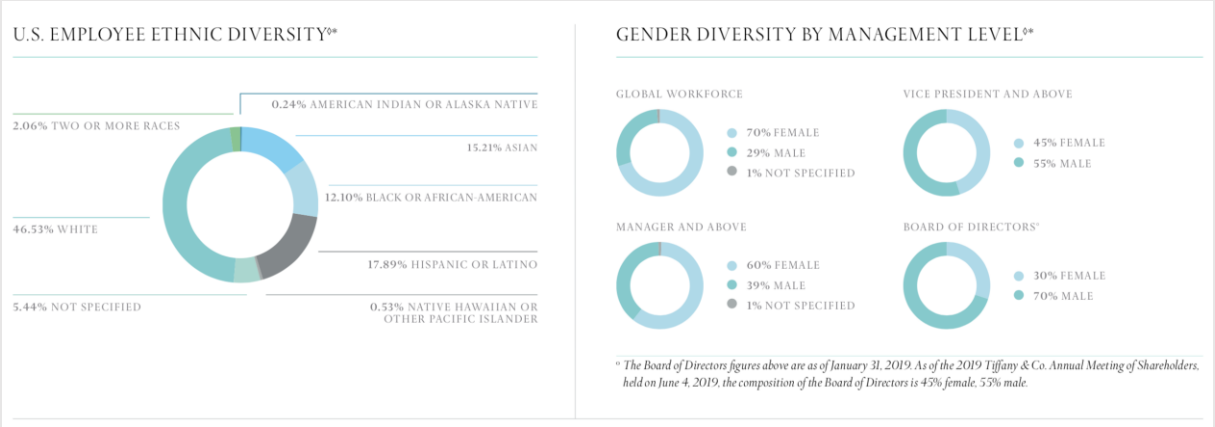
Lesson 1: Walk the Talk – Report on internal human resource performance

During the course of the research we found several examples of increased transparency and reporting around hiring and pay equity. This type of 'human resources reporting' was noticeably absent from reporting among sustainability standards. In fact, companies were the only ones reporting results (not just reach) related to gender. This practice among companies demonstrates an ability to "walk the talk", by showing how the company is performing internally with regard to key sustainability objectives it sets for supply chains and production landscapes.

A number of companies are reporting on employee demographics and wage/salary differentials. Shell[24], for example, reports on the percentage of women in supervisory/professional positions, management positions, and senior leadership positions. PepsiCo[25] goes much further, reporting on the percent difference in base salaries between male and female employees in 33 countries. Tiffany & Co[26] provides an example of 'human resource reporting' that includes the gender and ethnic diversity of its workforce, as illustrated in case study #6.

Case study #6: Human resource reporting by Tiffany & Co

Tiffany & Co reports on the employee diversity by gender and ethnicity (as shown here) as well as by generation (born 1964 and prior, 1965-1980, and 1981-present).



[24] Shell Sustainability Report 2018, last accessed on April 7, 2020: https://reports.shell.com/sustainability-report/2018/
[25] Pepsico 2018 Performance Metrics, last accessed on April 7, 2020: https://www.pepsico.com/docs/album/sustainability-report/2018-csr/pepsico-2018-sustainability-performance-metrics-sheet.pdf
[26] Tiffany & Co Sustainability Reporting and Metrics, Fiscal Year 2018, last accessed on April 7, 2020: https://media.tiffany.com/is/content/Tiffany/Tiffany_CSR_Metrics_and_Assurance

Lesson 2: Report on Environmental Footprint – Demonstrate results across the supply chain

Nearly all companies are reporting, in some way, on environmental performance. We found that companies most commonly report on greenhouse gas emissions and water use efficiency in their direct operations. However, several companies have expanded this reporting to include performance on emissions and water use in their supply chains, usually against a stated target. In addition to reporting on GHG emissions, Mars Inc. reports on the *percent reduction of unsustainable water use in the supply chain* and *percent increase or decrease in total land associated with its value chain*[27]. Some companies demonstrate changes over time. Tiffany & Co, for example, reports on change in energy use and emissions since 2013. Others report against discreet, clearly defined targets. PepsiCo, for example, reports against targets in water, climate, agriculture, circular packaging, as well as people & prosperity. Case study #7 provides a snapshot of their reporting on water.

Other companies report on priority environmental sustainability issues, such as deforestation and water, with the help of third-party data sets and/or globally agreed frameworks. Several companies are now mapping the individual production areas in their supply chains (e.g. Mondalez, Unilever, Cargill, Nestlé, Proctor &Gamble), allowing them to use Global Information Systems (GIS) and third-party data to analyze forest cover and risk. Multi-stakeholder initiatives such as the Accountability Framework are working with these same companies to define methods to measure changes to inform responsible reporting on zero deforestation commitments and other environmental outcomes.

Case study #7: Prioritization of and leadership on key sustainability challenges, PepsiCo example

For PepsiCo, water is a top priority, and core to its business. The snapshot below shows just some of the goals, indicators and targets that PepsiCo uses to report results related to water. One unique feature is its reporting on water, sanitation and hygiene (WASH). PepsiCo measures WASH against 12 criteria in their Wash Standard, which is based on World Business Council for Sustainability guidance.

POSITIVE WATER IMPACT

FOCUS AREA	GOAL	2016	2017	2018	2025 TARGET	COMMENTS
Water	Improve water-use efficiency of our direct agricultural supply chain by 15% in high-water risk sourcing areas[1]	–[2]	–[2]	3%	15%	High-water-risk locations defined by WRI's Aqueduct tool.
	Build on the 25% improvement in water-use efficiency achieved as of 2016 with additional 25% improvement by 2025, focusing on manufacturing operations in high-water-risk areas[3]	1%	2%	5%	25%	Between 2006–2015, water-use efficiency improved by 25.8% in legacy operations.
	Strive to have 100% of wastewater from our operations meet PepsiCo's high standards for protection of the environment	90%	95%	98%[4]	100%	
	Work to provide appropriate access to safe water, sanitation and hygiene (WASH) for 100% of our own manufacturing employees	14%	46%	92%	100%	Manufacturing locations assess their conformance against 12 criteria encapsulated in our internal WASH standard and based on World Business Council for Sustainability (WBCSD) guidance.

Lesson 3: Engage Communities – Generate insights and solutions simultaneously

Companies, like others, are recognizing the value in community participation and qualitative methods for measuring performance. Companies such as Nestlé (and others, such as Olam) have used context

[27] Mars 2018 Scorecard, last accessed on April 7, 2020: https://www.mars.com/sites/g/files/jydpyr316/files/2019-09/SIGP_Scorecard_FINAL.pdf

assessments to gather qualitative information for better targeting of supply chain investments. Nestlé[28] is also using community-based and qualitative methods to help address some of its most challenging supply chain issues, such as child labour. Similar approaches are beginning to emerge for addressing forced labour and other human rights concerns.

Case study #8: Community-based monitoring, Nestlé example

While not audit data, Nestlé's approach to addressing and reporting results on child labour represents a growing trend in how to talk about, measure, and address child labour in supply chains. More specifically, they employ a Child Labour Monitoring and Remediation System (CLMRS), in partnership with the International Cocoa Initiative, in three countries/commodities. CLMRS engage communities in the detection and remedy of child labour. The approach recognizes that underlying conditions such as poverty, lack of safe childcare and inadequate education systems can drive child labour. It replaces punitive compliance measures, which can generate fear and push the problem underground, with a system that attempts to identify and addresses the root causes of the problem through supportive communities.

Through this system, they are able to report on their strategy, their reach, and key outcomes in key geographies– including:

- # of children currently being monitored through the CLMRS;
- # of children being helped through the upstream supply chain;
- # of children identified as working on farms or in communities covered by their Cocoa Plan;
- % of children identified that are no longer in child labour.

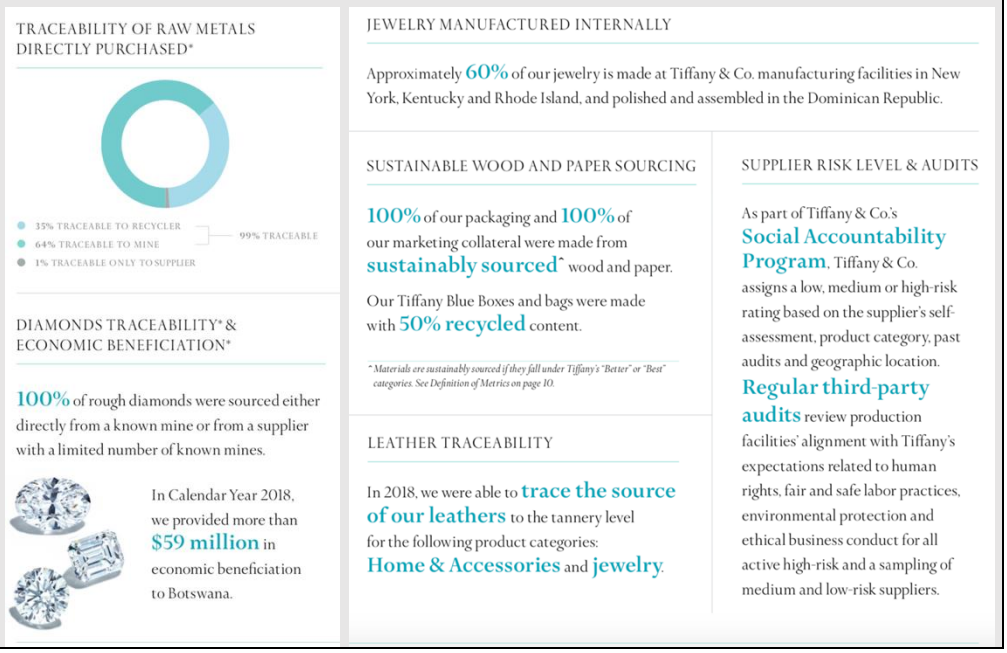
Lesson 4: Report on Traceability – Report on the middle, as well as both ends of supply chains

As discussed above, a number of companies are reporting results in aggregate across their entire supply chains. This is found across thematic areas, but primarily related to environmental performance, human rights, and human resources. Fewer companies report disaggregated results for different parts of their supply chain. Tiffany & Co is one company that does disaggregate, if simply, to report on performance and demonstrate traceability at difference points along its supply chain, as illustrated in case study #9.

[28] Nestlé child labour strategy, last accessed on April 7, 2020: https://www.nestle.com/ask-nestle/human-rights/answers/nestle-child-labour-supply-chains

Case study #9: Traceability reporting, Tiffany & Co

Tiffany & Co reports on traceability, as well as aspects of its sourcing and supplier risk.



D. Linking to the Sustainable Development Goals

The United Nations (UN) SDGs, also known as *The 2030 Agenda for Sustainable Development*, is a set of 17 global goals, 169 associated targets, and 230 individual indicators. This international collaboration between 193 UN Member States and global organizations and agencies is a step towards international collective impact efforts, focusing and guiding the interventions of humanitarian efforts around the globe. Further, while the SDGs are likely to be iterated upon over time, they are likely to remain relevant, thus representing a galvanizing influence for several innovations in how sustainability standards are striving to report results. The SDGs could be considered a motivating factor for a majority of the recently observed evolution in measurement and reporting.

In the impact investment and monitoring & evaluation specialties, the SDGs are a strong ingredient helping to forge alignment and promote interoperability among sustainability tools striving to achieve the same sustainability outcomes. As governments and companies endeavor to report how their actions and investments contribute to achieving the SDGs, they are looking to sustainability standards to identify how certification delivers on the different goals under the framework.

Sustainability standards have responded by linking the SDGs to their theories of change, and dedicating space in their reporting tools and frameworks to articulate how they contribute to the SDGs. Most report by simply stating which SDG is related to each of their strategic goals or outcome areas. This is often a simple narrative or basic mapping of how outcome areas and/or results relate to the SDGs. However, some VSS, such as Bonsucro and RSPO[29] are linking to the SDGs more concretely, by providing clear visualizations and explanations about how their organization-specific audit results map to each of the relevant goals. Case study #10 illustrates how Bonsucro is able to use their audit data to go beyond

[29] RSPO Impact Report 2019 and Impact Brochure 2019, last accessed 23 April 2020. https://rspo.org/impact/measuring-and-evaluating-impacts

simple mapping of their goals or theory of change, by mapping the indicators in their audit processes (including in the verified self-reporting templates) to specific SDGs.

Case study #10: Linking reporting to the SDGs, Bonsucro

Bonsucro's reported results include reach compliance and outcome reporting. On their impacts page,[30] they specifically associate audit and other data and metrics with six of the SDGs (3, 6, 8, 12, 13 and 17). They visually link key results to the specific SDGs. For each SDG they reference a result value, infographic and either a comparator, equivalent, or trend description based on their audit data and other information.

Opportunities and Risks

When sustainability standards use audit data to communicate outcomes, they can be much more concrete in how certification contributes to the SDGs. This affords supporting companies to better quantify and communicate how their commitments to sourcing certified commodities and services delivers on specific SDGs. While there doesn't appear to be any risks associated with reporting against SDGs, and basic mapping to SDGs is fairly simple, it can be challenging to map specific audit data to SDGs unless the VSS is collecting higher level data, beyond compliance.

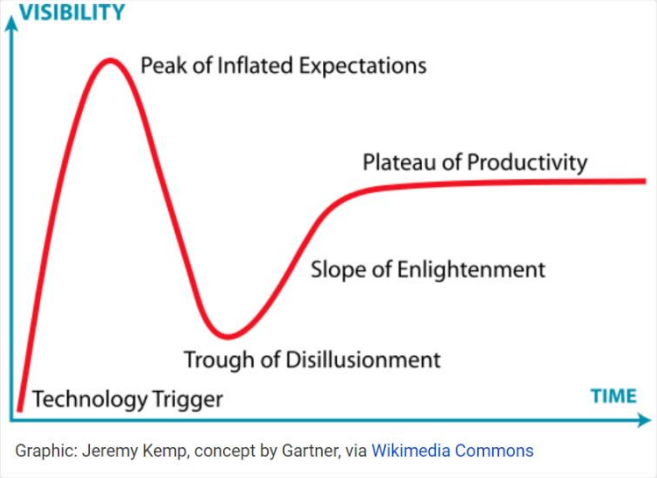
IV. Emerging Trends and New Innovations

A. Overview

Sustainability standards are experimenting with a variety of innovations to address the ever-increasing demand for real time, relevant and credible information on the results of certification. Consequently, a number of trends are emerging. These trends, by their very nature, are rapidly evolving areas of change and go through stages. It can be challenging to keep pace with how a trend is maturing. The Garner Hype Cycle is a useful way to think about the stages of a trend (Figure 1).

[30] Bonsucro 2019 Impacts webpage, last accessed 31 March 2020. http://www.bonsucro.com/our-impacts/

Figure 1: The Garner Hype Cycle



In this section, the focus is on emergent trends. Emergent trends are generally those associated with the first rising part of the curve in the Hype Cycle. Emergent trends have four distinguishing characteristics:

1.They are spearheaded by pioneering thought leaders.
2.Not all the bugs and kinks are worked out for the innovation.
3.Real world examples of the benefits or value proposition are limited, and successes and failures are still be realized.
4.Details on the skills, staffing, strategies, and tactics required to successfully implement are not clear for all contexts.

This section considers seven emergent trends. They are summarized in Table 7. These trends are not entirely mutually exclusive. By and large, they all represent a merging of M&E and assurance processes, which have been historically separate functions in many standard systems. As assurance processes mature and sustainability standards regularly revise their standards, there is greater opportunity to merge outcome-level information collection through audits. Different actors are experimenting with different elements, and the exploration is what is reported as the emergent trend.

Two overarching topics underpin many of the described trends, the advent of the SDGs and the need to strengthen assurance to better manage risk. These and other drivers are first briefly characterized. Subsequently, for each trend, we describe underpinning elements, provide some additional context for why it is emerging, and examples of observed or expected benefits. For some trends there are compelling examples, and a brief description is provided

Table 7: Basic overview for seven emerging trends influencing how sustainability standards and others are designing assurance processes or reporting on results of certification.

Trend	Definition	Trend Leaders
1. Direct self-reporting – certified unit to VSS *(plus verification)*	Use of online and downloadable frameworks for reporting on standardized data fields. These data are recorded by the certified entity and then verified through third party audits.	Bonsucro, BCI, LEAF
2. Aligning on targets for common reporting	Multi-stakeholder initiatives focused on measuring and reporting on harmonized themes and indicators, ideally using common methods.	Delta project, GCP, World Cocoa Foundation, Global Living Wage Coalition, GRI, Accountability Framework
3. Outcome-based standards and assurance	Structuring standards and related assurance processes to directly measure the status of the outcomes instead of practice compliance.	Bonsucro, LEAF, RSPO

4. Risk-based assurance and reporting	Identification of risk issue occurrences and investing greater frequency and/or intensity in investigation of incidence to support more credible reporting on high risk issues. This often requires additional techniques (e.g. GIS, community engagement) beyond the traditional audit format.	RSPO, Nestlé, GRI, Mars, SAN
5. Use of 3rd party data to demonstrate results	Combining non-audit data sources with audit data to generate insights or validate results.	MSC, Rainforest Alliance, PepsiCo
6. Improving complaints procedures	Creating secure platforms to capture grievances or concerns about compliance with a standard.	RSPO
7. Operating and reporting at scale	Participation in multi-stakeholder collaboration to identify, measure and report on sustainability issues that are not directly achievable through an exclusive site-based approach.	VERA, Accountability Framework, SAN

B. The Drivers Behind Emergent Trends: Strengthening Assurance and Reporting

The overarching driver behind these emergent trends is a recognized need for strengthening assurance systems to better identify and mitigate risk[31] ***and generate value for all stakeholders.***

Sustainability standards are predominately applied in sectors or regions where there is governance or market failures to address key risks. In the absence of regulatory frameworks, sustainability standards are a key mechanism for safeguarding human rights and protecting the environment through verified improved practices. However, it has become increasingly clear that key, high-risk sustainability issues such as preserving natural resources and safeguarding human rights are not necessarily best addressed through a traditional check list approach to auditing. Complex social issues such as protection of land rights, workplace gender discrimination and child labour are issues that can easily be missed in traditional intermittent audit processes, eroding confidence in sustainability standards.

In response, sustainability standards and other supply chain initiatives are finding ways to strengthen their assurance processes to better detect and report on key sustainability issues. This includes collecting and using data to better define context and identify risks (e.g., based on geography, sector or enterprise size) and adjusting assurance systems accordingly. Increased access to new technologies (e.g. satellite imagery and worker hotlines) and digitalization of data are changing the timeliness, reliability and effectiveness of assurance processes.

Of note is the advance in use of GIS and the availability of real-time geospatial data. There is marked increase in the number of supply chain actors and standard systems using their audit data in combination with geolocation data and other data layers. Most commonly, audit data and processes are being used in combination with geospatial data layers to assess and report on risk and performance related to deforestation and water scarcity. As illustrated in case study #14, RSPO is using satellite imagery to report on compliance with criteria related to fires and land clearing. As standard systems reimagine assurance processes to include self-reporting templates and other means of collecting output and outcome data, they are also exploring how to map that data geospatially to look at results relative to landscape-level trends and risks. For example, a standard system that collects audit data (or verifies

[31] The authors differentiate risk management from risk mitigation. Part of a risk management process is planning a risk response for previously identified and assessed risks. Risk mitigation reduces the probability or the negative impact of the risk by reducing the likelihood of it occurring or the impact that it may have.

self-reported data) on yields, productivity and commodity income through self-assessment (as Bonsucro and BCI do), could map these results spatially and also compare to 3rd party statistics for that same landscape[32]. Similarly, standard systems could map 3rd party social data such as school attendance rates or migration patterns to assess how compliance results compare to risk factors or social issues such as child labour or forced labour (e.g., methodology led by SAN, as illustrated in case study # 13). The use of GIS and geospatial data provides a clear visual for on-the-ground realities to enable a more tailored approach for assessing compliance, and a visual tool for communicating compliance results. It also helps with targeting technical assistance and mitigating identified risks.

Other key factors that are fueling and influencing the needs for better assurance and reporting include:

- Globally agreed frameworks, such as the Sustainable Development Goals (see Section III. D.) and United Nations Guiding Principles on Business and Human Rights
- Recognition that not all criteria are required as a precondition of certification – in other words, that with many certification systems, businesses can achieve certification without complying to 100% of a standard's criteria. Rather they must meet a certain percentage of criteria. As a result, stakeholders are uncertain about which criteria are indeed being met, and increasingly demanding that VSS clearly demonstrate progress and results on the key issues that matter most to them.
- Desire for more outcome and impact level results (for accountability, business uptake, and to facilitate targeted investment)
- Recognition that context is an important factor and the need to more effectively manage risk (for example, bolstering assurance measures for child labour in the geographies or commodities where child labour is a significant risk).
- Need to create value for producers by packaging and providing them data in a useful manner
- Desire for alignment on metrics and performance reporting (for example, ISEAL common core indicators and GLWC common targets for living wage)
- Desire to demonstrate and report on impact at scale (sector-wide and landscape-scale)

C. Description of Seven Emergent Trends

i. Self-Reporting Directly from Certified Unit to the Voluntary Sustainability Standard

Several sustainability standards are moving away from a sole reliance on binary yes/no audits, and instead finding ways to capture more detailed information from certified units. One clear trend is the use of self-reporting templates and data management systems that automatically provide detailed information directly to the VSS or supply chain initiatives. Both Bonsucro and LEAF, for example, require their producers to complete self-reporting templates as a condition of certification. The VSS has immediate access to the self-assessments, and the results are then verified through third party audits. Many companies use a similar approach, having the capacity to incorporate sustainability measurements into larger integrated management systems, which can be verified through internal or third-party auditing. These detailed, verified data sets enable VSS and others to report on a greater number of performance results, and with more information on higher-level results. With more data also

[32] This type of communication on yields, productivity and income using geospatial data was not found in the public domain, but rather has been part of future-focused conversations in ISEAL-led collaborations related to the use of geospatial data.

comes the ability to analyze, compare and report in new ways. Some examples of potential comparative analyses include:

- Longitudinal, comparing previous performance and change over time for the same actor,
- Threshold or gap analysis, Comparing to a predetermined value or target, or
- Cross sectional, comparing one actor's performance relative to others measuring the same thing in the same way

The self-reporting templates, such as those used by Bonsucro and LEAF, provide the added value of providing producers the ability to more easily track their own performance over time and benchmark themselves against their peers. This trend toward detailed, transparent data is affiliated with an increased interest in being able to benchmark against different targets, support understanding of status, and promote continuous improvement to allow self-differentiation.

Case Study #11 briefly describes the systems used by Bonsucro, LEAF and BCI.

Case study #11: Self-reporting trends among VSS

Bonsucro: For any mill and cane supply area to become certified to the Bonsucro Production Standard, each producer is required to complete the Bonsucro Calculator self-assessment, which is used to evaluate the producer's compliance with each of the Standard's indicators. These data are then verified by trained, licensed and accredited certification bodies to formalize certification. The full version is available only to members or those completing a Bonsucro training, while an input only versions allows others to assess how they compare to certification requirements and receive feedback from Bonsucro.

"It is essential to help producers see themselves relative to others, over time and, relative to context. This is where there is substantial potential to accelerate change." - Bonsucro

LEAF: The LEAF Sustainable Farming Review[33] is a member only self-assessment on-line management tool to help farmers better achieve sustainability goals. It enables them to monitor their performance, identify strengths and weaknesses and set targets for improvement across the whole farm. It includes a benchmarking option to compare performance and progress over time and against other Review users.

BCI: BCI has partnered with Cotton Australia to expand application of a tool called myBMP –Through the myBMP platform[34], farmers can access expert advice, compare practices and measure progress. According to a BCI case study[35], due to the uptake in irrigation technology, scientific research and the myBMP program, the Australian cotton industry has achieved a 40% increase in water productivity over the last decade.

ii. Aligning on Targets for Common Reporting

Several factors have given rise to multi-stakeholder alignment around sustainability targets and metrics. Among these are SDGs, which require improved interoperability among sustainability tools, an

[33] LEAF Sustainable Farming Review website, last accessed 26 March, 2020. https://leafuk.org/farming/leaf-sustainable-farming-review

[34] Cotton Australia myBMP website, last accessed 18 March 2020. https://cottonaustralia.com.au/mybmp

[35] BCI case study, last accessed 18 March 2020. https://bettercotton.org/sharing-progressive-environmental-practices-globally/

expanding demand for sector-wide reporting and action, and an increased interest across stakeholders in harmonized performance monitoring. Precompetitive collaborations and partnerships among VSS, companies, and donors are shaping what data is best collected in audit processes, and how that information is being communicated.

There is quite a lot of activity currently occurring on this topic within the ISEAL community[36], including historical work on the ISEAL Common Core indicators. One of the better ISEAL community examples of this trend is led by the GCP. In collaboration with a variety of stakeholders, GCP co-developed a set of fifteen common indicators for the coffee sector. The common indicators are accompanied by documentation for the framework[37] and guidance for applying the standardized indicators[38]. The Delta Project[39], currently funded under the ISEAL Innovations Fund, is expanding on the GCP indicator work to enable harmonized performance reporting for cotton and coffee across the two sectors.

Another example is the Global Living Wage Coalition[40], which has aligned on a common definition and approach for setting living wage benchmarks. While each VSS may measure progress differently, this common target has created a growing demand for wage improvement and wage reporting across supply chains and through certification and assurance processes. The GRI SDG compass[41] is a tool to guide companies to align business activities and measure their contribution to the SDGs. Finally, of merit is the diverse coalition under the Accountability Framework[42] that convened to establish consensus on a harmonized global reference for setting, implementing and monitoring ethical supply chain commitments in agriculture and forestry.

iii. Outcome-based Standards and Assurance

Third party verification that a certified operation is meeting an agreed standard is what sets sustainability standards apart from most other sustainability tools. However, there is comprehensive recognition that practice compliance alone limits credible claims about sustainability performance or impact. Similarly, lack of information for how practice leads to achievement of specific outcomes hinders targeted and sustained investment from companies and the finance sector, as these entities need to demonstrate ESG results to their shareholders in addition to financial return. In response, sustainability standards are striving to re-imagine their assurance models to better communicate ESG results. Exploration of how to make these changes includes transition toward outcome-based models. Outcome-based standards also facilitate flexibility, encouraging actors to achieve results by applying the best approach for their circumstance, as opposed to a standard set of practices. Outcomes are more easily reported from the audit data, because it is the outcomes that are verified during audits.

Case study #12: Outcome-based standards lead to outcome-based reporting
LEAF: The LEAF Marque Standard has been exploring how to design and implement a hybrid approach that includes both outcome and practice-based elements in the standard and assurance frameworks. Initial prioritization is to focus on biodiversity, and they will be trialing two outcome indicators:

[36] See Aligning and combining: What we've learned about metrics and data sharing, last accessed 20 March 2020. http://www.isealalliance.org/sites/default/files/resource/2020-02/ISEAL_Metrics%20alignment%20and%20data%20sharing%20report_V3.pdf
[37] GCP data standard documentation, last accessed 19 March 2020. http://datastandard.globalcoffeeplatform.org/en/latest/
[38] GCP common indicators for farm level coffee sustainability, last accessed 19 March 2020. http://datastandard.globalcoffeeplatform.org/en/latest/explanation.html
[39] Delta Framework webpage, last accessed 23 March 2020. https://www.deltaframework.org/
[40] Global Living Wage Coalition website, last accessed 20 March 2020. https://www.globallivingwage.org/
[41] Global Reporting Initiative SDG compass website, last accessed 23 March 2020. https://sdgcompass.org/
[42] Accountability Framework website, last accessed 23 March 2020. https://accountability-framework.org/the-initiative/

populations of locally negotiated indicator species and *percentage of habitat managed for native biodiversity*. The assurance process will allow variation in frequency and intensity of the audit process based on the risk profile for the operation. Following successful integration of these outcomes, they plan to incorporate energy efficiency, soil and water management.

RSPO: In their new metrics template, RSPO is planning to require individual units of certification to regularly monitor and continuously improve their economic, social and environmental performance. This is still to be implemented. As of 31 December 2019, RSPO requires all grower members to estimate and monitor GHG emissions from existing plantations and new developments using the RSPO PalmGHG Calculator[43]. The calculator also enables growers to identify crucial areas in their production chain and guide emission reduction opportunities.

iv. Risk-based Assurance and Context Reporting

Reporting based on risk or key thematic issues is emerging in response to desires to better identify, manage and mitigate risks. Acknowledgement that risks are not equally distributed across geographies or sectors in which sustainability standards operate is resulting in increased assessment approaches to define context relevant risk profiles. These approaches inform targeting of investment, tailored interventions, as well as frequency and intensity of assurance practices and contextualized reporting. Some examples are provided in case study #13.

Case study #13: Risk-based approaches bring focus to certain issues and geographies

Mars: Mars implemented a process, with input from experts, to identify the most salient human rights risks in its supply chains. Drawing on the United Nations Guiding Principles on Business and Human Rights, Mars has developed its CARE framework[44] to guide decisions and develop human rights action plans. While Mars doesn't provide easily accessible information on audit results, this prioritization allows them to provide in-depth case studies on issues deemed highest risk.

The SAN, Rainforest Alliance and Ergon Associates: These organizations recently collaborated to develop a method[45] for identifying high-risk locations for forced labour. The methodology assesses agricultural supply chain vulnerability to forced labour. It has been recently piloted in Guatemala and India. The methodology also enables reporting based on risk factors.

Nestlé: To prioritize investments in new strategies, and frame their commitments for sustainability reporting, Nestlé uses a risk-based approach. For the topics of human rights, modern slavery and human trafficking[46] for example, they identify risk areas by 'rights holder' (i.e., employees, on-site contractors, suppliers, farmers and farm workers, consumers, local community) as well as identify the

[43] RSPO PalmGHG Calculator webpage, last accessed 26 March 2020. https://rspo.org/certification/palmghg/palm-ghg-calculator

[44] Mars Thriving People webpage, last accessed 26 March 2020. https://www.mars.com/sustainability-plan/thriving-people/promoting-human-rights

[45] ISEAL Innovation Fund project webpage, last accessed 26 March 2020. http://www.isealalliance.org/innovations-standards/innovations-projects/improving-detection-and-remediation-forced-labour

[46] Nestlé 2017 modern slavery and human trafficking report, last accessed 26 March 2020. https://www.Nestlé.co.uk/sites/g/files/pydnoa461/files/asset-library/documents/aboutus/corporate-reporting/Nestlé-mod-slave-act-2017-17-april.pdf

lead and support roles that Nestlé assumes to address the risks. For high-risk topics such as child labour, they further invest in programming, M&E and due diligence.

GRI: The GRI, a set of standards for corporate reporting, is influencing corporate reporting by precipitating that companies understand and can report on the risks within their supply chains. For example, GRI's requirement on forced labour necessitates disclosure of the type of approach for geographies determined to be high risk for forced labour. Similar requirements exist for child labour.

v. Use of Third-party Data to Demonstrate Results

As discussed in the results section, VSS and companies are beginning to combine audit data with third-party data to demonstrate performance and generate greater understanding of sustainability impacts (see case study #4 on MSC). Improved data collaborations and partnerships along with better data analytics is allowing actors to combine data in innovative ways to generate insights and report on results. Additional examples are provided below, in case studies #14 and 15.

Case study #14: Combining audit data and third-party data to monitor, verify, and report on risks

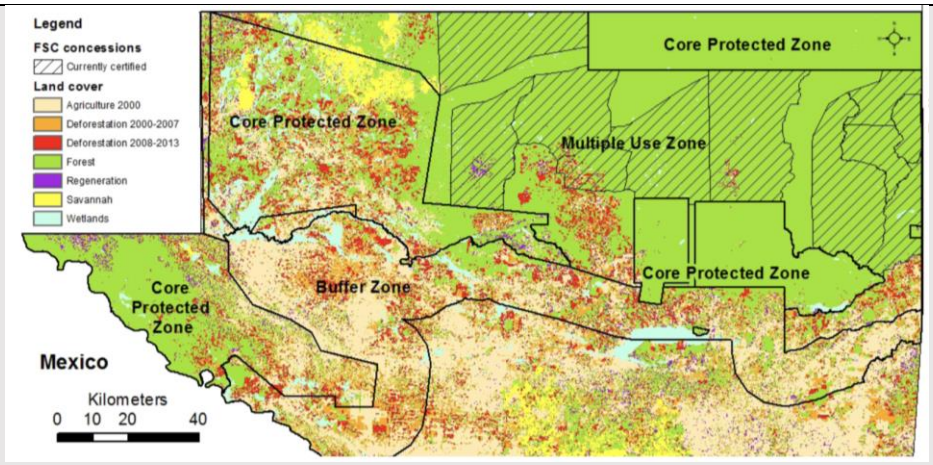
RSPO: Using auxiliary third-party geospatial data combined with certified and non-certified concession map data sourced directly from their members, RSPO can remotely and preliminarily assess a variety of potential environmental non-compliances by RSPO members (e.g. land clearing and fire), especially those related to complaints. For Malaysia and Indonesia, they are actively monitoring fire hotspots in near-real time. When fires are identified, RSPO requests the member to submit the necessary documentation, such as the cause of fire, relative location of the fires, best practices and photographic evidence for how the fire was managed. This is followed up by targeted field verification as required. This capacity allows RSPO to report incidence of fires as well as geographic distribution in near-real time and over time. Similarly, they can report accurate annual values for land cover changes for RSPO member concessions.

Case study #15: Combining geolocation data of certificates with satellite imagery

Rainforest Alliance has historically used program geolocation data combined with tree cover data from Global Forest Watch and others to demonstrate the impact of their programs, including certification. The most communicated and recognized example is the effectiveness of community forestry in the Mayan Biosphere Reserve[47] [48], where tree cover loss rates were compared over time for protected areas and community concessions, demonstrating that community concessions were better at avoiding tree cover loss. In addition to the static map below, Rainforest Alliance also provides a dynamic map showing the time-lapsed data. With increased collection and use of geolocation data, this type of analysis and reporting is becoming more common.

[47] Rainforest Alliance report, Deforestation trends in the Mayan Biosphere Reserve, Guatemala, last accessed 26 March 2020. https://www.rainforest-alliance.org/sites/default/files/2016-08/MBR-Deforestation-Trends.pdf

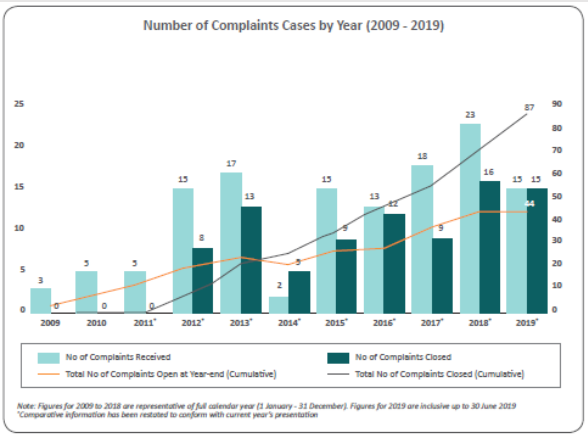
[48] Rainforest Alliance webpage, last accessed 26 March 2020. https://www.rainforest-alliance.org/articles/community-the-secret-to-stopping-deforestation-in-guatemala

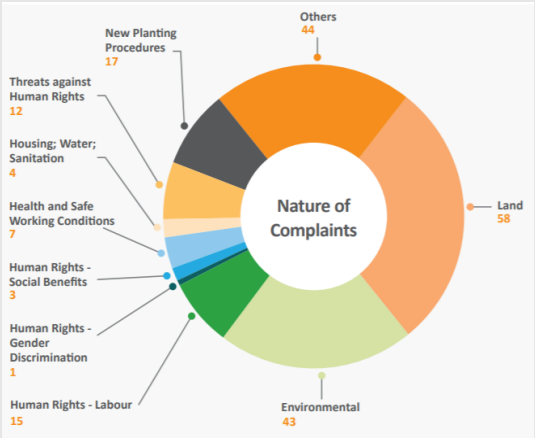


vi. Improving Complaints Procedures

Human rights violations are not easily captured in traditional audits. Social issues such as gender discrimination in the workplace, child labour, and protection of land rights are complex issues and impossible to sufficiently capture in intermittent site visits. This issue is recognized by sustainability standards and they are responding through application of better risk identification methods described above, as well as improving grievance/complaints procedures. The result is a better understanding of the scale and type of complaints, and an ability to include this information in reporting.

Case study #16: Improved complaint procedures result in more information and reporting





RSPO applies a hotline named the Human Rights Defender SOS[49]. The emergency contact point allows workers, whistleblowers, and community spokespersons to confidentially lodge complaints on activities undertaken by, on behalf of, or in connection with RSPO member activities. Because filing a formal complaint can result in safety risks or security of the person filing the complaint, this vector for filing complaints has been added.

[49] RSPO Human Rights Defender SOS webpage, last accessed 26 March 2020. https://rspo.org/about/contact/hrd-hotline-eng

RSPO is the only organization in the review that transparently reports on the number and nature of complaints as well as the number of complaints cases open alongside number closed by year. The graphic examples here were extracted from their 2019 Impact Update report[50].

vii. Operating and Reporting at Scale

Addressing complex and intrenched issues such as child labour, biodiversity loss, deforestation, and land rights requires collaboration among all stakeholders (producers, traders, sourcing companies, governments, civil society, financers) toward common goals at scale. Several promising landscape initiatives are successfully forging such collaborations, as well as governance structures and other enabling conditions to tackle these pernicious issues. Some initiatives are bringing together stakeholders within a common landscape (e.g., a cocoa growing region of Ghana) to address key issues, while others are ensuring that claims made at a landscape (geographic area) level are appropriate and credible. To survive the Hype Cycle though, these initiatives must be able to demonstrate and deliver the social and environmental results that matter.

Standard systems have a wealth of experience addressing a range of issues that have landscape scale implications (e.g., workers' rights, reducing GHG emissions, managing water resources) and are well placed to contribute to the development of credible sustainable landscapes. The Accountability Framework[51] and VERRA[52] are exploring ways to provide effective monitoring, verification and communication of progress at scale. Additionally, ISEAL will soon be releasing a good practice guide for verification of jurisdictional claims. These initiatives, if successful, could change the face of communications using audit results – from standard-specific reporting, to collaborative reporting on landscape-level impact.

Case study #17: SAN blueprint for operating and reporting at scale

SAN launched the Blueprint for a Sustainable Landscape project[53] to create a practical evaluation framework (blueprint) based on indicators prioritized by local stakeholders and aligned to the content of sustainability standards such as the Roundtable on Responsible Palm Oil, Rainforest Alliance and Fairtrade. The project aims to give visibility to the role and value of sustainability standards in landscape-level transformation.

V. Discussion

This review set out to describe how organizations are communicating results using audit data. The report presents a variety of reporting approaches and associated considerations for each. It is evident that organizations are evolving the structure of their standards, with a genuine transition toward capturing higher level results (outputs and outcomes) through assurance processes. This allows more sophisticated reporting that speaks directly to specific sustainability themes. It is predominantly recognized for environmental themes, but not exclusively, and the opportunities for higher-level reporting on social themes is expanding. A second prevailing insight from the review is that

[50] RSPO 2019 Impact Update report, last accessed on 26 March 2020. https://rspo.org/impact
[51] Accountability Framework webpage, last accessed 28 March 2020. https://accountability-framework.org/overview/
[52] VERRA webpage, last accessed 28 March 2020. https://verra.org/
[53] Sustainable Agriculture Network project webpage, last accessed 28 March 2020. https://www.sustainableagriculture.eco/blog/blueprintproject

collaboration, coordination and harmonization across VSS, sectors and stakeholders are strengthening opportunities to unpack, understand and ultimately report on the more complex sustainability issues that traditional assurance approaches cannot adequately nor credibly capture. This is evidenced in the Global Living Wage Coalition[54], Living Income Community of Practice[55], the Accountability Framework[56], and a host of ISEAL-based initiatives such as the VIA project[57] and pilots funded through their Innovations Fund.

A. Current VSS Reporting Strategies

VSS use audit data in a myriad of ways. Many organizations are finding new ways to make greater use of audit information, and thereby tying them more tightly into M&E systems. This includes finding creative ways to communicate results using some of the most basic data on reach and compliance. As demonstrated in the results section, reach data, in particular can enhance an organizations value proposition by communicating scope and influence across space and time. Additionally, VSS are experimenting with collecting additional data through their existing audit processes in order to measure and report outputs such as new knowledge and practices among certified entities. Others are combining different data sets, and even linking to third-party data to communicate higher-level outcomes and impacts.

B. The Takeaway from Companies

Corporate reporting differs from VSS reporting in some important ways. Detailed corporate reporting tends to focus primarily on their own direct operations, with some reporting on supply chain performance. Corporations that do measure and report on higher-level outcomes among suppliers often do so with the help of civil society partners. Large companies also tend to have more sophisticated data management systems and data governance structures. The research focused on a handful of companies that are known to be leaders in the sustainability space and/or have strong performance measurement and reporting frameworks in place. While it was difficult to parse out audit data from other forms of data among companies, some important lessons emerged, which are discussed in the results section. Taken together, the main theme that emerges from corporate reporting is a trend toward increased transparency. While there is still a long way to go, companies are beginning to provide the public with a peek into their internal workings – from human resources, to environmental footprint, to traceability.

C. Considering Emerging Trends

The trends discussed in this paper are in large part emerging to address increasing demands from stakeholders – including donors, companies, consumers, civil society, governments and financial institutions – for reliable, credible, current information about sustainability results. These demands are being felt by sustainability standards and businesses alike. By and large, these trends are underpinned by a recognized need to strengthen assurance to better address risk and create value – resulting in a greater merging of assurance and M&E. Strategies to address risk are perhaps best exemplified in trends such as *risk-based assurance and reporting* and *improving complaints procedures*. The growing trend toward *outcome-based standards and a*ssurance, *direct self-reporting*, and *operating and reporting at scale* strongly illustrate the need for demonstrated higher-level results. The trends and examples on *use*

[54] www.globallivingwage.org
[55] https://www.living-income.com/
[56] https://accountability-framework.org/
[57] https://www.isealalliance.org/get-involved/resources/initiative-summary-breaking-through-barriers-communicating-impact

of 3rd party data to demonstrate results and *aligning on targets for common reporting* demonstrate creative and collaborative ways in which organizations are attempting to make the most of their existing audit data. These trends, by their very nature, are rapidly evolving areas of change. As such, we can expect more lessons as testing and learning continues.

D. Recommendations Based on Findings

As Fairtrade is embarking on evolving its own approaches, we frame a few recommendations to support this endeavor.

1. Use the data you have to the greatest extent possible.
2. Strive to report trends over time and, as possible, provide up-to-date information on the types of information key stakeholders want and need to manage supply chain risks.
3. Clarify what can and can't be verified through audit processes. How data is collected (e.g., using acceptable sample sizes) dictates what you can say.
4. Keep in mind that data science and governance underpin credible reporting.
5. Seek opportunities to credibly capture additional information from audit processes that are already taking place (e.g., asking auditors to record interview responses systematically).
6. Identify opportunities to link audit data with other M&E or external data.
7. Consider developing new approaches for detailed data capture that can both benefit the assurance process and enhance communication of audit results (e.g., self-assessment templates).
8. If considering verified-self reporting approaches, recognize that working with small holders requires a thoughtful and stepwise approach, and this is normally slow to ensure they understand the concepts and requirements to obtain accurate reporting.
9. Develop approaches to provide more value to the certified entity with packaged data feedback. Providing performance and socio-economic data back to farmers and other certified entities can facilitate tracking their own progress (and potentially comparing their efforts to others). This motivates continuous improvement of the certified actor that can be measured over time.
10. Strive toward greater transparency.
11. Take advantage of multi-stakeholder collaborations and partnerships on performance reporting.
12. Continue to refer and reference to internationally recognized and sector-agreed frameworks on goals, metrics and credible reporting.
13. Draw lessons and experiment with emerging trends, while recognizing that most are still being tested and thus all the kinks and details are still to be worked out.
14. Build in time and expectations for adaptation and adjustments.