

The State of Sustainable Markets 2021

STATISTICS AND EMERGING TRENDS



International
Trade
Centre

In collaboration with:

FiBL

IISD
International Institute for
Sustainable Development

Supported by:



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs FDE
State Secretariat for Economic Affairs SECO

© International Trade Centre 2022

The International Trade Centre (ITC) is the joint agency of the World Trade Organization and the United Nations.

Street address: ITC
54-56, rue de Montbrillant
1202 Geneva, Switzerland

Postal address: ITC
Palais des Nations
1211 Geneva 10, Switzerland

Telephone: +41-22 730 0111

Fax: +41-22 733 4439

E-mail: itcreg@intracen.org

Website: www.intracen.org

THE STATE OF
SUSTAINABLE MARKETS 2021

STATISTICS AND EMERGING TRENDS

ABOUT THE REPORT

This sixth global report provides new insights into the evolution of certified agriculture and forestry. The International Trade Centre 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.

The 2021 report adds data from 2019, showing that sustainability standards continue to expand their land coverage. This report helps shape decisions of policymakers, producers and businesses, working to address systemic labour and environmental challenges through certified sustainable production.

Title: The State of Sustainable Markets 2021: Statistics and Emerging Trends

Publisher: International Trade Centre, International Institute for Sustainable Development, Research Institute of Organic Agriculture

Publication date and place: June 2022, Geneva

Page count: 80

Language: English

ISBN: 978-92-1-103685-5

UN Sales Number: E.22.III.T.1

ITC Document Number: P54.E/SIVC/DEI/22.VI

Citation: Claudia Meier, Gregory Sampson, Cristina Larrea, Bernhard Schlatter, Steffany Bermudez, Duc Dang and Helga Willer (Eds.), *The State of Sustainable Markets 2021: Statistics and Emerging Trends*. ITC, Geneva.

For more information, contact Gregory Sampson (sampson@intracen.org) at ITC, or Helga Willer (helga.willer@fibl.org) at FiBL.

For more information on sustainability standards, see www.standardsmap.org.

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.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means electronic, electrostatic, magnetic tape, mechanical, photocopying or otherwise, without prior permission in writing from the International Trade Centre.

Digital image(s) on the cover: © Shutterstock

© International Trade Centre (ITC) 2022

ITC is the joint agency of the World Trade Organization and the United Nations.

ITC, Palais des Nations, 1211, Geneva 10, Switzerland (www.intracen.org)

FOREWORD

The COVID-19 pandemic caught the world off guard, causing social, economic and political shocks globally. It brought major changes in our personal and professional lives and caused us to re-assess our values and priorities. Now we need to act.

Sustainability standards are a powerful tool for a recovery that leaves no one behind. Consumers start to recognize the premium around ethically sourced, sustainable goods and services. Businesses across the world are being scrutinized for decisions that have an impact on the environment, employees, customers and society.

Our sixth edition of *the State of Sustainable Markets* shows that sustainability standards continue overall to expand their land coverage for agriculture and forestry. In cotton, for example, at least 17% of production area is certified.

These annual reports offer greater transparency and build awareness of the shifting yet enduring landscape for sustainability standards. They are among the few tools to have stood the test of time with relevant criteria and implementation frameworks to address social and environmental trade in doing business.

We can all encourage sustainable consumption. Consumer choices about products such as bananas, coffee and tea can transform lives – when they support small growers and values-based, sustainable trade. It's equally important to develop policies and regulations that support sustainable cultivation – such as those that encourage deforestation-free cocoa, fewer agrochemicals or better prices for farmers.

Our hope is that our *State of Sustainable Markets* report contributes to those choices.



Pamela Coke-Hamilton
Executive Director
International Trade Centre

ACKNOWLEDGEMENTS

The Research Institute of Organic Agriculture (FiBL), the International Institute for Sustainable Development (IISD) and the International Trade Centre (ITC) are very grateful to the Swiss State Secretariat for Economic Affairs for its financial support of the global data collection on voluntary sustainability standards and the production of this publication.

Further thanks are due to all the standard-setting organizations that collaborated on the report: 4C – Common Code for the Coffee Community, Better Cotton Initiative (BCI), Bonsucro, Cotton made in Africa (CmiA), Fairtrade International, Forest Stewardship Council (FSC), GLOBALG.A.P., IFOAM – Organics International, the Programme for the Endorsement of Forest Certification (PEFC), ProTerra Foundation, Rainforest Alliance, the Roundtable on Sustainable Palm Oil (RSPO), the Round Table on Responsible Soy (RTRS), Textile Exchange and UTZ.¹

The publishers also wish to thank the following individuals, without whose contributions this report would not have been possible:

Oshin Abrami, GLOBALG.A.P., Cologne; **Aminah Ang**, RSPO, Kuala Lumpur; **Thorsten Arndt**, PEFC International, Geneva; **Abang Mahd Aizat**, RSPO, Kuala Lumpur; **Shannon Avison**, BCI, Geneva; **Gustavo Bacchi**, 4C Services, Cologne; **Gerlind Baez**, CmiA, Hamburg; **Lisa Barsley**, Textile Exchange, London; **Ana Patricia Batalhone**, ITC, Geneva; **Christina Ben Bella**, CmiA, Hamburg; **Stefanny Bermudez**, IISD, Ottawa; **Emese Brosz**, ProTerra Foundation, Bilthoven; **Thomas Bernet**, FiBL, Frick; **Daniel Castro**, Fairtrade International, Bonn; **Chen-Wei Chang**, Bonsucro, London; **Florencia Chavat**, PEFC International, Geneva; **Sean Zeng Chong**, FSC International, Bonn; **Luca Costa**, FSC International, Bonn; **Christina Endemann**, FSC International, Bonn; **Lise Favre**, PEFC International, Geneva; **Augusto Freire**, ProTerra Foundation, Bilthoven; **Salvador Garibay**, FiBL, Frick; **Ricardo Gonzalez**, Rainforest Alliance, Amsterdam; **Nikita Grabher-Meyer**, BCI, Geneva; **Phan Ha**, Rainforest Alliance, Amsterdam; **Marion Karmann**, FSC International, Bonn; **Daniel Kazimierski**, RTRS, Buenos Aires; **Kristin Komives**, ISEAL Alliance, London; **Karin Kreider**, ISEAL Alliance, London; **Jennah Landgraf**, IISD, Ottawa; **Cristina Larrea**, IISD, Ottawa; **Julia Lernoud**, IFOAM World Board of Directors, Bonn; **Louise Lutikholt**, IFOAM – Organics International, Bonn; **Claudia Meier**, FiBL, Frick; **Claudia Meifert**, GLOBALG.A.P., Cologne; **Monika Messmer**, FiBL, Frick; **Sally Millett**, IISD, Toronto; **Kristian Moeller**, GLOBALG.A.P., Cologne; **Joanna Nowakowska**, FSC International, Bonn; **Bernadette Oehen**, FiBL, Frick; **Soo Chin Oi**, RSPO, Kuala Lumpur; **Kendra Pasztor**, BCI, Geneva; **Andres Felipe Ramirez**, FSC International, Bonn; **Catherine Rivier**, Rainforest Alliance, Amsterdam; **Aimee Russillo**, Liseed, Kentucky; **Gregory Sampson**, ITC, Geneva; **Damien Sanfilippo**, BCI, Geneva; **Bernhard Schlatter**, FiBL, Frick; **Monika Schneider**, FiBL, Frick; **Tracey Schoemaker**, PEFC International, Geneva; **Nina Schöttle**, CmiA, Hamburg; **Abdullah Shazaley**, RSPO, Kuala Lumpur; **Alexia Stumpf**, ProTerra Foundation, Bilthoven; **Evonne Tan**, Textile Exchange, Petaling Jaya; **Pia Thauer**, GLOBALG.A.P., Cologne; **Liesl Truscott**, Textile Exchange, Bath; **Nahuel Tuñon**, Bonsucro, London; **Rob Ukkerman**, FSC International, Bonn; **Andrea Valenzuela**, Rainforest Alliance, San José; **Enrique Uribe**, GLOBALG.A.P., Cologne; **Nicolas Viart**, Bonsucro, London; **Laura Villegas**, RTRS, Buenos Aires; **Gerrit Walter**, Fairtrade International, Bonn; **Helga Willer**, FiBL, Frick.

We are also grateful to Natalie Domeisen and Anne Griffin, ITC, for quality and production management; Jennifer Freedman, for editing this report; Iva Stastny Brosig, for design, Duc Dang for layout and Serge Adeagbo and Franco Iacovino, ITC, for printing.

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.

It builds on well-established online tools such as Standards Map, which offers comprehensive, verified and transparent information on more than 260 standards for environmental protection, worker and labour rights, economic development, quality and food safety, as well as business ethics.

Contribution to this report: Conceptual elaboration; data validation and visualization (dashboard); editorial development and promotion.

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 long lasting experience in collecting and publishing data on organic agriculture. Since 2000, it has developed a network of some 200 experts from more than 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. Since 2014, FiBL has also been active in the collection of data on sustainability standards.

For more information, see <https://statistics.fibl.org>.

Contribution to this report: Data collection, processing, validation, and visualization; authors of chapters 1, 2, 4 and 5.

The **International Institute for Sustainable Development (IISD)** is an independent think tank with the mission to accelerate solutions for a stable climate, sustainable resources and fair economies. 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. Its work affects economies, communities, ecosystems and lives in nearly 100 countries. Numerous governments, United Nations agencies, foundations, the private sector and individuals fund its projects.

IISD been assessing the characteristics, performance and market trends of voluntary sustainability standards via the State of Sustainability Initiatives project since 2008. This international research project aims to advance sustainable and inclusive value chains by providing credible and solutions-oriented analysis and dialogue on voluntary sustainability standards and their potential to contribute to sustainable development outcomes. Besides conducting strategic policy research and analysis on standards, IISD makes important contributions to sustainable consumption, production and trade through the initiatives implemented within the Economic Law Programme.

For more information, see <https://www.iisd.org/ssj/>

Contribution to this report: Authors of chapter 3.

CONTENTS

Foreword iii
Acknowledgements iv
Project partners v
Acronyms, units and measures ix

EXECUTIVE SUMMARY xi

HIGHLIGHTS xii
WHY THIS REPORT? xiii
FEATURED CROPS AND STANDARDS xiv
REPORTING CHALLENGES: LACK OF DATA, MULTIPLE CERTIFICATION xvi

Chapter 1

STATE AND DEVELOPMENT OF THE SELECTED COMMODITIES 1

AT LEAST 7.9% OF THE GLOBAL AREA OF EIGHT CROPS IS CERTIFIED 3
FORESTRY CERTIFICATION GREW BY 4.7% 6
HIGHLIGHTS BY AGRICULTURAL AND FORESTRY PRODUCTS 6

Chapter 2

STATE AND DEVELOPMENT OF THE SELECTED SUSTAINABILITY STANDARDS 11

ORGANIC COVERS THE WIDEST MIX OF AGRICULTURE GOODS 12
PEFC CONTINUES TO OUTPACE FSC ON FOREST AREA CERTIFICATION 14
SINGLE-SECTOR STANDARDS DOMINATE 14

Chapter 3

CONSUMPTION TRENDS FOR CERTIFIED PRODUCTS 19

BANANAS 21
COCOA 21
COFFEE 22
COTTON 22
PALM OIL 23
SOYBEANS 23
SUGAR 24
TEA 24
HOW TO ENCOURAGE CONSUMPTION? 25

Chapter 4	
MEET THE SUSTAINABILITY STANDARDS	27
4C	28
BCI	29
BONSUCRO	30
COTTON MADE IN AFRICA	31
FAIRTRADE INTERNATIONAL	32
FOREST STEWARDSHIP COUNCIL	33
GLOBALG.A.P.	34
IFOAM – ORGANICS INTERNATIONAL	35
PROGRAMME FOR THE ENDORSEMENT OF FOREST CERTIFICATION	36
PROTERRA FOUNDATION	37
RAINFOREST ALLIANCE	38
UTZ	39
ROUNDTABLE ON SUSTAINABLE PALM OIL	40
ROUND TABLE ON RESPONSIBLE SOY ASSOCIATION	41
Chapter 5	
METHODOLOGY	43
FOCUS ON COMMODITIES	44
SUSTAINABILITY STANDARDS	44
LIST OF INDICATORS	45
QUALITY CHECKS	45
DATA YEAR	46
MULTIPLE CERTIFICATION SKEWS CALCULATIONS	46
DATA PUBLICATION AND REVISIONS	46
Appendix	49
References and further reading	56
Sources	59
Endnotes	60

FIGURES

Figure 1: Coffee and cocoa have biggest certified share of cultivated land.....	xiv
Figure 2: Eleven agricultural voluntary standards and eight commodities analysed.....	xv
Figure 3: Eleven agricultural voluntary standards and eight commodities analysed.....	xv
Figure 4: Growth of minimum area certified by crop, 2008–2019.....	4
Figure 5: Area certified by agricultural standard, 2019.....	13
Figure 6: Area harvested by agricultural standard and commodity, 2019.....	15

BOXES

Box 1: Multiple certification and data on total area and production.....	xvi
--	-----

TABLES

Table 1: Minimum area certified by agricultural commodity, 2019.....	3
Table 2: Estimated minimum production volume by agricultural commodity, 2019	5
Table 3: FSC and PEFC certified area, 2019	6
Table 4: Area certified and producers by agricultural standard, 2019	13
Table 5: Certified forest area and CoC certificate holders by forestry standard, 2019	14
Table 6: Area harvested by agricultural standard and commodity, 2019.....	15
Table 7: Ranges of certified area by agricultural commodity, 2019.....	50
Table 8: Area harvested by agricultural commodity and standard, 2019.....	51
Table 9: Estimated production volume ranges by agricultural commodity, 2019	52
Table 10: Estimated production volume by agricultural commodity and standard, 2019	53

ACRONYMS, UNITS AND MEASURES

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
CBI	Centre for the Promotion of Imports from developing countries
CmiA	Cotton made in Africa
CoC	Chain of custody
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
SSI	State of Sustainability Initiatives
VSS	Voluntary sustainability standards



EXECUTIVE SUMMARY

International Trade Centre (Gregory Sampson)
International Institute for Sustainable Development (Cristina Larrea)
Research Institute of Organic Agriculture (Claudia Meier)

HIGHLIGHTS xii

WHY THIS REPORT?..... xiii

FEATURED CROPS AND STANDARDS xiv

REPORTING CHALLENGES: LACK OF DATA, MULTIPLE CERTIFICATION xvi



EXECUTIVE SUMMARY

This report is the sixth in what is now an annual update on the state of sustainable markets. It shares the 2019 data on area, production volume and producers for 14 major standard-setting organizations¹ focusing on eight commodities and forestry. For the first time, the report is presented as an e-publication and have the word e-publication linked to <https://digital.intracen.org/state-sustainable-markets-2021/state-of-sustainable-markets-2021/>

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 below. Among the focal points of this year's report:²

Highlights

Features of the current market context are continued but slower 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:³

The big four: cotton, oil palm, cocoa and sugarcane

- In 2019, cotton still had the largest certified area. Cocoa and oil palm switched places, with oil palm becoming the second-largest commodity in terms of area certified in 2019, followed by cocoa. Coffee is no longer among the big four; rather, sugarcane now has the fourth-largest certified area.

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

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

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

- Cotton: At least 6.5 million hectares or at least 16.8% of the global cotton area was certified, with 12.6% by the Better Cotton Initiative alone.
- Oil palm: At least 3.1 million hectares or at least 10.9% of the global oil palm area was certified, with 10.8% by the Roundtable on Sustainable Palm Oil alone.
- Cocoa: At least 2.8 million hectares or at least 22.7% of the global cocoa area was certified, with 20.8% by UTZ alone.

Certified area continues to grow, but standard compliance loses ground

- In the five-year period from 2015–2019, the certified area of all agricultural commodities covered in this report grew by at least one-third (+30.9%). Sugarcane experienced the highest growth rate of its certified area, which more than doubled (+123.7%). This was followed by cotton, which doubled in area (+99.9%), and there was notable growth in the cocoa and tea areas (+53.2% and +30.2%, respectively).
- The selected agricultural commodities experienced an accelerated one-year area growth in 2016–2017 (+18.8%) that then flattened in both 2017–2018 (+6.7%) and 2018–2019 (+1.8%).
- While cotton and sugarcane expanded by more than 10% in 2018–2019 (cotton +11.2% and sugarcane +14.8%) tea, oil palm and bananas had single-digit growth. A decline was recorded for coffee, cocoa and soybeans (coffee -18.5%, cocoa -12.7%, soybeans -6%).
- The selected agricultural standards certified at least 7.9% of the global area of the selected agricultural commodities in 2019, down from 8.1% in 2018. Four standards certified at least 22.7% of the global cocoa area (26.8% in 2018). A standard certified at least 16.8% of the global cotton area (18.2% in 2018), at least 16.1% of the global coffee area (20.7% in 2018) and at least 14.4% of the global tea area (16.1% in 2018).

Organic is the leading standard in terms of area certified, but others grow faster

- Organic is the biggest sustainability standard in terms of both area and product variety. In 2019, 72.1 million hectares of agricultural land were certified as organic (including areas in the process of becoming organic-certified), representing 1.5% of agricultural land worldwide.
- In 2019, after organic, four standards covered land exceeding 4 million hectares each. The Better Cotton Initiative certified the largest area (4.9 million hectares), followed by Rainforest Alliance (4.3 million hectares), the Roundtable on Sustainable Palm Oil (4.2 million hectares), and GLOBALG.A.P. (4.1 million hectares), each representing a global share of approximately 0.1%.
- All of the standards covered in this report, except 4C Services, grew in their compliant areas in 2015–2019, most of them by at least 10%. The Better Cotton Initiative saw the greatest jump, with its certified area doubling in size (+113.1%), followed by Cotton made in Africa and Bonsucro, whose certified area expanded by 69.9% and 69.7%, respectively.
- Three of the 12 agricultural standards experienced double-digit area growth in 2018–2019, with Bonsucro achieving the highest growth rate (+35.7%).

Why this report?

This publication 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.

The report presents a summary of the key data. The full data are available in the online platform 'Market Trends', where users can access and analyse them in a visual, more dynamic and more user-friendly way. Country, commodity, forestry and sustainability standard-specific interactive graphs are available at www.sustainabilitymap.org/trends.

Data from the latest survey (2019 data) demonstrate how certified agriculture and forestry continue to grow, in line with an expanding global population and increasing demand for sustainable products. The rising share of total area and production volume covered by voluntary sustainability standards (VSS) suggests there is significant potential for further growth.

The steady increase in certification over the past decade reflects demand among consumers, buyers and producers to address common environmental and social concerns. The agricultural commodities covered in this report are extremely important for food security, job creation and human development. Therefore, they must be produced in a sustainable way for these sectors to remain resilient. Although VSS are present in these sectors, major challenges remain, including how farm-gate prices, climate change, slave labour, poor working conditions and land-grabbing issues.

One of the main challenges for most of the VSS-compliant markets is that supply outpaces demand. In some cases, products such as certified palm oil and soybeans are not even labelled as such. Europe and North America already are demanding more VSS-compliant products. The key to expanding VSS-compliant consumption is to increase demand in new markets: emerging economies and producing countries, particularly in Asia.

Voluntary standards continue to play an important role in enabling the shift of agricultural supply chains towards more sustainable and resilient ones. This will require more transparency and traceability of goods through the value chain, lowering the vulnerability of supply chains to shocks and stresses, and the transition towards environmental recovery and regeneration.

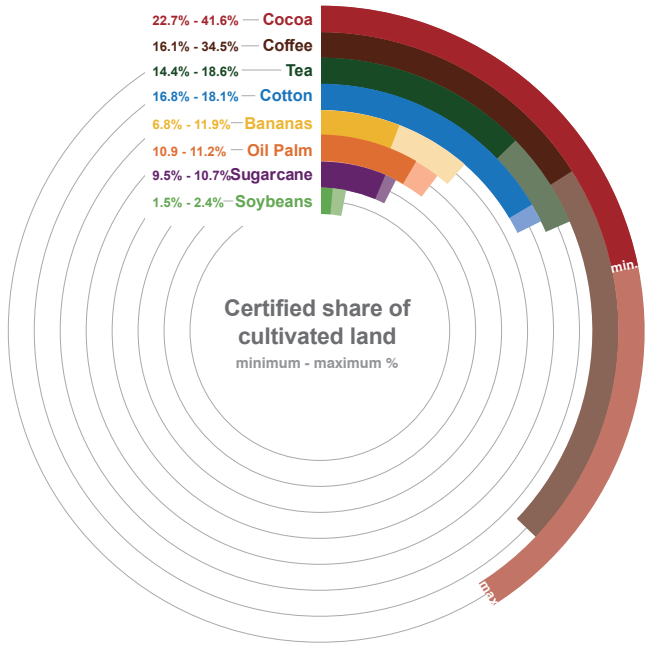
As in previous years, the Swiss State Secretariat for Economic Affairs funded the global survey on sustainability standards. The Research Institute of Organic Agriculture (FiBL), the International Institute of Sustainable Development (IISD) and the International Trade Centre (ITC) jointly produced this report, building on their complementary and in-depth expertise on sustainability standards. The data presented here cover 2019, as well as earlier years.

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, oil palm, soybeans, sugarcane, tea and forestry. It presents market and statistical data on these sectors as well as at-a-glance tables on products and standards (Figure 1).

The publication 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 UTZ⁴.

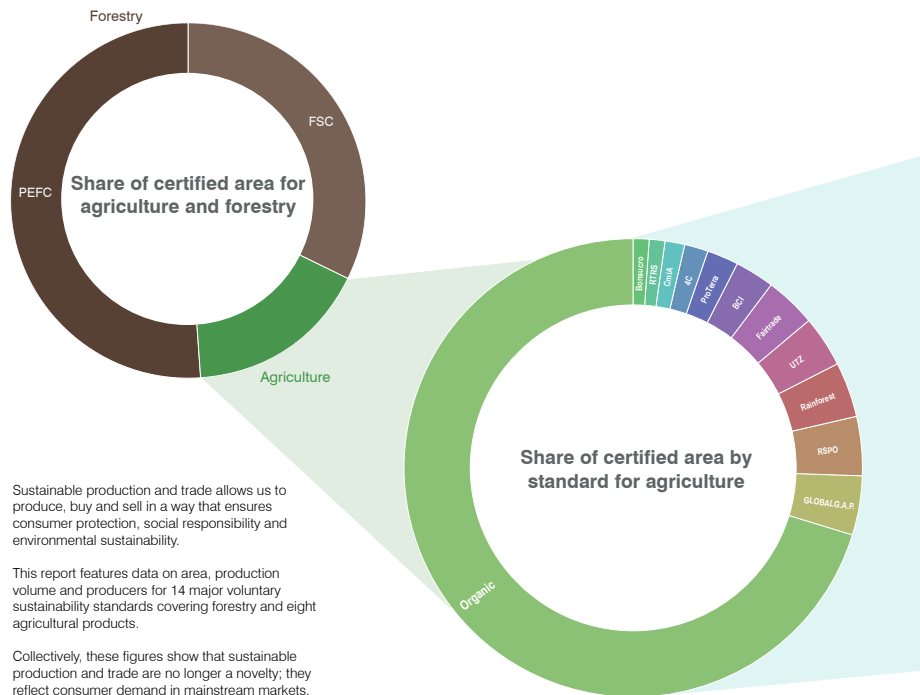
Figure 1: Coffee and cocoa have biggest certified share of cultivated land



Source: FiBL-ITC-IISD survey, 2021.

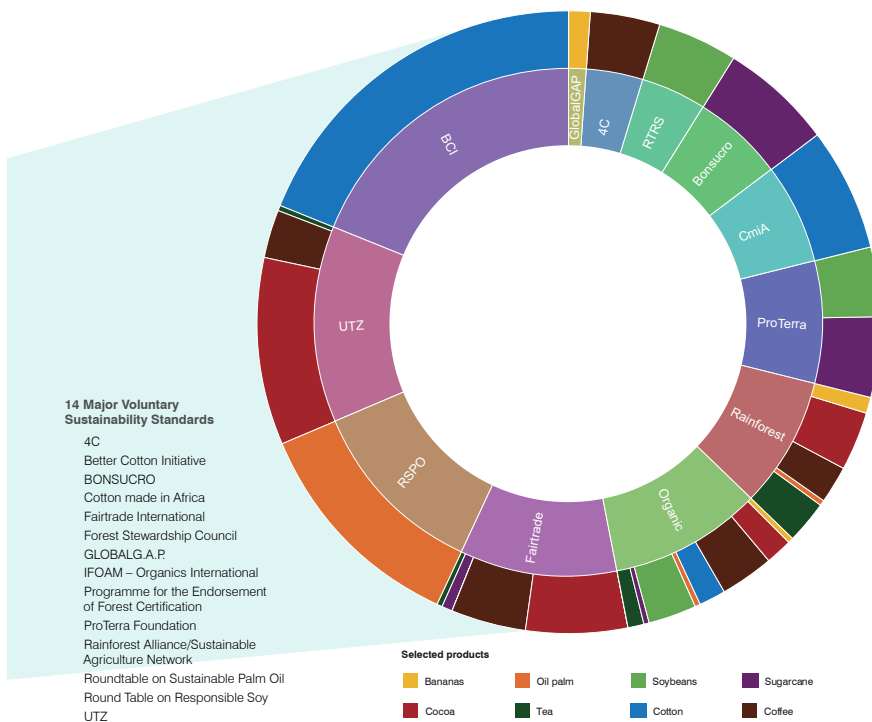
4. Although UTZ merged with Rainforest Alliance in 2018, the 2019 data used for this report were provided for each standard individually.

Figure 2: Eleven agricultural voluntary standards and eight commodities analysed



Source: FiBL-ITC-IISD survey, 2021.

Figure 3: Eleven agricultural voluntary standards and eight commodities analysed



Source: FiBL-ITC-IISD survey, 2021.

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 vital on the supply side, but also on the demand side, as information on the prices of certified crops and on consumption patterns is needed. Data are also required on the international trade patterns of compliant products.

Furthermore, there is a need to expand reporting and transparency requirements for certified producers, broaden the Harmonized System coding system, and increase both corporate reporting and reporting on sustainable consumption at the national level.

Another challenge is that reporting a global total for individual sectors is difficult, because 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. More information is available in the section on methodology.

Box 1 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 reliable data on the share of multiple certifications are inadequate. 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 as they are estimates that indicate a trend.

Unless otherwise stated, the data presented show the minimum possible.





CHAPTER 1

STATE AND DEVELOPMENT OF THE SELECTED COMMODITIES

Research Institute of Organic Agriculture
(Claudia Meier, Bernhard Schlatter and Helga Willer)

AT LEAST 7.9% OF THE GLOBAL AREA OF EIGHT CROPS IS CERTIFIED 3

FORESTRY CERTIFICATION GREW BY 4.7% 6

HIGHLIGHTS BY AGRICULTURAL AND FORESTRY PRODUCTS 6



STATE AND DEVELOPMENT OF THE SELECTED COMMODITIES

This chapter examines the area certified and the production volume of the selected commodities on an aggregate level. As multiple certification remains an issue for some commodities, global totals were computed by adding the country minimums⁵ (leading to a global minimum value for each commodity) the country maximums⁶ (leading to a global maximum value for each commodity) and the country minimum-maximum averages⁷ (leading to a global average value for each commodity).

Unless otherwise stated, the data presented in this section show the global minimum.

5. A country minimum corresponds to the area or production volume of the standard with the largest area or greatest production volume in that country.

6. A country maximum corresponds to the total area or production volume of all standards in that country.

7. A country average corresponds to the average of the country maximum and the country minimum.

At least 7.9% of the global area of eight crops is certified

Minimum area certified

In 2019, the standards covered in this report certified a minimum of 19.7 million hectares of the eight agricultural commodities that were studied: bananas, cocoa, coffee, cotton, oil palm, soybeans, sugarcane and tea. This constituted at least 7.9% of the global area for these crops.

For the fifth consecutive year, cotton had the largest certified area (four standards). With a minimum of 6.5 million hectares, at least 16.8% of the global cotton area was certified.

Oil palm was the commodity with the second-largest certified area (three standards). With a minimum of 3.1 million hectares, at least 10.9% of the global oil palm area was certified.

The commodities with the third- and fourth-largest certified areas were cocoa (four standards) and sugarcane (four standards). Certified cocoa covered at least 2.8 million hectares, representing 22.7% of the global cocoa area. Certified sugarcane covered a minimum of 2.6 million hectares, corresponding to at least 9.5% of the global sugarcane area.

Certified coffee (five standards) and soybeans (three standards) each covered a minimum of 1.8 million hectares, representing at least 16.1% and 1.5% of the global coffee and soybeans area, respectively.

The commodities with the smallest certified area were tea (four standards) and bananas (four standards). Certified tea covered a minimum of 729,021 hectares, representing at least 14.4% of the global tea area, and certified bananas covered a minimum of 353,445 hectares, corresponding to at least 6.9% of the global banana area.

Table 1: Minimum area certified by agricultural commodity, 2019

Commodity	Minimum area certified [ha]	Share of global area	Area growth 2018–2019	Area growth 2015–2019
Bananas	353,445	6.9%	3.1%	21.5%
Cocoa	2,772,162	22.7%	-12.7%	53.2%
Coffee	1,789,026	16.1%	-18.5%	-31.5%
Cotton	6,545,498	16.8%	11.2%	99.9%
Oil palm	3,085,192	10.9%	7.7%	10.8%
Soybeans	1,840,465	1.5%	-6.0%	-27.9%
Sugarcane	2,550,414	9.5%	14.8%	123.7%
Tea	729,021	14.4%	8.1%	30.2%
<i>Total (based on minimum)</i>	<i>19,665,224</i>	<i>7.9%</i>	<i>1.8%</i>	<i>30.9%</i>
<i>Total (based on maximum)</i>	<i>26,413,559</i>	<i>10.6%</i>	<i>2.7%</i>	<i>34.0%</i>
<i>Total (based on average)</i>	<i>23,039,396</i>	<i>9.3%</i>	<i>2.3%</i>	<i>32.7%</i>

Note: The data in this table were not adjusted for multiple certifications, so 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.

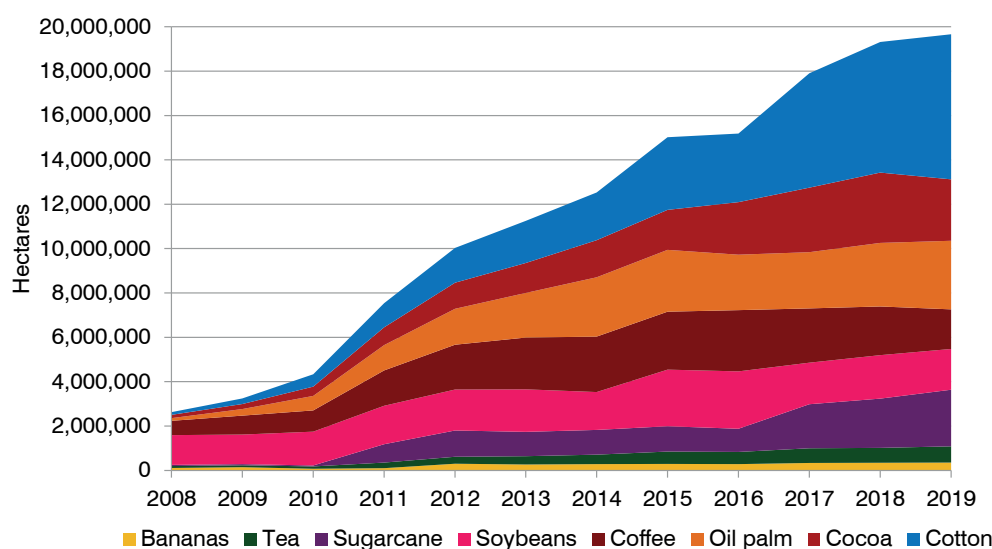
Sources: FiBL-ITC-IISD survey, 2021; 4C Services, 2014 – 2016, 2018 – 2021; Better Cotton Initiative, 2014, 2015, 2017 – 2021; Bonsucro, 2014 – 2016, 2018 – 2021; Cotton made in Africa, 2014 – 2016, 2018 – 2021; Fairtrade International, 2017 – 2021; GLOBALG.A.P., 2015, 2016, 2018 – 2021; FiBL survey, 2008 – 2021; ProTerra Foundation, 2014 – 2016, 2018 – 2021; Rainforest Alliance, 2014 – 2016, 2018 – 2021; Roundtable on Sustainable Palm Oil, 2019 – 2021; Round Table on Responsible Soy, 2014 – 2016, 2018 – 2021; Textile Exchange 2013–2021.

Growth of minimum area certified

In 2015–2019, the minimum certified area of the selected crops expanded by about one third (+30.9%). The minimum certified sugarcane area grew the most, more than doubling in size (+123.7%).⁸ This was followed by cotton, the minimum certified area of which doubled in size (+99.9%), and cocoa and tea, the minimum certified area of which grew by 53.2% and 30.2%, respectively. The smallest growth rates were recorded for bananas, with 21.5%, and oil palm, with 10.8%. The minimum certified coffee area dropped by 31.5%. So did the minimum certified soybeans area (-27.9%) (Table 1 and Figure 2).

The minimum certified area of most of the commodities stagnated or changed by less than 10% in 2015–2016, and expanded by just 2.3% overall. The growth rates were markedly higher for most crops in 2016–2017, with an overall growth of 18.8%, the second-highest growth rate since 2014–2015. Growth flattened again in 2017–2018 (overall growth rate of 6.7%). While the minimum certified area of cotton, oil palm and sugarcane expanded by more than 10%, a negative growth rate was recorded for coffee (-10.4%) (Table 1 and Figure 2). In 2018–2019, growth further flattened, with an overall growth rate of 1.8%. While the minimum area of cotton and sugarcane grew by more than 10%, the minimum area of coffee,⁹ cocoa and soybeans dropped by 18.5%, 12.7% and 6.0%, respectively.

Figure 4: Growth of minimum area certified by crop, 2008–2019



Note: The data in this table were not adjusted for multiple certifications, so 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-IISD survey, 2021; 4C Services, 2014 – 2016, 2018 – 2021; Better Cotton Initiative, 2014, 2015, 2017 – 2021; Bonsucro, 2014 – 2016, 2018 – 2021; Cotton made in Africa, 2014 – 2016, 2018 – 2021; Fairtrade International, 2017 – 2021; GLOBALG.A.P., 2015, 2016, 2018 – 2021; FiBL survey, 2008 – 2021; ProTerra Foundation, 2014 – 2016, 2018 – 2021; Rainforest Alliance, 2014 – 2016, 2018 – 2021; Roundtable on Sustainable Palm Oil, 2019 – 2021; Round Table on Responsible Soy, 2014 – 2016, 2018 – 2021; Textile Exchange 2013–2021.

For all statements made on agricultural commodities in this chapter, 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.

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

9. The drop in the coffee area certified since 2017 is mainly due to more rigorous certification procedures by the 4C standard.

Minimum production volume certified

Production data are often incomplete¹⁰ and/or based on estimates. For organic, the production volumes presented in Table 2 were computed based on partly estimated data. Therefore, production shares, as well as growth rates, need to be interpreted with care, particularly if they differ from area shares and growth rates presented in Table 1.

Of the five commodities listed in Table 2, global shares in certified production were largest for cocoa (27.1%), tea (25.8%) and coffee (20.8%). The lowest production shares were recorded for certified bananas (8.6%) and soybeans (1.7%).

The production of certified bananas grew the most in 2015–2019 (+55.1%). This was followed by certified cocoa (+40.2%) and certified tea (+39.8%). The production of certified soybeans increased by only +6.0% and the production of certified coffee dropped by 29.4%.

In 2018–2019, the production volumes of certified tea and certified bananas rose by 19.8% and 4.9%, respectively. The production volume of certified coffee, cocoa and soybeans fell by 21.5%, 10.1% and 6.0%, respectively.

Although the global shares in certified production were similar to the global shares in certified area, except for tea, this was not the case for growth rates. Particularly for certified soybeans and bananas, there were some major differences. Whereas the four-year production growth of soybeans was positive (+6.0%) the four-year area growth was negative (-27.9%). For bananas, the four-year production growth of 55.1% was notably higher than the four-year area growth of 21.5%. This may be due to inconsistent reporting in some cases.

Table 2: Estimated minimum production volume by agricultural commodity, 2019

Agricultural product	Estimated minimum production [tons]	Share of global production	Production growth 2018–2019	Production growth 2015–2019
Bananas*	10,000,813	8.6%	4.9%	55.1%
Cocoa	1,516,289	27.1%	-10.1%	40.2%
Coffee	2,089,636	20.8%	-21.5%	-29.4%
Soybeans	5,791,031	1.7%	-6.0%	6.0%
Tea	1,674,629	25.8%	19.8%	39.8%

Note: The data in this table were not adjusted for multiple certification, so 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.

* *Production volume of bananas is missing for GlobalG.A.P.*

Source: FiBL-ITC-IISD survey, 2021; 4C Services, 2014 – 2016, 2018 – 2021; Better Cotton Initiative, 2014, 2015, 2017 – 2021; Bonsucro, 2014 – 2016, 2018 – 2021; Cotton made in Africa, 2014 – 2016, 2018 – 2021; Fairtrade International, 2017 – 2021; GLOBALG.A.P., 2015, 2016, 2018 – 2021; FiBL survey, 2008 – 2021; ProTerra Foundation, 2014 – 2016, 2018 – 2021; Rainforest Alliance, 2014 – 2016, 2018 – 2021; Roundtable on Sustainable Palm Oil, 2019 – 2021; Round Table on Responsible Soy, 2014 – 2016, 2018 – 2021; Textile Exchange 2013–2021.

10. No minimum production values were estimated for cotton, oil palm and sugarcane due to a substantial amount of missing production data for these commodities.

Forestry certification grew by 4.7%

PEFC and FSC certified more than 433.5 million¹¹ hectares of forest in 2019, representing 10.7% of the global forest area. The combined PEFC- and FSC-certified forest area grew by 10.4% in 2015–2019, with a one-year growth in 2018–2019 of 4.7% (Table 3).

For forestry, no production data are available.

Table 3: FSC and PEFC certified area, 2019

Commodity	FSC and PEFC certified area [ha]	Share of global forest area	Area growth 2018–2019	Area growth 2015–2019
Forest	433,473,263	10.7%	4.7%	10.4%

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 2015–2019.

Source: FiBL-ITC-IISD survey, 2021: FSC-PEFC, 2021.

Highlights by agricultural and forestry products

This section provides an overview of the area certified for each of the selected sectors (bananas, cocoa, coffee, cotton, palm oil, soy, sugarcane, tea and forestry) for the year 2019. Little information is available about the share of multiple certification. Therefore, the section below provides information on the area range, spanning from the minimum area possible (no multiple certification occurring) to the maximum area possible (100% multiple-certified).

Table 7 and Table 9 show area and production ranges by commodity. Table 8 and Table 10 show area and production by commodity and standard.

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



Bananas

- Four of the 14 standards covered in this report certified the production of bananas, namely **Fairtrade International**, **GLOBALG.A.P.**, **organic** and **Rainforest Alliance**.
- Combined, they certified at least 353,445 hectares (minimum), representing 6.8% of the global banana area. Assuming there was no double certification among the four standards, their common certified area would amount to 615,512 hectares (maximum), representing 11.9% of the global banana area.
- In 2015–2019, the minimum certified banana area grew by 21.5%.
- In 2018–2019, the minimum certified banana area grew by 3.1%.
- GLOBALG.A.P., with 322,817 hectares, certified the largest banana area, representing 6.2% of the global banana area.
- Rainforest Alliance achieved the highest four-year growth; its certified banana area grew by more than half since 2015 (+69.9%), reaching 186,363 hectares in 2019.
- Fairtrade achieved the highest one-year growth; its certified banana area grew by 14.0% since 2018, reaching 46,887 hectares in 2019.

11. FiBL computed the total area certified by FSC and PEFC based on data from FSC and PEFC with respect to certified area by standard and estimated double-certified area.



Cocoa

- Four of the 14 standards covered in this report certified the production of cocoa, namely **Fairtrade International, organic, Rainforest Alliance** and **UTZ**.
- Combined, they certified at least 2.8 million hectares (minimum), representing 22.7% of the global cocoa area. Assuming there was no double certification among the four standards, their common certified area would amount to 5.1 million hectares (maximum), representing 41.6% of the global cocoa area.
- In 2015–2019, the minimum certified cocoa area grew by 53.2%.
- In 2018–2019, the minimum certified cocoa area decreased by 12.7%.
- With 2.5 million hectares, UTZ certified the biggest cocoa area, representing 20.8% of the global cocoa area.
- Fairtrade International achieved both, the highest four-year growth and the highest one-year growth; its certified cocoa area more than doubled in size since 2015 (+140.8%) and grew by 16.5% since 2018, reaching 1.4 million hectares in 2019.



Coffee

- Five of the 14 standards covered in this report certified the production of coffee, namely **4C, Fairtrade International, organic, Rainforest Alliance** and **UTZ**.
- Combined, they certified at least 1.8 million hectares (minimum), representing 16.1% of the global coffee area. Assuming there was no double certification among the five standards, their common certified area would amount to 3.8 million hectares (maximum), representing 34.5% of the global coffee area.
- In 2015–2019, the minimum certified coffee area decreased by 31.5%.
- In 2018–2019, the minimum certified coffee area decreased by 18.5%.
- For the first time since 2015 it is Fairtrade International who certified the largest coffee area - 1 million hectares – representing 9% of the global coffee area.
- UTZ achieved the highest four-year growth; its certified coffee area expanded by about one third since 2015 (+31.2%), reaching 720,250 hectares in 2019.
- Fairtrade achieved the highest one-year growth; its certified coffee area expanded by 4.1% since 2018, reaching 1 million hectares in 2019.



Cotton

- Four of the 14 standards covered in this report certified the production of cotton, namely **BCI, CmiA, Fairtrade International** and **organic**.
- Combined, they certified at least 6.5 million hectares (minimum), representing 16.8% of the global cotton area. Assuming there was no double certification among the four standards, their common certified area would amount to 7.1 million hectares (maximum), representing 18.1% of the global cotton area (Table 7).
- In 2015–2019, the minimum certified cotton area expanded by 99.9%.
- In 2018–2019, the minimum certified cotton area expanded by 11.2%.
- BCI, with 4.9 million hectares, certified the biggest cotton area, representing 12.6% of the global cotton area.
- BCI also achieved the highest four-year and one-year growth; its certified area more than doubled in size since 2015 (+113.1%) and grew by 18.3% since 2018.



Oil palm

- Three of the 14 standards covered in this report certified the production of oil palm, namely **organic**, **Rainforest Alliance** and **RSPO**.
- Combined, they certified at least 3.1 million hectares (minimum), representing 10.9% of the global oil palm area. Assuming there was no double certification among the three standards, their common certified area would be only marginally higher, amounting to 3.2 million hectares (maximum), representing 11.2% of the global oil palm area.
- In 2015–2019, the minimum certified oil palm area expanded by 10.8%.
- In 2018–2019, the minimum certified oil palm area expanded by 7.7%.
- RSPO certified nearly all of this oil palm area: 3.05 million hectares, representing 10.8% of the global oil palm area.
- Rainforest Alliance achieved the highest four-year and one-year growth; its certified area more than doubled in size since 2015 (+121.7%) and grew by 21.2% since 2018, reaching 110,503 hectares in 2019.



Soybeans

- Three of the 14 standards covered in this report certified the production of soybeans, namely **organic**, **ProTerra Foundation** and **RTRS**.
- Combined, they certified at least 1.8 million hectares (minimum), representing 1.5% of the global soybean area. Assuming there was no double certification among the three standards, their common certified area would amount to 2.9 million hectares (maximum), representing 2.4% of the global soybean area.
- In 2015–2019, the minimum certified soybean area decreased by 27.9%.
- In 2018–2019, the minimum certified soybean area decreased by 6.0%.
- RTRS, with 1.1 million hectares, certified the largest soybean area, representing 0.9% of the global soybean area.
- RTRS also achieved the highest four-year growth; its certified area grew by half since 2015 (+51.4%).
- Organic achieved the highest one-year growth; its certified area grew by 11.3% since 2018, reaching 717,050 hectares in 2019.



Sugarcane

- Four of the 14 standards covered in this report certified the production of sugarcane, namely **Bonsucro**, **Fairtrade International**, **organic** and **ProTerra Foundation**.
- Combined, they certified at least 2.6 million hectares (minimum), representing 9.5% of the global sugarcane area. Assuming there was no double certification among the four standards, their common certified area would amount to 2.9 million hectares (maximum), representing 10.7% of the global sugarcane area.
- In 2015–2019, the minimum certified sugarcane area expanded by 123.7%.
- In 2018–2019, the minimum certified sugarcane area expanded by 14.8%.
- Bonsucro, with 1.5 million hectares, certified the largest sugarcane area, representing 5.8% of the global sugarcane area.
- Bonsucro also achieved the highest four-year and one-year growth; its certified area grew by more than half since 2015 (+69.7%) and by 36.4% since 2018.



Tea

- Four of the 14 standards covered in this report certified the production of tea, namely **Fairtrade International, organic, Rainforest Alliance** and **UTZ**.
- Combined, they certified at least 729,021 hectares (minimum), representing 14.4% of the global tea area. Assuming there was no double certification among the four standards, their common certified area would amount to 943,109 hectares (maximum), representing 18.6% of the global tea area.
- In 2015–2019, the minimum certified tea area expanded by 30.2%.
- In 2018–2019, the minimum certified tea area expanded by 8.1%.
- Rainforest Alliance certified the largest tea area – 613,582 hectares – representing 12.1% of the global tea area.
- Organic achieved the highest four-year and one-year growth; its certified area doubled in size since 2015 (+106.1%) and grew by 46% since 2018, reaching 153,695 hectares in 2019.



Forestry

- Two of the 14 standards covered in this report certified forestry, namely **PEFC** and **FSC**.
- Combined, they certified a forest area of 433.5 million hectares, representing 10.7% of the global forest area.
- In 2015–2019, the combined PEFC- and FSC-certified forest area grew by 10.4%, with a one-year growth in 2018–2019 of 4.7%.
- As in previous years, the PEFC-certified area exceeded the FSC-certified area in both size and growth in 2019. With 326.5 million hectares of forest, 8% of the global forest area was PEFC-certified, expanding by 20% since 2015 and by 5.5% since 2018. FSC reported 202.4 million hectares of certified forest, representing 5% of the global forest area and an increase of 8.6% since 2015 and by 2.7% since 2018.



CHAPTER 2

STATE AND DEVELOPMENT OF THE SELECTED SUSTAINABILITY STANDARDS

Research Institute of Organic Agriculture
(Claudia Meier, Bernhard Schlatter and Helga Willer)

ORGANIC COVERS THE WIDEST MIX OF AGRICULTURE GOODS 12

PEFC CONTINUES TO OUTPACE FSC ON FOREST AREA CERTIFICATION 14

SINGLE-SECTOR STANDARDS DOMINATE..... 14

THE SELECTED SUSTAINABILITY STANDARDS

This chapter examines the selected sustainability standards on an aggregate level, taking into account the full range of commodities each standard certified (and not only the nine commodities covered in this report).¹² For this purpose, this chapter focuses on variables for which an aggregation across commodities is meaningful, namely, a standard's certified area and some producers/certificate holders.

Please note: Due to multiple certification, it is impossible to determine the global certified area or the global number of producers for all sustainability standards together.

Organic covers the widest mix of agriculture goods

Area certified

Organic is the sustainability standard with the largest variety of agricultural products and, by far, the largest area certified (Willer et al., 2021). A total of 72.1 million hectares¹³ were organic certified in 2019, representing 1.5% of all agricultural land worldwide.

Of the remaining 11 agricultural standards, four covered land exceeding 4 million hectares each in 2019. BCI certified the largest area (4.9 million hectares), followed by Rainforest Alliance (4.3 million hectares), RSPO (4.2 million hectares), and GLOBALG.A.P. (4.1 million hectares), each representing a global share of approximately 0.1%.

Growth in area certified

The area of almost all sustainability standards expanded by double digits in 2015–2019. The exceptions are organic, which grew by 9% and 4C, which recorded a decline of 41.1%.¹⁴ Single-sector standards reported the largest area growth: the certified area of BCI more than doubled (+113.1%), and the area certified by CmiA and Bonsucro grew by 69.9% and 69.7%, respectively.

Area growth in 2018–2019 was also greatest for single-sector standards, namely Bonsucro (+35.7%), BCI (+18.3%) and RSPO (+11.2%). Six standards experienced a decline in area certified. The largest drops were reported for 4C (-29.4%), UTZ (-13.4%) and RTRS (-9.6%).

Number of producers

As the standard with the biggest certified area, organic also has the most producers – 3.1 million in 2019. However, Fairtrade, BCI and Rainforest, which certified markedly smaller areas than organic, also had relatively high numbers of producers: Fairtrade and BCI both reported 1.7 million producers, and Rainforest 1.4 million.

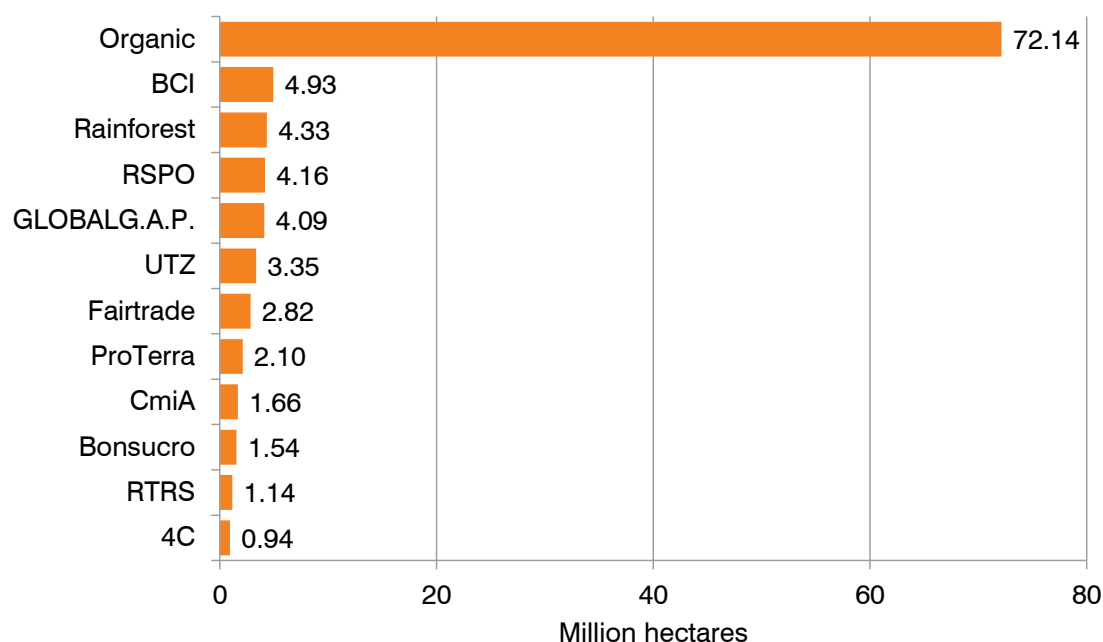
This apparent contradiction can be explained by the fact that most of the sustainability standards presented in this report focus on the Global South, where smallholders prevail. In contrast, organic is prominent globally, including in countries where large farms dominate, such as Australia and the United States. It should also be noted that the producer data for organic are incomplete for many countries.

12. For instance, organic certified a total of 72.1 million hectares in 2019, but 2.5 million hectares if only the selected eight agricultural commodities are taken into account.

13. This includes land that is in the process of becoming certified as organic.

14. This can mainly be explained by the more rigorous certification procedures by the 4C standard.

Figure 5: Area certified by agricultural standard, 2019



Note: This figure shows the total area certified by VSS, including all commodities each VSS certifies, hence going beyond the eight commodities examined in this report. For organic, the reported number also includes permanent grazing areas, which account for over two-thirds of the total area certified.

Sources: FiBL-ITC-IISD survey, 2021; 4C Services, 2021; Better Cotton Initiative, 2021; Bonsucro, 2021; Cotton made in Africa, 2021; Fairtrade International, 2021; GLOBALG.A.P., 2021; FiBL survey, 2021; ProTerra Foundation, 2021; Rainforest Alliance, 2021; Roundtable on Sustainable Palm Oil, 2021; Round Table on Responsible Soy, 2021; Textile Exchange 2021.

Table 4: Area certified and producers by agricultural standard, 2019

Standard	Area certified [ha]	Producers [no.]	Share of global agricultural area	Area growth 2018–2019	Area growth 2015–2019
4C	938,445	385,404	0.02%	-29.4%	-41.1%
BCI	4,928,000	1,653,055	0.10%	18.3%	113.1%
Bonsucro	1,539,800	132	0.03%	35.7%	69.7%
CmiA	1,657,000	885,575	0.03%	-6.9%	69.9%
Fairtrade	2,824,074	1,716,245	0.06%	6.4%	13.9%
GLOBALG.A.P.	4,090,540	205,780	0.09%	6.1%	31.4%
Organic	72,138,583	3,135,119	1.52%	0.9%	7.0%
ProTerra	2,100,557	9,252	0.04%	-4.6%	16.1%
Rainforest Alliance	4,328,069	1,383,649	0.09%	-3.4%	49.4%
RSPO	4,160,924	157,580	0.09%	11.2%	20.1%
RTRS	1,141,611	246	0.02%	-9.6%	51.4%
UTZ	3,349,656	1,101,485	0.07%	-13.4%	57.5%

Sources: FiBL-ITC-IISD survey, 2021; 4C Services, 2014 – 2016, 2018 – 2021; Better Cotton Initiative, 2014, 2015, 2017 – 2021; Bonsucro, 2014 – 2016, 2018 – 2021; Cotton made in Africa, 2014 – 2016, 2018 – 2021; Fairtrade International, 2017 – 2021; GLOBALG.A.P., 2015, 2016, 2018 – 2021; FiBL survey, 2008 – 2021; ProTerra Foundation, 2014 – 2016, 2018 – 2021; Rainforest Alliance, 2014 – 2016, 2018 – 2021; Roundtable on Sustainable Palm Oil, 2019 – 2021; Round Table on Responsible Soy, 2014 – 2016, 2018 – 2021; Textile Exchange 2013–2021.

PEFC continues to outpace FSC on forest area certification

Area certified

The forest area certified by PEFC exceeded the forest area certified by FSC in 2019 as well as in preceding years. With 326.5 million hectares of forest, 8% of the global forest area was PEFC-certified. FSC reported 202.4 million hectares of certified forest, representing 5% of the global forest area.

In 2015–2019, the certified forest area grew considerably more for PEFC (+20.0%) than for FSC (+8.6%). In 2018–2019, the PEFC-certified area grew by 5.5% and the FSC-certified forest area by 2.7%.

Number of chain-of-custody certificate holders

FSC counted 42,115 chain-of-custody (CoC) certificate holders in 2019 and PEFC, 11,984.

Table 5: Certified forest area and CoC certificate holders by forestry standard, 2019

Standard	Area certified [ha]	CoC certificate holders [no.]	Share of global forest area	Area growth 2018–2019	Area growth 2015–2019
FSC	202,372,423	42,115	5.0%	2.7%	8.6%
PEFC	326,458,724	11,984	8.0%	5.5%	20.0%

Source: FiBL-ITC-IISD survey, 2021: FSC-PEFC, 2021.

Single-sector standards dominate

Standards that directly target mainstream adoption within a specific sector largely drive growth and market uptake. In the sectors discussed, where single-commodity standards¹⁵ have been developed (coffee, cotton, forestry, oil palm, sugarcane and soy), these standards usually are the ones with the largest area for their specific crops.

In 2019, BCI and CmiA had the biggest certified cotton area (global shares of 12.6% and 4.2%, respectively), RSPO the largest certified oil palm area (global share of 10.8%), RTRS the largest certified soybean area (global share of 0.9%) and Bonsucro the largest sugarcane area (global share of 5.8%). Only the coffee area certified by the single-commodity standard 4C fell short of the coffee area certified by Fairtrade International.

Multiple-commodity standards¹⁶ such as Fairtrade, GLOBALG.A.P, organic, ProTerra, Rainforest Alliance and UTZ may have lower coverage of a specific commodity than single-commodity standards because of their wider scope. This is most notable for organic agriculture. In 2019, organic certified 2.5 million hectares for the eight agricultural products analysed in this report, but 72.1 million hectares in total, covering more or less all agricultural commodities.

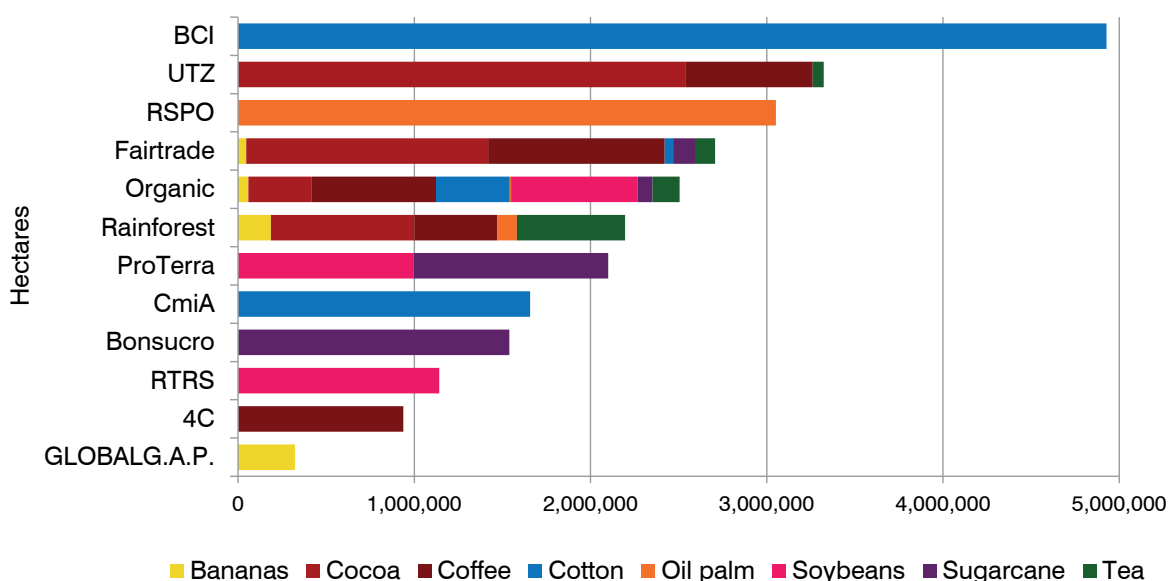
However, multiple-commodity standards are gaining importance – in the coffee sector as well as the sugarcane and soybean sectors. Fairtrade, UTZ, organic and Rainforest Alliance all certified a substantial share of the global coffee area in 2019 (9%, 6.5%, 6.3% and 4.2%, respectively). ProTerra and organic both certified an important portion of the global soybean area (0.6% and 0.8%, respectively). ProTerra also certified an important part of the global sugarcane area (4.1%).

UTZ remained the most important certifier in the cocoa sector (global cocoa area share of 20.8%) and Rainforest Alliance in the tea sector (global tea area share of 12.1%), in which no single-commodity standards have been developed. As Rainforest Alliance and UTZ merged in 2018, they may dominate not only the cocoa and tea sectors, but also the coffee sector in the years to come.

15. Single-commodity standards are sustainability standards that certify just one commodity. An example is 4C, which only certifies coffee.

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

Figure 6: Area harvested by agricultural standard and commodity, 2019



Note: This figure shows the area certified by VSS for the eight selected agricultural commodities.

Sources: FIBL-ITC-IISD survey, 2021; 4C Services, 2021; Better Cotton Initiative, 2021; Bonsucro, 2021; Cotton made in Africa, 2021; Fairtrade International, 2021; GLOBALG.A.P., 2021; FIBL survey, 2021; ProTerra Foundation, 2021; Rainforest Alliance, 2021; Roundtable on Sustainable Palm Oil, 2021; Round Table on Responsible Soy, 2021; Textile Exchange 2021.

Table 6: Area harvested by agricultural standard and commodity, 2019

Standard	Product	Area harvested [ha]	Share of global area harvested	Area growth 2018–2019	Area growth 2015–2019
4C	Coffee	938,445	8.44%	-29.36%	-41.14%
4C total		938,445	8.44%	-29.36%	-41.14%
BCI	Cotton	4,928,000	12.64%	18.26%	113.06%
BCI total		4,928,000	12.64%	18.26%	113.06%
Bonsucro	Sugarcane	1,539,800	5.75%	36.41%	69.73%
Bonsucro total selected crops		1,539,800	5.75%	36.41%	69.73%
CmiA	Cotton	1,657,000	4.25%	-6.89%	69.89%
CmiA total selected crops		1,657,000	4.25%	-6.89%	69.89%
Fairtrade	Bananas	46,887	0.91%	13.96%	15.42%
	Cocoa	1,372,820	11.22%	16.47%	140.79%
	Coffee	1,001,002	9.00%	4.08%	-22.83%
	Cotton	48,763	0.13%	-12.16%	8.29%
	Sugarcane	124,030	0.46%	-17.17%	-33.58%
	Tea	113,382	2.23%	-16.91%	-7.16%
Fairtrade total selected crops		2,706,884	2.72%	7.28%	19.68%
GLOBALG.A.P.	Bananas	322,817	6.25%	7.94%	30.01%
GLOBALG.A.P. total selected crops		322,817	6.25%	7.94%	30.01%

Standard	Product	Area harvested [ha]	Share of global area harvested	Area growth 2018–2019	Area growth 2015–2019
Organic	Bananas	59,446	1.15%	-19.61%	13.23%
	Cocoa	359,630	2.94%	13.02%	34.11%
	Coffee	703,762	6.33%	0.28%	-11.81%
	Cotton	418,935	1.07%	17.64%	19.68%
	Oil palm	8,040	0.03%	-6.51%	88.07%
	Soybeans	717,050	0.60%	11.29%	35.72%
	Sugarcane	85,825	0.32%	-20.10%	-7.28%
	Tea	153,695	3.03%	45.96%	106.09%
Organic total selected crops		2,506,383	1.01%	8.24%	15.59%
ProTerra	Soybeans	996,125	0.83%	-7.11%	-44.97%
	Sugarcane	1,104,432	4.12%	-2.24%	0.00%
ProTerra total selected crops		2,100,557	1.43%	-4.61%	16.05%
Rainforest	Bananas	186,363	3.61%	11.99%	69.95%
	Cocoa	815,321	6.66%	12.69%	10.54%
	Coffee	470,611	4.23%	-0.05%	16.18%
	Oil palm	110,503	0.39%	21.24%	121.70%
	Tea	613,582	12.08%	3.39%	29.86%
Rainforest total selected crops		2,196,378	3.55%	7.38%	23.69%
RSPO	Oil palm	3,051,930	10.78%	8.71%	10.02%
RSPO total selected crops		3,051,930	10.78%	8.71%	10.02%
RTRS	Soybeans	1,141,611	0.95%	-9.63%	51.40%
RTRS total selected crops		1,141,611	0.95%	-9.63%	51.40%
UTZ	Cocoa	2,541,054	20.77%	-15.50%	66.07%
	Coffee	720,250	6.48%	-6.51%	31.19%
	Tea	62,450	1.23%	-16.22%	30.57%
UTZ total selected crops		3,323,754	11.69%	-13.72%	56.27%

Sources: FIBL-ITC-IISD survey, 2021; 4C Services, 2014 – 2016, 2018 – 2021; Better Cotton Initiative, 2014, 2015, 2017 – 2021; Bonsucro, 2014 – 2016, 2018 – 2021; Cotton made in Africa, 2014 – 2016, 2018 – 2021; Fairtrade International, 2017 – 2021; GLOBALG.A.P., 2015, 2016, 2018 – 2021; FiBL survey, 2008 – 2021; ProTerra Foundation, 2014 – 2016, 2018 – 2021; Rainforest Alliance, 2014 – 2016, 2018 – 2021; Roundtable on Sustainable Palm Oil, 2019 – 2021; Round Table on Responsible Soy, 2014 – 2016, 2018 – 2021; Textile Exchange 2013–2021.





CHAPTER 3

CONSUMPTION TRENDS FOR CERTIFIED PRODUCTS

International Institute for Sustainable Development
(Steffany Bermudez and Cristina Larrea)

BANANAS 21

COCOA 21

COFFEE..... 22

COTTON 22

PALM OIL 23

SOYBEANS 23

SUGAR 24

TEA..... 24

HOW TO ENCOURAGE CONSUMPTION? 25



CONSUMPTION TRENDS FOR CERTIFIED PRODUCTS

The global economy has been hit hard by COVID-19. Restrictions on movement, low prices, logistics and labour shortages have affected the agricultural sector.¹ Consumption of agricultural goods has also been affected, as global disposable incomes fell around 5% in 2020 and lockdown measures have limited people's access to restaurants, travel and shops.² Despite growing optimism about economic recovery in 2021,³ many households continue to reduce spending on non-essential goods and services, which can include VSS-compliant products that are often more costly.⁴

On the other hand, there is growing demand for more nutritious, healthier and safer products that also safeguard animal and human welfare. People are increasingly interested in knowing where and how their food has been produced.⁵ As a result, buyers, traders, manufacturers and retailers are using sustainability standards to assure consumers and governments that their supply chains satisfy requirements that aim to protect food quality, safety, human health and the environment.⁶

These trends vary by geography and commodity market. Prospects to expand sustainable consumption continue to be more positive for developed countries compared with low- and middle-income countries, where prohibitive costs and a lack of education about voluntary standards remain the biggest barriers to consumption.⁷



Bananas

Europe and North America continue to lead consumption of VSS-compliant bananas

Banana value chains proved to be resilient in 2020,⁸ with traditional markets in the Global North leading VSS-compliant consumption. Organic bananas represented more than 10% of all the bananas consumed in Europe and North America in 2020,⁹ and their sales outperformed conventional ones in the United States in the first quarter of 2021.¹⁰ Furthermore, a third of all bananas sold in the United Kingdom are Fairtrade certified,¹¹ and sales of Fairtrade bananas have grown 30% in the United States since 2019.¹²

The success of VSS in these markets is driven by low prices in retail stores, growing consumer preferences for healthy and safer fruit, consumer awareness of the environmental crisis¹³ and the shift towards home meal preparation during the pandemic.¹⁴

However, increasing market shares and competition in the industry are slowly bringing down banana prices, which can lead to challenges for producers in developing countries.^{15,16} VSS such as Fairtrade are working with other actors to implement living wages and living incomes to protect banana farmers and workers.^{17,18,19} Publicizing these efforts may encourage consumers to purchase VSS-compliant bananas.²⁰

Boosting VSS-compliant consumption in the sector requires efforts from all actors, including importers, end-consumers, and retailers. The latter can have a significant influence on shopping choices, as they determine the banana range on shelves. It is also crucial to promote sustainable consumption in major producing countries, as about 80% of bananas are consumed locally in countries such as India, China, and Brazil.²¹



Cocoa

Policy regulations and sustainability initiatives in Western countries will continue to drive VSS-compliant cocoa consumption.

Europe remains the most important market for VSS-compliant cocoa in the world. European demand for VSS-compliant cocoa is growing, with more and more large chocolate manufacturers sourcing sustainably grown options. The COVID-19 pandemic has disrupted the cocoa value chain and consumption patterns, making it difficult for consumers to access higher-end and seasonal products such as VSS-compliant or specialty cocoa.²² Despite this, favourable long-term market prospects are expected for sustainable cocoa post-pandemic.²³

Policy regulations and emerging national sustainability initiatives will continue to drive demand for VSS-compliant cocoa. Chocolate in the bulk market faces increasingly strict entry requirements relating to sustainability, and non-certified cocoa bean suppliers are having a more difficult time accessing the European market due to the tougher protocols.²⁴

Countries such as Belgium, Germany and Switzerland have set up national cocoa platforms with targets to move towards a sustainable cocoa sector. The Dutch government has also articulated specific sustainable procurement guidelines that apply to the cocoa sector and with which producers must either comply or commit to comply.²⁵

The Rainforest Alliance has its largest cocoa markets in Germany, the Netherlands, Italy and Belgium, while the largest market for Fairtrade is found in the United Kingdom.²⁶ The organic chocolate market is also expected to keep growing between 2017 and 2022, particularly in France and Germany. Despite this positive forecast, unfortunately the global supply of certified cocoa continues to surpass the demand.²⁷

Promoting the consumption of VSS-compliant cocoa beyond Europe is crucial to balance the market. Strategies should target new consumers in traditional markets as well as emerging economies and producing countries.



Coffee

Consumption of VSS-compliant coffee is rising despite the COVID-19 pandemic, however there is still an imbalance between supply and demand.

The COVID-19 pandemic has changed coffee consumption patterns globally. As millions of people were forced to start working from home, coffee purchases shifted from coffee shops to at-home coffee machines.²⁸ However, changes in VSS-compliant coffee consumption resulting from the pandemic have differed across regions.

In emerging economies and producing countries, price-sensitive consumers may have substituted higher value coffee, including VSS-compliant, with lower value brands.²⁹ Meanwhile in high-income countries or traditional markets such as the United States and Europe, VSS-compliant coffee consumption increased despite the pandemic.³⁰

The success of VSS-compliant coffee in traditional markets reflects increasing consumer preferences for ethical consumption.³¹ Surveys show that 43% of American coffee drinkers said that 'ethical, environmentally friendly, or socially responsible coffee options would influence their product choice'.³² In Europe, many retailers such as Lidl, ALDI, and Sainsbury's have entered the certified market by developing private-label brands linked to VSS such as Rainforest Alliance/UTZ and organic, boosting retail sales of certified coffee in the region.³³

Although the market for sustainable coffee is growing, there is still an imbalance between supply and demand. Not all VSS-compliant coffee is being sold as such, with farmers not being able to receive premium prices and struggling to maintain certifications.^{34,35} Falling incomes and the higher costs of production experienced in 2020 because of supply chain disruptions have led to greater rates of poverty among smallholder coffee growers, and in some cases reduce investments in sustainable production and climate resilience.³⁶

It is therefore crucial to boost consumption of VSS-compliant coffees, especially in emerging economies such as the Russian Federation, China and Indonesia, where domestic consumption rates are growing exponentially thanks to the influence of millennials with higher disposable incomes.³⁷ These countries are also among the fastest-growing markets for the coffee sector, showing accelerated development of roasting facilities and coffee shops serving high-quality coffees with sustainability claims.^{38,39}



Cotton

Younger generations in Asia, North America, and Europe will continue to drive consumption of VSS-compliant cotton in a post-pandemic scenario.

The global apparel and textile sector was one of the most severely affected industries in 2020, as the long and complex cotton-to-textile value chains were highly sensitive to cancelled orders from overseas textile manufacturers caused by the COVID-19 crisis.⁴⁰ With retail stores closed, government-mandated lockdowns in place and a global contraction of economic growth, worldwide demand for cotton decreased by 13%–32% in 2019–2020.⁴¹

Paired with high cotton production levels, this meant that up to 70% of the fibres produced in 2020 remained trapped in factories, transit hubs or ports.⁴² Revenues for the global fashion industry contracted by 27%–30% in 2020,⁴³ affecting consumption of VSS-compliant cotton, too.

On the flip side, young shoppers in Asia, North America and Europe are increasingly seeking out sustainable brands and have expressed willingness to pay more for environmentally friendly fashion.⁴⁴ With customers making big lifestyle changes since the crisis to lessen their environmental impact, researchers predict a change in attitudes towards more sustainable clothing shopping in a post-pandemic scenario.⁴⁵

For brands and retailers, the pandemic has also provided an opportunity to re-evaluate sustainability practices and commitments.⁴⁶ These companies are trying to improve their sustainable product innovation by committing to source more VSS-compliant cotton by 2025,^{47,48} as well as implementing traceability systems to track their purchases through the supply chain.⁴⁹

Continuing to promote sustainable cotton production and consumption in China, the largest textile and apparel producer and consumer, is essential. Retailers and brands can play a major role in promoting VSS-compliant cotton by encouraging consumers to buy more eco-friendly products and by pushing manufacturers to produce clothes with more sustainable cotton. As they are the bridge between producers and end-consumers, their decisions can create a positive chain effect.⁵⁰



Palm oil

Increasing consumption of VSS-compliant palm oil requires collaboration and collective action among all actors along the value chain.

Reports of poor labour conditions, deforestation and forest degradation have made governments and consumers around the globe (particularly in European markets) wary of the palm oil industry. As a result, interest is growing in adopting measures that promote imports of more sustainably grown palm oil,⁵¹ and looking for palm oil alternatives such as coconut and babassu oils.⁵²

Despite these concerns, palm oil consumption remained stable and even increased during the COVID-19 outbreak, as it is widely used as an ingredient in many foods, cosmetic, pharmaceutical, and industrial products, including hand sanitizer.⁵³

The forecast for global demand for VSS-compliant palm oil is positive. This is largely driven by public concerns about deforestation associated to palm oil operations, developed nations' growing focus on clean, green fuel and its growing application as a feedstock in biofuel production.⁵⁴ Increasing consumer preferences for nutritious, healthy food and environment-friendly ingredients are also driving food processors to switch to palm oil complying with the RSPO scheme as well as organic and genetically modified organism-free palm oil.^{55,56}

Despite these prospects and the increase of businesses taking part in sustainability standards, such as the RSPO, producers consider price competitiveness their top priority when deciding which oils to grow.⁵⁷ Some exporters report shortages of VSS-compliant palm oil in some periods of the year⁵⁸ and some traders and processors struggle to source VSS-compliant palm oil due to factors including low demand from manufacturing companies.⁵⁹

Increasing consumption of VSS-compliant palm oil requires collaboration and collective action among actors along the entire value chain. This includes policy support from major importing countries such as the EU, as well as Indian and Chinese markets,⁶⁰ to support farmers adopting more sustainable production practices, while incentivizing buyers to source VSS-compliant palm oil.⁶¹



Soybeans

Increasing global demand for vegetarian and vegan food and soy-based beverages has driven consumption for VSS-compliant soybeans, however expanding consumption requires involvement from China as the major consumer of the crop.

Consumption of VSS-compliant soybeans, notably RTRS-certified, grew exponentially from 2019 to the first half of 2020. This increase in demand was driven by sustainable sourcing commitments made by processing and trading companies that chose certification to fulfil their sustainability goals and those of other actors in the soy value chain, such as food manufacturers and retailers.⁶²

However, it is important to note that this rise corresponds largely to purchases of RTRS credits – as opposed to physical soybeans compliant with the scheme – as compensation for soybean products that are not sourced from sustainably grown sources.⁶³

Consumer preferences have played an important role in growing demand for VSS-compliant soy, as there is a global surge for vegan, dairy-free and ethical food and beverages.⁶⁴ In general, meat consumption has grown slowly in developed markets, while demand in developing markets in Asia is increasing more rapidly.⁶⁵ In North America and Europe, changing consumer behavior and interest in alternative-protein sources, due to health and environmental concerns as well as animal welfare, have led to a growth in the plant proteins market mainly based on soy, which is considered healthier than animal-derived proteins.⁶⁶

The European market is leading demand for VSS-compliant soy, with the Netherlands accounting for about 66% of total RTRS purchases, followed by the Scandinavian region and then the United Kingdom.^{67,68} This comes from rising demand for organic feed crops needed to feed organic livestock, as well as a general increase in demand for European-grown organic soy.⁶⁹

However, European consumption is not sufficient to ensure sustainability in the sector. Boosting sustainable consumption in China, the world's top soybean consumer, where sustainable products make up less than 10% of goods on shelves, is crucial. Promoting the awareness of buyers, retailers and consumers on eco-labelling can encourage consumption of VSS-compliant soy in China.⁷⁰



Sugar

Demand for fossil-fuel alternatives drives consumption of VSS-compliant sugarcane, and this is expected to continue.

Sugarcane is a vital endemic arable crop in many producing countries, as it often contributes significantly to their economy and to producers' livelihoods. Sugar-producing countries in Latin America, such as Colombia and Brazil, have benefited from greater demand for organic-certified sugar, particularly from the EU, whose imports rose by 29% in 2020 compared to 2018.^{71,72}

The pandemic has caused a global decline in sales of beverages, desserts and pastries, which require large amounts of sugarcane.⁷³ It has also brought to light concerns about sugar consumption and the dangers of a high daily calorie intake and its link to increased risks of severe COVID-19 symptoms.⁷⁴ Thus, the uptake and promotion of healthy food options – with an emphasis on reduced sugar content – could represent a threat to the sector.⁷⁵ On the other hand, the use of sugarcane in biofuels demonstrates an alternative pathway forward for the industry beyond food consumption.

Indeed, demand for VSS-compliant sugarcane over the last few years stems from greater demand for fossil-fuel alternatives such as bioethanol. Market uptake of Bonsucro-certified ethanol has improved considerably, with sales climbing 68% in 2018–2019.⁷⁶ Also, sustainability standards in the sector, such as the International Sustainability and Carbon Certification and Bonsucro, have been certifying more sugar mills producing bioethanol in countries such as Brazil and Argentina.^{77,78}

The conversion of sugar into biofuels and bioenergy offer opportunities to ensure continuity of demand for VSS-compliant sugar in the face of changing climate regulations and regulatory systems for sustainable biofuels in Europe, that recognize voluntary schemes as valid form of compliance.^{79,80} To this end, VSS-compliant sugarcane operations encourage farming practices to increase soil health and productivity, which can help supply to keep up with this growing demand, and ensure the longevity of the industry.⁸¹



Tea

Demand for VSS-compliant tea is rising, but there is still room for growth – especially in producing countries, the largest tea consumers.

Global demand for tea has grown considerably during the COVID-19 pandemic, providing opportunities to build a more sustainable and resilient sector.⁸² Initial lockdowns early on in the pandemic slightly slowed distribution and marketing logistics in the sector, with tea producers postponing their plans to move to VSS-compliant production due to difficulties performing auditing. However, the industry adapted very quickly to the new normal and returned to a stable state in 2021.⁸³

As lockdowns and other restrictions are lifted, the tea industry foresees an increase in VSS-compliant production, coupled with greater demand from predominantly European consumers who are seeking more ethical consumption options.⁸⁴ Increased demand from Europe for organic products such as tea, where sales of organic options outperformed non-organic sales in 2020, has led to a supply challenge in India, where food processing and exports were halted in March 2020.⁸⁵

While some consumers in developed and emerging economies are eager to put their money towards more sustainable food and drink options, only 15% of hot beverages (including tea and coffee) sold globally are certified sustainable in some way.⁸⁶ This indicates that there is still potential to increase consumption of VSS-compliant tea in the hot beverage markets.

Another issue is the price discrepancies between VSS-compliant teas and their conventional counterparts. In major tea-consuming countries such as Turkey, the Russian Federation and Indonesia, conventional teas are sometimes as much as 625% cheaper than the sustainable alternative.⁸⁷

An important takeaway is that if sustainable products such as certified tea are handled as luxury goods, the premium price will continue to be a barrier to a growing consumer base, particularly in price-sensitive markets in emerging economies and major producing countries.⁸⁸ Encouraging consumption of sustainably grown tea requires more market transparency and greater awareness of the importance of sustainability for rural development and livelihoods in producing countries.

How to encourage sustainable consumption?

Concerns related to health and food safety brought to light during the pandemic have become major drivers for global consumers to look for sustainable certified products. Consumers globally are paying more attention to the claims that companies make about the environmental and social impact of the goods they sell and have proven their willingness to pay more for these products. Credible and verifiable proof of sustainable sourcing has thus become increasingly pertinent.⁸⁹

However, one of the biggest challenges for most of the VSS-compliant markets covered in this report is that supply still outpaces demand. In some cases, VSS-compliant products such as palm oil and soybeans are not even labelled as such.

Traditional markets in Europe and North America continue to lead consumption of VSS-compliant commodities and are showing important progress in developing regulations and due diligence measures to expand sustainable consumption. However, increasing demand in other markets, such as emerging economies and producing countries that are also major consumers (particularly in Asia), is fundamental to achieve a supply and demand balance.

To make this happen, it is important to:

- educate consumers, especially when it comes to price-sensitive products such as bananas, coffee and tea, on the true costs of production and the impact their purchases have when they choose to support small growers and values-based, sustainable options.
- encourage affordability through monetary incentives to consumers, while reducing production cost of VSS-compliant products. This is key, as prohibitive prices remain the biggest barrier to consumers purchasing VSS-compliant sustainable goods in non-traditional markets.⁹⁰
- implement regulatory frameworks and policies to support more sustainable cultivation practices such as deforestation-free cocoa, reduced use of agrochemicals and increased farm prices. These policies can, in turn, encourage sourcing and consumption of VSS-compliant products.



CHAPTER 4

MEET THE SUSTAINABILITY STANDARDS

4C.....28

BCI29

BONSUCRO30

COTTON MADE IN AFRICA31

FAIRTRADE INTERNATIONAL.....32

FOREST STEWARDSHIP COUNCIL.....33

GLOBALG.A.P.34

IFOAM – ORGANICS INTERNATIONAL35

PROGRAMME FOR THE ENDORSEMENT OF FOREST CERTIFICATION36

PROTERRA FOUNDATION37

RAINFOREST ALLIANCE.....38

UTZ39

ROUNDTABLE ON SUSTAINABLE PALM OIL40

ROUND TABLE ON RESPONSIBLE SOY ASSOCIATION41

For more details about the voluntary sustainability standards and interactive infographics, see www.standardmap.org/trends.



4C

The Common Code for the Coffee Community was launched in 2003 to promote sustainable global coffee production that respects people and the environment. Through its strict Code of Conduct, comprising 12 principles and 45 criteria, 4C helps protect landscapes with high biodiversity and carbon values, safeguard natural resources and promote good working conditions along the supply chain. Its auditing process uses advanced, innovative tools to support risk assessments and verification of compliance.

In 2019, 4C-certified land accounted for more than 900,000 hectares of coffee crops worldwide, representing 0.02% of global agricultural land and 8.44% of the global coffee area. More than 385,000 certified producers – including at least 340,000 smallholders – produced more than 1.6 million tons of coffee. Colombia had the largest area (302,413 hectares), followed by Brazil (198,945 hectares), Viet Nam (141,141 hectares) and Côte d'Ivoire (77,654 hectares). In 2009–2016, 4C's certified area grew almost fourfold. However, because of more rigorous certification procedures, it dropped by almost 50% in 2016–2019.

4C: Key indicators 2019	
Area [hectares]	938,445
4C share of global agricultural land	0.02%
4C share of global coffee area	8.44%
Production volume [tons]	1,606,821
Certificate holders	224
Producers	385,404
Smallholders	340,298

Source: 4C, 2021.

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

BETTER COTTON INITIATIVE

Launched in 2009, the Better Cotton Initiative is the world's largest cotton sustainability programme. The global non-profit aims to make production methods measurably better for the environment and farming communities, and enable farmers to access vital training, build their capacity and earn a decent living wage. BCI is defined by the Better Cotton Standard System – core components include the Better Cotton Principles and Criteria, and Assurance Programme to ensure compliance. BCI aimed to account for 30% of global cotton production and support five million farmers by the end of the 2020/21 season.

For the 2019/20 season, Better Cotton was grown on more than 4.9 million hectares worldwide, representing 0.1% of global agricultural land and 12.6% of the global cotton area. Nearly 1.7 million farmers produced more than 5.6 million tons of Better Cotton. India harvested the largest area (1.587 million hectares), followed by Pakistan (1.286 million hectares) and Brazil (1.235 million hectares). BCI's global cotton area has more than doubled since 2015, and increased by 18% in 2018/19.

BCI: Key indicators, 2019/20 season ¹⁷	
Area [hectares]	4,928,000
BCI share of global agricultural land	0.1%
BCI share of global cotton area	12.64%
Production volume [cotton lint, tons]	5,627,000
Certificate holders	1,222
Licensed producers	1,653,055
Smallholders	1,647,508
Producer groups	1,222

Source: BCI, 2021.

17. Figures reported here do not include BCI-CmiA benchmarked figures, which are reported separately in this report. (For BCI-CmiA benchmarked figures see BCI's 2020 Annual Report here: https://issuu.com/better-cotton-initiative/docs/bci_annual_report_2020_-_final/7.)



BONSUCRO

Non-profit organization Bonsucro sets standards for sustainable sugarcane production. It has a community of more than 280 members, from farms, mills and non-governmental organisations to traders, retailers and end users. Bonsucro's purpose is to collectively accelerate the sustainable production and uses of sugarcane. Bonsucro's strategic aims are to create value across the supply chain, improve the environmental impact of sugarcane and strengthen human rights and decent work in sugarcane farming and milling.

Launched in 2011, Bonsucro had certified 134 sugar mills by 2020. Its process is guided by the Production Standard and the Chain-of-Custody Standard, to effect industry-wide change. Members can also access impact projects on key issues such as implementing the standard, collaborating with policymakers on sustainability, assisting smallholder farmers and collaborating with finance institutions on sustainability assessment.

Bonsucro certified over 1.5 million hectares of sugarcane in 2019, representing 0.03% of global agricultural land and 5.75% of the global sugarcane area. In 2019, 132 certified producers grew more than 86 million metric tons of sugarcane. Brazil had the largest area (1.054 million hectares), followed by Guatemala (251,883 hectares), and Australia (48,116 hectares). Bonsucro's total certified area increased by 70% since 2015 and by 36% in 2018–19.

Bonsucro: Key indicators 2019	
Area [hectares]	1,539,800
Bonsucro share of global agricultural land	0.03%
Bonsucro share of global sugarcane area	5.75%
Production volume [metric tons]	86,177,061
Certificate holders	132
Producers	132

Source: Bonsucro, 2021.

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



www.cottonmadeinafrica.org/en



COTTON MADE IN AFRICA

Founded in 2005, Cotton made in Africa – an initiative of the Aid by Trade Foundation – supports African cotton farmers to improve their lives through trade. Around 32% of all African cotton was grown in accordance with the CmiA standard in 2019, and some 125 million CmiA-labelled textiles were produced to meet international demand, representing around €2 million in license revenues – a 21% increase compared to 2018. Income from licensing fees is reinvested to benefit farmers and the environment.

The CmiA programme encompassed 11 countries and worked with more than 885,000 smallholder cotton farmers in 2019. The same year, more than 1.6 million hectares were CmiA-certified, representing 0.03% of global agricultural land and 0.15% of the African agricultural area. Its share in terms of cotton areas is considerably higher, at 4.25% globally and 33.75% of the African cotton area. Burkina Faso had the largest area (646,611 hectares), followed by Côte d'Ivoire (357,950 hectares) and Zambia (237,571 hectares). In 2015–2019, the CmiA-certified area grew by 70%, with a reported decline of 7% in 2018–2019.

CmiA: Key indicators 2019	
Area [hectares]	1,657,000
CmiA share of global agricultural land	0.03%
CmiA share of global cotton area	4.25%
Production volume [cotton lint, tons]	593,068
Export [tons]	186,088
Certificate holders	23
Smallholders	885,575

Source: CmiA, 2021.

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



FAIRTRADE INTERNATIONAL

The global Fairtrade International network ensures an equal share of trade benefits for farmers and workers in 75 countries through standards and certification, focused programmes and advocacy. Standards encompass social, economic and environmental requirements for smallholder farmers, plantations using hired labour, traders and guarantee a minimum price and premium on most goods for producers.

More than 2.8 million hectares were Fairtrade-certified in 2019, representing 0.06% of global agricultural land. Fairtrade International certifies a wide range of commodities, from tropical fruit to cereals and textiles. Cocoa accounted for almost half of Fairtrade International's total area at more than 1.3 million hectares – 11.2% of the global cocoa area. Coffee was the second most important commodity at more than 1 million hectares, representing 9% of the global coffee area.

Fairtrade International certified more than 1.7 million farmers and 174,000 agricultural employees in 2019. Most farmers were certified in Africa and the Middle East (71%), followed by Latin America (18%) and Asia (11%). The Fairtrade-certified area has expanded by 14% since 2015 and grew by 6% in 2018–2019.

Fairtrade: Key indicators 2019	
Area [hectares] ¹⁸	2,824,074
Fairtrade share of global agricultural land	0.06%
Fairtrade share of global cocoa area	11.22%
Fairtrade share of global coffee area	9%
Production [tons] ¹⁹	4,311,996
Producers	1,716,245
Employees/workers, full- and part-time	174,136

Source: Fairtrade International, 2021.

18. This excludes honey, nuts, pulp, gold and sports balls.

19. This excludes gold, flowers and sports balls.



www.fsc.org/en

FOREST STEWARDSHIP COUNCIL

The Forest Stewardship Council is a member-based initiative with certificates operating in 135 countries. Its core Principles and Criteria standard articulates the requirements for forest-management certification, which aims to protect the environmental and social values of managed forests, including protection of areas of high conservation value and the rights of indigenous peoples. To display the FSC Mix label (the initiative's most common label), material used for products must comprise at least 70% certified material; the remainder can be FSC Controlled Wood or recycled material.

More than 202 million hectares of forest were FSC-certified in 2019, according to data from January 2020, representing 5.06% of the global forest area. The Russian Federation had the largest area, with more than 50 million hectares, followed by Canada (more than 48 million hectares) and the United States (more than 14 million hectares). Together, these three countries represented 56% of the global FSC-certified area. In 2019, there were 1,687 forest-management certificate holders and 42,115 chain-of-custody certificate holders.

Forest Stewardship Council: Key indicators 2019	
Area [hectares]	202,372,423
FSC share of global forestry area	5.06%
Forest-management certificate holders	1,687
Chain-of-custody certificate holders	40,430

Source: FSC, 2021.

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



GLOBALG.A.P.

GLOBALG.A.P. develops smart farm assurance solutions together with producers, retailers and other stakeholders from across the food industry. These solutions include standards for safe, socially and environmentally responsible farming practices. GLOBALG.A.P.'s most widely used flagship standards are the Integrated Farm Assurance standards for fruit and vegetables, aquaculture, floriculture and livestock, which also forms the basis for the GLOBALG.A.P. consumer label: the GGN Label for certified, responsible farming.

In 2019, more than 4 million hectares were certified against the GLOBALG.A.P. standard,²⁰ managed by almost 206,000 agricultural producers.²¹ The product with the largest non-covered area was potatoes, followed by bananas and apples.

Europe has the biggest percentage of area covered by GLOBALG.A.P. certification (43%), followed by Latin America (24%), Africa (12%) and North America (11%). Spain had the largest certified area (more than 474,000 hectares), followed by the United States (more than 453,000 hectares) and South Africa (more than 237,000 hectares). GLOBALG.A.P.'s certified area has increased by 29% since 2015, and by 6% in 2018–2019. Today, 359 fruit and vegetable products are certified with Integrated Farm Assurance standards worldwide.

GLOBALG.A.P.: Key indicators 2019	
Area [hectares]	4,090,540
GLOBALG.A.P. share of global agricultural land	0.09%
Certificate holders	53,472
Producers under certification	205,780

Source: GLOBALG.A.P., 2021.

20. This includes more than 144,000 hectares covered by greenhouses and plastic tunnels for intensive production.

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



www.ifoam.bio/



IFOAM – ORGANICS INTERNATIONAL

This global membership-based organization represents the organic movement across the entire food system, with more than 800 affiliates in 127 countries.

Of the standards presented in this report, organic applies to the widest range of commodities. Almost all agricultural products are certified. In addition to the agricultural land, there are wild collection, aquaculture and forestry products, and in 2019 these sectors accounted for 35.1 million hectares.

In the same year, 72.1 million hectares were certified organic worldwide, representing 1.5% of all agricultural land. Furthermore, 3.1 million producers in 187 countries practised organic farming; most of them were certified through group certification.²² Australia had the largest organic area at 35.7 million hectares, followed by Argentina (3.7 million hectares) and Spain (2.4 million hectares).

The global organic market was worth \$125.7 billion in 2019 and the leading countries were the United States (42%), Germany (11%) and France (11%).

Where a country’s production volume data were not available, FiBL estimated the area harvested and the production volume for the commodities covered in this report: bananas, cocoa, coffee, cotton, palm oil, soybeans, sugarcane and tea. If available, the fully converted area or 90% of the certified area was taken as the area harvested. FiBL calculated the production volume by using estimated yields based on country yields provided by the United Nations Food and Agriculture Organization corporate statistical database, assuming that organic has a lower yield in most cases.

IFOAM: Key indicators 2019	
Area [hectares]	72,138,583
Organic share of global agricultural land	1.5%
Producers	3,135,119
Retail sales [\$ million]	125,690

Source: FiBL, 2021; Textile Exchange, 2021 (only cotton). More information at <https://www.organic-world.net/yearbook/yearbook-2021.html>

22. For some countries, areas certified by participatory guarantee systems have been included.

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



PROGRAMME FOR THE ENDORSEMENT OF FOREST CERTIFICATION

Founded in 1999, the Programme for the Endorsement of Forest Certification is a leading global alliance of national forest certification systems with more than 80 international members. The non-profit, non-governmental organization promotes sustainable forest management through independent third-party certification. Certified entities must meet strict environmental, social and economic requirements.

PEFC enables forest owners around the world to demonstrate responsible practices and access certification, and empowers companies and consumers to buy sustainably. In 2018, with the publication of its latest Sustainable Forest Management benchmark standard, PEFC extended the impact of its certification beyond forests and enhanced its contribution to the United Nations Sustainable Development Goals.

In 2019, more than 326 million hectares of forest worldwide were PEFC certified – 8.16% of the global forest area. Canada had the largest PEFC-certified forest area with more than 137 million hectares, followed by the United States and the Russian Federation. There were 11,984 chain-of-custody certificate holders.

PEFC: Key indicators 2019	
Forest area [hectares]	326,458,724
PEFC share of global forest area	8.16%
Chain-of-custody certificate holders	11,984

Source: PEFC, 2021.

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



PROTERRA FOUNDATION

The non-profit ProTerra Foundation was created in 2006 and became independent in 2012. Its standard is applied primarily to the sustainable production of soy and soy-derived consumer products, but is designed to encompass all agricultural products and offer full traceability. Key components centre on protecting high conservation value areas, biodiversity and the rights of communities, indigenous people and smallholders, and promoting good labour and agricultural practices.

In 2019, almost 1.3 million hectares were ProTerra-certified or had a Good Agricultural Practices (GAP) audit audited²³. The ProTerra standard was applied mainly in soybean and sugarcane production (ProTerra reported sugarcane data for the first time in 2017). There were almost 1 million hectares of soybeans, 0.83% of the global soybean area, and almost 300,000 hectares of sugarcane, 1.10% of the global sugarcane area. ProTerra-certified producers were active in 17 countries, with the largest certified area in Brazil, representing 75% of the foundation's global area (over 973,000 hectares, mainly soybeans). Since 2015, the soybean area has almost halved, with drops of 12% in 2017/18 and 7% in 2018/19.

ProTerra: Key indicators 2019	
Total area [hectares]	1,291,106
■ Soybeans	996,125
■ Sugarcane	294,981
ProTerra share of global agricultural land	0.03%
ProTerra share of global soybean area	0.83%
ProTerra share of global sugarcane area	1.10%
Production volume [tons]	24,287,534
Certificate holders	46
Producers	9,252

Source: ProTerra Foundation, 2021.

23. Of the total area certified, 16% had a Good Agricultural Practices (GAP) audit.



www.rainforest-alliance.org/

RAINFOREST ALLIANCE

Rainforest Alliance and UTZ merged in 2018 to form a new Rainforest Alliance organization. The international non-profit organization works to create a better future for people and the environment with a strong focus on coffee, tea, cocoa and bananas as the priority crop sectors.

Data for 2019 were still reported separately for Rainforest Alliance and UTZ. Rainforest Alliance certified more than 4.3 million hectares of a wide variety of commodities, managed by some 1.3 million producers. Cocoa had the largest area (more than 815,000 hectares), followed by tea (more than 613,000 hectares) and coffee (more than 470,000 hectares).

Most of Rainforest Alliance's certified land was in Africa (51%), followed by Latin America (30%) and Asia (14%). Côte d'Ivoire had the largest area (more than 526,000 hectares), followed by Kenya (more than 519,000 hectares) and Brazil (more than 433,000 hectares). The Rainforest-certified area dropped by 3% in 2018–2019.

Rainforest Alliance: Key indicators 2019	
Area [hectares]	4,328,069
Rainforest Alliance share of global agricultural land	0.09%
Rainforest Alliance share of global cocoa area	6.66%
Rainforest Alliance share of global tea area	12.08%
Rainforest Alliance share of global coffee area	4.23%
Production volume ²⁴ [tons]	21,093,614
Certificate holders ²⁵	2,490
Producers	1,383,649

Source: Rainforest Alliance, 2021.

24. Excluding flowers and foliage.

25. Corrected for double counting

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



www.utz.org

UTZ

UTZ certified more than 3.3 million hectares worldwide in 2019, representing 0.07% of the global agricultural area. Cocoa was the most important UTZ-certified product, with more than 2.5 million hectares, representing 20.8% of the global cocoa area and 76% of the total UTZ-certified area. UTZ coffee was grown on more than 720,000 hectares, or 6.5% of the global coffee area (22% of UTZ’s certified area). UTZ tea was grown on more than 62,000 hectares, or 1.2% of the global tea area (2% of UTZ’s certified area).

More than 1.1 million producers were operating under UTZ standards in 2019. Côte d’Ivoire had the largest UTZ area (almost 1.3 million hectares), followed by Ghana (more than 713,000 hectares) and Nigeria (more than 243,000 hectares). The UTZ-certified area has grown by 58% since 2015 and dropped by 13% in 2018–2019.

UTZ: Key indicators 2019	
Area [hectares]	3,349,656
UTZ share of global agricultural land	0.07%
UTZ share of global cocoa area	20.77%
UTZ share of global coffee area	6.48%
UTZ share of global tea area	1.23%
Production volume [tons]	2,593,635
Production volume sold [tons]	1,565,465
Certificate holders	1,492
Producers	1,101,485

Source: Rainforest Alliance, 2021.

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



ROUNDTABLE ON SUSTAINABLE PALM OIL

Founded in 2004, the Roundtable on Sustainable Palm Oil is a member-based initiative that unites stakeholders from the key sectors of the palm-oil industry across 98 countries and territories. Certification supports smallholders to improve their livelihoods and produce more oil using less land, and reduces the risk of land conversion, which threatens forests, wildlife and biodiversity.

In 2019, more than 4.1 million hectares were RSPO-certified – with oil palm accounting for better than 3 million hectares – representing 0.09% of global agricultural land and 10.8% of the global oil palm area. The largest areas were in Indonesia (more than 2.1 million hectares), Malaysia (more than 1.2 million hectares) and Papua New Guinea (195,010 hectares). Asia had the largest RSPO-certified area (82%), followed by Latin America (9%), Oceania (5%) and Africa (5%). The RSPO-certified oil palm area has grown by 11.9% since 2015 and increased by 8.9% in 2018–2019.

RSPO: Key indicators 2019	
Area [hectares]	4,160,924
RSPO share of global agricultural land	0.09%
RSPO share of global oil palm area	10.78%
Production volume, oil palm ²⁶ [tons]	68,468,179
Production volume, ²⁷ palm oil [tons]	15,192,356
Production volume, sold palm oil [tons]	7,068,715
Certificate holders ²⁸	412
Producers (excluding mills and supply bases) ²⁹	157,580

Source: RSPO, 2021.

26. Refers to the fresh fruit bunches of the oil palm.

27. The production volume of palm oil refers to the 'certified volume', i.e. the estimated volume to be produced by a management unit based on historical production data.

28. Refers to number of certified palm oil mills.

29. Refers to number of members certified under the scheme and independent smallholders.

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



ROUND TABLE ON RESPONSIBLE SOY ASSOCIATION

The Round Table on Responsible Soy Association is a global multi-stakeholder not-for-profit organization. It promotes the production, trade and use of responsible soy – which is economically viable, socially beneficial and environmentally appropriate – through cooperation with actors in and relevant to the soy value chain from production to consumption in an open dialogue.

RTRS also sets the standards for responsible soy and chain of custody. The RTRS Standard for Responsible Soy Production scheme ensures that RTRS soy not only meets the highest environmental criteria (including a guarantee of third party-verified zero deforestation and zero conversion), but also a wide-reaching set of social and labour requirements. It is based on five principles: legal compliance and good business practices, responsible labour conditions, responsible community relations, environmental responsibility and good agricultural practices.

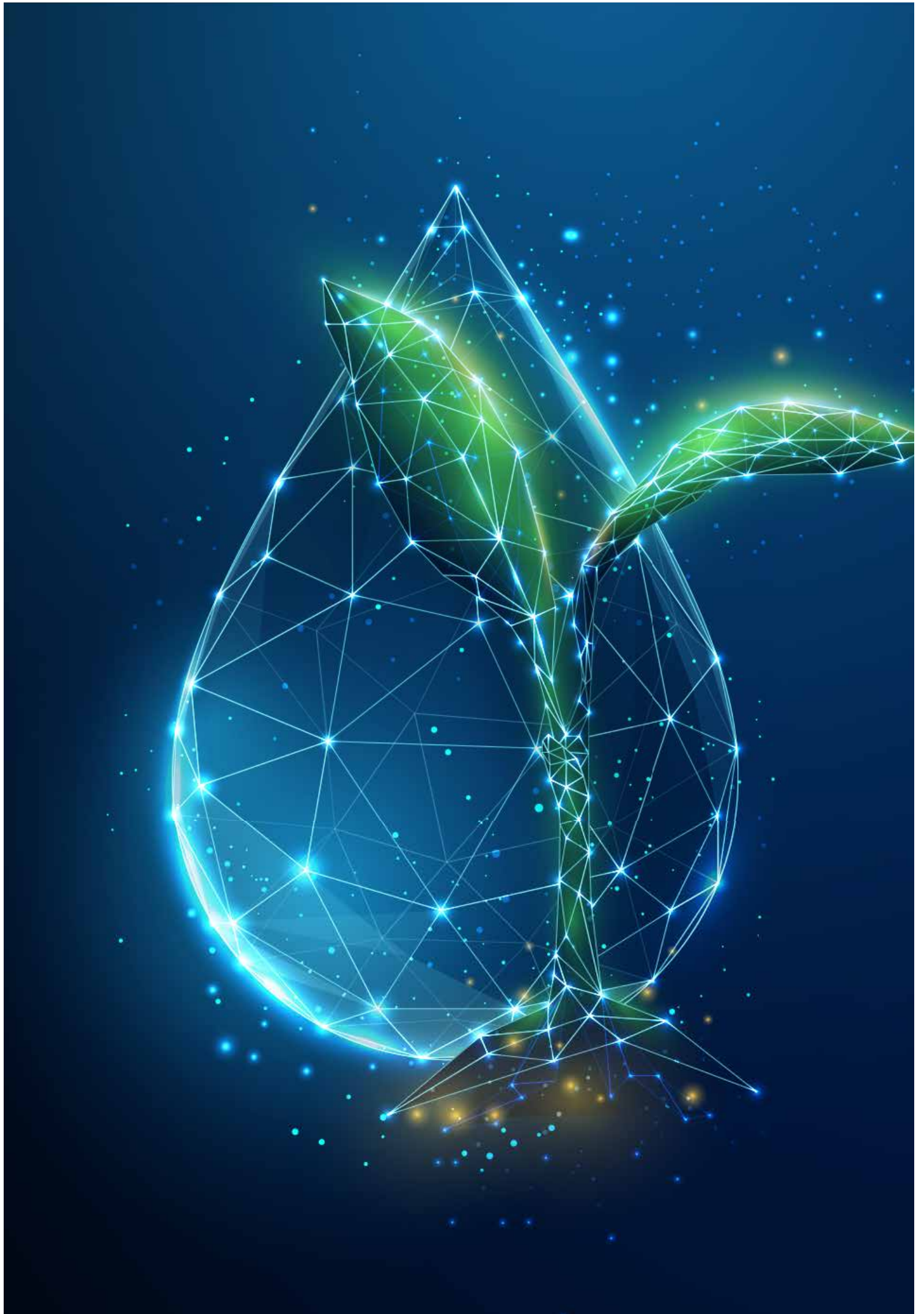
Since joining the UN Global Compact in 2014, RTRS has been fully committed across-the-board to its sustainability initiatives and its 10 principles grouped in four areas: human rights, labour practices, environment and corruption.

In 2019, RTRS certified more than 1.1 million hectares, representing 0.02% of global agricultural land and 0.95% of the global soybean area. A total of 246 producers harvested more than 4 million tons of soybeans worldwide. Brazil had the largest RTRS area (910,974 hectares), followed by Argentina (167,269 hectares). The RTRS-certified area has increased by 51% since 2015.

RTRS: Key indicators 2019	
Area [hectares]	1,141,611
RTRS share of global agricultural land	0.02%
RTRS share of global soybean area	0.95%
Production volume [tons]	4,053,747
Certificate holders	57
Producers	246
Producers [no.]	7,099

Source: RTRS, 2021.

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



CHAPTER 5

METHODOLOGY

FiBL (i.e. "Research Institute of Organic Agriculture FiBL")
(Helga Willer, Claudia Meier and Bernhard Schlatter)

FOCUS ON COMMODITIES	44
SUSTAINABILITY STANDARDS	44
LIST OF INDICATORS	45
QUALITY CHECKS	45
DATA YEAR	46
MULTIPLE CERTIFICATION SKEWS CALCULATIONS	46
DATA PUBLICATION AND REVISIONS	46

METHODOLOGY

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 et al. 2021). The data collection process, voluntary sustainability standards, indicators and commodities covered, as well as the quality checks carried out, are described below.

FiBL sent a standardized questionnaire to the sustainability standard organizations in early 2021. All of them returned data, but not consistently across all the indicators requested and not on all commodities.

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; Willer et al. 2019; Meier et al. 2020): bananas, cocoa, coffee, cotton, oil palm, soy, sugarcane and tea, as well as forestry. The sustainability standards were also asked to provide data on other crops they covered and on the total certified area.

Sustainability standards

The following standards were analysed:³⁰

- 4C (previously 4C Association)
- Better Cotton Initiative
- Bonsucro
- Cotton made in Africa
- Fairtrade International
- Forest Stewardship Council
- GLOBALG.A.P.
- IFOAM – Organics International³¹
- Programme for the Endorsement of Forest Certification
- ProTerra Foundation
- Rainforest Alliance
- Roundtable on Sustainable Palm Oil
- Round Table on Responsible Soy
- UTZ

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

31. 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	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)	Tons
Operators		
Certificate holder	Total number of current valid certificates and those 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).	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 following quality checks were used to validate the data received from the standards:

- Area and production data were compared with the data from previous years as provided by the sustainability standards themselves in past surveys (Lernoud et al., 2015, 2017, 2018, Willer et al., 2019, Meier *et al.*, 2020) 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, 2021).
- 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 explain 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.³² 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, 2021).³³

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

33. 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 2018/2019 were labelled as 2019 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 skews calculations

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 encompassed 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 estimates that indicate a trend.

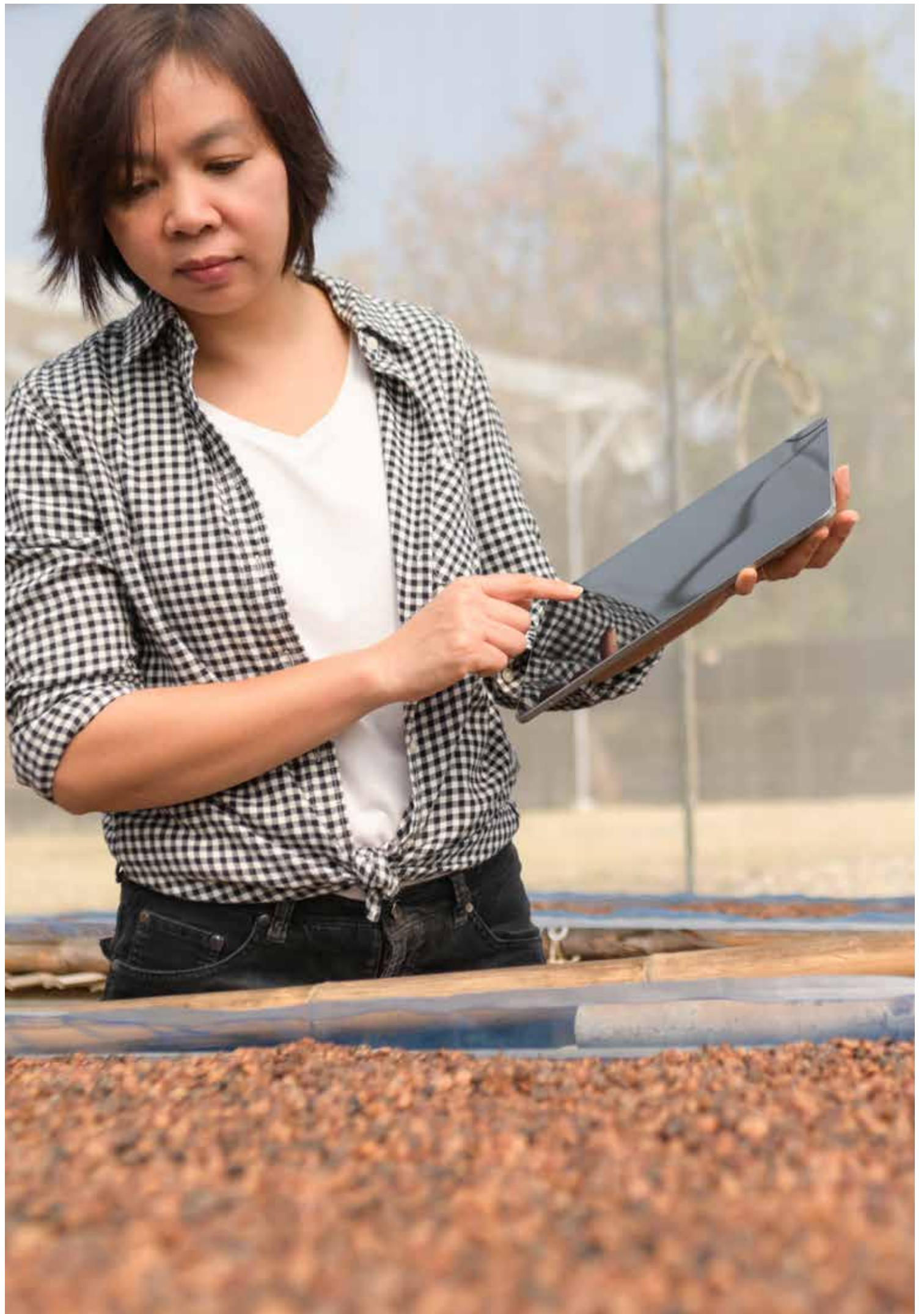
The survey asked for the extent of multiple certification by country and for the standard in question. Only two standards provided data on multiple certification, which made it impossible to calculate the actual share of multiple certification.

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 <https://vss.fibl.org/vss-report>.





APPENDIX

KEY DATA, AREA AND PRODUCTION

Table 7: Ranges of certified area by agricultural commodity, 2019

Commodity	Indicator	Area certified [ha]	Share of global area	Area growth 2018–2019	Area growth 2015–2019
Bananas	Minimum area possible	353,445	6.8%	3.1%	21.5%
	Average area	484,480	9.4%	4.9%	30.6%
	Maximum area possible	615,512	11.9%	6.0%	36.5%
Cocoa	Minimum area possible	2,772,162	22.7%	-12.7%	53.2%
	Average area	3,930,492	32.1%	-6.4%	59.9%
	Maximum area possible	5,088,825	41.6%	-2.7%	63.8%
Coffee	Minimum area possible	1,789,026	16.1%	-18.5%	-31.5%
	Average area	2,811,548	25.3%	-12.5%	-22.5%
	Maximum area possible	3,834,070	34.5%	-9.4%	-17.4%
Cotton	Minimum area possible	6,545,498	16.8%	11.2%	99.9%
	Average area	6,799,099	17.4%	11.1%	95.4%
	Maximum area possible	7,052,699	18.1%	10.9%	91.5%
Oil palm	Minimum area possible	3,085,192	10.9%	7.7%	10.8%
	Average area	3,127,834	11.0%	8.4%	11.5%
	Maximum area possible	3,170,472	11.2%	9.1%	12.1%
Soybeans	Minimum area possible	1,840,465	1.5%	-6.0%	-27.9%
	Average area	2,347,625	1.9%	-4.9%	-16.8%
	Maximum area possible	2,854,786	2.4%	-4.2%	-7.7%
Sugarcane	Minimum area possible	2,550,414	9.5%	14.8%	123.7%
	Average area	2,702,253	10.1%	14.1%	132.3%
	Maximum area possible	2,854,087	10.7%	13.5%	140.5%
Tea	Minimum area possible	729,021	14.4%	8.1%	30.2%
	Average area	836,065	16.5%	5.5%	31.0%
	Maximum area possible	943,109	18.6%	3.7%	31.5%

Sources: FiBL-ITC-IISD survey, 2021; 4C Services, 2014 – 2016, 2018 – 2021; Better Cotton Initiative, 2014, 2015, 2017 – 2021; Bonsucro, 2014 – 2016, 2018 – 2021; Cotton made in Africa, 2014 – 2016, 2018 – 2021; Fairtrade International, 2017 – 2021; GLOBALG.A.P., 2015, 2016, 2018 – 2021; FiBL survey, 2008 – 2021; ProTerra Foundation, 2014 – 2016, 2018 – 2021; Rainforest Alliance, 2014 – 2016, 2018 – 2021; Roundtable on Sustainable Palm Oil, 2019 – 2021; Round Table on Responsible Soy, 2014 – 2016, 2018 – 2021; Textile Exchange 2013–2021.

Table 8: Area harvested by agricultural commodity and standard, 2019

Product	Standard	Area harvested [ha]	Share of global area harvested	Area growth 2018–2019	Area growth 2015–2019
Bananas	Rainforest	186,363	3.6%	12.0%	69.9%
	Fairtrade	46,887	0.9%	14.0%	15.4%
	GLOBALG.A.P.	322,817	6.2%	7.9%	30.0%
	Organic	59,446	1.2%	-19.6%	13.2%
Cocoa	Rainforest	815,321	6.7%	12.7%	10.5%
	Fairtrade	1,372,820	11.2%	16.5%	140.8%
	Organic	359,630	2.9%	13.0%	34.1%
	UTZ	2,541,054	20.8%	-15.5%	66.1%
Coffee	Rainforest	470,611	4.2%	-0.05%	16.2%
	4C	938,445	8.4%	-29.4%	-41.1%
	Fairtrade	1,001,002	9.0%	4.1%	-22.8%
	Organic	703,762	6.3%	0.3%	-11.8%
	UTZ	720,250	6.5%	-6.5%	31.2%
Cotton	BCI	4,928,000	12.6%	18.3%	113.1%
	CmiA	1,657,000	4.2%	-6.9%	69.9%
	Fairtrade	48,763	0.1%	-12.2%	8.3%
	Organic	418,935	1.1%	17.6%	19.7%
Oil palm	Rainforest	110,503	0.4%	21.2%	121.7%
	Organic	8,040	0.03%	-6.5%	88.1%
	RSPO	3,051,930	10.8%	8.7%	10.0%
Soybeans	Organic	717,050	0.6%	11.3%	35.7%
	ProTerra	996,125	0.8%	-7.1%	-45.0%
	RTRS	1,141,611	0.9%	-9.6%	51.4%
Sugarcane	Bonsucro	1,539,800	5.8%	36.4%	69.7%
	Fairtrade	124,030	0.5%	-17.2%	-33.6%
	Organic	85,825	0.3%	-20.1%	-7.3%
	ProTerra	1,104,432	4.1%	-2.2%	NA
Tea	Rainforest	613,582	12.1%	3.4%	29.9%
	Fairtrade	113,382	2.2%	-16.9%	-7.2%
	Organic	153,695	3.0%	46.0%	106.1%
	UTZ	62,450	1.2%	-16.2%	30.6%

Sources: FiBL-ITC-IISD survey, 2021; 4C Services, 2014 – 2016, 2018 – 2021; Better Cotton Initiative, 2014, 2015, 2017 – 2021; Bonsucro, 2014 – 2016, 2018 – 2021; Cotton made in Africa, 2014 – 2016, 2018 – 2021; Fairtrade International, 2017 – 2021; GLOBALG.A.P., 2015, 2016, 2018 – 2021; FiBL survey, 2008 – 2021; ProTerra Foundation, 2014 – 2016, 2018 – 2021; Rainforest Alliance, 2014 – 2016, 2018 – 2021; Roundtable on Sustainable Palm Oil, 2019 – 2021; Round Table on Responsible Soy, 2014 – 2016, 2018 – 2021; Textile Exchange 2013–2021.

Please note that due to methodological challenges, the production ranges cannot be made available for all of the selected commodities.

Table 9: Estimated production volume ranges by agricultural commodity, 2019

Product	Indicator	Estimated production [tons]	Share of global production	Production growth 2018–2019	Production growth 2015–2019
Bananas*	Minimum production possible	10,000,813	8.6%	4.9%	55.1%
	Average	11,175,317	9.6%	7.6%	57.9%
	Maximum production possible	12,349,821	10.6%	9.8%	60.3%
Cocoa	Minimum production possible	1,516,289	27.1%	-10.1%	40.2%
	Average	2,087,028	37.3%	-4.8%	42.3%
	Maximum production possible	2,657,762	47.5%	-1.6%	43.5%
Coffee	Minimum production possible	2,089,636	20.8%	-21.5%	-29.4%
	Average	3,322,109	33.1%	-13.8%	-15.2%
	Maximum production possible	4,554,579	45.4%	-9.8%	-6.5%
Soybeans	Minimum production possible	5,791,031	1.7%	-6.0%	6.0%
	Average	7,288,158	2.2%	-6.6%	15.6%
	Maximum production possible	8,785,282	2.6%	-7.0%	22.9%
Tea	Minimum production possible	1,674,629	25.8%	19.8%	39.8%
	Average	1,868,280	28.8%	18.3%	39.7%
	Maximum production possible	2,061,930	31.7%	17.1%	39.6%

* Production volume of bananas is missing for GLOBALG.A.P.

Sources: FiBL-ITC-IISD survey, 2021; 4C Services, 2014 – 2016, 2018 – 2021; Better Cotton Initiative, 2014, 2015, 2017 – 2021; Bonsucro, 2014 – 2016, 2018 – 2021; Cotton made in Africa, 2014 – 2016, 2018 – 2021; Fairtrade International, 2017 – 2021; GLOBALG.A.P., 2015, 2016, 2018 – 2021; FiBL survey, 2008 – 2021; ProTerra Foundation, 2014 – 2016, 2018 – 2021; Rainforest Alliance, 2014 – 2016, 2018 – 2021; Roundtable on Sustainable Palm Oil, 2019 – 2021; Round Table on Responsible Soy, 2014 – 2016, 2018 – 2021; Textile Exchange 2013–2021.

Table 10: Estimated production volume by agricultural commodity and standard, 2019

Agricultural product	Standard	Estimated production [tons]	Share of global production	Production growth 2018–2019	Production growth 2015–2019
Bananas*	Rainforest	9,242,453	7.9%	9.9%	63.3%
	Fairtrade	1,236,127	1.1%	23.0%	53.1%
	Organic	1,871,241	1.6%	2.5%	51.1%
Cocoa	Rainforest	439,503	7.9%	8.7%	-16.0%
	Fairtrade	618,633	11.1%	15.3%	145.4%
	Organic	262,286	4.7%	64.8%	65.0%
	UTZ	1,337,340	23.9%	-16.4%	45.7%
Coffee	Rainforest	669,698	6.7%	2.2%	28.2%
	4C	1,606,821	16.0%	-24.9%	-38.9%
	Fairtrade	824,404	8.2%	10.6%	47.0%
	Organic	370,006	3.7%	-9.3%	9.0%
	UTZ	1,083,649	10.8%	-1.7%	31.9%
Soybeans	Organic	1,740,522	0.5%	18.7%	102.1%
	ProTerra	2,988,374	0.9%	-14.9%	-23.1%
	RTRS	4,053,747	1.2%	-9.2%	69.1%
Tea	Rainforest	1,329,320	20.5%	9.9%	28.6%
	Fairtrade	183,630	2.8%	-3.2%	-10.7%
	Organic	406,709	6.3%	68.4%	167.9%
	UTZ	142,271	2.2%	18.8%	64.9%

* Production volume of bananas is missing for GLOBALG.A.P.

Sources: FiBL-ITC-IISD survey, 2021; 4C Services, 2014 – 2016, 2018 – 2021; Better Cotton Initiative, 2014, 2015, 2017 – 2021; Bonsucro, 2014 – 2016, 2018 – 2021; Cotton made in Africa, 2014 – 2016, 2018 – 2021; Fairtrade International, 2017 – 2021; GLOBALG.A.P., 2015, 2016, 2018 – 2021; FiBL survey, 2008 – 2021; ProTerra Foundation, 2014 – 2016, 2018 – 2021; Rainforest Alliance, 2014 – 2016, 2018 – 2021; Roundtable on Sustainable Palm Oil, 2019 – 2021; Round Table on Responsible Soy, 2014 – 2016, 2018 – 2021; Textile Exchange 2013–2021.



REFERENCES AND FURTHER READING

REFERENCES AND FURTHER READING	56
SOURCES	59
ENDNOTES	60

REFERENCES AND FURTHER READING

- Andrade, J. (June 2016). Smallholder Farmers. Retrieved 5 February 2018 from http://www.iisd.org/ssi/wp-content/uploads/2016/08/Smallholders_publication1.pdf
- Armengot, L., Barbieri, P., Andres, C., Milz, J., and Schneider, M. (2016). 'Cacao agroforestry systems have higher return on labor compared to full-sun monocultures.' *Agronomy for Sustainable Development*, 36(70), 1–10. <https://doi.org/10.1007/s13593-016-0406-6>
- Busaca, E., Moura e Castro, F., Katto-Andrighetto, J., and Huber, B., (2020). 'Public Standards and Regulations' in Willer, H.; Schlatter, B.; Trávníček, J.; Kemper, L. and Lernoud, J. (Eds.) (2020) *The World of Organic Agriculture Statistics and Emerging Trends 2020*. 21st edition. Research Institute of Organic Agriculture (FiBL) and IFOAM – Organics International, Frick and Bonn, pp. 150-158. <https://orgprints.org/37222/>
- CBI (2020). What is the Demand for Cocoa on the European Market? Market Information. Netherlands Ministry of Foreign Affairs. <https://www.cbi.eu/market-information/cocoa/trade-statistics>
- Chain Reaction Research. (2019). 'The chain: China's palm oil imports surge amid global trade shifts, potentially challenging zero-deforestation commitments.' <https://chainreactionresearch.com/the-chain-chinas-palm-oil-importssurge-amid-global-trade-shifts-potentially-challenging-zero-deforestation-commitments/>
- Confino, J. (8 May 2014). 'Major companies fail to act on responsible soy sourcing says WWF.' Retrieved 6 February 2018 from <http://www.theguardian.com/sustainable-business/responsible-soy-sourcing-wwf>
- Cotton Incorporated (2019). Consumer and retail insights. <https://www.cottonworks.com/wp-content/uploads/2019/02/Cotton-Incorporated-Market-Research-MAGIC-2019.pdf>
- Cotton made in Africa (2017). CmiA Annual Report 2017. Retrieved 3 February 2019 from <https://cottonmadein africa.org/en/media-library/>
- Cotton made in Africa (2018). Verification. Retrieved 3 February 2018 from <http://www.cottonmadein africa.org/index.php/en/standards/verification>
- Cotton made in Africa (2019). About us: Goals. Cotton made in Africa website. Hamburg. Available at: <http://www.cottonmadein africa.org/en/standards/goals>
- Donaldson, T. (2017). 'Report: The truth about organic cotton and its impacts.' Sourcing Journal. <https://sourcingjournal.com/topics/raw-materials/report-truth-organic-cotton-impacts-68512/>
- Euromonitor International (2018). 'The Dynamics of Growth in Global Tea.' <https://www.euromonitor.com/the-dynamics-of-growth-in-global-tea/report>
- European Palm Oil Alliance (2020). 'The progress in Europe.' <https://palmoilalliance.eu/>
- Fairtrade Foundation (2018). Top 12 facts about Fairtrade Bananas. Available from: <https://www.fairtrade.org.uk/media-centre/blog/top-12-facts-about-fairtrade-bananas/#:~:text=1.,op%20and%20Ocado%20are%20Fairtrade.>
- Fairtrade International (2019). Choosing a fairer future through trade. Annual Report 2018–2019. Fairtrade International, Bonn, Germany. Available at <https://www.fairtrade.net/library/>
- FAOSTAT (2020). FAOSTAT database. FAO, Rome. Available at <http://www.fao.org/faostat/en/>
- Global Coffee Platform (2018a). GCP Baseline. Retrieved 2 February 2018 from <http://www.globalcoffeeplatform.org/baseline-common-code/gcp-baseline>
- Global Coffee Platform (2018b). GCP Connect. Retrieved 2 February 2018 from <http://www.globalcoffeeplatform.org/the-global-platform/gcp-connect>
- IDH and MVO (2019). Choosing Sustainable Palm Oil. Progress Report on the Import and Use of Sustainable Palm Oil in Europe. https://www.idhsustainabletrade.com/uploaded/2019/01/EPPO_Vormgeving2019_DEF_31012019.pdf
- IISD (25 June, 2020). Voluntary Sustainability Standards and Resilient Supply Chains: Bananas, Cotton, Palm Oil and Soybeans. [Webinar]. <https://www.iisd.org/ssi/webinar/webinar-voluntary-sustainability-standards-and-resilient-supply-chains-bananas-cotton-palm-oil-and-soybeans/>
- International Trade Centre (2019). Sustainability Map website, www.sustainabilitymap.org, International Trade Centre, Geneva, Switzerland.
- International Cotton Advisory Committee (2019). Sources of Cotton Statistics. ICAC website, ICAC, Washington DC. Available at <https://icac.org/Home/SourcesofCottonStatistics?MenuId=64>
- ISEAL Alliance (2018). About ISEAL. Retrieved 30 January 2018 from <https://www.isealliance.org/about-iseal>
- Jadhav, R. (2019). 'India's palm oil imports could hit record on rising demand: Analyst.' Reuters. <https://in.reuters.com/article/india-palmoil-imports-idlNKBN1WA17P>
- Lernoud, J., Potts, J., Sampson, G., Voora, V., Willer, H., and Wozniak, J. (2015). *The State of Sustainable Markets – Statistics and Emerging Trends 2015*. ITC, Geneva. <https://vss.fibl.org/vss-report/vss-report.html>
- Lernoud, J., Potts, J., Sampson, G., Garibay, S., Lynch, M., Voora, V., Willer, H., and Wozniak, J. (2017). *The State of Sustainable Markets – Statistics and Emerging Trends 2017*. ITC, Geneva. <https://vss.fibl.org/vss-report/vss-report-2017.html>
- Lernoud, J., Potts, J., Sampson, G., Schlatter, B., Huppe, G., Voora, V., Willer, H., Wozniak, J., and Dang, D. (2018). *The State of Sustainable Markets – Statistics and Emerging Trends 2018*. ITC, Geneva. <https://vss.fibl.org/vss-report/vss-report-2018.html>

- Lernoud, J. and Willer, H. (2019). 'Current Statistics on organic agriculture worldwide.' In Willer, H., and J. Lernoud (Eds.) (2019), *The World of Organic Agriculture. Statistics and Emerging Trends*. FiBL, Frick and IFOAM – Organics International, Bonn, Germany.
- Maltais, K. (23 March, 2020). 'Cotton growers were recovering from trade war. Then coronavirus hit.' *Wall Street Journal*. <https://www.wsj.com/articles/cotton-growers-were-just-recovering-from-trade-war-then-coronavirushit-11584967536>
- Meier, C., Sampson, G., Larrea, C., Schlatter, B., Voora, V., Dang, D., Bermudez, S., Wozniak, J., and Willer, H. (2020). *The State of Sustainable Markets 2020 – Statistics and Emerging Trends*. ITC, Geneva. <https://www.intracen.org/publication/Sustainable-Markets-2020>
- Nesadurai, H.E.S. (2013). 'Food security, the palm oil–land conflict nexus, and sustainability: A governance role for a private multi-stakeholder regime like the RSPO?' *The Pacific Review*, 26, 505–29. <https://doi.org/10.1080/09512748.2013.842311>
- Nielsen (2018). 'What's Sustainability Got To Do With It? Linking Sustainability Claims to Sales.' <https://www.nielsen.com/us/en/insights/report/2018/whats-sustainability-got-to-do-with-it/>
- Organisation for Economic Co-operation and Development (2008). Promoting Sustainable Consumption: good practices in OECD countries. <https://www.oecd.org/green/growth/40317373.pdf>
- Parcerisa, C. (2018). 'Organic cotton has a long way to go in Latin America.' *Fashion United*. <https://fashionunited.uk/news/business/organic-cotton-has-a-long-way-to-go-in-latin-america/2018101139390>
- Potts, J., Lynch, M., Wilkings, A., Huppé, G., Cunningham, M., and Voora, V. (Eds.) (2014). *The State of Sustainability Initiatives Review 2014. Standards and the Green Economy*. 1st edition. International Institute for Sustainable Development and International Institute for Environment and Development, Winnipeg and London. Available at https://www.iisd.org/pdf/2014/ssi_2014.pdf
- Potts, J., Van der Meer, J., and Daitchman, J. (2010): *The State of Sustainability Initiatives Review 2010. Sustainability and Transparency*. 1st edition. International Institute for Sustainable Development and International Institute for Environment and Development, Winnipeg and London.
- ProForest (2004): The Basel Criteria for Responsible Soy Production. August 2004. Prepared by ProForest for Coop Switzerland in cooperation with WWF Switzerland. Coop, Basel. Available at: http://d2ouvy59p0dg6k.cloudfront.net/downloads/05_02_16_basel_criteria_engl.pdf
- ProTerra Foundation (2018). The Standard. Retrieved 4 February 2018 from <http://www.proterrafoundation.org/the-standard/>
- _____ (2020). ProTerra Standard. Retrieved 4 February 2020 from https://www.proterrafoundation.org/wp-content/uploads/2019/11/ProTerra-Standard-V4.1_EN.pdf
- Rainforest Alliance (2019). The Rainforest Alliance and UTZ to Merge, Forming New, Stronger Organization. Retrieved 27 August 2019 from <https://www.rainforest-alliance.org/articles/rainforest-alliance-utz-merger>
- RSPO (2017a). RSPO Impact Update Report 2017 (p. 47). Kuala Lumpur, Malaysia: RSPO. Retrieved from https://www.rspo.org/toc/RSPO-Impact-Update-Report-2017_221117.pdf
- _____ (2017b). Mainstreaming sustainable palm oil in North America. Retrieved 5 February 2018 from <https://rspo.org/news-and-events/news/mainstreaming-sustainable-palm-oil-in-north-america>
- _____ (2018). RSPO Credits put dreams within reach. Retrieved 5 February 2018 from <https://rspo.org/news-and-events/news/rspo-credits-put-dreams-within-reach>
- _____ (2019). RSPO Impact Update report 2018. (p.66). Kuala Lumpur, Malaysia: RSPO. <https://rspo.org/impact>
- _____ (2020). RSPO Impact Update report 2019. (p.35). Kuala Lumpur, Malaysia: RSPO. <https://rspo.org/key-documents/impact-reports>
- RTRS (2017). 2017: A year of strong growth for the Round Table on Responsible Soy. Retrieved 5 February 2018 from <http://www.responsiblesoy.org/2017-un-ano-de-fuerte-crecimiento-para-la-roundtable-on-responsible-soy/?lang=en>
- Seeley, M. (2020). 'US: Organic produce sales jump 22 % in March, up 8 % in Q1.' *Freshplaza*. Available from: <https://www.freshplaza.com/article/9208827/us-organic-produce-sales-jump-22-in-march-up-8-in-q1/>
- Textile Exchange (2020). 2020 Organic Cotton Market Report. Texas, United States: Textile Exchange.
- Tullis, P. (2019). 'How the world got hooked on palm oil.' *The Guardian*. <https://www.theguardian.com/news/2019/feb/19/palm-oil-ingredient-biscuits-shampoo-environmental>
- UTZ (2017). UTZ Cocoa Statistics Report 2017. https://utz.org/wp-content/uploads/2018/06/UTZ_Cocoa-Statistics-Report-2017.pdf
- Voora, V. (2014). Roundtable for Sustainable Palm Oil 11th Annual General Assembly. *The Standards Reporter*, p. 4.
- Voora, V. (2016). A Blueprint for Enabling Sustainable Commodities: Voluntary Sustainability Standards and the Cotton Sector. Commentary Report. IISD. Available at: http://www.iisd.org/ssi/wp-content/uploads/2016/11/Cotton-sector_commentary.pdf
- Voora, V., Bermudez, S., and Larrea, C. (2019a). Global Market Report: Coffee. Sustainable Commodities Marketplace Series 2019. State of Sustainability Initiatives. International Institute for Sustainable Development. Available at <https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-coffee.pdf>
- Voora, V., Bermudez, S., and Larrea, C. (2019b). Global Market Report: Cocoa. Sustainable Commodities Marketplace Series 2019. State of Sustainability Initiatives. International Institute for Sustainable Development. Available at <https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-cocoa.pdf>
- Voora, V., Bermudez, S., and Larrea, C. (2019c). Global Market Report: Tea. Sustainable Commodities Marketplace Series 2019. State of Sustainability Initiatives. International Institute for Sustainable Development. Available at <https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-tea.pdf>

- Voorra, V., Bermudez, S., and Larrea, C. (2020a). Global Market Report: Sugar. Sustainable Commodities Marketplace Series 2019. State of Sustainability Initiatives. International Institute for Sustainable Development. Available at <https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-sugar.pdf>
- Voorra, V., Larrea, C., Bermudez, S., and Baliño, S. (2020b). Global Market Report: Palm Oil. Sustainable Commodities Marketplace Series 2019. State of Sustainability Initiatives. International Institute for Sustainable Development. Available at <https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-palm-oil.pdf>
- Voorra, V., Larrea, C., and Bermudez, S. (2020c). Global Market Report: Cotton. Sustainable Commodities Marketplace Series 2019. State of Sustainability Initiatives. International Institute for Sustainable Development. Available at <https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-cotton.pdf>
- Voorra, V., Larrea, C., and Bermudez, S. (2020d). Global Market Report: Bananas. Sustainable Commodities Marketplace Series 2019. State of Sustainability Initiatives. International Institute for Sustainable Development. Available at <https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-banana.pdf>
- Voorra, V., Larrea, C., and Bermudez, S. (2020e). Global Market Report: Soybean. Sustainable Commodities Marketplace Series 2019. State of Sustainability Initiatives. International Institute for Sustainable Development. [forthcoming]
- Willer, H., Sampson, G., Voorra, V., Dang, D., and Lernoud, J. (2019). *The State of Sustainable Markets 2019 – Statistics and Emerging Trends*. ITC, Geneva. <https://vss.fibl.org/vss-report/vss-report-2019.html>
- Willer, H., Schlatter, B., Trávníček, J., Kemper, L., and Lernoud, J. (Eds.) (2020) *The World of Organic Agriculture Statistics and Emerging Trends 2020*. 21st edition. Research Institute of Organic Agriculture and IFOAM – Organics International, Frick and Bonn. <https://orgprints.org/37222/>
- Willer, H., Trávníček, J., Meier, C. and Schlatter, B. (Eds.) (2021) *The World of Organic Agriculture Statistics and Emerging Trends 2021*. 22nd edition. Research Institute of Organic Agriculture and IFOAM – Organics International, Frick and Bonn. <https://orgprints.org/id/eprint/40014/>
- Yeo, J. (14 August 2019). ‘“China speed’ needed for a breakthrough in sustainable palm oil.’ *Eco-Business*. <https://www.eco-business.com/news/china-speed-needed-for-a-breakthrough-in-sustainable-palm-oil/>

SOURCES

- **4C:** For 2008–2012, 4C data as quoted by Potts et al., 2014. For 2013–2015, data were provided by Juan Carlos Isaza, Standards Manager, George Watane, Global Coffee Platform (www.globalcoffeeplatform.org), Bonn, Germany. For 2016 onwards, data were provided by Gustavo Bacchi, Coffee Assurance Services, Bonn, Germany (www.cas-veri.com).
- **Better Cotton Initiative:** For 2008–2012, BCI data as quoted by Potts et al., 2014. For 2013 onwards, data were provided by Kendra Pasztor, Monitoring and Evaluation Manager, and Shannon Avison, Data Analyst, BCI, Geneva, Switzerland, www.bettercotton.org.
- **Bonsucro:** For 2008–2012, Bonsucro data as quoted by Potts et al., 2014. For 2013 onwards, data were provided by Nicolas Viart, Head of Sustainability, Nahuel Tuñon, Insights Analyst, and Chen-Wei Chang, Data Innovation Coordinator, Bonsucro, London, United Kingdom, www.bonsucro.com.
- **Cotton made in Africa:** For 2008–2011, CmiA data as quoted by Potts et al., 2014. For 2012 onwards, data were provided by Maria-Verena Spohler-Kouoh and Nina Schöttle, Project Managers CmiA, Monitoring and Evaluation, Aid by Trade Foundation, Hamburg, Germany, www.cottonmadein africa.org.
- **Fairtrade International:** For 2011 onwards, data were provided by Daniel Castro, Data Operations Manager, and Gerrit Walter, Data Management Officer, Fairtrade International, Bonn, Germany, www.fairtrade.net. Market data based on Fairtrade International Annual Reports 2005–2017, available at <https://www.fairtrade.net/about-fairtrade/annual-reports.html>. Fairtrade data have been revised, and the figures reported here might differ from previous Fairtrade International reports.
- **Forest Stewardship Council International:** Data were provided by Marion Karmann, Monitoring and Evaluation Program Manager, Rob Ukkerman, and Joanna Nowakowska, Deputy Director of Technology and Information Unit, FSC International, Bonn, Germany. FSC Annual Reports 2004–2019, www.fsc.org.
- **GLOBALG.A.P.:** Data were provided by Claudia Meifert, Enrique Uribe, and Oshin Abrami, GLOBALG.A.P., Cologne, Germany. Data from 2012–2017.
- **Organic:** FiBL surveys among national data providers and certifiers. Based on the data on the certified area, FiBL estimates the area harvested and the production volume. For full list of original data sources, see www.organic-world.net/yearbook. Contact: Helga Willer, FiBL, Frick, Switzerland, helga.willer@fibl.org. The organic cotton data were provided by Liesl Truscott and Evonne Tan, Textile Exchange, United Kingdom, <http://farmhub.textileexchange.org/>.
- **Programme for the Endorsement of Forest Certification:** Data were provided by Thorsten Arndt and Lise Favre, PEFC International, Geneva, Switzerland, www.pefc.org; PEFC annual reports from 2005–2016.
- **ProTerra Foundation:** For 2008–2012, ProTerra Foundation data as quoted by Potts et al., 2014. For 2013 onwards, data were provided by Augusto Freire, President, and Emese Brosz, Managing Director, ProTerra Foundation, Brasilia, Brazil, www.proterrafoundation.org.
- **Rainforest Alliance:** For 2008–2012, Rainforest data as quoted by Potts et al., 2014. For 2013 and 2014, data were provided by Joseph Cameron Booth, Assistant Market Transformation, Rainforest Alliance, London, United Kingdom, www.rainforest-alliance.org. For 2015–2017, data were provided by Andrea Valenzuela, Associate Certification Program, Landscapes & Livelihoods, Rainforest Alliance, San José, Costa Rica. For 2018, data were provided by Phan Ha, Senior Data Analyst, Rainforest Alliance, Amsterdam, The Netherlands, and Ricardo González, F&SCI Team, Guatemala, Central America.
- **Roundtable on Sustainable Palm Oil:** For 2008 onwards, RSPO data were provided by Soo Chin Ooi, Lee See Lung, Aminah Ang, Abang Mohd Aizat and Abdullah Shazaley, Roundtable on Sustainable Palm Oil, Kuala Lumpur, Malaysia, www.rspo.org.
- **Round Table on Responsible Soy:** For 2008–2012, RTRS data as quoted by Potts et al., 2014. For 2013 onwards, data were provided by Daniel Kazimierski and Laura Villegas, Round Table on Responsible Soy, Ciudad Autónoma de Buenos Aires, Argentina, www.responsiblesoy.org.
- **UTZ:** For 2008–2012, UTZ data as quoted by Potts et al., 2014. For 2013–2016, data were provided by Elisa Trepp and Anne Dullemeijer, UTZ. For 2017 onwards, data was provided by Phan Ha, Rainforest Alliance, Amsterdam, The Netherlands, and Ricardo González, F&SCI Team, Guatemala, Central America, www.utz.org.

ENDNOTES

- 1 Bochtis, D., Benos, L., Lampridi, M., Marinoudi, V., Pearson, S., & Sørensen, C. G. (2020). Agricultural Workforce Crisis in Light of the COVID-19 Pandemic. *Sustainability* (Basel), 2020(12), 8212. 10.3390/su12198212
- 2 Chehtman, A., Wolf, M. (2021). Health, Sustainability and New Priorities Drive Organic Food Sales. <https://blog.euromonitor.com/health-sustainability-and-new-priorities-drive-organic-food-sales/>
- 3 McKinsey & Company. (July 28, 2021). The coronavirus effect on global economic sentiment. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-coronavirus-effect-on-global-economic-sentiment>
- 4 Chehtman, A. and Wolf, M., op. cit.
- 5 Ibid.
- 6 Fazira, E. (2020). Healthy and Clean Positioning Opportunities in Edible Oils. <https://blog.euromonitor.com/healthy-and-clean-positioning-opportunities-in-edible-oils/>
- 7 Research And Markets. (2021). Global Ethical Food Market Report 2021: COVID-19 Impacts. Growth and Change, 2030. Retrieved from <https://www.globenewswire.com/fr/news-release/2021/05/11/2226889/28124/en/Global-Ethical-Food-Market-Report-2021-COVID-19-Impacts-Growth-and-Change-to-2030.html>
- 8 Food and Agriculture Organization of the United Nations (FAO) - (2021). Banana market review – Preliminary results 2020. Rome. <http://www.fao.org/3/cb5150en/cb5150en.pdf>
- 9 Compagnie Fruitiere. (n.d). Growing Organic Bananas In Latin America. <https://www.compagniefruitiere.fr/en/derose/>
- 10 Organic Produce Network. (2021) Q1 Organic Produce Performance. <https://www.organicproducenetwork.com/amass/doc-get-pub/document/28/OPN%20Q1%202021%20quarterly%20report.pdf>
- 11 Nicholson, H. (22 August, 2020). Top 12 Facts About Fairtrade Bananas. <https://www.fairtrade.org.uk/media-centre/blog/top-12-facts-about-fairtrade-bananas/>
- 12 Fairtrade America (10 December, 2020). Banana Impact Report-2018 & 2019. <https://www.fairtradeamerica.org/why-fairtrade/global-impact/reports-trends/banana-2019/>
- 13 Banana Link. (23 July, 2020). Why sustainability is the fastest growing purchase consideration. <https://www.bananalink.org.uk/news/why-sustainability-is-the-fastest-growing-purchase-consideration/>
- 14 Organic Produce Network. (2021). Ibid.
- 15 Banana Link (13 October, 2021). Organic and Fairtrade banana consumption amounts to 10% in Europe and North America <https://www.bananalink.org.uk/news/organic-and-fairtrade-banana-consumption-amounts-to-10-in-europe-and-north-america/>
- 16 Banana Link (8 July, 2021). Fairtrade leads way to living wages for banana workers. <https://www.bananalink.org.uk/news/fairtrade-leads-way-to-living-wages-for-banana-workers/>
- 17 Fairtrade International (2020). Innovation and Resilience for a More Sustainable World. Annual Report 2019-2020. https://files.fairtrade.net/publications/Fairtrade_Annual_Report_2020_web.pdf
- 18 IDH (n.d). Better Business Through Better Wages. Take Action Towards A Living Wage. <https://www.idhsustainabletrade.com/cta-living-wages/>
- 19 Banana Link (8 July 2021), op. cit.
- 20 Ibid.
- 21 Banana Link (n.d). All About Bananas and Why Bananas Matter. <https://www.bananalink.org.uk/all-about-bananas/>
- 22 Centre for the Promotion of Imports from developing countries (CBI), (20 April 2020). The bittersweet impact of COVID-19 on the cocoa and chocolate market. <https://www.cbi.eu/news/bittersweet-impact-covid-19-cocoa-chocolate-market>
- 23 CBI (11 November, 2020). What is the demand for cocoa on the European market? <https://www.cbi.eu/market-information/cocoa/trade-statistics>
- 24 CBI (November 17, 2020). What requirements must cocoa beans comply with to be allowed on the European market? <https://www.cbi.eu/market-information/cocoa/buyer-requirements>
- 25 CBI (7 September, 2020). The European Market Potential for Certified Cocoa. <https://www.cbi.eu/market-information/cocoa-cocoa-products/certified-cocoa/market-potential>
- 26 CBI (7 September, 2020). Ibid.
- 27 Fountain, A.C., and Huetz-Adams, F. (2020). 2020 Cocoa Barometer. <https://www.voicenetwerk.eu/wp-content/uploads/2020/12/2020-Cocoa-Barometer.pdf>
- 28 International Coffee Organization (2020). Impact of covid-19 on the global coffee sector: The demand side. <http://www.ico.org/documents/cy2019-20/coffee-break-series-1e.pdf>
- 29 Ibid.
- 30 CBI. (12 August, 2021). Increased certified coffee consumption in Europe despite COVID-19 pandemic. <https://www.cbi.eu/news/increased-certified-coffee-consumption-europe-despite-covid-19-pandemic>
- 31 Ibid.
- 32 Drinks Insight Network. (2020). COVID-19: Four key coffee trends for 2020-2022. <https://www.drinks-insight-network.com/comment/covid-19-coffee-trends/>
- 33 CBI (12 August 2021), op. cit.
- 34 Ibid.
- 35 Mongabay (1 April, 2021). Coffee sustainability check: Q&A with Sjoerd Panhuysen of Coffee Barometer report. <https://news.mongabay.com/2021/04/coffee-sustainability-check-qa-with-sjoerd-panhuysen-of-coffee-barometer-report/>

- 36 International Coffee Organizations (June 2020). Impact of covid-19 on the global coffee sector: Survey of ICO exporting Members. <https://www.ico.org/documents/cy2019-20/coffee-break-series-3e.pdf>
- 37 Perfect Daily Grind (13 February, 2020). Entering China's Emerging Coffee Market. <https://perfectdailygrind.com/2020/02/entering-chinas-emerging-coffee-market/>
- 38 CBI (20 September, 2020). Russian market potential for coffee. <https://www.cbi.eu/market-information/coffee/russia/market-potential>
- 39 SCA (11 December, 2020). An Emerging Market: The Rise of China's Coffee Drinking Culture | 25, Issue 13 <https://sca.coffee/sca-news/25/issue-13/an-emerging-market-the-rise-of-chinas-coffee-drinking-culture>
- 40 Moea, T., and Meliado, F. (11 May, 2021). COVID has disrupted Africa's cotton production. Here's how soap could provide a solution. World Economic Forum. <https://www.weforum.org/agenda/2021/05/cotton-byproducts-africa-economics-business-covid-coronavirus/>
- 41 International Cotton Advisory Committee Australia. Special Issue POTENTIAL IMPACTS OF COVID-19 ON THE COTTON SECTOR. https://australiancotton.com.au/assets/downloads/ICAC_Recorder__June_2020_-_COVID_19_special_edition.pdf
- 42 World Trade Organization (2020). REPORT JUNE 2020 - INFORMATION SESSION ON COVID-19 AND COTTON 'FROM FACTS TO SOLUTIONS'. <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/TN/AG/SCCW34.pdf&Open=True>
- 43 Ibid.
- 44 www.mckinsey.com/~/_media/McKinsey/Industries/Retail/Our%20Insights/The%20state%20of%20fashion%202020%20Navigating%20uncertainty/The-State-of-Fashion-2020-final.ashx
- 45 sustainablebrands.com/read/defining-the-next-economy/research-in-a-post-covid-2021-fashion-will-trend-toward-sustainability
- 46 sourcingjournal.com/topics/sustainability/u-s-cotton-trust-protocol-apparel-textile-sustainability-coronavirus-229269/
- 47 www.sustainablecottonranking.org/analysis
- 48 textileexchange.org/over-36-major-brands-pledge-to-achieve-sustainable-cotton-by-2025/
- 49 sourcingjournal.com/topics/sustainability/u-s-cotton-trust-protocol-apparel-textile-sustainability-coronavirus-229269/
- 50 Ibid.
- 51 For example, the European Green Deal, an upcoming legislative proposal to reduce deforestation associated with products the European Union imports, and the Swiss trade agreement with Indonesia as part of the Comprehensive Economic Partnership Agreement concluded between European Free Trade Area countries and Indonesia that defines tariff preferences for a number of palm oil products that comply with specific VSS.
- 52 CBI (2020). The European market potential for palm oil alternatives. <https://www.cbi.eu/market-information/natural-ingredients-cosmetics/palm-oil-alternatives>
- 53 Nur, Y. (13 May, 2020). Palm Oil: Local Consumption Down, Export Picks Up During Pandemic. <https://jakartaglobe.id/business/palm-oil-local-consumption-down-export-picks-up-during-pandemic/>
- 54 www.businesswire.com/news/home/20210719005632/en/Global-Palm-Oil-Market-Trajectory-Analytics-Report-2021---ResearchAndMarkets.com
- 55 www.businesswire.com/news/home/20210719005632/en/Global-Palm-Oil-Market-Trajectory-Analytics-Report-2021---ResearchAndMarkets.com
- 56 www.foodnavigator-latam.com/Article/2019/08/12/Organic-palm-oil-is-growing-faster-than-conventional-Alcopalma-CEO-on-opportunities-for-growth
- 57 www.cbi.eu/market-information/grains-pulses-oilseeds/trends
- 58 Bermudez, S. (29 July 2021). IISD's personal communication with a palm oil trader.
- 59 document.rspo.org/Unilever_ACOP2019.pdf
- 60 www.idhsustainabletrade.com/news/latest-data-shows-86-of-palm-oil-imported-to-europe-sustainable/
- 61 www.politico.eu/sponsored-content/the-palm-oil-industry-is-changing-and-the-eu-can-help/
- 62 Ibid.
- 63 Voora, V., Larrea, C., and Bermudez, S. (2020). Global Market Report: Soybeans. Sustainable Commodities Marketplace Series 2019. <https://www.iisd.org/system/files/2020-10/ssi-global-market-report-soybean.pdf>
- 64 www.mckinsey.com/industries/agriculture/our-insights/alternative-proteins-the-race-for-market-share-is-on
- 65 Ibid.
- 66 Ibid.
- 67 p 21. https://issuu.com/rtrs/docs/management_report_2019__eng?e=42710408/81527153
- 68 www.idhsustainabletrade.com/uploaded/2021/06/2019-IDH-European-Soy-Monitor-report.pdf, p.14
- 69 www.cbi.eu/market-information/grains-pulses-oilseeds/trade-statistics
- 70 Cabezas, S.C. Bellfield, H. Lafortune, G. Streck, C., and Hermann, B. (2019). Towards more sustainability in the soy supply chain: How can EU actors support zero- deforestation and SDG efforts? German Federal Ministry for Economic Cooperation and Development. <https://webcache.googleusercontent.com/search?q=cache:cOA8QEX4YvoJ:https://www.climatefocus.com/sites/default/files/20191209%2520%2520GIZ-%2520Soy%2520supply%2520chain%2520consolidated%2520study%2520clean%2520v.7.0.pdf+%&cd=5&hl=en&ct=clnk&gl=ca>
- 71 www.fibl.org/fileadmin/documents/shop/1150-organic-world-2021.pdf, p275
- 72 Ibid., p.141
- 73 www.bonsucro.com/the-impact-of-covid-19-on-sugarcane-sustainability/
- 74 pubmed.ncbi.nlm.nih.gov/33529978/
- 75 www.healthline.com/health-news/eating-excess-sugar-is-worse-for-you-during-covid-19-6-ways-to-cut-it
- 76 www.bonsucro.com/wp-content/uploads/2020/06/Bonsucro-Outcome-Report-2019.pdf
- 77 www.bonsucro.com/first-argentine-bonsucro-certification-for-ethanol-production/
- 78 www.iscc-system.org/wp-content/uploads/2017/04/16.-Colens_Braskem_ISCC-Conference_170216.pdf

- 79 br.cofcointernational.com/media/1927/cil_sr_2020_digital.pdf, p. 17
- 80 ec.europa.eu/energy/topics/renewable-energy/biofuels/voluntary-schemes_en?redir=1
- 81 br.cofcointernational.com/media/1927/cil_sr_2020_digital.pdf, p. 18
- 82 www.fao.org/news/story/pt/item/1401575/icode/
- 83 cdn.nation.co.ke/pdfs/DN-Tea_Day.pdf
- 84 www.cbi.eu/news/covid-19-prevents-organic-certification-new-natural-ingredient-producers
- 85 www.foodnavigator.com/Article/2020/05/06/Organic-food-gets-coronavirus-boost
- 86 Barry, M. (14 May, 2021). The Sustainability Gap in Hot Beverages. Euromonitor Blog. <https://blog.euromonitor.com/the-sustainability-gap-in-hot-beverages/>
- 87 Ibid.
- 88 Ibid.
- 89 www.cbi.eu/market-information/grains-pulses-oilseeds/trends
- 90 www.marketwatch.com/press-release/global-ethical-food-market-report-2021-covid-19-impacts-growth-and-change-to-2030-2021-05-11?siteid=bigcharts&dist=bigcharts&tesla=y

Printed by ITC Digital Printing Service.

A free pdf is available on ITC's website at:
www.intracen.org/publications.



ISBN 978-92-1-103685-5



9 789211 036855