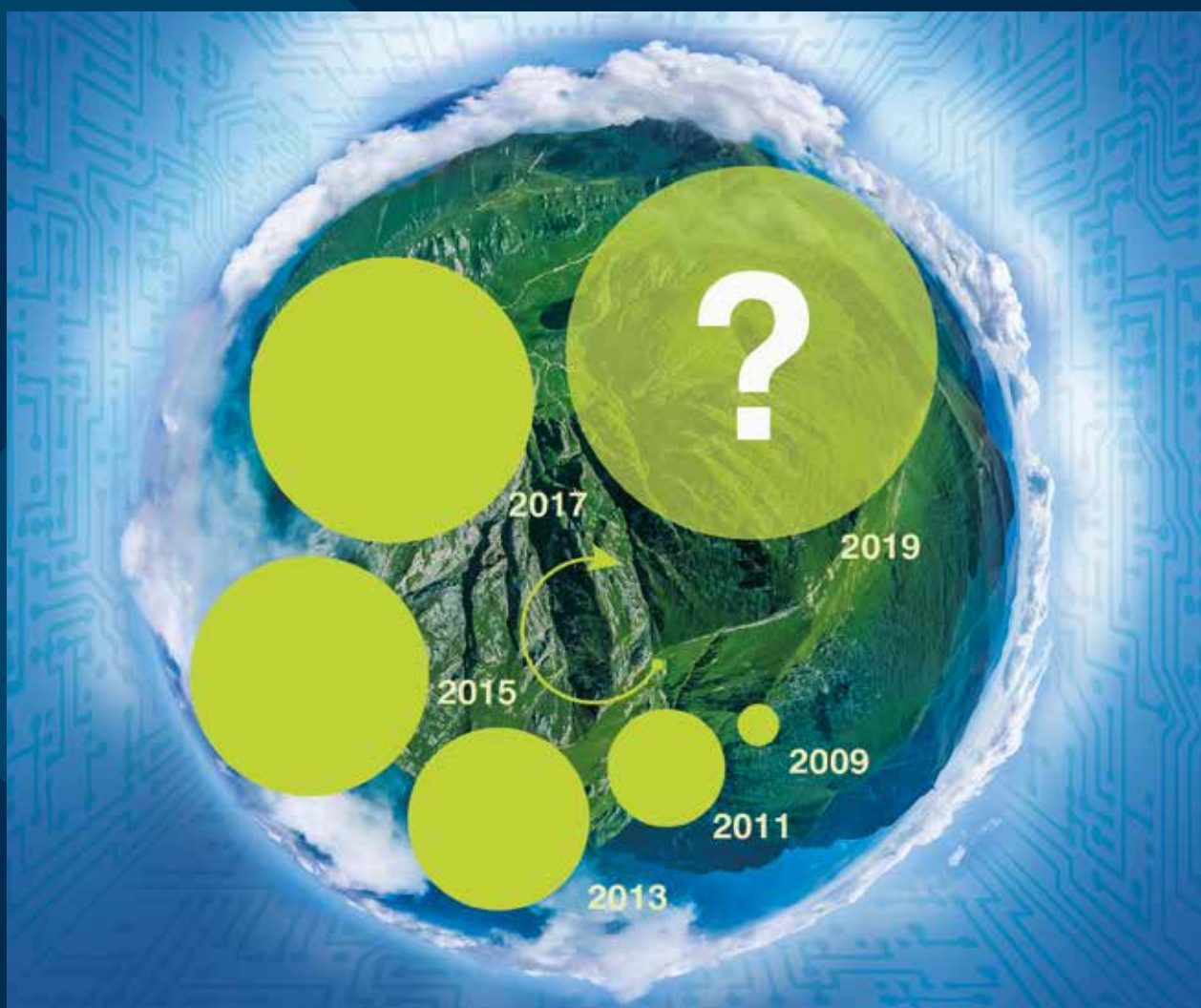


The State of Sustainable Markets 2019

STATISTICS AND EMERGING TRENDS



How much has agricultural land certified as sustainable grown since 2011?

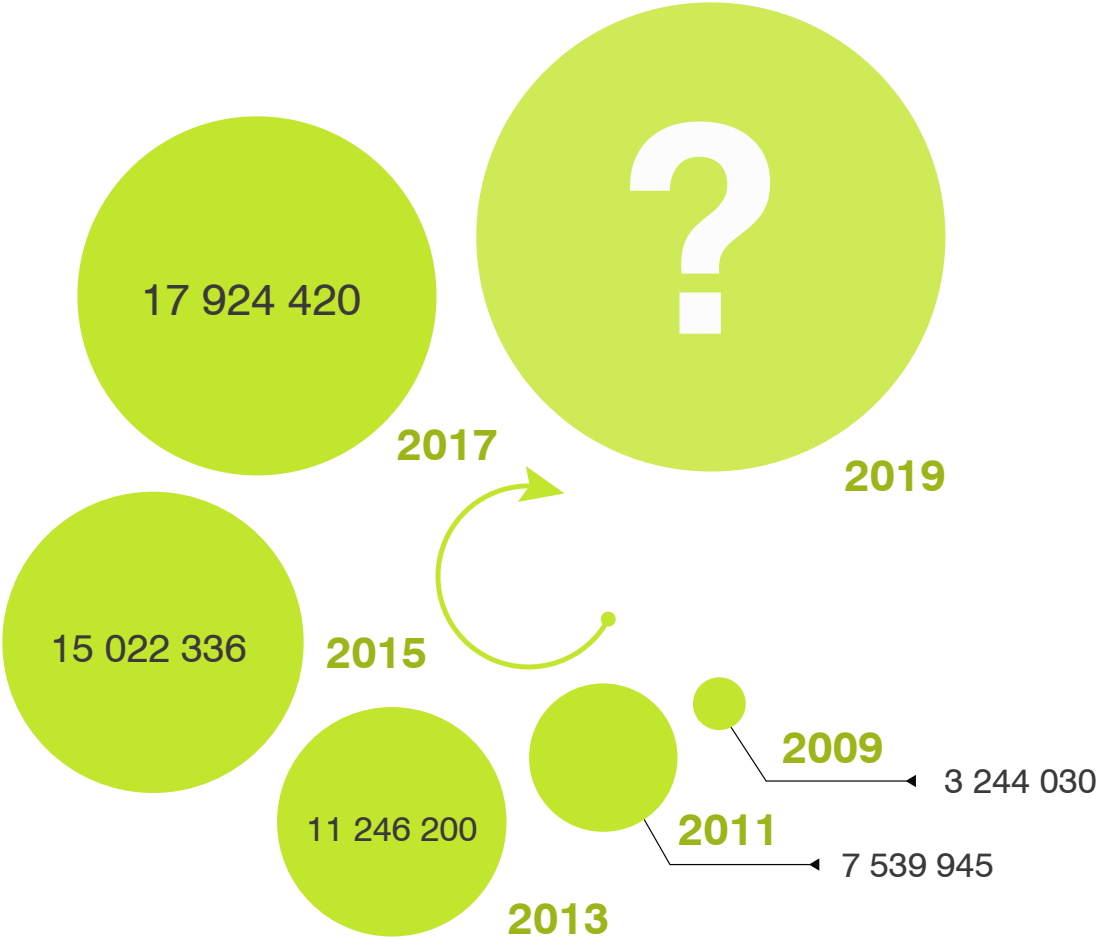
This is the world's most comprehensive report on sustainable markets, with data from 14 major sustainability standards for eight agricultural products, plus forestry.

This chart gives a snapshot of sustainable land area (in hectares) certified by at least one standard from 2011 to 2017. It covers eight agricultural products, highlighted in the report.

Note: This is a minimum. The actual land area is larger, as many producers have multiple certifications.

THE STATE OF SUSTAINABLE MARKETS 2019

STATISTICS AND EMERGING TRENDS



Sustainability standards continue their growth across the world.

This fourth global report provides new insights into the evolution of certified agriculture and forestry. ITC has teamed up once again with the Research Institute of Organic Agriculture and the International Institute for Sustainable Development to provide data about 14 major sustainability standards for bananas, cocoa, coffee, cotton, oil palm, soybeans, sugarcane, tea and forestry products. This report helps shape decisions of policymakers, producers and businesses, working to address systemic labour and environmental challenges through certified sustainable production.

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For more information on sustainability standards, see www.sustainabilitymap.org/standards.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the International Trade Centre concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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FOREWORD

To deliver on the United Nations 2030 Agenda and to protect our planet over the long term, our collective challenge must be to consume, produce and trade sustainably.

Unsustainable consumption and production depletes natural resources and can exacerbate inequalities between and within societies. United Nations Sustainable Development Goal 12 (SDG 12), which focuses on responsible consumption and production, highlights the central role that businesses, governments and consumers play in driving the changes needed in how global value chains are organized and how final products and services are consumed.

Ensuring that environmentally sustainable methods are used in production processes should be a top priority. Not only because it ensures cleaner and greener value chains, but it also helps in the fight against climate change. Data drive decisions. And the data show that our planet is under strain. Rainforests are burning, glaciers are melting and increasingly destructive hurricanes are rolling back decades of socioeconomic gains in small island states.

In tandem, we must ensure that decent working conditions are a core element of production processes, regardless of sector or location. Consumer behaviour can encourage environmentally and socially sustainable production as well as proper labour conditions. People want to know who has produced the food that eventually reaches their table, as well as how and where it was produced. Increasingly, they are protesting with their purchasing power.

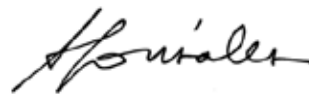
In part, SDG 12 is about scrutinizing labour and environmental conditions in global value chains and steering current business habits towards more ethical and responsible sourcing strategies. But it is also about informing consumers how their purchasing decisions affect micro, small and medium-sized businesses in developing countries. ITC's role is to strengthen sustainable production capacities in developing countries, promote sustainable consumption and support actors who practice what we call 'good trade'.

This year's State of Sustainable Markets edition shows continued growth in sustainably certified agricultural and forestry commodities. It shows expanding coverage of agricultural land and dominance in some sectors of single-sector standards.

For the first time, we have made this wealth of information and analytics available online in an interactive format. We have also added a new feature that enables readers to search by country for a specific certified area and for a product or particular sustainability standard.

The findings in this year's report corroborate the results from ITC's latest research initiative focusing on a cross-sectoral survey on the demand for sustainable goods in the European Union. Sustainable product sales in the EU are rising swiftly, and European retailers are shifting towards sourcing and selling goods that are socially and environmentally sound.

ITC's main takeaway from this research – both the supply-side data found in this study and the results from our demand-side EU survey – is that efforts to achieve the SDGs require a holistic value chain approach. This means engaging local stakeholders and adopting socially and environmentally sustainable production practices – to make 'good trade' the new normal.



Arancha González
Executive Director
International Trade Centre

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1. Although UTZ merged with Rainforest Alliance in 2018, they are treated separately in the report as the data presented are from 2017.

PROJECT PARTNERS

The **International Trade Centre (ITC)**, founded in 1964, is the joint agency of the World Trade Organization and the United Nations. Its aim is for businesses in developing countries to become more competitive in global markets, to speed up economic development and to contribute to the achievement of the United Nations Sustainable Development Goals.

Trade for Sustainable Development is the partnership-based programme of ITC that helps businesses chart their paths to more sustainable trade. The programme offers access to wide-ranging information for trade-related sustainability initiatives and standards. Building on well-established online tools, such as Standards Map and SustainabilityXchange, ITC launched a new platform, the Sustainability Map, in September 2017. It provides new features, such as the Sustainability Network. The online platform enables users, regardless of their position in the value chain, to better understand the sustainability initiatives landscape and to connect with business partners.

The **Research Institute of Organic Agriculture (FiBL)**, founded in 1973, links interdisciplinary research to the rapid transfer of knowledge from research to agricultural practice, drawing on advisory work, training and conferences. FiBL has offices in Austria, France, Germany and Switzerland, as well as a representative office in Brussels. It also undertakes numerous projects and initiatives in Africa, Asia, Europe and Latin America.

FiBL has more than 15 years of experience in collecting and publishing data on organic agriculture. Since 2000, it has developed a network of some 200 experts from 180 countries, all of whom contribute to data collection. Every year, FiBL and IFOAM – Organics International jointly publish *The World of Organic Agriculture*, which documents recent developments in the field worldwide. The Swiss State Secretariat for Economic Affairs (SECO), in collaboration with ITC, has financially supported this global data collection since 2008. NürnbergMesse (organizer of the BIOFACH organic fair), the Coop Sustainability Fund and IFOAM – Organics International also provide support. FiBL has been active since 2014 in the collection of data on sustainability standards. For more information, see <https://statistics.fibl.org>.

FiBL works to encourage sustainable production in the food and agriculture sector, in part by contributing to the development of the guidelines for Sustainability Assessment of Food and Agriculture Systems (SAFA), published in 2013 by the Food and Agriculture Organization of the United Nations (FAO). Based on these guidelines, FiBL developed the Sustainability Monitoring and Assessment Routine (SMART), which is now widely used for transparent and comparable assessments of the sustainability performance of farms and the impacts of voluntary standards.

The **International Institute for Sustainable Development (IISD)** is an independent think tank championing sustainable solutions to twenty-first century problems. Its mission is to promote human development and environmental sustainability. Through research, analysis and knowledge sharing, IISD identifies and champions sustainable solutions that support sound policymaking. Established in 1990, the institute has offices in Canada, Switzerland and the United States, and its work impacts economies, communities, ecosystems and lives in nearly 100 countries. Numerous governments, United Nations agencies, foundations, the private sector and individuals fund its projects.

IISD has been assessing the characteristics, performance and market trends of voluntary sustainability standards via the State of Sustainability Initiatives (SSI) project since 2008. The SSI Reviews of 2010 and 2014 are the most comprehensive reports published to date offering supply-chain decision makers – including procurement agents, investment advisers, chief executives, policymakers, sustainability initiatives and non-governmental organizations – the high-level data and analysis needed to navigate the increasingly complex world of sustainability standards.

The institute was also instrumental in establishing the Committee on Sustainability Assessment (COSA) and the Sustainable Commodity Assistance Network (SCAN), which are now independent organizations focused respectively on measuring sustainability impact and building capacity for the adoption of VSS. In addition to conducting strategic policy research and analysis on standards, IISD continues to make important contributions to sustainable consumption and production through its sustainability standards programme.

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ACRONYMS

Unless otherwise specified, all references to dollars (\$) are to United States dollars, and all references to tons are to metric tons.

4C	Common Code for the Coffee Community
BCI	Better Cotton Initiative
CmiA	Cotton made in Africa
FAO	Food and Agriculture Organization of the United Nations
FIBL	Research Institute of Organic Agriculture
FSC	Forest Stewardship Council
GAP	Good Agricultural Practice.
IFOAM	IFOAM – Organics International
IISD	International Institute for Sustainable Development
ISEAL	International Social and Environmental Accreditation and Labelling Alliance
ITC	International Trade Centre
PEFC	Programme for the Endorsement of Forest Certification
RA	Rainforest Alliance
RSPO	Roundtable on Sustainable Palm Oil
RTRS	Round Table on Responsible Soy
SECO	Swiss State Secretariat for Economic Affairs
SSI	State of Sustainability Initiatives
VSS	Voluntary sustainability standard

A COMPREHENSIVE SNAPSHOT

This report, the fourth in what is now an annual update on the state of sustainable markets, presents the latest data on area, production volume and producers for 14 major standard-setting organizations.

For this edition, we are presenting a summary of the key data. This report is more compact than the previous ones. The full data are available in the recently launched online platform 'Market Trends', where users can access and analyse the data in a visual, more dynamic and more user-friendly way. Country, commodity, forestry and sustainability standard-specific interactive graphs are available on www.sustainabilitymap.org/trends.

Data from the latest survey demonstrate how certified agriculture and forestry continue to grow, in line with an expanding global population and increasing consumption. The rising share of total area and production volume covered by voluntary sustainability standards (VSS) suggests there is significant potential for further growth.

Sustainability standards are usually third party-assessed norms and standards relating to environmental, social, ethical and food safety issues, adopted by companies to show how their organizations or products perform in specific areas. There are more than 400 such standards across the globe.

These standards are developed at the local, national or international level by organizations from the public and private sectors. Businesses or not-for-profit non-governmental organizations develop private sustainability standards. In the agricultural sector, these standards promote sustainability along the value chain.

Sustainability standards represent an opportunity along international supply chains to meet resource shortfalls. They are a way to adopt production and trade practices that have the potential to lead to social, environmental and economic sustainability.

The current market context shows:

- Continued growth;
- An expanding share of agricultural land, which surpasses the 20% mark in some commodities;
- Dominance of single-sector standards in some sectors.

As in previous years, the Swiss State Secretariat for Economic Affairs (SECO) funded the global survey on sustainability standards. The Research Institute of Organic Agriculture (FiBL), the International Institute of Sustainable Development (IISD) and the International Trade Centre (ITC) jointly produced this report, building on their complementary and in-depth expertise on sustainability standards. The data presented here cover the year 2017, where available, as well as earlier years.

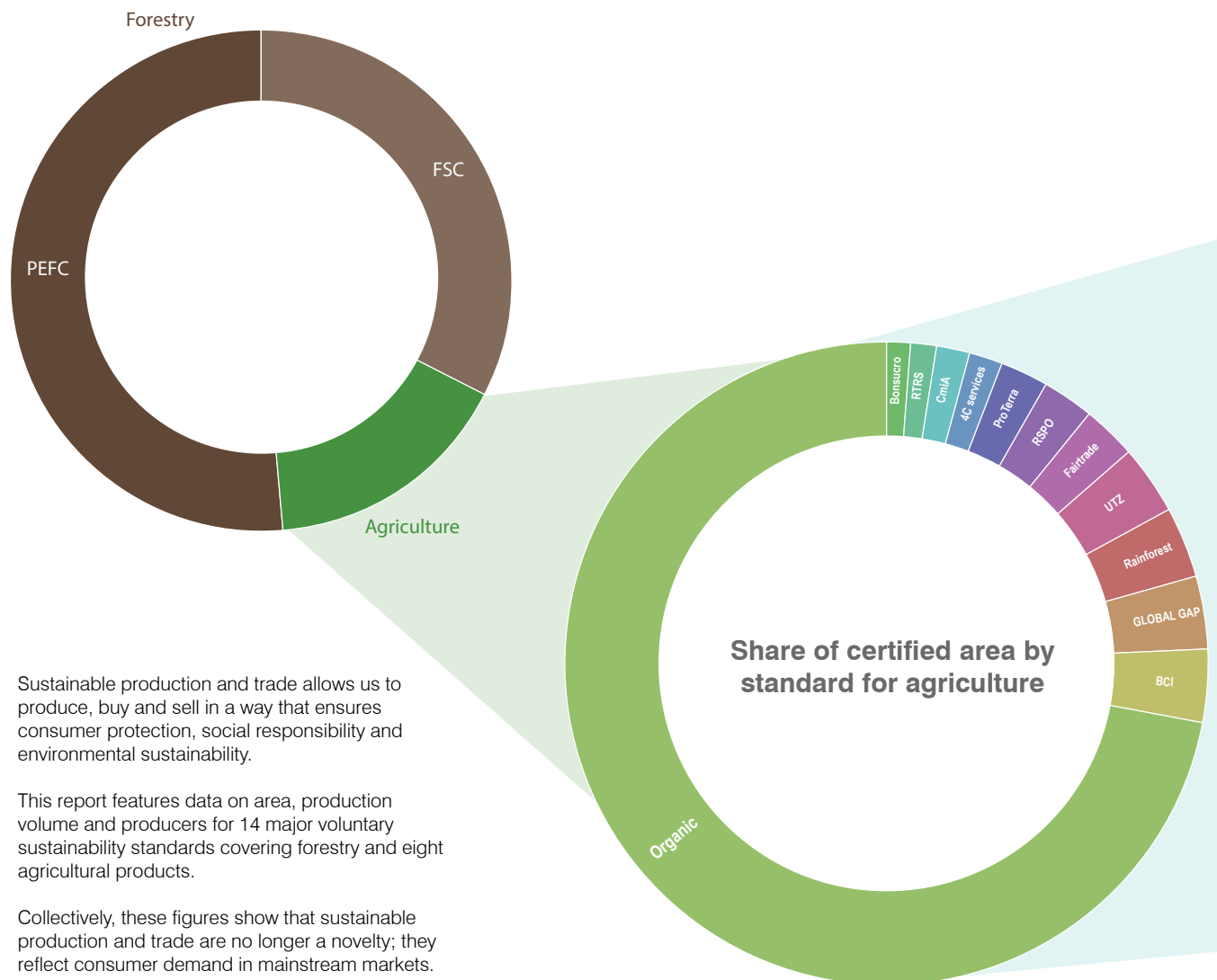
Standards address sustainability concerns

The steady increase in certification over the past decade reflects a demand among consumers, buyers and producers to address common environmental and social concerns. For example, the banana industry, the world's second-largest consumer of agrochemicals after cotton, faces challenges such as low wages, worker health and safety, child labour and lack of biodiversity.

The cocoa market is confronted by a disorganized production base, systemic poverty and child labour, while high water use, volatile prices and worker exploitation damage the reputation of the cotton market.

Growing consumption of sugarcane is having a major impact on biodiversity amid allegations of abusive labour practices.

For the tea market, concerns include deforestation, soil erosion, chemical inputs and worker protection.



Sustainable production and trade allows us to produce, buy and sell in a way that ensures consumer protection, social responsibility and environmental sustainability.

This report features data on area, production volume and producers for 14 major voluntary sustainability standards covering forestry and eight agricultural products.

Collectively, these figures show that sustainable production and trade are no longer a novelty; they reflect consumer demand in mainstream markets.

Standards offer strategies for sustainable trade

Sustainability standards offer explicit strategies to link trade with better practices. Better data will improve understanding of the state of sustainable markets, and better reporting will help round out the picture of sustainable supply chains.

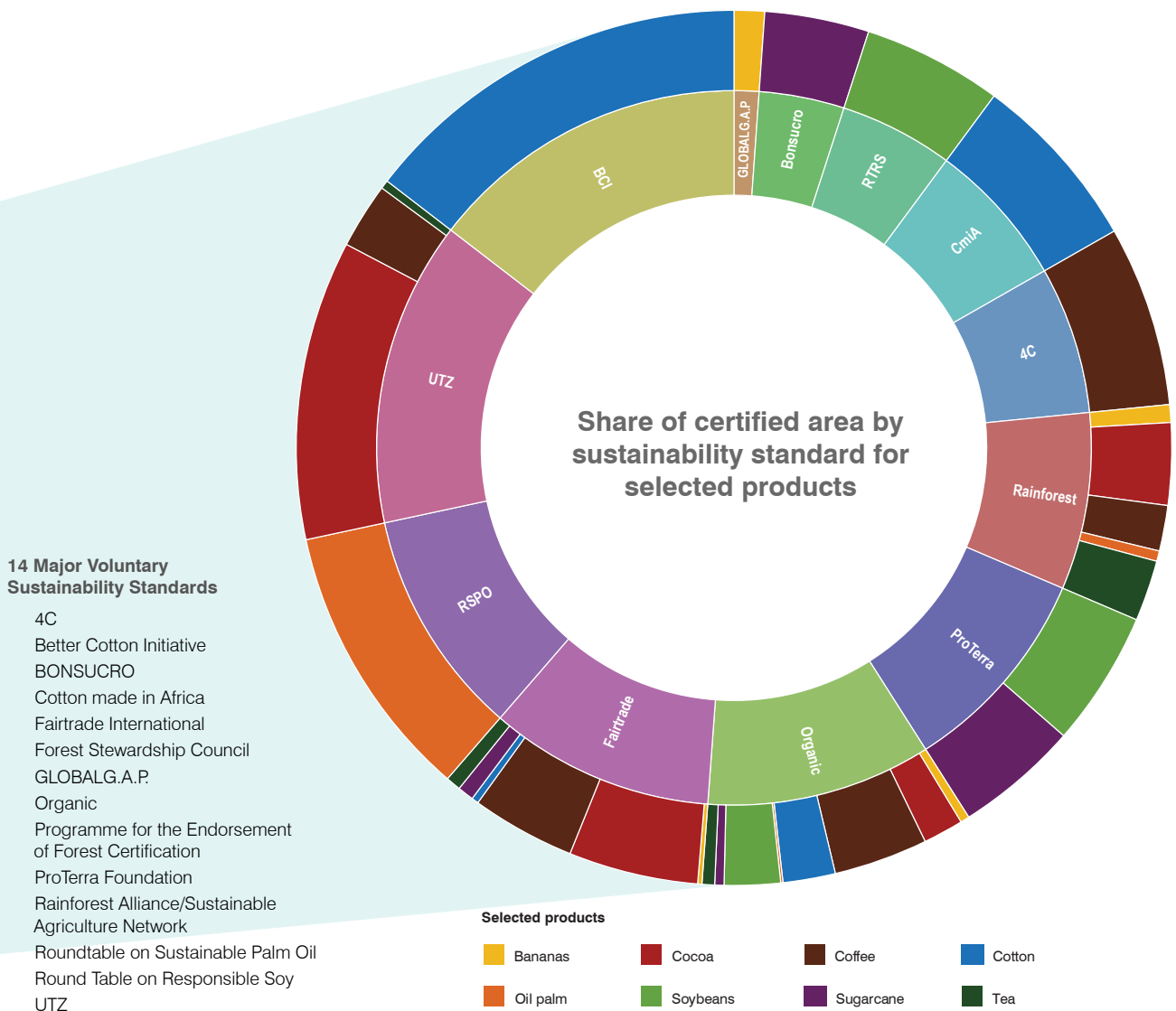
This report's presentation of the trends intends to inform readers, encourage additional data collection and promote accountability in sustainable markets. It also serves as a resource for further analysis and informed decision-making by researchers, policymakers, industry actors and other stakeholders.

Sustainability standards are no longer a novelty serving niche markets. Over the past decade and more, they have increasingly found their way into mainstream markets.

There are many reasons for this. For some producers and suppliers, adopting a set of recognized principles for sustainable practices represents a stepping stone to implementing best practices within supply chains.² For others, compliance with a given standard may offer a strategy for managing reputational risks or even supply risks.

Regardless of the reasons, the trend is clear: sustainable commodities, defined as products that are demonstrably (for instance, third-party verified) compliant with internationally recognized standards, are growing at a pace that outstrips markets for conventional commodities.

2. Some of the sustainability standards covered here are members of the non-governmental organization ISEAL, the International Social and Environmental Accreditation and Labelling Alliance. For more information, see <http://www.isealliance.org/>.



Featured crops and standards

This report offers a comprehensive snapshot of significant growth in the adoption of global sustainability standards across nine sectors: bananas, cocoa, coffee, cotton, palm oil, soybeans, cane sugar, tea and forestry. It provides market and statistical data on these sectors as well as at-a-glance tables on products and standards (Figure 1).

The report covers the following standards: 4C Services (4C), Better Cotton Initiative (BCI), Bonsucro, Cotton made in Africa (CmiA), Fairtrade International (Fairtrade), Forest Stewardship Council (FSC), GLOBALG.A.P., IFOAM – Organics International (organic), the Programme for the Endorsement of Forest Certification (PEFC), ProTerra Foundation (ProTerra), Rainforest Alliance (Rainforest), the Roundtable on Sustainable Palm Oil (RSPO), the Round Table on Responsible Soy (RTRS) and UTZ³ (Figure 2).

Reporting challenges: Lack of data, multiple certification

Policymakers, producers and businesses require better information for strategic planning. Higher-quality and more transparent data are not only needed on the supply side, but also on the demand side, as there is a need for information on the prices of certified crops and on consumption patterns. Data are also required on the international trade patterns of compliant products. Furthermore there is a need for expanding reporting and transparency requirements for certified producers, broadening the Harmonized System coding system, increased corporate reporting and reporting on sustainable consumption at the national level.

Another challenge is that reporting a global total for individual sectors is difficult, as many producers are certified by more than one standard. There are not enough reliable data on the share of these multiple certifications.

For the purposes of this report, FiBL, IISD and ITC decided that the best approach was to work with the minimum as a reference, but to provide the maximum and average of the area or production volume as well (for more see Methodology).

Multiple certification and data on total area and production

Reporting a global total for certain commodities remains difficult, as many producers are certified by more than one sustainability standard and there are not enough reliable data on the share of multiple certifications. Taking this into account, FiBL, IISD and ITC decided that the best approach was to provide a range that encompasses the minimum and the maximum amounts possible, along with the average of the two at the country level.

To calculate the maximum amount, the total area or production of all standards in the country was determined. For the minimum, the standard with the largest area or greatest production volume in the country was used as the reference. An average of the maximum and minimum was then calculated. These figures must be treated with caution, however, as they are simply estimates that indicate a trend.

Unless otherwise stated, the data presented in the following sections show the minimum possible.

3. Although UTZ merged with Rainforest Alliance in 2018, they are treated separately in the report as the data presented are from 2017.

Highlights

Features of the current market context are continued growth, expanding coverage of agricultural land and dominance in some sectors of single-sector standards, as outlined above. Among the highlights of this year's report:⁴

Certified area continues to grow and standard compliance gains ground

- In the five-year period from 2013–2017, cotton experienced the highest growth rate of its certified area, which almost tripled (+172%). This was followed by cocoa, which more than doubled in area (+115%), as well as a notable growth in sugarcane (+80%) and tea (+77 %) area (Table 1).
- In 2016–2017 alone, the certified area for these commodities grew at least 18%. Sugarcane expanded the fastest (+89%) while cotton grew by two-thirds (+67%). With the exception of soybeans and coffee, which dropped, and oil palm, which almost stagnated, all other commodities showed double-digit growth (Table 1).
- Four standards certify approximately 25% of the global cocoa area. The coffee sector also boasts a high compliance rate, with at least 23% of the coffee area certified. More than 16% of the tea area and at least 16.2% of the global cotton area are certified by a standard.

Organic is still the leading standard in terms of certified area, but growth is faster for others

- Organic is the biggest sustainability standard in terms of both area and product variety. In 2017, almost 70 million hectares of agricultural area were certified as organic (including areas in the process of becoming organic-certified), representing 1.4% of worldwide agricultural land (Table 4).
- With 3.56 million hectares, BCI covers the second-largest area of all the standards, followed by GLOBALG.A.P. (3.55 million hectares) and Rainforest Alliance (3.46 million hectares).
- All of the standards covered by this report experienced growth in their compliant areas in 2013–2017, most of them double-digit, and some even triple-digit. BCI saw the greatest jump, with the certified area expanding 197%, and CmiA more than doubled (+134%). The area certified by RTRS, another single-sector standard, increased 180%.
- All but three of the 12 agricultural sustainability standards experienced double-digit area growth in 2016–2017, with BCI achieving the highest growth rate (+67%).

4. The commodity-specific data are based on the minimum possible values. (For an explanation, see section on reporting challenges.)



CHAPTER 1

SUSTAINABILITY STANDARDS: IN THE MAINSTREAM

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DEVELOPMENT OF THE SELECTED COMMODITIES

Agricultural commodities

Area

The standards covered in this report certified at least 17.9 million hectares of the eight agricultural commodities that were analysed: bananas, cocoa, coffee, cotton, oil palm, soybeans, sugarcane and tea (Table 1).

This constituted at least 7.6% of the global area for these crops, expanding by two-thirds in 2013–2017 and by 18% in 2016–2017 (Table 1).⁵ The latter represents the second-biggest one-year growth in area for these commodities since 2013.

Total area for the selected commodities

The commodity with the largest area is cotton (certified by four standards), with almost 5.2 million hectares (Tables 1 and 8). This is followed by cocoa (2.9 million hectares, four standards), oil palm (2.5 million hectares, three standards) and coffee, with at least 2.5 million hectares (five standards).

Four standards – now including ProTerra, which reported sugarcane for the first time – certify the production of sugarcane, the world's primary source of sugar (almost 2 million hectares).

Soybeans, which are certified by three of the standards, cover at least 1.8 million hectares. Tea has 668,768 hectares (four standards) and bananas have 340,196 hectares (four standards).

Table 1: Area for the selected commodities, 2017

Commodity	Area harvested based on minimum (hectares)	Share of global total	Change 2016/2017	Change 2013–2017
Bananas	340,196	6.0%	17.2%	28.6%
Cocoa	2,908,640	24.8%	22.8%	114.7%
Coffee	2,533,211	23.4%	-8.5%	8.7%
Cotton	5,154,933	16.2%	66.8%	172.4%
Oil palm	2,537,424	11.9%	1.4%	26.1%
Soybeans	1,801,269	1.5%	-30.2%	-5.9%
Sugarcane	1,979,979	7.6%	88.5%	80.2%
Tea	668,768	16.4%	22.7%	77.3%
Total (based on minimum)	17,924,420	7.6%	18.0%	59.4%
Total based on maximum	24,457,547	10.4%	17.9%	67.1%
Total based on average	21,190,985	9.0%	19.2%	71.4%

Note: The data in this table were not adjusted for multiple certifications, thus the minimum possible is reported. The total VSS-compliant area corresponds to the standard with the largest compliant area operating within a given sector by country.

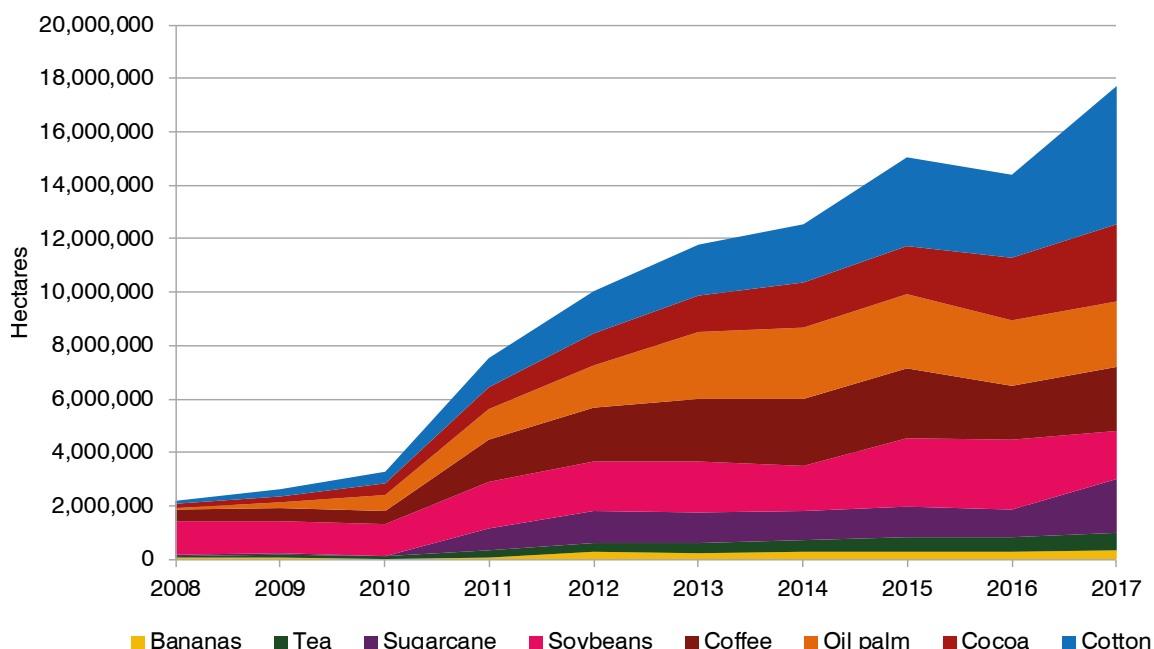
Sources: FiBL-ITC-SSI survey, 2019; 4C Services, 2014, 2015, 2016, 2018 and 2019; Better Cotton Initiative, 2014, 2015, 2017, 2018 and 2019; Bonsucro, 2014, 2015, 2016, 2018 and 2019; Cotton made in Africa, 2014, 2015, 2016, 2018 and 2019; Fairtrade International, 2017, 2018 and 2019; GLOBALG.A.P., 2015, 2016, 2018 and 2019; FiBL survey, 2019; ProTerra Foundation, 2014, 2015, 2016, 2018 and 2019; Rainforest Alliance, 2014, 2015, 2016, 2018 and 2019; Roundtable on Sustainable Palm Oil, 2019; Round Table on Responsible Soy, 2014, 2015, 2016, 2018 and 2019; Textile Exchange 2013–2019; UTZ, 2014, 2015, 2016, 2018 and 2019.

5. The maximum is 24.5 million hectares and the average is 21.2 million hectares.

Growth continues

The certified area for the selected crops grew 59.4% in 2013–2017 and 18% in 2016–2017 (Table 1, Figure 1).

Figure 1: Selected products certified by sustainability standard (minimum possible), 2008–2017



Note: The products are sorted by area. For the purpose of the figure, it is assumed that a maximum amount of multiple certification is occurring within each commodity and the minimum possible VSS-compliant area is shown. This corresponds to the standards with the largest compliant area operating within a given sector.

Sources: FiBL-ITC-SSI survey, 2019; 4C Services, 2014, 2015, 2016, 2018 and 2019; Better Cotton Initiative, 2014, 2015, 2017, 2018 and 2019; Bonsucro, 2014, 2015, 2016, 2018 and 2019; Cotton made in Africa, 2014, 2015, 2016, 2018 and 2019; Fairtrade International, 2017, 2018 and 2019; GLOBALG.A.P., 2015, 2016, 2018 and 2019; FiBL survey, 2019; ProTerra Foundation, 2014, 2015, 2016, 2018 and 2019; Rainforest Alliance, 2014, 2015, 2016, 2018 and 2019; Roundtable on Sustainable Palm Oil, 2019; Round Table on Responsible Soy, 2014, 2015, 2016, 2018 and 2019; Textile Exchange 2013–2019; UTZ, 2014, 2015, 2016, 2018 and 2019.

The certified area for cotton – the largest such area at almost 5.2 million hectares – grew the most in 2013–2017, almost tripling in size (+172%).⁶ This was followed by cocoa, which more than doubled in area (+114%), and sugarcane, which grew by 80%. All commodities expanded in area by double digits except soybeans, which dropped 5.9%, and coffee, which grew 8.7%.

Most of the commodities stagnated or increased in area by less than 10% in 2015–2016, and overall expanded just 1% (Lernoud et al., 2018). In 2016–2017, the growth rates were markedly higher for most crops; in fact, for all selected commodities together, the second-largest one-year growth rate since 2013 was recorded (+18%).

Sugarcane added the most certified area in 2016–2017, almost doubling (+88.5%), mainly because ProTerra reported sugarcane area for the first time (1.1 million hectares). Cotton grew 67% thanks to a substantial increase of the BCI- and CmiA-certified area. Most other commodities expanded at least 10% (bananas, cocoa and tea).

However, the oil palm area grew just 1.4%. The coffee area decreased by 8.5%, mainly due to stricter procedures for data collection and analysis during the audit process. The soybean area declined by 30.2%, primarily because of a major drop in the ProTerra soybean area (Table 6).

6. These growth rates are calculated by taking the minimum area possible as the reference.

Double-digit area shares for many commodities

The commodities with large certified areas – cotton, cocoa and coffee – also had the highest certified shares of the total area (Table 1):

- In 2017, one of the standards covered in this report certified almost 25% of the global cocoa area and more than 23% of the global coffee area. UTZ had the highest share for cocoa, and was the first label to break the 20% mark, with 23% of global cocoa UTZ-certified. The label with highest certified share of the coffee area was 4C, which had nearly 15% of the global coffee area (Tables 6 and 8).
- Certified tea reached 16.4% of the total tea area, with Rainforest Alliance having highest share (13.5%).
- Certified cotton accounted for more than 16% of the global cotton area in 2017. BCI, the label with the highest share, reached 11.2%.
- Oil palm achieved a double-digit area share at 11.9%, almost all of which was certified by RSPO (11.8%).
- Sugarcane (7.6%), bananas (6%) and soybeans (1.5%) had the lowest shares.

For more details about the commodities by sustainability standard, see Table 88.

For all statements made in this section on agricultural commodities, it should be noted that, for methodological reasons, we are referring to the minimum possible values. To calculate this, we assume that multiple sustainability standards certify all areas. The minimum corresponds to the standard with the largest compliant area operating within a given sector. Readers should bear in mind that the per crop areas, shares and growth rates might actually be considerably higher.

Production

Production data are often incomplete and based on estimates, so it is difficult to compare production data with area data. Generally, however, it can be said that production shows the same trends as area.

Cocoa, coffee and tea had the biggest shares of total production. Cocoa grew the most (+19%) in 2016–2017 (Table 2).

Data for cotton, oil palm and sugarcane are missing. But it can be assumed that at least 19 million metric tons of compliant commodities were produced for the remaining products, with bananas showing the greatest volume at almost 9 million tons (Table 2).

Table 2: Production volumes of the selected commodities, 2017

Commodity	Estimated production based on minimum (metric tons)	Share of total area for the commodity	Change 2016/2017	Change 2013–2017
Bananas	8,567,899	5.6%	5.0%	88.7%
Cocoa	1,526,660	29.4%	18.8%	58.2%
Coffee	2,406,680	26.1%	-12.9%	-7.8%
Soybeans	5,201,809	1.5%	-4.0%	34.3%
Tea	1,275,424	20.9%	11.3%	71.0%

Note: The data in this table were not adjusted for multiple certification, thus the minimum possible is reported. The total VSS-compliant production corresponds to the standard with the largest compliant production operating within a given sector by country.

Source: FiBL-ITC-SSI survey, 2019; 4C Services, 2014, 2015, 2016, 2018 and 2019; Bonsucro, 2014, 2015, 2016, 2018 and 2019; Fairtrade International, 2017, 2018 and 2019; GLOBALG.A.P., 2015, 2016, 2018 and 2019; FiBL survey, 2019; ProTerra Foundation, 2014, 2015, 2016, 2018 and 2019; Rainforest Alliance, 2014, 2015, 2016, 2018 and 2019; Roundtable on Sustainable Palm Oil, 2019; Round Table on Responsible Soy, 2014, 2015, 2016, 2018 and 2019; Textile Exchange 2013–2019; UTZ, 2014, 2015, 2016, 2018 and 2019.

Forestry

A total of 430 million hectares were certified in the forestry sector, representing 10.8% of the global forestry area. PEFC holds the highest share of the global forestry area (7.5%). While growth in 2000–2017 was very strong (+1,000%), the increase was a modest 2.1% in 2016/2017 (Table 3).

No production data are available for forestry.

Table 3: Forest area, 2017

Commodity	FSC and PEFC certified area [hectares]	Share of total area [%]	Growth 2016–2017 [%]	Growth 2010–2017 [%]	Growth 2000–2017 [%]
Forest	430,429,302	10.8 %	2.1%	27.9%	1000.8%

Note: FSC and PEFC joined forces in 2016 and produced a common data set with multiple certification taken into account. The joint data set is available for 2000, 2005, 2010 and 2015–2018.

Source: FSC-PEFC, 2019.

SUSTAINABILITY STANDARDS CONTINUE TO GROW

Agricultural standards

Area

This section examines the total area and producers certified by the sustainability standards. These values therefore include crops that are not covered in this report (see section called Development of the selected commodities on page 13).⁷ Multiple certification makes it impossible to determine the total certified area or the growth or certified shares of all farmland.

The sustainability standard with the largest certified area is organic (Table 4), which also has the biggest share of agricultural land (1.4%). However, the strongest growth in 2013–2017 was achieved by single-sector standards (BCI, RTRS and CmiA, which almost tripled).

The same applied to growth rates in 2016–2017, when BCI grew by two-thirds and CmiA and Bonsucro by one-third. All sustainability standards except 4C grew over this one-year period (Table 4).⁸

Area and area share

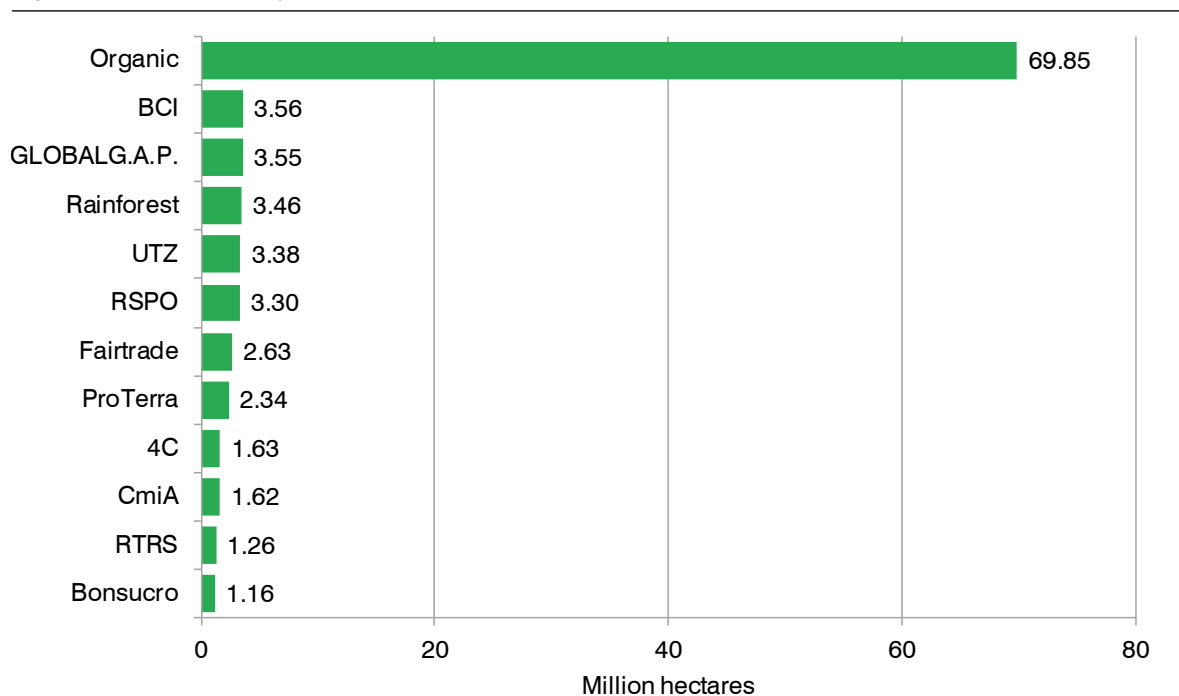
More than 69.8 million hectares were organic-certified in 2017 (including land that is in the process of becoming certified as organic), representing 1.4% of all agricultural land worldwide. Organic is the biggest sustainability standard in terms of area (Figure 1, Table 4) and the one with the largest variety of agricultural products (Willer and Lernoud, 2019).

Three standards each cover around 3.5 million hectares: BCI, GLOBALG.A.P. and Rainforest Alliance. BCI certified almost 3.6 million hectares, making it the standard with the second-largest area.

7. For instance, almost 70 million hectares are organic-certified (Figure 5). However, the commodities covered in this report only account for 2.5 million hectares (Figure 6).

8. This can be explained primarily by the stricter procedures for data collection and analysis during the various stages of the audit process implemented by 4C Services (4C, 2019).

Figure 2: Certified area by standard, 2017



Sources: FiBL-ITC-SSI survey, 2019; 4C Services, 2019; Better Cotton Initiative (BCI), 2019; Bonsucro 2019; Cotton made in Africa (CmiA), 2019; Fairtrade International, 2019; GLOBALG.A.P., 2019; FiBL survey, 2019; ProTerra Foundation, 2019; Rainforest Alliance, 2019; Roundtable on Sustainable Palm Oil (RSPO), 2019; Round Table on Responsible Soy (RTRS), Textile Exchange 2019; 2019; UTZ 2019.

Table 4: Selected sustainability standards: Key indicators

Standard	Total area [ha]	Producers [no.]	Share of total agricultural area*	Area growth 2016–2017	Area growth 2013–2017
4C	1,630,546	526,633	0.03%	-10.7%	11.3%
BCI	3,561,000	1,016,098	0.07%	67.4%	197.2%
Bonsucro	1,161,100	72	0.02%	34.9%	26.3%
CmiA	1,619,469	1,033,483	0.03%	37.0%	133.9%
Fairtrade	2,634,678	1,520,110	0.05%	14.3%	35.1%
GLOBALG.A.P.	3,548,194	183,598	0.07%	7.7%	26.2%
Organic	69,845,243	2,858,358	1.4%	20.8%	61.7%
ProTerra	2,339,259	1,349 (2016)	0.03%	22.1%	58.1%
Rainforest Alliance	3,458,167	1,304,160	0.07%	11.4%	15.8%
RSPO	3 301 088	92,398	0.07%	2.0%	
RTRS	1,259,672	32,646 (2016)	0.03%	20.8%	179.9%
UTZ	3,376,870	987,493	0.07%	23.6%	97.9%

Sources: FiBL-ITC-SSI survey, 2019; 4C Services, 2019; Better Cotton Initiative (BCI), 2019; Bonsucro, 2019; Cotton made in Africa (CmiA), 2019; Fairtrade International, 2019; GLOBALG.A.P., 2019; FiBL survey, 2019; ProTerra Foundation, 2019; Rainforest Alliance, 2019; Roundtable on Sustainable Palm Oil (RSPO), 2019; Round Table on Responsible Soy (RTRS), 2019;

Many of the sustainability standards certify only one commodity, so the share of total agricultural land is somewhat misleading. For the share of each commodity that is certified, see Table 8.

Area growth

All sustainability standards expanded by double digits in 2013–2017. BCI and RTRS reported the most growth, almost tripling in area.

While 4C declined almost 11% in 2016–2017, the other sustainability standards grew over that period.⁹ Furthermore, all showed double-digit growth except GLOBALG.A.P. (+7.7%) and RSPO (+1.3%). The single-sector standards BCI, Bonsucro and CmiA achieved the highest growth rates (Table 4).

Area share

Looking at the share of certified area, organic is the only standard to have exceeded 1% of the global agricultural land. However, there are many countries, in which a higher share of agricultural land is certified organic, in 14 countries, more than 10% of the farmland is organic (Willer and Lernoud, 2019).

All other sustainability standards certify less than 1% of agricultural land worldwide. Still, some countries have considerably higher shares. For example, more than 16% of the farmland in Belize and Fiji is Fairtrade-certified. RSPO has certified 11.6% of the farmland in Papua New Guinea and UTZ has certified 6.7% of the farmland in Côte d'Ivoire.

Producers

Table 4 also shows the number of producers¹⁰ under each of the analysed sustainability standards. While organic has the highest numbers of producers (almost 3 million), other standards with markedly less certified area than organic also have high numbers.

For example, Fairtrade reported 1.5 million producers and Rainforest Alliance 1.3 million. This apparent contradiction can be explained by the fact that most of the sustainability standards presented here focus on the global South, where smallholders prevail.

On the other hand, organic is prominent globally, including countries where large farms dominate, such as Australia and the United States. It should also be noted that for organic, the producer data are not complete for many countries.

Forestry

Looking at the two forestry standards – FSC and PEFC – the data show that, with more than 313 million hectares, PEFC has the larger area and, accordingly, also a higher share of total forest area (7.5%). This standard also enjoyed higher growth rates in both 2013–2017 (+23.8%) and 2016–2017 (+4%) (Table 5).

Table 5: Forest area by standard, 2017

Commodity	Total certified area [ha]	Share of total forest area [%]	Growth 2016–2017 [%]	Growth 2013–2017 [%]
FSC	198,862,289	4.9%	1.3%	6.6%
PEFC	313,485,220	7.5%	4.0%	23.8%

Source: FSC and PEFC, 2019.

9. This can mainly be explained by the stricter procedures for data collection and analysis during the various stages of the audit process implemented by 4C Services (4C, 2019).

10. For a definition of producers, see Methodology.

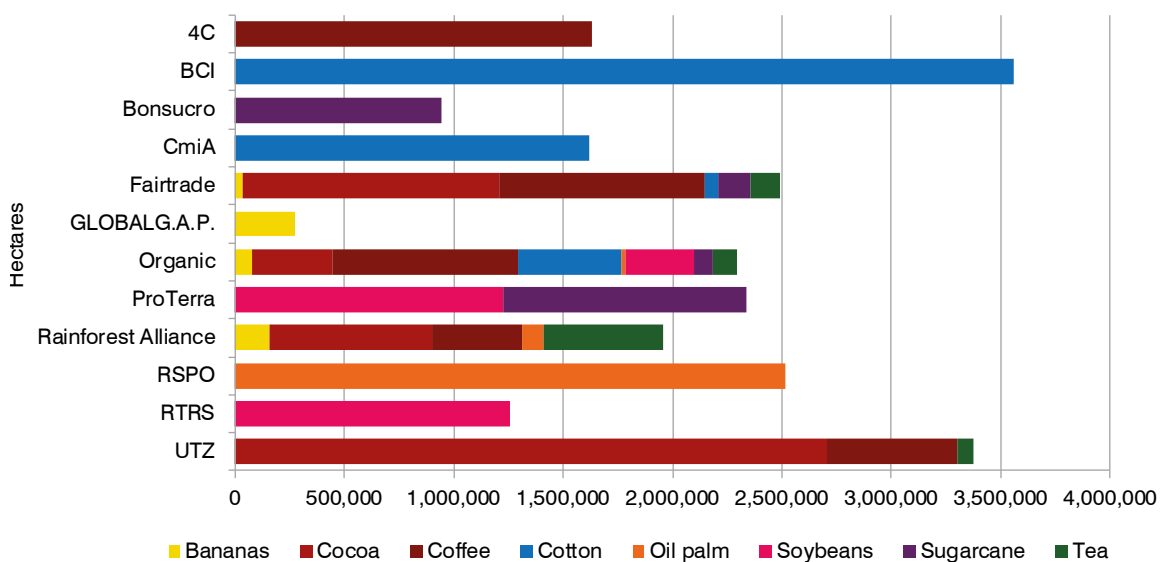
SINGLE-SECTOR STANDARDS STILL DOMINATE

Standards that directly target mainstream adoption within a specific sector largely drive growth and market uptake. In each of the sectors discussed, where single-commodity standards¹¹ have been developed (coffee, cotton, forestry, oil palm, sugarcane and soy), they are by far the largest standard for these commodities.

This is shown by the fact the 4C has the largest certified coffee area, BCI the largest certified cotton area, RPSO the largest palm oil area and RTRS the largest soy area (Figure 6, Table 6). The dominance of single-commodity standards is particularly remarkable given that they tend to be the newest standards on the market, with the exception of the forestry sector.

Multiple-commodity standards¹² such as Fairtrade, GlobalG.A.P, Organic, ProTerra, Rainforest Alliance and UTZ might have lower coverage of a specific commodity than single-commodity standards because of their wider scope. This is most notable for organic agriculture, which has nearly 2.3 million hectares for the eight agricultural products analysed in this report, but 69.8 million hectares in total, covering more or less all agricultural commodities.

Figure 3: Area harvested by standard and selected agricultural commodities, 2017



Sources: FiBL-ITC-SSI survey, 2019; 4C Services, 2019; Better Cotton Initiative (BCI), 2019; Bonsucro, 2019; Cotton made in Africa (CmiA), 2019; Fairtrade International, 2019; GLOBALG.A.P., 2019; FiBL survey, 2019; ProTerra Foundation, 2019; Rainforest Alliance, 2019; Roundtable on Sustainable Palm Oil (RSPO), 2019; Round Table on Responsible Soy (RTRS), Textile Exchange 2019; 2019; UTZ 2019.

11. Single-commodity standards: sustainability standards that certify only one commodity. An example is the Global Coffee Platform, which only certifies coffee.

12. Multiple-commodity standards: sustainability standards that certify multiple commodities. An example is Fairtrade International, which certifies a wide variety of commodities.

Table 6: Area for the eight commodities by sustainability standard, 2017

Standard	Commodity	Area harvested in hectares	Share of total area harvested	Change 2016/2017	Change 2013-2017
4C	Coffee	1,630,546	15.00%	-10.70%	11.30%
4C total selected crops		1,630,546	15.00%	-10.70%	11.30%
BCI	Cotton	3,561,000	11.20%	67.40%	197.30%
TOTAL - selected crops		3,561,000	11.20%	67.40%	197.30%
Bonsucro	Sugarcane	942,875	3.60%	9.50%	2.60%
Bonsucro total selected crops		942,875	3.60%	9.50%	2.60%
CmiA	Cotton	1,619,469	5.10%	66.00%	133.90%
CmiA total selected crops		1,619,469	5.10%	66.00%	133.90%
Fairtrade	Bananas	38,316	0.70%	5.00%	0.30%
	Cocoa	1,170,612	10%	62.10%	173.80%
	Coffee	938,158	8.70%	-10.40%	-7.20%
	Cotton	62,899	0.20%	25.80%	-27.6
	Sugarcane	146,388	0.60%	-4.30%	-3.80%
	Tea	135,155	3.30%	7.10%	25.90%
Fairtrade total selected crops		2,491,528	2.80%	16.70%	36.60%
GLOBALG.A.P.	Bananas	274,968	4.90%	7.60%	23.20%
GLOBALG.A.P. total selected crops		274,968	4.90%	7.60%	23.20%
Organic	Bananas	81,007	1.40%	57.30%	68.30%
	Cocoa	362,800	3.10%	13.30%	74.10%
	Coffee	849,675	7.80%	-5.10%	33.00%
	Cotton	472,999	1.50%	56.30%	124.20%
	Oil palm	20,000	0.10%	73.70%	455.60%
	Soybeans	505,564	0.40%	3.20%	68.00%
	Sugarcane	83,650	0.30%	-10.40%	56.40%
	Tea	113,755	2.80%	39.80%	59.20%
Organic total selected crops		2,489,450	1.10%	10.80%	62.10%
ProTerra	Soybeans	1,223,789	1.00%	-36.10%	-17.30%
	Sugarcane	1,115,470	4.30%		
ProTerra total selected crops		2,339,259	1.60%	22.10%	58.10%
Rainforest	Bananas	161,084	2.90%	11.30%	103.00%
	Cocoa	740,822	6.30%	7.00%	-11.60%
	Coffee	411,415	3.80%	6.20%	-5.20%
	Oil palm	94,368	0.40%	48.40%	157.10%
	Tea	550,646	13.50%	17.50%	75.90%
Rainforest total selected crops		1,958,335	3.70%	11.50%	15.10%
RSPO	Oil palm	2,513,576	11.80%	1.40%	27.10%
RSPO total selected crops		2,513,576	11.80%	1.40%	27.10%
RTRS	Soybeans	1,259,672	1.00%	20.80%	179.90%
RTRS total selected crops		1,259,672	1.00%	20.80%	179.90%

Standard	Commodity	Area harvested in hectares	Share of total area harvested	Change 2016/2017	Change 2013-2017
UTZ	Cocoa	2,706,596	23.00%	29.10%	125.70%
	Coffee	592,977	5.50%	4.50%	25.10%
	Tea	77,298	1.90%	14.20%	136.00%
UTZ total selected crops		3,376,871	12.70%	23.60%	97.90%

Sources: FiBL-ITC-SSI survey, 2019; 4C Services, 2019; Better Cotton Initiative (BCI), 2019; Bonsucro, 2019; Cotton made in Africa (CmiA), 2019; Fairtrade International, 2019; GLOBALG.A.P., 2019; FiBL survey, 2019; ProTerra Foundation, 2019; Rainforest Alliance, 2019; Roundtable on Sustainable Palm Oil (RSPO), 2019; Round Table on Responsible Soy (RTRS), 2019; UTZ, 2019.

HIGHLIGHTS BY AGRICULTURAL AND FORESTRY PRODUCTS

This section provides an overview of the key statistics for each of the selected sectors (bananas, cocoa, coffee, cotton, palm oil, soy, sugarcane, tea and forestry products). Little information is available about the share of multiple certification. Therefore, the below provides information on the minimum area (100% multiple-certified) and the maximum area (no multiple certification occurring) along with the average.

For area and production data by sustainability standard and for the ranges, see Tables 7, 8, 9 and 10.

Data by country are available at www.sustainabilitymap.org/trends.

Bananas

Four of the sustainability standards covered in this report – **Fairtrade International**, **GLOBALG.A.P. organic** and **Rainforest Alliance** – certified banana production in 2017. Combined, they certified a minimum of 340,196 hectares and a maximum of 555,373 hectares (for an average of 447,785 hectares). In terms of the certified share of the global banana area, the minimum is 6%, the maximum is 9.9% and the average is 7.9%. With nearly 275,000 hectares, GLOBALG.A.P. had the largest certified banana area in 2017. Rainforest Alliance had the most growth in area in 2013–2017, doubling its coverage (Tables 7 and 8).

Cocoa

Four of the standards – **Fairtrade International, organic**, **Rainforest Alliance** and **UTZ** – certified cocoa production. Combined, they certified a minimum of 2.9 million hectares and a maximum of 5 million hectares in 2017 (an average of 3.95 million hectares). In terms of the certified share of the global cocoa area, the minimum is 23.4%, the maximum is 40.8% and the average is 32.1%. UTZ reported the largest certified cocoa area (2.7 million hectares), and the highest growth was reported for Fairtrade, whose area almost tripled in 2013–2017 (Tables 7 and 8).

Coffee

Five of the standards – **4C**, **Fairtrade International, organic**, **Rainforest Alliance** and **UTZ** – certified coffee production, with a combined minimum of 2.5 million hectares and a maximum exceeding 4.4 million hectares in 2017 (average: 3.45 million hectares). In terms of the certified share of the global coffee area, the minimum is 22.1%, the maximum is 37.6% and the average is 29.9%. 4C had the largest certified coffee area (more than 1.6 million hectares), while organic showed the greatest growth (+33%) in 2013–2017 (Tables 7 and 8).

Cotton

Four of the standards – **BCI**, **CmiA**, **Fairtrade International** and **organic** – certified cotton production. Combined, they certified a minimum of 5.2 million hectares and a maximum of 5.7 million hectares in 2017 (average: 5.45 million hectares). In terms of the certified share of the global cotton area, the minimum is 16.2%, the maximum is 17.9% and the average is 17%. With almost 3.6 million hectares, BCI had the largest certified cotton area, and it showed the highest growth; its area tripled in 2013–2017 (Tables 7 and 8).

Oil palm

Three of the standards – **organic**, **Rainforest Alliance** and **RSPO** – certified oil palm production. Combined, they certified a minimum of 2.54 million hectares and a maximum of 2.63 million hectares in 2017 (average: 2.58 million hectares). In terms of the certified share of the global oil palm area, the minimum is 11.5%, the maximum is 12% and the average is 11.7%. With 2.5 million hectares, RSPO had the biggest certified oil palm area, while organic, which had the smallest area, expanded the most; its area grew more than fivefold in 2013–2017 (Tables 7 and 8).

Soy

Three of the standards – **organic**, **ProTerra Foundation** and **RTRS** – certified soybean production. Combined, they certified a minimum of 1.8 million hectares and a maximum of almost 3 million hectares in 2017 (average: 2.4 million hectares). In terms of the certified share of the global soybean area, the minimum is 1.5%, the maximum is 2.4% and the average is 1.9%. RTRS had the largest certified soybean area (1.3 million hectares) and reported the most growth; it almost tripled its soy area in 2013–2017 (Tables 7 and 8).

Sugarcane

Four of the standards – **Bonsucro**, **Fairtrade International**, **organic** and **ProTerra Foundation** – certified sugarcane production. Combined, they certified a minimum of 2 million hectares and a maximum of 2.3 million hectares in 2017 (average: 2.1 million hectares). In terms of the certified share of the global sugarcane area, the minimum is 7.6%, the maximum is 8.8% and the average is 8.2%. ProTerra had the largest sugarcane area (1.1 million hectares), while organic increased the most (more than 50%) in 2013–2017 (Tables 7 and 8).

Tea

Four of the standards – **Fairtrade International**, **organic**, **Rainforest Alliance** and **UTZ** – certified tea production. Combined, they certified a minimum of almost 669,000 hectares and a maximum of nearly 877,000 hectares in 2017 (average: almost 773,000 hectares). In terms of the certified share of the global tea area, the minimum is 16.4%, the maximum is 21.5% and the average is 19%. Rainforest had the largest certified tea area (more than a half-million hectares). UTZ, whose area more than doubled, reported the most growth in 2013–2017 (Tables 7 and 8).

Forestry

In 2017, an estimated 430 million hectares of certified forest were reported, representing almost 11% of the global forest area. The certified forest area grew 30% in 2010–2017. Most of the managed certified forest area was in North America (48%), followed by Europe (36%) (Tables 3 and 5).



CHAPTER 2

MEETING THE SUSTAINABILITY STANDARD

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www.4C-services.org

4C

The 4C project (Common Code for the Coffee Community), was initiated in 2003 through an extensive participatory, transparent and balanced consultation with coffee stakeholders worldwide. As of April 2016, the 4C Association evolved into the Global Coffee Platform and handed over the responsibility of operating the 4C certification system to 4C Services. Based on independent third-party audit procedures, compliance with the 4C Code of Conduct is assessed at the producer and processing level under two main components:

- 10 Unacceptable Practices that must have to be excluded before applying for 4C certification;
- 27 Principles across economic, social and environmental dimensions based on good agricultural and management practices as well as international conventions and recognized guidelines in the coffee sector.

4C stands for climate-friendly coffee. The carbon footprint from coffee production can be significantly reduced by no emissions regarding land use change, improved agricultural practices, reduced fertilizer application, soil conservation and efficient energy use. Its certification system aims to promote sustainable coffee production that respects people, nature and the climate.

Through the strict application of the 4C Code of Conduct, including improvement plans for participating farmers, 4C helps protect landscapes with high biodiversity and carbon values, safeguard natural resources and promote working conditions along the supply chain. The resulting impacts therefore directly and indirectly contribute on many levels to achieving the United Nations Sustainable Development Goals.

4C also incorporates advanced and innovative tools during the auditing process, including the latest remote sensing technologies and other tools to support risk assessments and verification of compliance based on land use change criteria (4C, 2019).

In 2017, more than 1.6 million hectares of coffee worldwide received a 4C licence, representing 0.03% of global agricultural land and 15% of the global coffee area. Almost 527,000 producers were 4C-licensed and produced more than 2.4 million metric tons of coffee. Brazil had the largest 4C area (exceeding 647,000 hectares), followed by Colombia (342,378 hectares), Indonesia (nearly 136,000 hectares) and Viet Nam (almost 124,000 hectares). In 2008–2016, the 4C licence area grew almost sevenfold; however, it dropped by almost 11% in 2016–2017.

4C: Key indicators	
Area [hectares]	1,630,546
Share of 4C area of global agricultural land	0.03%
Share of 4C coffee area of global coffee area	15%
Production volume [metric tons]	2,406,679.8
Production volume sold under the label [metric tons]	536,161
Certificate holders [No.]	301
Producers [No.]	526,633

Explore the latest trends at www.sustainabilitymap.org/trends



www.bettercotton.org



BETTER COTTON INITIATIVE

The Better Cotton Initiative – a global non-profit organization founded in 2005 – is the largest cotton sustainability programme in the world. The Better Cotton Standard System includes seven Better Cotton Principles and Criteria, which lay out the global definition of Better Cotton. Adhering to these principles and criteria enables BCI farmers to produce cotton in a way that is measurably better for people, the environment and farming communities.

The initiative is in its ‘mainstreaming phase’ and aims to transform cotton production worldwide by developing Better Cotton as a sustainable mainstream commodity. By 2020, BCI hopes to train 5 million farmers worldwide on more sustainable agricultural practices, and account for 30% of global cotton production.

The programme focuses on building the capacity of participating farmers to adopt cotton production practices aligned with the Better Cotton Principles and Criteria, such as more sustainable water conservation approaches and pest management techniques.

The Better Cotton Growth and Innovation Fund was established in 2016 with IDH, The Sustainable Trade Initiative, BCI Retailer and Brand Members, and other public and private donors to support BCI in its mission. The fund invested significant resources in 2017–2018, reaching more than 1 million farmers through Better Cotton projects in China, India, Pakistan, Mozambique, Senegal, Tajikistan and Turkey (BCI, 2019). In 2015, BCI began an extensive review of the Better Cotton Principles and Criteria that ended in 2018. The initiative uses third-party verification to ensure compliance (Potts et al., 2014).

BCI certified nearly 3.6 million hectares worldwide in 2017, representing 0.07% of the global agricultural area and 11.2% of the global cotton area. More than 1 million producers participated in its programmes, and 4.6 million metric tons of cotton lint were produced in 2017. India has the largest BCI area (905,000 hectares), with 8% of its cotton area BCI-certified. It is followed by Brazil, with 866,000 hectares (87% of the country’s cotton area), and Pakistan, with 811,000 hectares (29.8% of the country’s cotton area). The BCI-certified area grew eightfold in 2011–2017 and almost 70% in 2016–2017.

BCI: Key indicators	
Area [hectares]	3,561,000
Share of BCI area of global agricultural land	0.07%
Share of BCI cotton area of global cotton area	11.2%
Certificate holders [No.]	1,235
Cotton lint [metric tons]	4.6 million
Producers [No.]	1,016,098

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BONSUCRO

Bonsucro is a non-profit organization setting standards for sustainable production of sugarcane, with a community of more than 540 members, from farms, mills, non-governmental organizations and civil society to traders, retailers and end users.

Its vision is a sugarcane sector with thriving, sustainable producer communities and resilient, assured supply chains. Its mission is to ensure that responsible sugarcane production creates lasting value for the people, communities, businesses, economies and ecosystems in all cane-growing countries.

Bonsucro has certified sugarcane since 2011 at the mill level, where mills engage with their supplying farmers to adopt more sustainable production practices (Bonsucro, 2018c). By 2019, 107 sugar mills were Bonsucro-certified. Products certified by Bonsucro (including sugar, ethanol, molasses and bagasse) are traded physically and via a credit-trading-scheme that supports the sustainable production and processing of sugarcane.

The Bonsucro Production Standard and the Chain-of-Custody Standard guide the certification process and underpin efforts to change the sector. In 2018, Bonsucro launched a version of its Production Standard tailored to a smallholder farming context. A revised version of the Chain of Custody Standard was published in 2019, and the Production Standard is being revised in 2019–2020.

In addition to its standards, Bonsucro offers tools and programmes, such as performance improvement through certification acceleration programmes, benchmarking schemes, providing market-based value via productivity and professionalism, assisting smallholder farmers, technical support, and monitoring and evaluating (Bonsucro, 2018a, 2018b; Viart et al., 2017).

Bonsucro certified 1,161,100 hectares in 2017, of which 943,000 hectares were sugarcane. That represents 0.02% of the global agricultural area and 3.6% of the global sugarcane area. In 2017, 72 producers grew almost 75 million metric tons of Bonsucro-certified sugarcane. Brazil had the largest certified sugarcane area (more than 812,000 hectares), followed by Argentina (27,090 hectares). Bonsucro’s total certified area increased by almost 63% in 2011–2017 and by 35% in 2016–2017.

Bonsucro: Key indicators	
Area [hectares]	1,161,100.4
Share of Bonsucro area of global agricultural land	0.02%
Share of Bonsucro sugarcane area of global sugarcane area	3.6%
Production volume sugarcane [metric tons]	74,843,395
Producers [No.]	72
Certificate holders [no.]	57

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COTTON MADE IN AFRICA

Founded in 2005, Cotton made in Africa is an initiative of the Aid by Trade Foundation that aims to assist African cotton farmers to help themselves through trade (Cotton made in Africa, 2018b). It works with cotton farmers in nine countries, and specifically with smallholder farmers, who cultivate rain-fed, handpicked cotton in accordance with the CmiA standard criteria, which are regularly verified for compliance (Cotton made in Africa, 2018d, 2018a).

In 2009–2016, CmiA obtained significant support from the Competitive African Cotton Initiative, which focused on building the capacity of African cotton farmers to adopt more sustainable farming practices.

About 40% of all African cotton was grown in accordance with the CmiA standard in 2017. More than 1 million smallholder cotton farmers are part of the initiative (Cotton made in Africa, 2017). Demand for CmiA cotton by international retailers and brands led to the fabrication of some 90 million CmiA-labelled textiles representing more than €2 million (\$2.2 million) in license revenues – an increase of about 49% compared to 2016 (Cotton made in Africa, 2017).

Income from licensing fees is reinvested to benefit farmers and nature protection. The Aid by Trade Foundation directly invested €1.7 million euros (\$1.9 million) in e.g. training measures for the smallholders and accompanying cooperation projects as part of the project implementation (Cotton made in Africa, 2017).

More than 1.6 million hectares were CmiA-verified in 2017, representing 0.03% of the global agricultural area and 0.1% of the African agricultural area. Looking solely at the cotton area, the shares are considerably higher: the CmiA area represents 5.1% of the global cotton area and almost 35% of the African cotton area.

In 2017, Burkina Faso had the largest area (810,265 hectares), followed by Côte d'Ivoire (more than 224,000 hectares) and Zambia (209,705 hectares). The CmiA-certified area increased more than fivefold in 2008–2017. Growth of 66% was reported in 2016–2017.

CmiA: Key indicators	
Area [hectares]	1,619,469
Share of CmiA area of global agricultural land	0.03%
Share of CmiA cotton of global cotton area	5.1%
Certificate holders [No.]	18
Producers [No.]	1,033,483
Cotton lint production [MT]	495,839

Explore the latest trends at www.sustainabilitymap.org/trends



www.fairtrade.net

FAIRTRADE INTERNATIONAL

Fairtrade International is a global network working to share the benefits of trade more equally – through standards and certification, producer support, focused programmes, advocacy and awareness raising.

Three Fairtrade producer networks co-own the international Fairtrade system, representing more than 1.7 million farmers and workers in 75 countries in Latin America and the Caribbean, Africa and the Middle East, and Asia and the Pacific. More than 25 organizations promote Fairtrade on a national level, supporting and challenging businesses and governments to increase commitments to sustainable production and consumption, as well as connecting farmers and workers with the people who buy their products.

The first Fairtrade label was launched in 1988 in the Netherlands, called Max Havelaar after a fictional Dutch character who opposed the exploitation of coffee pickers in Dutch colonies. Following the growth of additional Fairtrade initiatives in other countries, Fairtrade International was founded in 1997 to unite the national Fairtrade organizations under one umbrella and harmonize worldwide standards and certification. Fairtrade International sets standards for smallholder farmers, for plantations that use hired labour and for traders, setting out social, economic and environmental requirements. All entities along the supply chain must be certified for the end product to carry the Fairtrade label.

The standards require buyers to pay a set Fairtrade minimum price to producers for most goods. That price is based on the average cost of sustainable production and acts as a safety net when market prices fall.

Producers also receive a Fairtrade premium, a required additional amount on top of the selling price, which farmers and workers decide how to invest in their businesses and communities. Fairtrade partners with other stakeholders on solutions to issues that affect producers, including climate change, human rights such as tackling child and forced labour, and enabling farmers and workers to earn a decent living (Fairtrade, 2019).

More than 2.6 million hectares were Fairtrade-certified in 2017, representing 0.05% of the global agricultural area. Fairtrade International certifies a wide range of commodities, from tropical fruit to cereals, gold and textiles.

Cocoa accounted for almost half of the total Fairtrade International area, with nearly 1.2 million hectares, or close to 10% of the global cocoa area. Coffee was the second most important product after cocoa, with more than 938,000 hectares, representing 8.7% of the global coffee area. Fairtrade International certified over 1.5 million farmers and more than 190,000 agricultural workers in 2017, mainly in Africa (66%), followed by Latin America (20%) and Asia (9%). The Fairtrade-certified area expanded more than 92% in 2011–2017 and by 14% in 2016–2017.

Fairtrade: Key Indicators	
Area [hectares]	2,634,678
Share of Fairtrade area of global agricultural land	0.05%
Production [metric tons.]	3,705,314.1
Producers [No.]	1,520,110

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www.fsc.org/en



FOREST STEWARDSHIP COUNCIL

Founded in 1993, the Forest Stewardship Council is a member-based initiative with certificates operating in 122 countries. The core FSC standard for forest management – the FSC Principles and Criteria – articulates the requirements for forest management certification. To ensure that the global principles and criteria are well suited for national and regional contexts, standard development groups are formed to establish national and regional standards.

Based on annual field and office audits, independent, accredited certification bodies issue forest management and chain-of-custody certificates, which correspond to the different origins and stages of production of forestry goods through the value chain. Forest management certification aims to protect the environmental and social values of managed forests including, but not limited to, protection of areas of high conservation value and the rights of indigenous peoples.

FSC chain-of-custody certification ensures that FSC-certified wood can be traced through certified supply chains. Products must be made up of at least 70% FSC-certified material to display the FSC Mix label (the initiative’s most common label). The remainder can be FSC Controlled Wood or recycled material.

The controlled wood standard aims to avoid unacceptable material in the FSC supply chain. FSC Controlled Wood status ensures that wood is harvested legally in accordance with traditional and human rights and is not sourced from areas where forest management activities threaten high conservation values, from forests with genetically modified trees or from areas being converted to give way to plantations or other non-forest uses (FSC, 2019).

Almost 199 million hectares of forest were FSC-certified in 2017 (data per January 2018), representing 4.9% of the global forest area. Canada had the largest area, with almost 54.5 million hectares, followed by the Russian Federation (nearly 46 million hectares) and the United States (almost 14 million hectares). Together, these three countries represented 57% of the global FSC-certified area. In 2017, there were 1,533 forest-management certificate holders and 33,626 chain-of-custody certificate holders.

Forest Stewardship Council: Key indicators	
Area [hectares]	198,862,289
Share of FSC area of global forestry area	4.9%
Forest-management certificate holders	1,533
Chain-of-custody certificate holders [No.]	33,626

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www.globalgap.org/uk_en/

GLOBAL G.A.P.

Founded in 1997, the Global Partnership for Good Agricultural Practices is a private initiative operating in the food and agriculture sector across 136 countries including the Integrated Farm Assurance Standard (IFA) and its scopes Aquaculture, Livestock and Crops.¹³

GLOBALG.A.P. started as an initiative by the Euro-Retailer Produce Working Group (EUREP)¹⁴ and has since become an international standard that is based on an equal partnership among producers of raw agricultural food products and their buyers, such as retailers and food service organizations. GLOBALG.A.P. standards are tools for the entire agri-food sector that cover food safety and environmental aspects as well as worker health and safety. GLOBALG.A.P. has more than 400 members worldwide and a farmer currently chairs its board.

GLOBALG.A.P. runs 40 standards for crops, livestock and aquaculture production. It also implements a chain-of-custody standard to ensure product segregation and traceability of the certified products. The 'localg.a.p.' programme provides buyers with a step-by-step approach to accessing local markets, which allows them to grow a supplier base that will eventually achieve certification against a GLOBALG.A.P. standard (GLOBALG.A.P., 2018a).

This approach enables growers engaging with the localg.a.p. programme to meet the minimum requirements for food safety and hygiene at its 'foundation' level before advancing to the full food safety and sustainability criteria that are included in the standards. For retailers and food service organizations looking to go beyond GLOBALG.A.P. certification, the standard modular approach offers add-ons that are tailor-made to address any particular needs. Examples are the GLOBALG.A.P. Risk Assessment on Social Practice, the Sustainable Program for Irrigation and Groundwater Use and the Tesco Nurture Program associated with a limited list of plant protection products (GLOBALG.A.P., 2018b).

In 2017, more than 3.5 million hectares were certified against the GLOBALG.A.P. standard,¹⁵ managed by almost 185,000 horticultural producers.¹⁶ The product with the largest non-covered area were potatoes, followed by bananas and apples. Most GLOBALG.A.P.-certified area is in Europe (44%), followed by Latin America (25%), Africa (12%) and North America (11%). Spain had the largest certified area (over 424,000 hectares), followed by the United States (more than 389,000 hectares) and Italy (over 215,000 hectares). The area certified by GLOBALG.A.P. increased by 33% in 2011–2017. Currently, a variety of 230 different fruit and vegetable products are certified with the IFA standard worldwide.

GLOBALG.A.P.: Key Indicators	
Area [hectares]	3,548,194.2
Share of global agricultural land	0.07%
Certificate holders [No.]	46,355
Producers [No.]	183,598

13. The GLOBALG.A.P. Certificate, also known as the Integrated Farm Assurance Standard (IFA), covers Good Agricultural Practices for agriculture, aquaculture, livestock and horticulture production. It also covers additional aspects of the food production and supply chain such as Chain of Custody and Compound Feed Manufacturing. More information is available on the GLOBALG.A.P. website at https://www.globalgap.org/uk_en/for-producers/globalg.a.p./integrated-farm-assurance-ifa/.

14. For more information about the history of GLOBALG.A.P. see the GLOBALG.A.P. website at https://www.globalgap.org/uk_en/who-we-are/about-us/history.

15. This includes many hectares covered by greenhouses and plastic tunnels for intensive production.

16. The number of producers includes crop producers only, and excludes livestock and aquaculture operators.



www.ifoam.bio/



IFOAM – ORGANICS INTERNATIONAL

Founded in 1972, IFOAM – Organics International is a membership-based umbrella organization representing the organic movement across the entire food system, with affiliates in 110 countries (Willer and Lernoud, 2019). It facilitates development towards truly sustainable agriculture systems based on the principles of organic agriculture. One of its tasks is setting reference standards and establishing quality assurance systems. Standards set at the national or regional level typically determine organic certification.

Many different organic standards may operate within a single country, and they may not follow the IFOAM standard or comply with those included in the IFOAM Family of Standards. Ninety-three countries have local organic standards, and 16 countries are in the process of drafting legislation (Huber et al., 2019).

IFOAM – Organics International focuses on three strategic areas that target the main drivers of the adoption of organic agriculture principles in a complementary and synergistic way: Enhancing know-how to increase supply, raising awareness to enhance demand and contributing to an environment that is truly conducive to sustainable production and consumption by supporting national and international policy development.

Unlike most other standard-setting organizations, IFOAM – Organics International is not involved in the certification and control process; all its efforts focus on the development of the organic sector. In 2017, 69.8 million hectares were certified organic worldwide, representing 1.4% of all agricultural land. At least 2.9 million producers in 181 countries were practising organic farming; most of them are certified through group certification. Australia has the largest organic area, with 35.6 million hectares, followed by Argentina (3.4 million hectares) and China (3 million hectares).

Almost all agricultural products can be certified according to organic standards and regulations. Indeed, organic has the widest range of commodities of all the standards presented in this report. Apart from agricultural commodities, wild collection, aquaculture and forestry products are certified. These areas covered more than 69 million hectares in 2017. The organic market was worth \$97 billion in 2017, and the leading countries were the United States (43% of the global organic market), Germany (11%) and France (9%).

FiBL collects data on organic agriculture every year and these data are published in the joint FiBL-IFOAM – Organics International publication *The World of Organic Agriculture* (Willer and Lernoud, 2019). Textile Exchange provided the data on organic cotton in this report. Production volume data are not available for most countries, so FiBL has estimated the area harvested and the production volume for the commodities covered in this report. It was assumed that 90% of the fully converted area was harvested. FiBL calculated the production volume by using estimated yields based on country yields provided by the Food and Agriculture Organization Corporate Statistical Database (FAOSTAT), assuming that organic has a lower yield in most cases.

IFOAM: Key indicators	
Area [hectares]	69,845,243
Share of organic of global agricultural land	1.4%
Producers [No.]	2,858,358
Retail sales [\$ million]	97,000

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PROGRAMME FOR THE ENDORSEMENT OF FOREST CERTIFICATION

Founded in 1999, the Programme for the Endorsement of Forest Certification is a global alliance of independent national standard-setting bodies and international stakeholder members. PEFC is represented in 51 countries via its national organizations (PEFC, 2019). The initiative manages the PEFC Sustainability Benchmarks, which set baseline requirements for national standards initiatives to be endorsed by PEFC.

PEFC is an international umbrella organization that develops forest management and chain-of-custody standards and provides independent assessment and endorsement of national forest certification systems. It operates on a business-to-consumer basis, developing standards and marketing the PEFC label to ensure sustainable forestry practices.

PEFC continues to push the boundaries of forest certification by challenging its members to address various sustainability challenges. In 2018, PEFC moved group certification into the focus, enabling more smallholders to benefit from affordable certification. PEFC expanded the social requirements and gender equality in its Benchmark Standards that same year, and included the certification of trees outside forests, as they also provide valuable ecosystem services (PEFC, 2019).

As of March 2019, more than 311 million hectares of forest worldwide were PEFC-certified – that is 9% of the global forest area. Canada had the largest PEFC-certified forest area, with more than 132 million hectares, followed by the United States and Russia. There were 11,537 chain-of-custody certificate holders in March 2019.

PEFC: Key indicators		
	2017	2018
Forest area [hectares]	313,485,220	311,776,983
Share of total forest area [%]	7.5%	9%
Chain-of-custody certificate holders [No.]	11,484	11,537

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www.proterrafoundation.org/

PROTERRA FOUNDATION

The ProTerra Foundation, a not-for-profit organization that was created in 2006 and became an independent foundation in 2012, is registered in the Netherlands and operates in 39 countries (The ProTerra Foundation, 2018).

The ProTerra standard is based on the Basel Criteria for Sustainable Soy Production, but was designed to apply to all agricultural products (ProForest, 2004). The ProTerra standard has been applied primarily to the sustainable production of soy and soy-derived consumer products. However, it is also being used in the sugarcane, tapioca and tree nut sectors, and may be applied to the production of any crop.

All certified products arrive in the market as “identity preserved”, meaning there is full traceability and the raw material comes from certified production.

The ProTerra Foundation standard version 4.0 was last revised in 2018 and will be fully deployed as of 1 January 2020. Its key components centre around the protection of the Amazon, Cerrado, Chaco biomes, and other High Conservation Value Areas; the protection of the rights of communities, indigenous people and smallholders; the promotion of good labour practices such as workplace safety, equal opportunities and particular attention to preventing child and forced labour; the promotion of good agricultural practices, especially regarding soil fertility, water management and continuous efforts to reduce the use of fertilisers and pesticides; and the protection of biodiversity, particularly through rigorous non-GMO requirements (ProTerra Foundation, 2019).

In 2017, 2.3 million hectares were ProTerra-certified. The ProTerra standard applied mainly in soybean and sugarcane production (ProTerra reported sugarcane data for the first time in 2017).

Some 1.2 million hectares of soybeans, representing 1% of the global soybean area, and more than 1.1 million hectares of sugarcane, or 4.3% percent of the global sugarcane area, were reported in 2017. ProTerra-certified producers were active in 18 countries. The largest area was in Brazil representing more than half of the global ProTerra Foundation area.

The ProTerra-certified area has grown significantly since 2006. Including the sugarcane area led to an increase of almost 22% in 2016–2017, while the soybean area dropped over this period. Provisional figures for 2018 show further growth, both for sugarcane and soybeans.

ProTerra: Key indicators 2017	
Area [hectares], total	2,339,259
▪ Soybeans	1,223,789
▪ Sugarcane	1,115,470
Share of global agricultural land	0.03%
▪ Share of global soybean area	1.0%
▪ Share of global sugarcane area	4.3%
Producers [No.]	564

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www.rainforest-alliance.org/



RAINFOREST ALLIANCE

Rainforest Alliance and UTZ recently merged, forming a new organization that carries forward the Rainforest Alliance name. Rainforest Alliance is an international non-profit organization working to create a better future for people and nature. Both sustainability standards work in similar agricultural commodity sectors, which primarily include coffee, tea and cocoa.

In addition, Rainforest Alliance certifies palm oil, cattle, bananas and cut flowers, while UTZ certifies hazelnuts. Rainforest Alliance and UTZ certification programmes will continue to operate in parallel until a new certification programme is published at the end of 2019 (with transition beginning in 2020).

The Sustainable Assistance Network was the sole standard-setting body for Rainforest Alliance-certified agricultural products until November 2017, but has since moved on from this role. The Rainforest Alliance Sustainable Agriculture standard has replaced the Sustainable Assistance Network standard, and authorized certification bodies will continue to audit participating farmers against the standard, which will be combined with the UTZ Codes into a new certification programme by 2019 (Rainforest Alliance, 2018).

Rainforest Alliance continues to manage labelling and marketing support of Rainforest Alliance-compliant goods. It owns the trademark and manages the traceability, labelling and marketing of Rainforest-certified products. Farms meeting the requirements of the standard can sell their products as Rainforest Alliance-certified and use the Rainforest trademarks. These functions will be maintained and will evolve as the Rainforest Alliance and UTZ merger advances (Rainforest Alliance, 2019).

Rainforest Alliance certified almost 3.5 million hectares of a wide variety of commodities in 2017, managed by 1.3 million producers. Cocoa had the largest area (741,000 hectares), followed by tea (more than 550,000 hectares) and coffee (more than 411,000 hectares).

Most Rainforest Alliance-certified area was in Africa (48%), followed by Latin America (34%), Asia (15%) and Europe (2%). Côte d'Ivoire had the largest area (more than 618,000 hectares), followed by Brazil (almost 367,000 hectares) and Kenya (nearly 354,000 hectares). The Rainforest-certified area grew almost fivefold in 2010–2017.

Rainforest Alliance: Key indicators	
Area [hectares]	3,458,167.1
Share of Rainforest Alliance of global agricultural land	0.07%
Producers [No.]	1,304,160
Certificate holders	2,910
Production [metric tons]	15,978,382.2
Production sold under the Rainforest label [metric tons]	885,010.6

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ROUNDTABLE ON SUSTAINABLE PALM OIL

Founded in 2004, the Roundtable on Sustainable Palm Oil is a member-based initiative operating in the palm oil sector across 89 countries, with 16 countries producing RSPO-certified oil palm (RSPO, 2017a). The initiative aims to achieve mainstream market uptake of palm oil production and processing.

Accredited bodies certify palm oil producers by verifying the production process in keeping with the RSPO principles and criteria. Certification can be withdrawn at any time in case of infringement of the rules and standards. Elements of the RSPO certification scheme include the standard itself, accreditation and the process requirements. RSPO principles and criteria are developed and revised every five years (RSPO, 2016).

RSPO continues to expand and work towards capturing more market share. In December 2017, it announced the formation of the North American Sustainable Palm Oil Network, which aims to mainstream sustainable palm oil in North America (RSPO, 2017b). It is expanding steadily in South America and specifically in Colombia and Brazil.

By establishing the RSPO smallholder task force and fund, it hopes to make its certification programme accessible to palm oil producers (Andrade, 2016; RSPO, 2018; Voora, 2014).

More than 3.3 million hectares were certified by RSPA and of these, 2.5 million hectares of oil palm were RSPO-certified in 2017, representing 0.05% of the global agricultural land and 11.8% of the global oil palm area.

The largest areas were in Indonesia (over 1.3 million hectares), Malaysia (almost 734,000 hectares) and Papua New Guinea (more than 140,000 hectares). Asia has 84% of the RSPO area, followed by Latin America (9%) and Oceania (6%). The RSPO-certified oil palm area grew almost 30% in 2013–2017. An increase of 1.4% was reported in 2016–2017.

RSPO: Key indicators	
Area [hectares]	3,301,088
Share of RSPO of global agricultural land	0.07%
RSPO harvested palm oil area [hectares]	2,513,576
Share of global palm oil area	11.8%
Producers [No.]	92,398

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ROUND TABLE ON RESPONSIBLE SOY

Founded in 2006, the Round Table on Responsible Soy is a member-based initiative functioning as a multi-stakeholder platform that works to achieve responsible soy value chains. The main motivation behind its creation was to lower soy production impacts on the Amazon and Cerrado ecosystems of South America (Confino, 2014; WWF, 2017). Consequently, RTRS started its operations primarily in South America, but expanded over time to Asia, Africa and North America.

The initiative develops and manages products and chain-of-custody standards for responsible soy production and operates across eight countries (Round Table on Responsible Soy, 2017).

Demand is expected to grow, as 14 of the 17 new RTRS members are from industry, trade and the finance sector (Round Table on Responsible Soy, 2017). Three-quarters of all soy production is destined for animal and fish feed, and the Aquaculture Stewardship Council recently incorporated a requirement for its feed manufacturers to source strictly RTRS-certified soy (Confino, 2014; Round Table on Responsible Soy, 2017).

RTRS offers a generic set of principles and criteria explicitly designed to apply to genetically modified, conventional and organic production systems. Version 3.0 of the RTRS Soy Production Standard, which was approved in 2016, includes zero deforestation provisions for all natural conservation areas.

In 2017, RTRS made two important changes to the standard by including a requirement to phase out paraquat by 2021 and updating the biofuel-specific module (RTRS EU-RED) to align it with European Commission requirements (Round table on Responsible Soy, 2017).

RTRS certified nearly 1.3 million hectares in 2017, representing 0.03% of the global agricultural area and 1% of the global soybean area. More than 32,600 producers harvested more than 4.1 million metric tons of soybeans worldwide.

Brazil had the largest RTRS area (990,419 hectares), followed by Argentina (172,568 hectares). The RTRS-certified area increased more than eightfold in 2011–2017 and almost 21% in 2016–2017.

RTRS: Key indicators	
Area [hectares]	1,259,672
Share of RTRS of global agricultural land	0.03%
Share of RTRS of global soybean area	1.0%
Producers [No.]	32,646

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www.utz.org

UTZ

Rainforest Alliance and UTZ recently merged, forming a new organization that carries forward the Rainforest Alliance name. Rainforest Alliance is an international non-profit organization working to create a better future for people and nature. Both sustainability standards work in similar agricultural commodity sectors, which primarily include coffee, tea and cocoa. In addition, Rainforest Alliance certifies palm oil, cattle, bananas and cut flowers, while UTZ certifies hazelnuts.

Rainforest Alliance and UTZ certification programmes will continue to operate in parallel until the publication of a new certification programme at the end of 2019 (with transition beginning in 2020).

To become certified, all UTZ producers follow a code of conduct that offers expert guidance on better farming methods, farm management and social issues, such as working conditions and care for nature. UTZ supports its farmers by providing training and working on several aspects of sustainability. For instance, in collaboration with the International Center for Tropical Agriculture (CIAT), it recently studied climate suitability scenarios for tea production in Malawi (CIAT & UTZ certified, 2017).

UTZ also invests in evaluating and measuring impact. It is one of the few sustainability standards to track multiple certification. This has been a major challenge, overcome via VSS market performance reporting.

UTZ has developed rigorous measurement and traceability systems that other standards have adopted. RSPO uses the e-trace system developed and managed by UTZ for enhanced traceability in its palm oil supply chains. The Sustainable Rice Platform also benefited from the guidance and expertise of UTZ when developing its standard (UTZ, 2019).

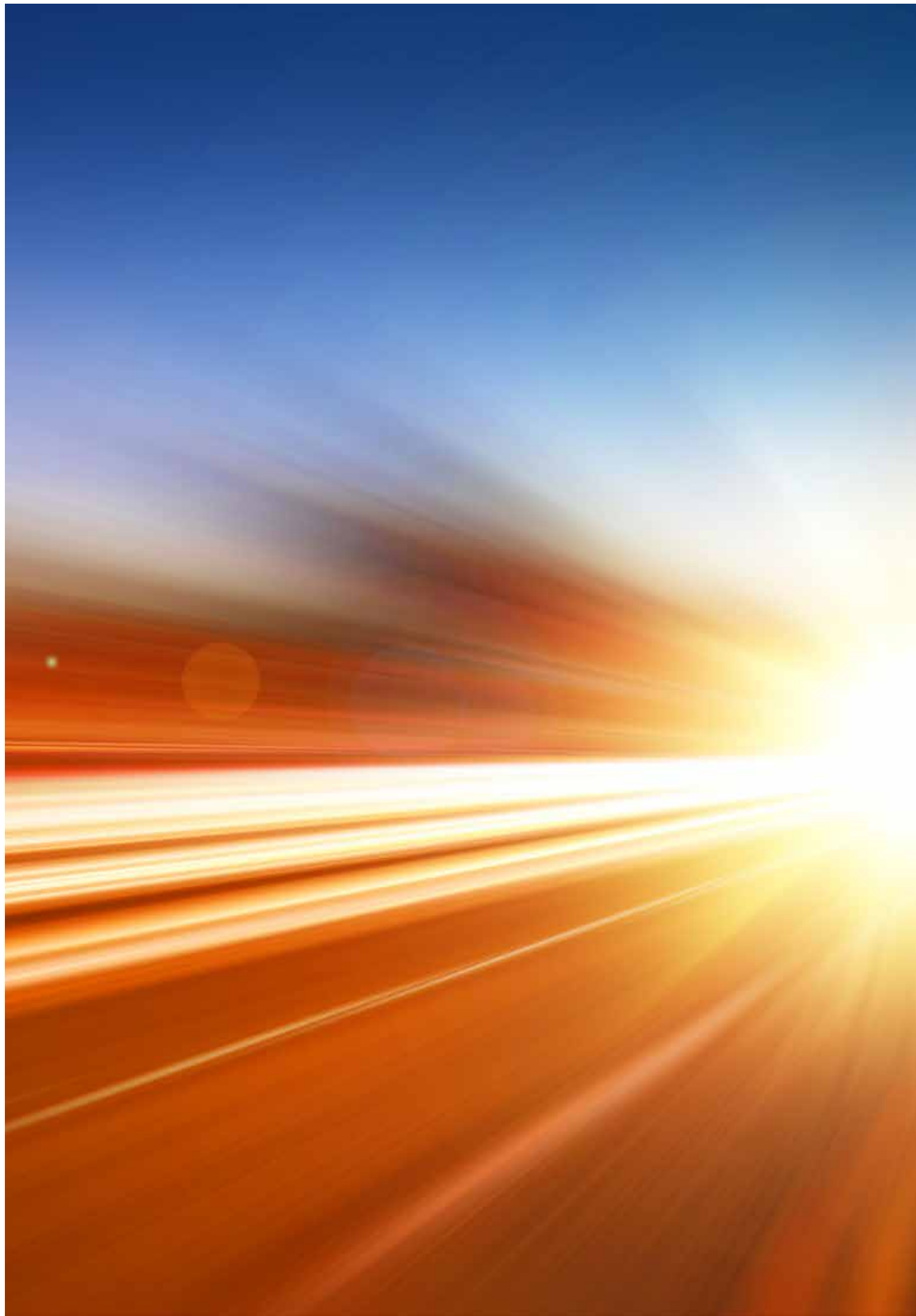
UTZ certified 3.4 million hectares worldwide in 2017, representing 0.07% of the global agricultural area. Cocoa was the largest UTZ-certified product, with more than 2.7 million hectares, representing 23% of the global cocoa area and nearly 80% of the total UTZ-certified area.

UTZ coffee was grown on almost 593,000 hectares, or 5.5% of the global coffee area (18% of UTZ's certified area). UTZ tea was grown on more than 77,000 hectares, or 1.9% of the global tea area.

More than 987,000 producers were operating under UTZ standards in 2017. Côte d'Ivoire has the largest UTZ area (1.4 million hectares), followed by Ghana (more than 567,000 hectares) and Nigeria (over 195,000 hectares). The UTZ-certified area grew fourfold in 2011–2017 and almost 24% in 2016–2017.

UTZ: Key indicators	
Area [hectares]	3,376,870.2
Share of UTZ of global agricultural land	0.07%
Producers [No.]	987,493

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CHAPTER 3

STATE OF SUSTAINABLE MARKETS ONLINE

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INTERACTIVE ONLINE GRAPHICS: THE 2019 DASHBOARD

Graphics previously available as part of the State of Sustainable Markets report are now available on the ITC Sustainability Map at www.sustainabilitymap.org/trends.

Digitalizing visual data provides numerous advantages, including:

- A wider dissemination and reach of the data included in the report.
- Facilitated access to specific information.
- Additional use of the information, as this year's report integrates not only a 'commodity' and 'standard' dimension, but it is possible to explore data by 'country'. While the report has previously provided information for only the top 10 countries, it is now possible to review information across country, standard and commodity.
- Easier continuous data update to ensure data integrity after the report is published.
- Interested parties can download and analyse data in its raw form.

Access

- Go to the ITC Sustainability Map (www.sustainabilitymap.org) and click on the Market Trends tab located at the top of the screen.
- Click on one of the two images to explore data pertaining to either the agriculture or forestry sector.

The screenshot shows the ITC Sustainability Map interface. At the top, there is a navigation bar with 'Standards Map', 'Virtual Network', 'Market Trends', and 'Login'. Below this is the ITC logo and a menu with 'Our Solutions', 'Our Users', 'Collaborators', 'T4SD Hubs', and 'Resources'. The main content area features a large blue banner with the title 'The State of Sustainable Markets - 2019'. Below the title, there is a sub-header 'Click and review market trends specific to 14 major Voluntary Sustainability Standards (VSS) for bananas, cocoa, coffee, cotton, palm oil, soybeans, cane sugar, tea and forestry products. For more information on the main findings and data methodology, download the report [here](#).' Two main interactive sections are displayed: 'Market trends of certified commodities and 12 VSS' with a collage of agricultural products and a hand icon indicating it is clickable; and 'Market trends of certified forests and two VSS' with a forest image and a hand icon indicating it is clickable (labeled as a draft). At the bottom, there is a 'Data sources' box listing various reports and organizations, and a 'Supported by' section with logos for ITC, FIBL, and IISD.

Navigate

Explore key graphics and tables that provide an overview of the most recent trends specific to a sector. To further refine your analysis, select a focus area to explore this year's trends:

- By country
- By commodity / for forestry
- By VSS
- Download data



Explore

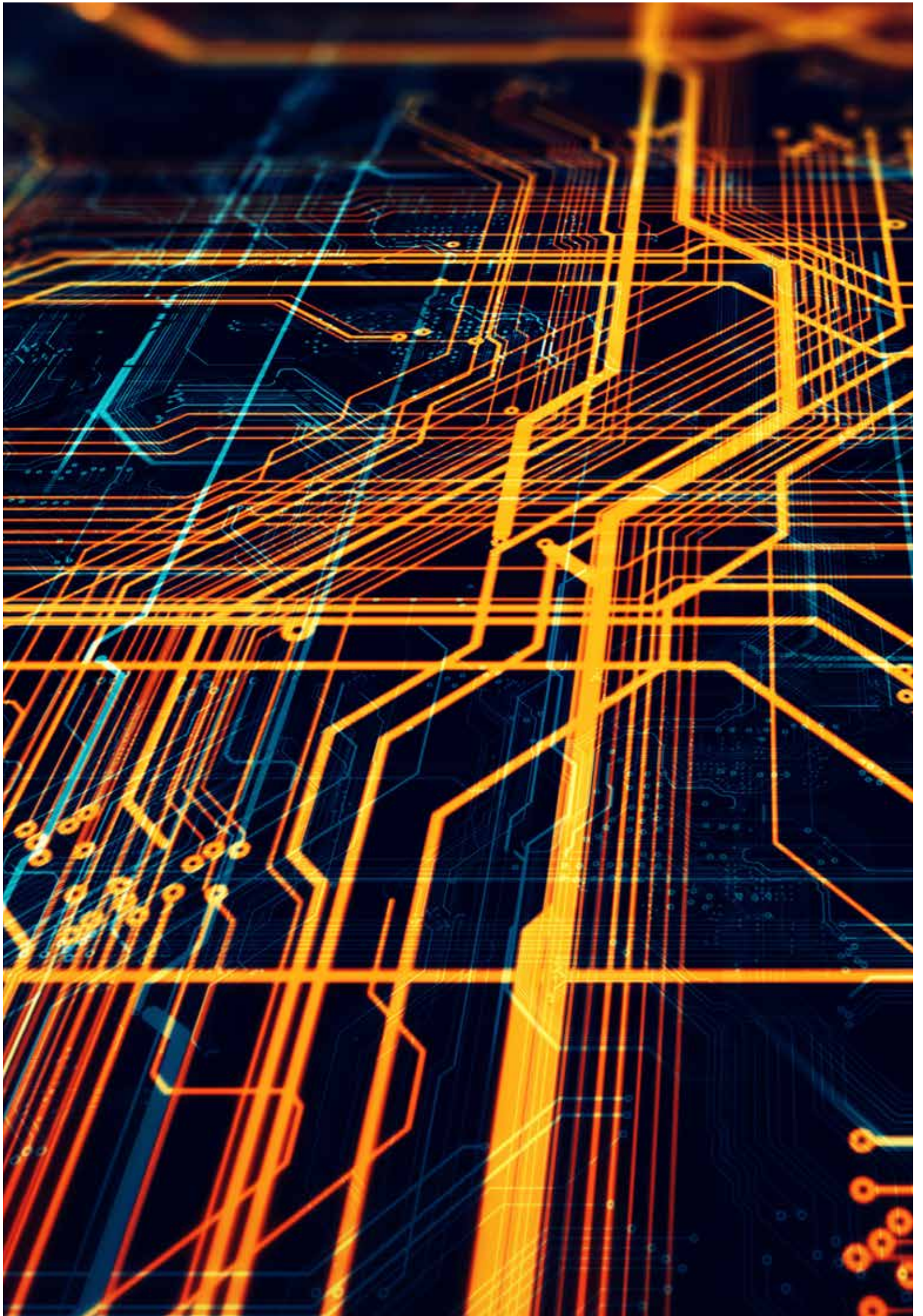
Each of the focus areas have two levels of analysis.

- First level – Users are invited to refine their analysis based on a country, commodity/forestry or VSS, depending on the focus area that was selected



- Users then have the option lower on the page to review information specific to their selection





CHAPTER 4

METHODOLOGY

A LOOK BEHIND THE DATA

The data presented in this report were obtained either directly from the standard-setting organizations or indirectly from published annual reports and other literature. For organic agriculture, data were gathered from private-sector organizations, governments and certification bodies as part of the annual FiBL survey on organic agriculture worldwide (Willer and Lernoud, 2019). The data collection process, voluntary sustainability standards, indicators and commodities covered, as well as the quality checks carried out, are described below.

In October 2018, FiBL sent a standardized questionnaire to the sustainability standard organizations. All of them returned data, but not consistently across all the indicators requested and not on all the commodities for 2017.

Focus on commodities

The focus was on the same crops as those presented in previous editions of The State of Sustainable Markets (Lernoud et al., 2015, 2017, 2018): bananas, cocoa, coffee, cotton, oil palm, soy, sugarcane and tea, as well as forestry. The sustainability standards were also asked to provide data on additional crops covered by their standard and on the total certified area.

Standard

The following voluntary standards were analysed:¹⁷

- 4C (previously 4C Association)
- Better Cotton Initiative (BCI)
- Bonsucro
- Cotton made in Africa (CmiA)
- Fairtrade International
- Forest Stewardship Council (FSC)
- GLOBALG.A.P.
- IFOAM – Organics International¹⁸
- Programme for the Endorsement of Forest Certification (PEFC)
- ProTerra Foundation
- Rainforest Alliance
- Roundtable on Sustainable Palm Oil (RSPO)
- Round Table on Responsible Soy (RTRS)
- UTZ

17. For more information about the standards, see the ITC Standards Map: www.sustainabilitymap.org.

18. Not all production considered organic actually complies with IFOAM norms. IFOAM – Organic International is nevertheless the leading global reference for defining organic standards. Market data on organic production and trade include all recognized organic production, regardless of whether the production complies with IFOAM criteria per se.

List of indicators

The sustainability standards that were surveyed for this report were asked to provide data on the following indicators:

Indicator	Definition	Unit of measure
Area		
Area	Area certified (fully converted plus under conversion)	Hectares
Area cultivated	Area that was cultivated	Hectares
Harvested area	Area actually harvested	Hectares
Production		
Production value	Value of production volume that is VSS-compliant, even if not sold as compliant at the first point of sale	\$ million
Production volume	Production volume that is VSS-compliant, even if not sold as compliant at the first point of sale	Metric tons
Production volume sold under a VSS label	Volume of VSS-compliant product that is sold as compliant at the first point of sale (e.g. from cooperative to trader)	Metric tons
Operators		
Certificate holder	Total number of current valid certificates and in process	No.
Producer	Production unit operated under a single management for the purpose of producing agricultural products (including processing, packaging and initial labelling of own crop and livestock products on the farm). This includes the producers organized under a group, resource manager, community or cooperative certificate, and/or those producing, collecting or gathering for a supply chain covered by a standard.	No.

This publication focuses on the indicators for which all sustainability standards provided data: area, area harvested, production volume and producers/operators.

Quality checks

The data received from the standards were validated using the following quality checks:

- Area and production data were compared with the data from the previous year as provided by the sustainability standards themselves in previous surveys (Lernoud et al., 2015, 2017, 2018) or as available in the IISD database (data as published by Potts et al., 2014).
- Area and production data were compared with the total area and production as provided by FAO (FAOSTAT, 2019) and, for cotton, by the International Cotton Advisory Committee (2019).
- Yields provided by FAO were compared with the yields calculated on the basis of the area and production data provided by the sustainability standards.

Pivot tables were used to analyse the data, which enabled the identification of data anomalies. The standards were asked to provide explanations for suspicious data, which resulted either in plausible explanations or in data revisions.

For most countries and territories, the Standard Country and Area Classifications as defined by the United Nations Statistics Division were applied.¹⁹ Where the designation 'country' appears in this report, it covers countries or areas. To calculate the share of the total certified area and commodity area, per country and worldwide, total country and world data were taken from the FAOSTAT database (FAOSTAT, 2019).²⁰

19. For the composition of macrogeographical (continental) regions, geographical sub-regions, and selected economic and other groupings, see the United Nations Statistics Division homepage at <http://unstats.un.org/unsd/methods/m49/m49regin.htm>.

20. FAOSTAT, Data Archives, the FAO Homepage, FAO, Rome, at [faostat.org > Inputs > Land at http://faostat3.fao.org/download/E/*E](http://faostat3.fao.org/download/E/*E).

Data year

Data collected and reported as crop year spanning two consecutive years were relabelled as, and attributed to, the latter of the two years. For instance, data reported in 2017/2018 were labelled as 2018 in the report to ensure consistency in data handling. This assumption was necessary to allow comparisons across the standards, as there are inconsistencies in how they report their data.

Multiple certification

Reporting a global total of certain commodities remains difficult. This is because many producers are certified by more than one sustainability standard, and there are not enough reliable data on the share of multiple certification. Considering this, FiBL, IISD and ITC decided that the best approach was to provide a range that encompasses the minimum and the maximum amounts possible, along with the average of the two at the country level.

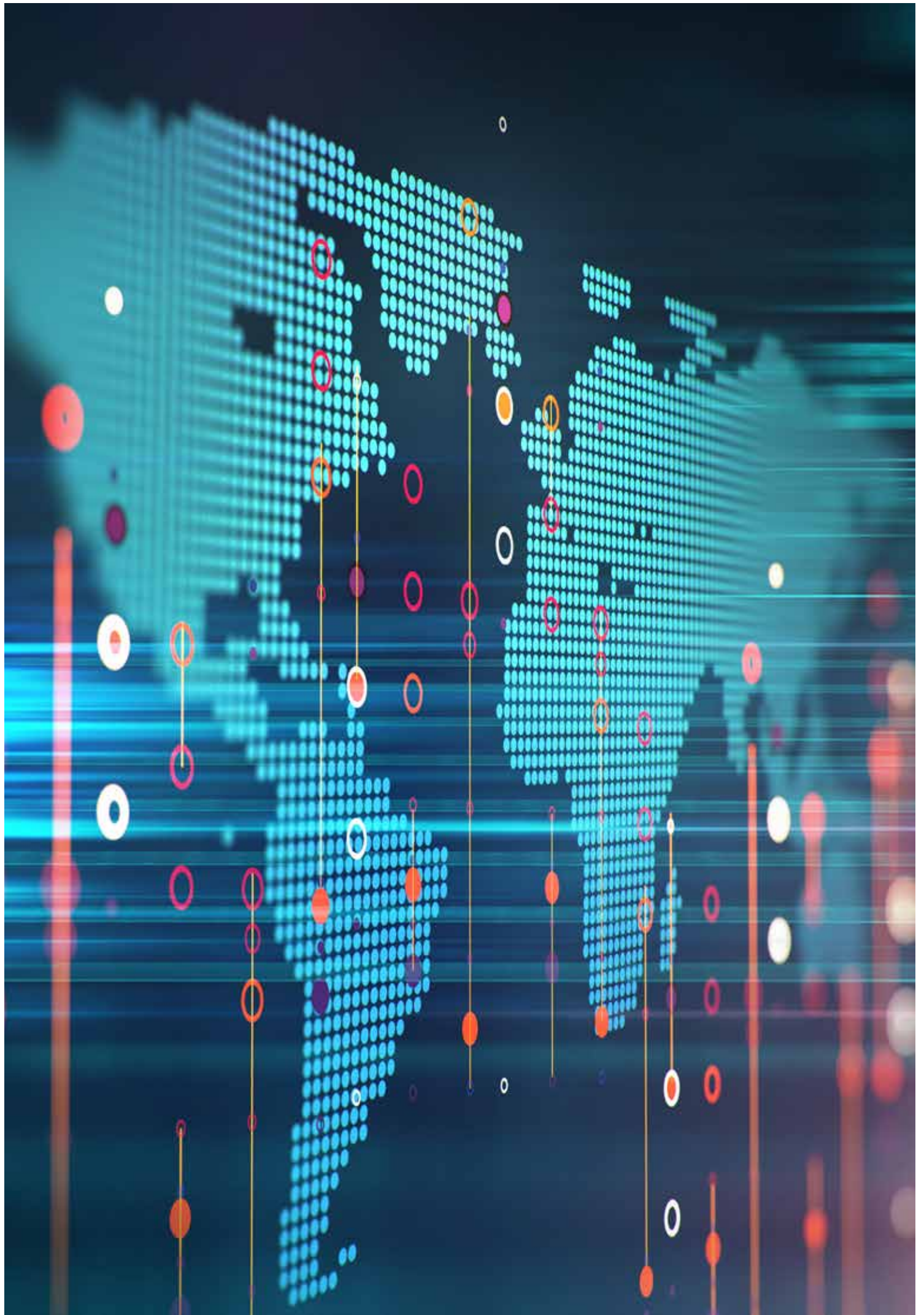
To calculate the maximum, the total area and production volume of all standards in the country were aggregated. For the minimum, the sustainability standard with the largest area or most production volume in the country was used as the reference. An average of the maximum and minimum was then calculated. These figures must be treated with caution, however, as they are simply estimates that indicate a trend.

The survey asked for the extent of multiple certification by country and for the standard in question. Only two standards provided data on multiple certification, which made it impossible to calculate the actual share of multiple certification.

FiBL, IISD and ITC agreed to implement the method explained above to be able to report a development trend for each of the selected commodities. Nevertheless, the three organizations remain committed to providing more accurate global figures in subsequent publications as data on multiple certification become available. FiBL and ISEAL Alliance are working to improve the availability of data on multiple certification from ISEAL members.

Data publication and revisions

Data going back to 2008 have been stored in the ITC Trade for Sustainable Development database and are available in the 'Trends' module of the Sustainability Map portal, www.sustainabilitymap.org/trends. Data revisions and corrections will be communicated at <http://www.vss.fibl.org/de/vss-report/data-revisions.html>.



APPENDIX

KEY DATA, AREA AND PRODUCTION

Table 7: Area ranges for the selected crops, 2017

Commodity	Indicator	Area harvested (hectares)	Share of total (%)	Change 2016/2017 (%)	Change 2016–2017 (%)
Bananas	Minimum area possible	340,196	6.0%	17.7%	28.6%
	Average area	447,785	7.9%	15.2%	37.1%
	Maximum area possible	555,373	9.9%	13.7%	42.8%
Cocoa	Minimum area possible	2,908,640	24.8%	22.8%	114.7%
	Average area	3,944,735	33.6%	27.2%	95.%
	Maximum area possible	4,980,830	42.4%	30.0%	86.3%
Coffee	Minimum area possible	2,533,211	23.4%	-8.5%	8.7%
	Average area	3,477,991	32.1%	-7.2%	9.5%
	Maximum area possible	4,422,771	40.8%	-6.4%	9.9%
Cotton	Minimum area possible	5,154,933	16.2%	66.8%	172.4%
	Average area	5,435,650	17.0%	66.1%	166.4%
	Maximum area possible	5,716,367	17.9%	65.5%	161.2%
Oil palm	Minimum area possible	2,537,424	11.9%	1.4%	26.1%
	Average area	2,582,684	12.1%	2.2%	28.2%
	Maximum area possible	2,627,943	12.3%	2.8%	30.2%
Soybeans	Minimum area possible	1,801,269	1.5%	-30.2%	-5.9%
	Average area	2,395,147	1.9%	-20.5%	15.5%
	Maximum area possible	2,989,025	2.4%	-13.3%	34.0%
Sugarcane	Minimum area possible	1,979,979	7.6%	88.5%	80.2%
	Average area	2,134,181	8.2%	97.8%	91.9%
	Maximum area possible	2,288,383	8.8%	106.7%	103.4%
Tea	Minimum area possible	668,768	16.4%	22.7%	77.3%
	Average area	772,811	19.0%	19.9%	71.4%
	Maximum area possible	876,854	21.5%	17.9y	67.1%

Sources: FiBL-ITC-SSI survey, 2019; 4C Services, 2019; Better Cotton Initiative (BCI), 2019; Bonsucro, 2019; Cotton made in Africa (CmiA), 2019; Fairtrade International, 2019; GLOBALG.A.P., 2019; FiBL survey, 2019; ProTerra Foundation, 2019; Rainforest Alliance, 2019; Roundtable on Sustainable Palm Oil (RSPO), 2019; Round Table on Responsible Soy (RTRS), 2019; Textile Exchange 2019; UTZ, 2019.

Table 8: Commodity areas with breakdown by sustainability standard, 2017

Commodity	Standard	Area harvested (hectares)	Share of total (%)	Change 2016/2017 (%)	Change 2013–2017 (%)
Bananas	Rainforest	161,084	2.9%	11.3%	103.0%
	Fairtrade	38,316	0.7%	5.0%	0.3%
	GLOBALG.A.P.	274,968	4.9%	7.6%	23.2%
	Organic	81,007	1.4%	57.3%	68.3%
Cocoa	Rainforest	740,822	6.3%	7.0%	-11.6%
	Fairtrade	1,170,612	10.0%	62.1%	173.7%
	Organic	362,800	3.1%	13.3%	74.1%
	UTZ	2,706,596	23.0%	29.1%	125.7%
Coffee	Rainforest	411,415	3.8%	6.2%	-5.2%
	4C	1,630,546	15.0%	-10.7%	11.3%
	Fairtrade	938,158	8.7%	-10.4%	-7.2%
	Organic	849,675	7.8%	-5.1%	33.0%
	UTZ	592,977	5.5%	4.5%	25.1%
Cotton	BCI	3,561,000	11.2%	67.4%	197.2%
	CmiA	1,619,469	5.1%	66.0%	133.9%
	Fairtrade	62,899	0.2%	25.8%	-27.6%
	Organic	472,999	1.5%	56.3%	124.2%
Oil palm	Rainforest	94,368	0.4%	48.4%	157.1%
	Organic	20,000	0.1%	73.7%	455.6%
	RSPO	2,513,576	11.8%	1.3%	27.1%
Soybeans	Organic	505,564	0.4%	3.2%	68.0%
	ProTerra	1,223,789	1.0%	-36.1%	-17.3%
	RTRS	1,259,672	1.0%	20.8%	179.9%
Sugarcane	Bonsucro	942,875	3.6%	9.5%	2.6%
	Fairtrade	146,388	0.6%	-4.3%	-3.8%
	Organic	83,650	0.3%	-10.4%	56.4%
	ProTerra	1,115,470	4.3%		
Tea	Rainforest	550,646	13.5%	17.5%	75.9%
	Fairtrade	135,155	3.3%	7.0%	25.9%
	Organic	113,755	2.8%	39.8%	59.2%
	UTZ	77,298	1.9%	14.2%	136.0%

Sources: FiBL-ITC-SSI survey, 2019; 4C Services, 2019; Better Cotton Initiative (BCI), 2019; Bonsucro, 2019; Cotton made in Africa (CmiA), 2019; Fairtrade International, 2019; GLOBALG.A.P., 2019; FiBL survey, 2019; ProTerra Foundation, 2019; Rainforest Alliance, 2019; Roundtable on Sustainable Palm Oil (RSPO), 2019; Round Table on Responsible Soy (RTRS), 2019; UTZ, 2019.

Table 9: Production ranges for the selected commodities, 2017

Commodity	Standard	Area harvested (hectares)	Share of total (%)	Change 2016/2017 (%)	Change 2013–2017 (%)
Bananas	Minimum production possible	8,567,899	5.6%	5.0%	88.7%
	Average	9,460,496	6.2%	8.5%	90.5%
	Maximum production possible	10,353,094	6.8%	11.6%	92.0%
Cocoa	Minimum production possible	1,526,660	29.4%	18.8%	58.2%
	Average	1,996,790	38.4%	19.0%	58.2%
	Maximum production possible	2,466,921	47.4%	19.1%	58.2%
Coffee	Minimum production possible	2,406,680	26.1%	-12.9%	-7.8%
	Average	3,670,722	39.8%	-0.2%	6.3%
	Maximum production possible	4,934,763	53.6%	7.5%	14.9%
Soybeans	Minimum production possible	5,201,809	1.5%	-4.0%	34.3%
	Average	7,033,397	2.0%	5.3%	62.6%
	Maximum production possible	8,864,984	2.5%	11.7%	85.6%
Tea	Minimum production possible	1,275,424	20.9%	11.3%	71.0%
	Average	1,456,337	23.9%	8.2%	67.3%
	Maximum production possible	1,637,249	26.8%	5.9%	64.4%

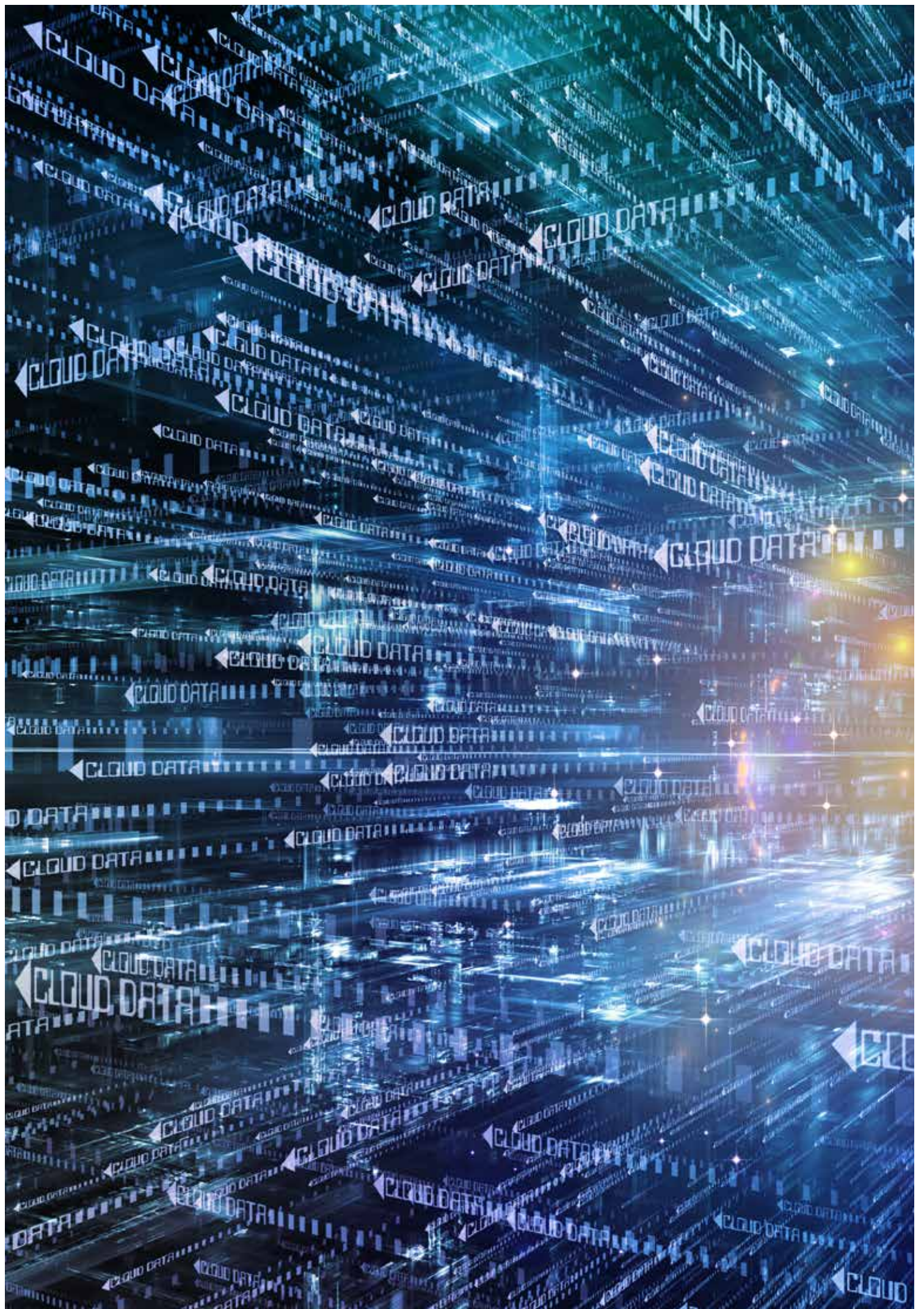
Note: Due to methodological challenges, the ranges cannot be made available for all of the selected commodities.

Sources: FiBL-ITC-SSI survey, 2019; 4C Services, 2019; Bonsucro, 2019; Fairtrade International, 2019; GLOBALG.A.P., 2019; FiBL survey, 2019; ProTerra Foundation, 2019; Rainforest Alliance, 2019; Roundtable on Sustainable Palm Oil (RSPO), 2019; Round Table on Responsible Soy (RTRS), 2019; UTZ, 2019.

Table 10: Estimated commodity production broken down by standard, 2017

Commodity	Standard	Estimated production (metric tons)	Share of total production (%)	Change 2016/2017	Change 2013–2017
Bananas	Rainforest	7,808,458	6.9%	6.2%	108.5%
	Fairtrade	970,531	0.9%	16.8%	22.4%
	Organic	1,574,105	1.4%	44.4%	83.9%
Cocoa	Rainforest	457,082	8.8%	-3.5%	-20.0%
	Fairtrade	428,053	8.2%	46.6%	134.3%
	Organic	131,860	2.5%	-16.2%	15.9%
	UTZ	1,449,926	27.9%	22.0%	109.7%
Coffee	Rainforest	557,911	6.1%	9.7%	22.6%
	4C	2,406,680	26.1%	-12.9%	2.0%
	Fairtrade	633,854	6.9%		29.6%
	Organic	478,515	5.2%	7.0%	80.4%
	UTZ	857,803	9.3%	-1.4%	18.1%
Cotton	Organic	328,361	1.3%	10.2%	7.3%
Oil palm	Rainforest	1,259,932	0.4%	-2.9%	35.3%
	Organic	199,655	0.1%	50.9%	356.4%
	RSPO	55,846,567	17.6%	-1.2%	
Soybeans	Organic	839,915	0.2%	2.5%	36.0%
	ProTerra	3,876,000	1.1%	0.6%	29.2%
	RTRS	4,149,069	1.2%	27.0%	258.4%
Sugarcane	Bonsucro	74,843,395	4.1%	46.5%	53.4%
	Organic	4,449,970	0.2%	-8.7%	60.8%
	ProTerra	96,786,590	5.3%		
Tea	Rainforest	1,170,395	19.2%	7.9%	73.6%
	Fairtrade	216,127	3.5%	-14.9%	17.0%
	Organic	130,845	2.1%	49.0%	70.6%
	UTZ	119,883	2.0%	0.2%	99.9%

Sources: FiBL-ITC-SSI survey, 2019; 4C Services, 2019; Better Cotton Initiative (BCI), 2019; Bonsucro, 2019; Cotton made in Africa (CmiA), 2019; Fairtrade International, 2019; GLOBAL.G.A.P., 2019; FiBL survey, 2019; ProTerra Foundation 2019; Rainforest Alliance, 2019; Roundtable on Sustainable Palm Oil (RSPO), 2019; Round Table on Responsible Soy (RTRS), 2019; Textile Exchange 2019; UTZ, 2019.



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