

Covering production trends and industry insights from the 2019/20 harvest and beyond.





About this report

The Organic Cotton Market Report provides a unique analysis of key data and emerging trends in organic cotton production at global, regional, and country levels. Each year, the report uses data from the previous harvest season and insights from industry insiders to shed light on current issues and priorities for the organic cotton sector.

Textile Exchange has collected data and insights on the global production of certified organic cotton for over 15 years and remains the only organization to do so. We believe such information is critical in facilitating growth of the sector and therefore also in facilitating progress towards <u>Textile Exchange's 2030</u> <u>Climate+ goal</u>. The report allows companies to make informed sourcing decisions, discover new sourcing destinations, hear from others in the sector, and address current supply chain challenges.

For the latest production news and trends from the wider preferred fiber and materials landscape, check out our sister publication the Preferred Fiber & Materials Market Report.

Disclaimer

The data shared in this report is intended to be a snapshot of production and makes no claims to represent total supply. While Textile Exchange carries out a systematic completeness and accuracy check on its data collection process, we rely on our data providers for data accuracy and integrity. Where data gaps exist, Textile Exchange attempts to replace these values with best estimates from historical or comparable proxies. Data submitted may change due to corrections or updates from data sources.

For the purpose of this report, the term "organic cotton" does not include any uncertified naturally grown cotton, nor does it make any statement regarding the integrity beyond its certification, or the numbers submitted by our data providers.

In selected cases, where data can only be obtained from one source, triangulation and validation of data may not be possible and the data is accepted as it is. See our <u>Methodology</u> for full information, including a breakdown of the data sources used for each of the 34 countries analyzed in the preparation of this report, alongside a confidence level on the data received based on results of triangulation.

Another important point to note is that the land area figures shared in this report refer to total land certified to an organic standard by a producer group growing organic cotton. The same piece of land could be used to grow other organic crops as part of a rotation system, a fundamental element of organic agriculture. This means that reported land area figures do not necessarily reflect solely the land area used to grow organic cotton and, as a result, may seem disproportionately high compared to the organic cotton volumes harvested. The same applies to in-conversion land which may or may not be used to grow organic cotton upon full certification.



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Methodology





Welcome

The early 1990's marked the beginning of organic cotton production's expansion as countries worldwide adopted national organic standards.

Flash forward 30 years and 2019/20 marks a record year for organic cotton. Despite the Covid-19 scourge, 2019/20 witnessed the largest volume of organic cotton fiber harvested globally to-date. And while the triedand-true players – India, China, Kyrgyzstan, and Turkey – continue to lead the way, countries in East Africa (Tanzania and Uganda) were the biggest contributors to the year's global growth.

It's taken a lot of learning, collaborating, and visioning to get to this point – one we should celebrate.

But even with this growth, organic cotton still only represents roughly one percent of the global cotton harvest that season. That's not enough.

Textile Exchange's Climate+ strategy recognizes the urgency of climate change and sets a goal of 45% reduced greenhouse gas (carbon dioxide equivalent) emissions by 2030 in the pre-spinning phase of textile fiber and materials production.

Organic soils are known to lock away, or sequester, far more carbon than conventional soils. What's more, common organic practices of using compost and manure have the biggest impact in the shortest period of time. The climate is calling, and we can't ignore it. We don't have another 30 years to grow by another one percent - we have less than nine to make radical, systemic changes. Fortunately, all signs point to hugely accelerated demand for organic cotton in the coming years as brands ramp up use of the fiber in their product lines.

Can you imagine if we could help mitigate climate change by dramatically decreasing the billions of pounds of greenhouse gas-emitting synthetic fertilizers applied to cotton by increasing the use of soil building practices like rotation and cover crops along with compost and other natural inputs? Well, we can't just imagine. We have to act.

Organic production systems are at the tip of the spear driving best practices across the entire textile industry. Organic cotton is one of the proven solutions for meeting our Climate+ goal. It is time to dramatically scale-up the use of organic cotton and send clear and committed market signals to shift from the current price paradigm system that creates the pollution, poverty, and problems to a value system that promotes and support life – life for the soil, the farm, the family, the community and our planet!

Together we can make the difference.



La Rhea Pepper CEO, Textile Exchange

Thank you

The production of this report is only possible thanks to each and every organic cotton producer, certification body, accreditation body, organization, gin, trader, distributor and other stakeholder who has taken the time to share data, expertise, updates, insights, and photos for this report. Please take time to look at the full list of acknowledgments at the end of this report. Thank you all for your continued and valuable co-operation and, most importantly, for working to grow the market for organic cotton and agroecology more broadly.



We also want to thank Textile Exchange members for their continued support and leadership.

Together, we can collectively accomplish what no individual or company can do alone.

Visit our <u>website</u> to learn more about how Textile Exchange membership can benefit you.





The year in numbers

2019/20 organic cotton production snapshot





Peru (712 tonnes); Burkina Faso (574 tonnes); Egypt (238 tonnes); Uzbekistan (165 tonnes); Ethiopia (148 tonnes); Brazil (134 tonnes); Mali (85 tonnes); Myanmar (32 tonnes); Thailand (5 tonnes); and Senegal (3 tonnes).

TOP FIVE BY FIBER VOLUME INCREASE

TOP FIVE BY

2019-20

FIBER GROWTH RATE

Tanzania: 114%

Uganda: 183%

Greece: 147%

Brazil: 138%



TOP FIVE BY **IN-CONVERSION LAND AREA**



GROWTH IN CERTIFIED FACILITIES





¹ OCS certified facilities figures for 2020 are estimates due to a delay in receipt of some data.

Pakistan: 1409%



Meet this year's industry insiders

During the making of this report, we interviewed twenty-one stakeholders from across the global supply network to bring you unique insights into their work in organic cotton.

In line with Textile Exchange's 2030 Climate+ strategy, this year's interviews focused on climate, water, biodiversity, and soil health. We also asked interviewees



Marco Bänninger Head Trader Hand Picked Cotton. Paul Reinhart AG Read full interview



Hardeep Desai Head of Farm Operations, CottonConnect South Asia Private Ltd.

Read full interview



Subindu Garkhel Senior Cotton and Textiles Lead. Fairtrade

Read full interview



Tobias Meier Senior Project Leader Sustainable Textiles,



Vitoon Panyakul Director. Green Net





□ Read full interview

Orlando Rivera

General Manager.

Bergman/Rivera





Ruud Shute Program Director, Organic Cotton Accelerator (OCA)

Read full interview

□ Read full interview





Avdin Unsal Owner, Chairman of the board. Egedeniz Tekstil Read full interview



Ligia Zottin Impact & Compliance Manager, VEJA Read full interview



Sanko Textile Company submission Read full interview



Vivek Rawal CEO and Managing Director. bioRe India Ltd

□ Read full interview





Read full interview



Amitabh Singh Founding Member, Farmer Association for Rural Management

□ Read full interview



Roland Stelzer Managing Partner, Cotonea/Gebr. Elmer & 7weifel

Read full interview



Read full interview

Lojas Renner **P**RENNER Company submission □ Read full interview





Read full interview



about the latest news from each project and

for their thoughts on the trends playing out

throughout this report but you can read the

full interviews with these and other industry

Rajan Bhopal

(Supply Chains),

(PAN) UK

International Project Manager

Pesticide Action Network

Read full interview

Corporate Responsibility & Communications GM.

□ Read full interview

Programme Officer - Materials,

Syeda Faiza Jamil

Artistic Milliners

Varun Joseph

Laudes Foundation

□ Read full interview

insiders in our Insider Series and Member

Quotes from the interviews are shared

in the organic cotton sector.

Spotlight.

Read full interview





Mariam Soliman Communication Specialist, Economy of Love □ Read full interview



Current trends and priorities

Photo: © Sanko Textile | Turkey





Keeping up with demand Why has there been a sudden shortage of organic cotton?

From small t-shirt manufacturing operations to the major fashion houses of Milan and Paris, brands and retailers are increasingly incorporating organic cotton into their supply chains, leading to a dramatic increase in demand that hit new heights in 2020.

With more and more companies recognizing the far-reaching benefits of organic cotton, many are now putting it at the heart of their preferred materials portfolios. And, as they realize these benefits, companies are setting ambitious targets to align their sourcing practices with initiatives such as the <u>Sustainable Development Goals</u>, the 2025 Sustainable Cotton Challenge, or <u>The</u> German Partnership for Sustainable Textiles.

Yet, establishing an organic management system requires investment and commitment – and up to three years for farmers to make the conversion. As a result, many brands wishing to incorporate the fiber into their supply chains are finding that there isn't currently enough to meet their needs.

The good news is that brands can help to increase supply by investing in <u>in-conversion</u> cotton and sending clear demand signals to farmers so that they can make the switch feeling confident there will be a market for it.

Besides heightened demand, there have also been supply-side factors impacting availability, including:

- Sanctions from some countries, including the U.S., on imports of cotton from China has resulted in companies that were sourcing from China turning to other sourcing destinations, increasing demand from these countries. Read Textile Exchange's <u>social stance</u> for further details.
- The detection of fraud in India in 2020 resulted in the companies involved being banned both by GOTS and Textile Exchange. The assurance model was critical to detecting the deficiency before the product was processed further. The use of standards and <u>third party verification</u> drives the adoption of best practices and elevates the value of the finished product by protecting the intrinsic value of the fiber and delivering confidence to consumers. Read Textile Exchange's <u>statement</u> for more detail.

Demand forecasting survey

Textile Exchange gathers data on cotton uptake annually through its <u>Corporate Fiber</u> and <u>Materials Benchmark</u> program. in March 2021, for the first time ever, we conducted an additional demand survey for organic cotton as a 'temperature check' and to gather data on future demand. Keep an eye out for the results - coming soon! We are going to see demand increasing at a faster pace and the supply side will have to find solutions to cope. We already see second year in-conversion cotton in high demand, and perhaps we may even see first year inconversion cotton used in textile production, which is a great way of supporting organic farming.

Aydin Unsal,
Egedeniz Tekstil

Read full interview

During the past year, we have seen a surge in organic cotton demand. Much of this demand is from "new companies" that are just transitioning to the sustainable materials world. Unfortunately, what has happened is that these brands expect organic cotton to always be available, as if it was a commodity, and that has not been the case.

Orlando Rivera,
 Bergman/Rivera



Read full interview

The demand for organic cotton has increased over the past year, especially for organic cotton from Africa, Turkey, and Central Asia [...] despite the disruptions caused by the pandemic in the supply chain.

- Paul Reinhart AG
- Read full interview

We are happy to see the hard work of organic farmers being well rewarded by the market but are well aware that the market conditions could rapidly change once more.

□ Rajan Bhopal, PAN UK



Read full interview



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Photo: © Charlotte Lapalus for VEJA | Brazil



Recommendations for securing supply

Ensure that your cotton is certified from field to finished product to provide verification to the industry and consumers.

Incorporate organic and in-conversion cotton into your long-term preferred fiber and materials strategy. Clear demand signals and fair prices will encourage farmers to plant more organic cotton. Be sure to order well in advance of planting time.

Source directly and make forward commitments to farmers/ farm groups, or a supplier who works closely with them, to secure supply and signal your demand. Visit our <u>Organic Cotton Producer</u> <u>Directory</u> to connect directly with producers.

Consider other sourcing geographies and models to diversify your supply base. This Organic Cotton Market Report and Textile Exchange and Kering's <u>A World Beyond Certification: A best practices</u> guide for organic cotton trading models provide information on sourcing regions, pricing, fiber qualities, and more.

Buy <u>in-conversion cotton</u> to support farmers/farm groups through the conversion phase, secure your supply, and help to build future supply of organic cotton. Learn more overleaf.

Keep up to date on global production trends via this Organic Cotton Market Report, published annually.

Join our Organic Cotton Round Table to discuss sourcing and other issues with the rest of the industry. Join here.

Help Textile Exchange enable the industry to plan for expansion by participating in our <u>Materials Change Index</u> and demand forecasting surveys.



In-conversion cotton

The driving force for the future of organic cotton

While demand for organic cotton is clear, incentives for farmers to transition to organic production are lacking. **Buying in-conversion cotton and investing in in-conversion programs support farmers and farm groups through the conversion phase, while building future supply of organic cotton.**

Here, we answer some common questions around in-conversion cotton.

What is the conversion period and why does it exist?

To grow any organic crop, the land must go through a conversion, or transition, period first. This is the time between the start of the organic management and the acceptance of crops as organic. From day one of this conversion time, the farmer implements organic production practices.

The length of the conversion period varies between countries but is generally between two and three years based on the crop and audit cycle. Farmers use the time to establish and embed new organic management systems, with a particular focus on building soil health and fertility, which can take time.

During this time, farmers may experience a temporary drop in yields, because they can no longer use quick-fix synthetic forms of fertility like nitrogen fertilizers, while the newness of their organic system means that naturally healthy soils that feed the crops haven't yet had a chance to fully develop. Organic farming is also knowledge-intensive, and farmers need time and support to adapt.

Converting to organic production can be a big risk for both individual farmers and farm groups. Without support or longer-term guarantees of a market, there is little incentive for farmers to enter the conversion period. But without farmers willing to enter it, brands won't have supplies of organic cotton secured into the future. Farmers need to plan their planting, so it's essential that we find ways to support and encourage them through the years of change.

How do we support farmers during the years of change?

There are several ways that farmers and implementing partners can be supported, and it's worth investigating which options work best for your business or brand.

Fundamentally, it's vital that farmers and implementing partners receive adequate support and fair prices through the years of change. Providing clear market demand signals that indicate commitment to organic for the long term, will ensure sustainable and resilient organic cotton supplies can be secured well into the future. We see interest and demand for in-conversion cotton increasing as brands become aware that farmers converting to organic are the engine to the growth in our sector.

□ Ruud Shute,

OCA

Read full interview

CottonConnect's Organic Farmer Training Program supports farmers on a four-to-five year transition from conventional cotton growing to organic cotton practices. The detailed farmer training modules cover all the aspects of organic cotton cultivation, the certification process, health and safety of the farmers, organic integrity and ICS (Internal Control System) documentation. CottonConnect also works with brands on organic cotton integrity, strategy, and traceability.

CottonConnect

Read full interview

We want to strengthen our market share in organic cotton to meet increased demand. However, organic cotton still represents a niche market, and we should not expect any miracles in terms of its short-term capacity and the expansion of arable land for organic cotton production. It is important that we strive for sustainable growth together with our partners and support them during these challenging times when supply chains can easily be interrupted.

Paul Reinhart AG

Read full interview

Organic has always been important for Fairtrade and for the last 28 years we have supported farmers during the transition to organic farming. [...] The Fairtrade premium helps farmers overcome the challenges of the transition phase.

Subindu Garkhel,
Fairtrade Foundation

Read full interview

Photo: © Grameena Vikas Kendram Society for Rural Development (RESET) | India



In-conversion cotton

How can in-conversion cotton be marketed?

One of the easiest ways to support organic systems is by communicating the benefits of organic systems to consumers. When it comes to marketing organic cotton, that's fairly straightforward - but things get more complicated with in-conversion cotton.

In most countries, you can label in-conversion cotton products as containing 'organic in-conversion' cotton. Unfortunately, this isn't allowed in the United States, which is the leading retail market for organic cotton. In the U.S. it's against the law to use the word 'organic' in relation to in-conversion or 'transitional' products on product labels or hang tags.

In this case, brands can talk about the journey to organic using other channels, such as on their websites. Check out the brand examples opposite to see how this can be done.

How can in-conversion cotton be traced through the supply chain?

Wherever you're selling products, it's important that you can trace your use of organic and in-conversion cotton in your supply chain. This enables you to be third party verified, transparent, and to substantiate your claims to your customers.

Textile Exchange's <u>Organic Content Standard</u> (OCS) helps you to do just that. Certification to OCS confirms that you have a certain percentage of organic cotton and/or inconversion cotton in a finished product. Please note that, at this time, whilst you can trace inconversion cotton in your OCS supply chains, you may not use the OCS logo in relation to in-conversion products.

The <u>Global Organic Textile Standard</u> (GOTS), which addresses both fiber content and processing, has a labelling category for inconversion products, with language that can be used in all countries where it is currently legal to do so.

Key resources on in-conversion cotton

VIII-Conversion Cotton webpage

We'll keep our <u>In-Conversion Cotton webpage</u> updated with the latest news, resources, and events, so save the link and check back often.

In-Conversion Cotton - The Basics (pdf)

This <u>pdf overview</u> aimed at brands and retailers outlines what inconversion cotton is – including discussion of standards, fair pricing, and what claims can be made.

Srand examples of marketing language

The following are links to brands that are successfully incorporating in-conversion cotton into their products, introducing the public to the concept of in-conversion cotton and promising them an organic future: ARMEDANGELS, Eileen Fisher, and Patagonia.

CRT e-Learning Series

In April 2021, Textile Exchange's Organic Cotton Round Table (OCRT) launched an e-Learning Series, with an initial focus on in-conversion cotton. Part 1 addressed the current shortage of organic cotton and shared recommendations for companies on how to source in-conversion fiber. Part 2 explored the different models for sourcing organic and in-conversion cotton.

Y Organic Cotton Round Table (OCRT)

Join the <u>OCRT</u> for information on the different approaches to sourcing organic and in-conversion products, access to our directory of organic producers, and the latest news. Find out more about the OCRT in the "<u>Get Involved</u>" section of this report.



Regenerative Building resilience through regenerative agriculture

The term "regenerative" is increasingly a feature of conversations about sustainable or preferred fiber choices, and you'll see it used frequently in this report - but what does it mean? To get to the heart of the matter, we need to understand the difference between regenerative practices and regenerative agriculture.

Regenerative practices usually address a single element or set of practices within the system. Regenerative agriculture is a holistic philosophy that takes a whole systems approach.

Regenerative agriculture is not a prescriptive "one size fits all" approach; instead, it looks at a combination of methods that support resilience as well as build and nourish our ecosystem. Over time, regenerative practices can increase production and naturally reduce the need for external inputs. When these regenerative practices are implemented successfully, the health of the agricultural ecosystem and farmer's economic stability can be improved. This is regenerative agriculture, and best-practice organic is a leading example.

Organic farmers have used regenerative practices such as crop rotation, green manures, and cover cropping for generations, as part of their holistic approach to managing the land without synthetic inputs. This is because working with the systems and cycles of nature is a fundamental part of the organic approach to agriculture. In most parts of the world, organic is enshrined in legislation, meaning that farmers must meet strict standards to sell their crop as organic. Whilst there are variations in the details, all of these standards ensure that farmers carry out practices to protect their soil. Studies have shown that organic farming has a positive effect on carbon capture and storage, biodiversity, animal welfare and general ecosystem health.

Being defined in law helps protect the term "organic" from greenwash. However, legislation is always a floor, not a ceiling, and farmers must be encouraged and supported to go beyond baseline requirements so that they are farming organically by design, not just default. It's important to support continuous improvement and strive for best practice. There are many fantastic programs and projects helping farmers to do just that, some of which are featured in this report.

Measurement is an important tool to help guide improvements, but it's what we do with the results that is key. Organic farmers have been at the forefront of agricultural innovation for decades and continue to lead the way by demonstrating the regenerative benefits of organic agriculture.

Research the regenerative agriculture landscape with Textile Exchange

Textile Exchange is committed to furthering research on regenerative agriculture. Research has begun aiming to serve as a guide to the fashion and textile industry by providing a clearer understanding of the tools, programs, initiatives, guidance, and best practices within the regenerative agriculture landscape – and to offer concrete pathways for brands to deepen their engagement. Regenerative agriculture presents an immense opportunity to brands to support practices that sequester carbon, protect biodiversity, enhance ecosystem services, improve livelihoods, and lead to longterm climate resilience. Despite these benefits, programs can be difficult to identify and support due to a complex network of stakeholders, all with different outcomes, practices, accounting methodologies, and claims. Through this research, Textile Exchange hopes to help organizations efficiently navigate the regenerative agriculture landscape, enabling more rapid scaling of projects and achievement of meaningful impact reduction.

We are working hard to connect regenerative farming practices with our in-conversion strategy to grow the organic farming community and to reward farmers for the contributions they make on every level. Doing this will help the sector increase the supply of organic cotton and deliver maximum environmental impact.

CA Ruud Shute,

Read full interview

Building on the learnings from our existing legacy organic cotton programmes, we are looking to encourage business to look beyond certification and source in ways that build producer power and enhanced stewardship of natural resources. In 2020, to enable this shift, we partnered with IDH and WWF India to establish our first landscape programme, Regenerative Production Landscape in Madhya Pradesh, India, and more recently ioined forces with the 1000 Landscapes for 1 billion People for global convening to further amplify the landscape narrative.

Varun Joseph,
Laudes Foundation

Read full interview



COVID-19 One year on

COVID-19 continues to have a profound and devastating impact on organic cotton communities worldwide, particularly those that are financially, socially, or physically vulnerable to its effects. You will find detail of regionspecific impacts later in this report.

Many organizations in the organic cotton community have stepped up to provide emergency relief, particularly in India, which has experienced a catastrophic second wave. This year, the Chetna Coalition has announced that they are seeking to cover the costs of vaccinations against Covid-19 and any prophylactic treatment or provision of basic medical kits for all Chetna staff and their immediate family members. The Organic Cotton Accelerator is allocating increased funds to their Farm Programme Kits, which will be distributed for the 2021/22 cotton season. bioRe Foundation set up <u>Mobile</u> <u>Health Units</u> to provide basic health care to farming families in villages throughout Madhya Pradesh. In India, Bangladesh and Pakistan, CottonConnect launched their <u>Mission Hope</u> <u>Campaign</u>, distributing masks, gloves, hand sanitizers and PPE kits and raising awareness of Covid-19 prevention measures. Such efforts are critical in the here and now to saving countless precious lives.

But the need to build lasting solutions to support farmers is greater than ever as communities plan for both short and long-term recovery from the impacts of Covid. This is our opportunity to push the reset button and - in the words of Textile Exchange CEO La Rhea Pepper - "create the shift from a Price to Value Paradigm".

Fortunately, despite disruptions caused by the pandemic, <u>demand</u> for organic cotton increased dramatically during 2020 thanks to strong brand commitment to source preferred fiber and materials. to deliver farmer training and support farmer groups during the COVID-19 pandemic and political unrest. To comply with government restrictions on group meeting size, the field team ran weekly training sessions with smaller groups of farmers, repeating these so that all farmers in each of the 14 project villages could take part, and they delivered hand sanitizing and health protection messages. We succeeded in training 1,430 farmers, 27 percent of whom were women.

PAN Ethiopia worked incredibly hard

□ Rajan Bhopal, PAN UK

Read full interview



After many COVID-19 lockdowns around the world, the majority of people were deprived of their usual way of life and learned how to live with it. They had time to value the environment, climate, and sustainability, and we have experienced the growing demand from the industry for sustainable products.

Aydin Unsal, Egedeniz Tekstil

Read full interview

In May 2020 Fairtrade announced a "Fairtrade Producer Relief Fund" and the establishment of a "Fairtrade Producer Resilience Fund" in response to the global COVID-19 pandemic, with initial investments of \in 3.1 million. The Fairtrade relief fund was launched for immediate assistance: to keep farmers and workers safe and operations running, while the Fairtrade resilience fund was created for long-term measures (such as adjusting business models or diversifying) to achieve a more solid economic recovery.

Subindu Garkhel,
 Fairtrade Foundation



Read full interview





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Seed innovation

Progress and updates on non-GM seed development

Seed is where cotton textiles begin. Yet, access to non-genetically modified (GM) seed that is suitable for organic cotton production continues to be a key barrier to expanding supply of organic fiber. Seed is big business, and the global dominance of GM cotton continues to pose serious challenges.

In 2019, ~25.7 million hectares of GM cotton was grown in 18 countries, accounting for **79 percent of total cotton production**.¹ March 2020 saw **Kenya** commercialize Bt cotton, becoming the seventh African country to commercialize GM cotton. Neighboring **Tanzania**, on the other hand, suspended GM seed trials in January 2021 due to concerns over the negative impact on farmers and a preference to conserve local seed varieties.

For an overview of GM cotton in Africa, the associated risks, and the opportunities offered by organic, see the white paper issued by Textile Exchange's Pan-Africa Sourcing Working Group in 2020: <u>Cotton in Africa:</u> <u>Sustainability at a Crossroads.</u>

Testing for GM cotton

The global ISO IWA 32:2019 proficiency

test was the result of a collaboration between GOTS, OCA, and Textile Exchange to create a common language among laboratories worldwide to screen for the potential presence of GM cotton along the organic cotton value chain.

In early 2021, <u>14 laboratories successfully</u> <u>passed the ISO IWA 32:2019 proficiency test</u>, constituting an important milestone on the journey towards transparency and verification of the presence of GM in cotton.

Non-GM seed breeding programs

- **bioRe India**'s breeding and evaluation program is now at the doorstep of producing seeds from five TFL released cultivars.
- Fairtrade runs non-GM seed projects in India, Kyrgyzstan, and Tajikistan. Fairtrade's partnership with Pratibha Syntex in India was due to enter Phase Two in 2020 but is on hold due to COVID-19 pandemic.
- **FiBL and OCA**'s "Seeding the Green Future" program is developing new and improved cultivars suited to organic farming conditions, while scaling up testing and multiplication. More on OCA's seed and innovation work opposite.
- Texas A&M AgriLife Research planted ten candidate varieties in demonstration plots at the AgCARES farm in Lamesa, Texas, in early 2021. Read more here.

Spotlight on seed: Organic Cotton Accelerator (OCA)

The production of an organic cotton tee-shirt actually starts by ensuring the availability, accessibility and diversity of quality organic cottonseed for farmers.

Organic farming conditions are not artificially buffered using synthetic inputs so it is especially important that organic farmers can access the right quality and type of seed that suits their local environment and their farming system. Only then can farmers fully and sustainably harvest the agronomic, environmental and economic benefits of growing organic cotton.

OCA has already achieved significant milestones in India since 2017 through our Seed and Innovation Programme. This year, we made our Non-GM Cottonseed Production Guidelines available to all seed producers who want to prevent GMO presence in their seed lots. By participating in this global industry approach, seed producers who follow these guidelines can improve the integrity of the entire organic cotton value chain, from seed to shirt.

Beyond India, OCA's Global Seed Strategy aims to boost the development, commercial release and production of non-GM / organic cultivars for the organic cotton sector globally by proactively working on capacity building, developing joint market incentives, informing advocacy and ensuring seed knowledge exchange.

Long-term partnerships are key to the success of the sector's seed journey which is why OCA is encouraging existing seed initiatives to share their stories, learnings and challenges. Knowledge sharing of this nature will help create a joint blueprint of best practices, that we can further populate as we grow our network in the coming years.'

If you would like to contribute to the seed journey and share your local seed story, please email Mathilde Tournebize at seeds@organiccottonaccelerator.org.

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□ Mathilde Tournebize,

Programme Officer Seed and Innovation, Organic Cotton Accelerator

Read OCA's Insider Series

Traceability & transparency

While transparency and traceability cannot be a complete substitute for trust, they do help to build trust and support pro-active and preventative measures when it comes to ensuring integrity within supply networks.

A growing number of companies are eager to improve the traceability of their organic cotton supply networks, and consumers are starting to demand more traceability and transparency too.

Technology has changed the way we access information with advances in digital infrastructure opening up new ways to trace organic cotton right back to the farm where it was grown.

Textile Exchange Standards

Transparency can only be achieved with a strong third-party chain of custody. Textile Exchange's Content Claim Standard (CCS) is the foundation of all Textile Exchange standards and offers chain of custody certification for cotton and other materials. A number of organizations are using these standards for chain of custody models such as identity preserved, segregation, control blended, mass balance, and book and claim.

To accompany this strong chain of custody certification, Textile Exchange is now introducing the new "Trackit" system.

Introducing Textile Exchange dTrackit

dTrackit is the upcoming technical platform for Textile Exchange's suite of standards. It will integrate scope and transaction certificates of the more than 30,000 sites currently certified within the scope of the Textile Exchange standards. It has been developed to achieve full supply chain traceability with minimal disruption to the existing certification process and involves centralizing, reconciling, and connecting scope and transaction data currently stored across each of our 20+ authorized certification bodies.

The objectives of dTrackit are:

- 1. Centralize scope and transaction certification data to create a single source of truth.
- 2. Connect transaction certification data to establish full supply chain traceability.
- 3. Prevent duplication by providing a single source for verification and volume reconciliation.
- Provide accurate, up-to-date, and more easily searchable public data on certified organizations and their product offerings.
- Improve Textile Exchange's ability to monitor, evaluate, and continuously improve the impact of our standards.

Organic cotton has taken its place on the sustainability agenda of most retailers and brands, with the demand that it can be fully traced back to the origin.

Paul Reinhart AG

Read full interview

We plan to add an extra layer of traceability via blockchain technology. We have partnered with a German company called Retraced to develop these solutions for us.

Syeda Faiza Jamil, Artistic Milliners

Read full interview

We are also working on digital infrastructure to provide our customers with efficient databases to improve the traceability of cotton.

Sanko Textile

Read full interview



Economy of Love is a newly established initiative that aims to bring together responsible consumers and producers in a community that works towards a more sustainable and ethical economy. We certify products that are sustainable and ethical along their supply chains and bring full transparency over their production and impact.

Mariam Soliman,
 Economy of Love

Read full interview

Cotonea is developing a Blockchain solution together with IBM and Kaya-Kato to provide full transparency to customers. Textile Trust will be developed as an industry platform.

Cotonea/Gebr. Elmer & Zweifel

Read full interview



The price vs. value paradigm Untangling organic cotton prices and investment costs

With the current mismatch between supply and demand, the prices paid for organic cotton at all stages of the supply chain have been increasing. Whether this lasts will depend on many factors, including the level of investment in capacity building, choice of sourcing models, depth of relationships, and commitments between supply chain actors.

The difficulty of ensuring a fair price for all is a major barrier to scaling up organic cotton and other preferred fibers and materials. While brands and retailers need to make a profit, their pricing decisions directly affect the livelihood and working conditions of the most vulnerable stakeholders – the millions of people in rural communities and along the organic cotton supply chain.

The price vs value paradigm is also a key topic in the wider organic sector, beyond cotton. The Sustainable Organic Agriculture Action Network has produced <u>guidelines</u> for full cost accounting to transform agriculture and food systems.

What makes pricing practices responsible and fair?

The textile sector has often promoted a fast-fashion model that seeks to reduce cost or price and neglects environmental or social considerations. However, in the end, the impacts of conventional products cost society and future generations much more. By accounting for social and environmental factors - not just financial - we start to see the value of investment, not just the price of the fiber or material. Incorporating values into the price paradigm ensures that we build a business model that aligns with our sustainability goals, fairly rewards investment of time and resources, and adequately remunerates effort and risk. For this to become a reality, transformative change is needed. We need to support the promotion and design of products that are made to last, and to build models and systems that make it easy to grow and make fibers and materials sustainably, as well as recycling or re-using whenever possible.

Five responsible and fair pricing practices

- Invest at all levels of the supply network to ensure sustainability efforts can be delivered with sufficient premiums for living wages and fair profits.
- 2. Invest in a new textile economy based on circular economy principles that lead to better economic, environmental, and societal outcomes.
- Adopt Science Based Targets (or Natural Capital Accounting) to show the real value of sustainability efforts.
- Invest in Impact Credits that provide a holistic return on investment at the farmgate.
- Increase consumer engagement and support by explaining the costs and benefits of sustainable fibers and create a market-driven solution that fairly rewards risks and effort.

Done well, the best business model constructs incentives that encourage honest, ethical, accountable behavior across the supply network. It also addresses the business risk of resources running out without effective stewardship. Insufficient investment in renewable resources – both environmental and societal – will undermine long-term business models and prove costly to businesses and wider society if not planned effectively. For more on this topic, read <u>The 'Price'</u> versus 'Value' Paradigm: Reframing Cost as <u>Investment</u> paper released by Textile Exchange in 2019.





2019/20 pricing snapshot

Please note that the charts on this page reflect 2019/20 harvest year prices and are estimated figures only, based on conversations with local experts. As noted on the previous page, there is a wide range of factors that affect cotton prices and organic differentials. Where there are gaps in the charts, this is due to no reliable

data being available. In 2019/20, according to our information, organic cotton fiber prices ranged from US\$/kg 0.86-3.59 (average of 2.10) compared to the Cotlook A Index that ranged from 1.61- 2.19 (average of 1.85) over the same time period.²

			Organic Seed Cotton		Organic Cotton Lint	
	Country	Common	Price Avg.	Range	Price Avg.	Range
	Country	fiber types	US\$/kg	US\$/kg	US\$/kg	US\$/kg
	Benin	Μ	0.55	-	-	-
	Burkina Faso	Μ	0.6	-	-	-
Sub	Ethiopia	L	0.46	-	1.6	-
Saharan	Mali	Μ	0.6	-	-	-
Africa	Senegal	Μ	0.6	-	-	-
	Tanzania	Μ	0.39	0.35 – 0.43	1.68	-
	Uganda	Μ	0.5	0.4 - 0.6	-	-
Latin	Brazil	Μ	0.67	0.44 – 0.91	2.32	1.91 – 2.64
America	Peru	L-ELS	-	-	2.73	1.95 – 3.50
N. America	U.S.	S-ELS	-	-	2.06	0.86 – 3.25
E. Asia	China	M-L	2.50	2.43 - 2.574	-	-
	Egypt ¹	M-ELS	0.90 ¹	0.78 - 1.0 ¹	3.34 ¹	3.07 – 3.59 ¹
	Greece ³	Μ	-	-	-	-
EMENA	Kyrgyzstan	Μ	-	-	1.9	-
Asia	Tajikistan	Μ	-	-	1.78	-
	Turkey	M-L	0.59	0.54 – 0.63	1.64	1.55 – 1.72
	Uzbekistan	Μ	0.56	0.52 – 0.60	2.15	1.45 – 2.75
	India	S-ELS	0.78	0.60 – 0.93	2.35	1.70 – 3.00
South &	Pakistan	Μ	0.83	0.80 – 0.85	1.81	1.71 – 1.91
Asia	Thailand	S	1.00	0.97 – 1.02	-	-
	Myanmar ³	-	-	-	-	-



1 Prices listed for Egypt do not factor in the price of the specialist 'Giza 45' variety, which was 3.53 USD/kg for seed cotton and 18.04 USD/kg for fiber.

2 Based on correspondence with Cotlook.

- 3 No organic cotton pricing information was available for Greece or Myanmar.
- 4 Please see Q&A with Jun Zhao for an explanation of China's organic cotton price.





Social context

The context within which Textile Exchange operates

Textile Exchange collects organic cotton production data and reports it as an industry resource. As "organic" is a legally controlled term around the world, we use the criteria set by the respective governing authority to establish whether it is certified "organic", regardless of other sustainability issues involved.

In this way, Textile Exchange is agnostic in its volume reporting. We include the data received from every producing country to create a complete picture of global supply. Textile Exchange does not perform certification work itself, nor provide on-the-ground program work regarding the production of organic cotton or any other fiber in any country, nor make recommendations for preferred sourcing locations.

Human rights

Textile Exchange works to accelerate environmentally sustainable practices in the textile value chain. This goes hand-inhand with social responsibility to ensure that the rights of all people, particularly workers, are respected.

Textile Exchange is deeply concerned by the disturbing reports of forced labor, as well as reports of forced and child labor in many parts of the world that have occurred over the past several years.

Textile Exchange does not condone forced or child labor. While human rights and social issues are not within Textile Exchange's scope of expertise, respect for people is the foundation to creating an industry built on integrity. Textile Exchange is currently identifying collaborations to complement existing work on social risks and issues.

Visit our <u>website</u> to find more about what Textile Exchange is doing to stop human rights violations in the industry.

What can you do?

Regardless of the region or the industry, companies can be part of the solution by taking the measures listed opposite.

More companies are starting to take such steps and, as a result, we are seeing a number of positive trends in the industry. Traceability is becoming more critical as companies work to improve due diligence, leading them to reassess their sourcing options, while proof of impact and storytelling are also becoming top priorities.

Be part of the solution

Textile Exchange strives to bring the industry together to invest in a future that supports production methods that protect both the planet and all its people. We encourage companies to be part of the solution to systemic problems by:

Reviewing and publishing your own human rights policies including sections on legal compliance and grievance mechanisms for anyone caught in suspected human rights violations.

Implementing sanctions and maintaining lists for known companies breaching human rights.

Waking long-term investments and prioritizing supply chain **transparency**.

Adhering to globally recognized, credible, third-party social standards that prohibit the use of forced or child labor, and take immediate action to identify, prevent or mitigate, and account for how actual and potential adverse impacts are addressed. This may include sourcing elsewhere when expectations are not met.

Using **economic power** and **collective action** to push for policy changes that support human rights.

Seeking advice from organizations with expertise on social and/or labor issues, such as the <u>Fair Labor Association</u> (FLA) and <u>Organisation for Economic Co-operation and Development</u> (OECD), to make the most environmentally sound and socially just sourcing decisions.



Impact

Photo: © bioRe® India | Drip irrigation | India





Climate

Organic farming as a tool for climate change mitigation

According to the United Nation's Intergovernmental Panel on Climate Change (IPCC), CO₂ emissions must fall 45 percent from 2010 levels by 2030, reaching net zero by 2050, to prevent 1.5°C of global warming and the associated risks to human health, livelihoods, food security, human security, water supply and economic growth.1

This year, nations across the world will present their updated national plans for achieving net zero emissions by 2050 at the 2021 United Nations Climate Change Conference (COP 26). One of the main objectives of COP 26 is to "urgently adapt to protect communities and natural habitats". The holistic contribution of organic agriculture will be key to ensuring this objective is met.

How does organic protect the climate?

Organic farming is recognized as a vital tool in climate change mitigation. The IPCC's special report on Climate and Land states that sustainable land management - such as implementation of organic agriculture practices - can build soil carbon and lower GHG emissions, among other benefits.

Organic farming also saves energy by avoiding the use (and manufacturing) of synthetic inputs.² Organic practices can reduce energy consumption by up to 30-70 percent per unit of land.3

1 IPCC, 2018 - Special Report: Global Warming of 1.5°C Summary for Policymakers. Link.

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2 Seufert & Ramankutt, 2017 - Many shades of gray - The context-dependent performance of organic agriculture. Link. 3 IFOAM-Organics International, 2020 - Organic Agriculture Countering Climate Change. Link.

New study on climate risks to cotton

In June 2021, Cotton 2040 released the firstever global analysis of climate risks to cotton production. The study reveals that by 2040, half of the world's cotton growing regions could face drastic changes to temperatures and water availability, and exposure to extreme weather events, if carbon emissions continue to soar. It highlights that even with ambitious decarbonization efforts, climate adaptation will be essential.

Textile Exchange's Climate+ strategy

Under our 2030 Strategy, Climate+, Textile Exchange will be a driving force for urgent climate action, with a goal to reduce CO. emissions from textile fiber and material production 45 percent by 2030. The "+" allows Textile Exchange to prioritize climate while addressing other impact areas that are interconnected with climate such as water. biodiversity, and soil health. The "+" is also an acknowledgment that Textile Exchange cannot achieve this goal on its own.

Science-based climate change targets

In June 2019, WRI published guidance for apparel and footwear companies to set science-based climate change targets. To get a better idea of the sector's carbon footprint, fiber volume data from Textile Exchange was combined with impact data from the Higg Materials Sustainability Index. Initial calculations indicate that raw material extraction accounts for 23 percent of total apparel and footwear GHG emissions. Cotton, which accounts for 24 percent of total fiber by volume, is estimated to be responsible for 14 percent of these emissions.

The earth systems of water, soil, biodiversity and climate are all interconnected. With a holistic approach, we can tackle more than one issue.

Sveda Faiza Jamil, Artistic Milliners



Read full interview

Farmer feedback suggests that organic systems are more resilient to adverse weather events and we would like to quantify this through formal research.

Rajan Bhopal, PAN UK



Read full interview

We can see the enormous potential of the sector to reduce greenhouse gases and sequester large volumes of carbon in our soil. With many initiatives kicking in around the globe, we need to ensure that the collective contribution of smallholder farmers in all regions is rewarded in proportion to their efforts.

Ruud Shute, OCA

Read full interview

Weather is always our greatest challenge. We have summer's heat, winter's cold, and every element in between - tornadoes, dirt storms, hail, strong winds, drought, and cold fronts.

TOCMC



Read full interview

Photo: © Kayla van Zielst for TOCMC | Storm clouds over Texas organic cotton | U.S.



Soil health Regenerating soil and reducing erosion

Mainstream agriculture is accelerating loss of topsoil at an alarming rate. About a third of the world's soil is already degraded¹ and it is estimated that the rate of soil erosion on arable or intensively grazed lands is 100-1,000 times higher than the natural erosion rate.² Generating two to three centimeters of topsoil takes 1,000 years.³ We must protect our soil.

How does organic cotton protect soil?

While exact metrics vary across studies and are naturally very context-dependent, the positive association between organic agriculture and soil health is unquestionable. Farming practices used in organic agriculture, such as crop rotation, green manure, composting, reduced tillage, and the recycling of crop residue, can help increase the amount of organic matter – including carbon – in the soil. As a result, soil structure is improved and soil erosion is reduced, making nutrients more easily available to the crops while also increasing the abundance of soil fauna.⁴

These regenerative practices build on indigenous knowledge developed by local farming communities throughout centuries.⁵ Indigenous knowledge and holistic land management practices are vital to organic farming systems and will play a key role in agroecosystem regeneration and climate change mitigation and adaptation. Soil is the basic component of living organisms on the earth. Soil needs to be cared for and kept safe to make it sustainable for the future living organisms. Different activities nowadays have been the source of soil destruction making it unsuitable for living organisms. [...] To combat this effect, farmers in our area, especially organic farmers, have been trained in different practices in order to grow and maintain good soil health.

DioRe Tanzania

Read full interview

Healthy soils are crucial in a region fighting against desertification. West-Africa, thus, is a place perfectly suited for organic farming, due to its small farmers, extensive agriculture and importance of improving soil health.

Photo (left): © CottonConnect | Farmer using vermicompost prepared and purchased at a CottonConnect input production

□ Tobias Meier,

ecos

Read full interview

center (IPC) | India

Texas Organic Cotton Marketing Cooperative growers utilize cover crops to aid in preventing water runoff and soil erosion as well as to create a healthy environment for the microbes in the soil. [...] Carbon is captured and stored in the soil by plant and microbial life. This will create an environment that is conducive for the upcoming growing season.

C Kayla van Zielst,



Read full interview

FAO and ITPS, 2015 - Status of the World's Soil Resources. Link.
 FAO, 2019 - Key figures on soil erosion. Link.

3 Ibid.

4 Seufert & Ramankutt, 2017 - Many shades of gray - The context-dependent performance of organic agriculture. Link.

5 Altieri, 2004 - Linking ecologists and traditional farmers in the search for sustainable agriculture. Link.



[In Benin] OBEPAB's promotion of nitrogen-fixing soybean in the rotation helps increase soil fertility and yields in subsequent crops. On average, organic farmers use three soil conservation methods, compared to only one by conventional farmers, and grow 15 different crops.

□ Rajan Bhopal, PAN UK

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Read full interview



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Conserving water and improving resilience to drought

Water underpins all life on earth, so it is unsurprising that the diversion of water for agriculture, a sector that accounts for 70 percent of annual freshwater withdrawals,¹ makes water a politically, economically, socially, and ecologically sensitive topic – particularly in the face of climate change.

How does organic conserve water?

In many conventional agricultural areas, pollution of groundwater courses with synthetic fertilizers and pesticides is a major problem. In organic agriculture, use of chemicals is prohibited. Instead, farmers use natural sources of fertility (such as compost, animal manure, green manure) and biodiversity (in terms of species cultivated and permanent vegetation), which help to enhance soil structure and water infiltration.

Well-managed organic systems with better nutrient-retentive abilities greatly reduce the risk of groundwater pollution. The higher amounts of soil organic matter in these systems result in a 'sponginess' in the soils, which reduce pressure on water resources by holding onto more water than conventionally managed soil² (useful during floods) and for longer periods (reducing the risk of crop damage caused by drought). The use of cover crops and innovative water management techniques in organic farming systems, such as micro watersheds, can also help to improve water efficiency.

Finally, because organic farming must be in tune with the surrounding environment, organic farmers tend to grow crops that are well-suited to local conditions.

Cotton is a notoriously thirsty crop – but these factors mean 80 percent of organic cotton globally is grown in rainfed conditions,³ rather than relying on surface or ground water irrigation.

Science Based Targets for Nature

Science Based Targets for Nature, under development now, is anticipated to be an important tool to support companies in understanding and measuring the impacts of their sourcing activities on fresh water and oceans, and in identifying the most effective actions for improvement. In advance of the release of this science-based methodology, this guide for companies from the UN Global Compact's CEO Water Mandate shows companies how to develop contextual, effective water impact targets.⁴ By only using rain-fed agriculture and avoiding chemicals, water in West Africa is very well used in organic cotton agriculture.

C Tobias Meier, ecos

Read full interview

Various water budgeting tools were adopted to determine the demand and supply ratio. We developed a crop calendar and a water retention index dashboard.

Amitabh Singh,
 FARM

Read full interview

Under this project [WAPRO], we are promoting water stewardship in women groups, creating water stewardship plans, training women to identify stay green cotton cultivars, and supporting farmers on alternative crops.

Vivek Rawal, bioRe India

Read full interview



We are seeing that most farmers are able to retain more humidity in their fields, making it possible to extend time between irrigations.

Orlando Rivera,
 Bergman/Rivera

Read full intervie

The region [of Brazil] where the cultivation is carried out is very dry, going up to nine months of

dry, going up to nine months of the year without rain. To solve this, the project captures and stores rainwater through a "calçadão" cistern, guaranteeing availability of water.

P RENNER

🖵 Lojas Renner

Read full interview

1 OECD, 2021 - Water and agriculture. Link.

- 2 Seufert & Ramankutt, 2017 Many shades of gray The context-dependent performance of organic agriculture. Link.
- 3 Textile Exchange, 2017 Organic Cotton Sustainability Assessment Summary of Findings. Link.
- 4 CEO Water Mandate, 2019 Setting Site Water Targets Informed By Catchment Context: A Guide For Companies. Link.

Biodiversity Protecting and regenerating ecosystems

Against the backdrop of Covid-19, forest fires, and increasing evidence of continued dramatic species loss, the importance of biodiversity has never been so clear.

In 2019, the IPBES Global Assessment found that around one million animal and plant species are now threatened with extinction, with many more predicted to become threatened within decades. This underscores what the <u>Stockholm Resilience Center</u> has also shown in relation to planetary boundaries: we are beyond the safe operating limits for humanity when it comes to the degradation of our biosphere. The <u>World Economic Forum</u> highlights the loss of nature as one of the greatest systemic risks to the global economy and the health of people and the planet. We have no time to lose.

How does organic promote biodiversity?

Organic production prohibits chemicals, instead attaining ecological balance through the design of farming systems, establishment of habitats, and maintenance of genetic and agricultural diversity. **Organic cotton is predominantly grown by smallholder farmers who grow it as part of a rotation system with an average of nine other crops.**¹ **Conventional cotton, on the other hand, is largely grown as a monoculture and is heavily reliant on chemical inputs that are detrimental to biodiversity.**

Within the organic cotton plant itself there is much greater varietal diversity, in stark contrast to conventional cotton, of which 79 percent is grown using genetically modified seed.²

Participatory seed breeding programs -

combining indigenous knowledge with new concepts and technology - are developing plant varieties performing well under organic growing conditions. In Odisha, India, Chetna Organic's '<u>seed guardians</u>' developed innovative ways to multiply, share and store a diversity of fiber and food crops seeds adapted to the local growing conditions.

Biodiversity and climate change

A 2021 IPBES report published by leading experts highlights how biodiversity and climate go hand in hand. While animal and plant species mitigate climate change by providing irreplaceable ecosystem services that are an integrated part of the carbon cycle, climate change poses a huge threat to these very species and to this symbiosis.

OCA releases study on crop diversification

The <u>study</u> identifies the best crop diversification practices to optimize the agronomic, environmental, and economic benefits for Indian organic cotton farmers.

Textile Exchange's Benchmark program now includes biodiversity impact

Part of Textile Exchange's Corporate Fiber and Materials Benchmark, the new <u>Biodiversity</u> <u>Benchmark</u> launched in beta form in 2020, providing a roadmap for companies to understand their impacts on nature and to deliver positive outcomes. This was created in partnership with Conservation International and The Biodiversity Consultancy, with support from our corporate partner Sappi. Texas Organic Cotton Marketing Cooperative farmers do not use chemical insecticides, but rather rely on cold winters and beneficial insects such as ladybugs to control damaging insects.

Graph Contract Contra

Read full interview

By calling for biodynamic agriculture in our certification, we aim to protect biodiversity on the farm; conventional cotton farmers in Egypt use pesticides to kill the insects that are threatening for the cotton crop, but by doing so kill a lot of harmless insects as well.

C Mariam Soliman, Economy of Love

Read full interview

As we started to grow our own organic cotton we realized that biodiversity was vital for organic cotton production. As biodiversity increases, so do the yield and quality of the cotton.

🖓 Sanko Textile

Read full interview

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SANKO



□ Rajan Bhopal, PAN UK

Read full interview

In the contract VEJA signs

In the contract VEJA signs every year with organic cotton associations, farmers must plant at least 5 different crops, of which one must be a legume that will ensure nitrogen fixation in the soil, and cotton cannot exceed 50 percent of the area planted. All of these initiatives ensure richer biodiversity.

□ Ligia Zottin, VEJA



Read full interview



Textile Exchange, 2017 - Organic Cotton Sustainability Assessment Tool. Link.
 ISAAA, 2019 - Brief 55: Global Status of Commercialized Biotech/GM Crops: 2019. Link.



Livelihoods

The socio-economic impacts of organic cotton

Millions of people around the world – including organic cotton farmers – live in rural communities dependent on farming. Organic agriculture offers a market-oriented solution to poverty among smallholder farming communities and increases food security through crop rotation.¹ This helps to create incentives for farmers to stay on their land, supporting the development of rural economies which, according to a 2014 UN report, can also reduce the risk of social unrest.²

Economic performance is a key parameter for farmers when deciding whether to grow cotton organically. Organic farming provides a competitive yield and can result in similar yields to conventional cotton. Organically grown cotton provides a competitive gross margin due to the reduction of input costs³ and there are plenty of examples and studies on this, some of which are mentioned in the quotes opposite.

It is important to note that, while many farmers do receive a better price for organic cotton, there are still significant issues in some areas in ensuring that the price differential reaches farmers.⁴ Impact assessment studies indicate that social benefits are a major reason for farmers to adopt organic practices. A study of cotton farmers in India showed that, while conventional farmers value their reputation in their community the most, organic farmers are motivated by the sustainability of cotton production, growing safer food without pesticides, and a desire to hand over their land to their successors in a favorable condition.⁵

Organic production also pays close attention to gender equality. A study in Benin showed organic farming was more attractive to women compared to conventional farming, and that women often had their own cotton farm, thus increasing their economic independence while strengthening the resilience of their household.⁶

A Helvetas study of 14-year-long organic and Fairtrade cotton projects in West Africa and Central Asia showed that other benefits include improved access to land, a greater quantity of cash crops for women farmers and more resilient production and marketing. This is thanks to enhanced soil fertility and diversification, access to capacity building and rural advisory services, food security through crop rotation, increased independence from seed companies, and improved local infrastructure.⁷

1 Panneerselvam, Hermansen & Halberg, 2010 - Food Security of Small Holding Farmers: Comparing Organic and Conventional Systems in India. Link.

- 2 United Nations Population Fund, 2014 The State of World Population 2014. Link.
- 3 Riar, Mandloi, Poswal, Messmer & Bhullar, 2017 A Diagnosis of Biophysical and Socio-Economic Factors Influencing Farmers' Choice to Adopt Organic or Conventional Farming Systems for Cotton Production. Link.
- 4 Müller, 2019 Patrick Hohmann: The organic cotton Pioneer. Link.
- 5 Riar, Mandloi, Poswal, Messmer & Bhullar, 2017 A Diagnosis of Biophysical and Socio-Economic Factors Influencing Farmers' Choice to Adopt Organic or Conventional Farming Systems for Cotton Production. Link.
- 6 Sodjinou, Glin, Nicolay, Tovignan & Hinvi, 2015 Socioeconomic determinants of organic cotton adoption in Benin. Link.
- 7 Helvetas, 2017 Organic Cotton Improves Livelihood Impact study on organic and Fairtrade cotton in Kyrgyzstan. Link.

For the third year in a row, farmers associated with the OCA Farm Programme earned on average more than their local non-organic peers. A combination of farmer premiums and lower production costs compensated for the lower yields of organic farmers, resulting in a better business case for programme farmers when compared to conventional farmers.

CA Ruud Shute,

Read full interview

bioRe India has been engaged with FiBL Switzerland on long term system comparison trials since 2007 [...] to bring information related to organic agriculture and potential socio-economic benefits.

Vivek Rawal, bioRe India

Read full interview

Photo: © Melani Bahuon for VEJA | Organic cotton being harvested | Brazil



Improving impact data for informed decision-making

Data and proof of impact are becoming top priorities for brands and retailers as they look to track the impact of their sourcing decisions, encourage continuous improvement at farm level, and facilitate transparency and storytelling with consumers.

Textile Exchange efforts to improve impact data for cotton

As a part of Textile Exchange's Climate+ Strategy, we are working on identifying methods and systems for increasing the availability of regional and farm-level data. Information on cotton has long been riddled with misconceptions due to outdated LCAs and extrapolations based on generalizations, and the overall limitations that LCAs represent. The industry has long lacked regional or farmlevel impact data at scale. It is imperative that we improve the data the industry uses to make decisions.

One example of this is the Delta Framework pilot that we are running with over 200 cotton farms in India. We are piloting 12 of the 15 sustainability indicators in the Delta Framework. This initial piloting in India is being done through an ISEAL grant. We will be extending beyond the scope of the grant and engaging selected farms in the U.S. and Latin America to further pilot this framework.

The learnings from the Delta Framework pilot will allow us to better understand the challenges of data collection at field level and develop a mechanism to incorporate impact data into standard organic cotton reporting based on incentivization.

Additionally, we plan to contribute to improving the underlying Life Cycle Assessments datasets. These integral improvements cannot be done by us alone, and we are calling on the industry to support this push for better data.

New research and reports

- In April 2021, the UN's Fashion Industry Charter for Climate Action Raw Materials Working Group issued the report "Identifying Low Carbon Sources of Cotton and Polyester Fibers", which focuses on the two most-used materials in the fashion and textile industry - cotton and polyester - and highlights actions that can be taken now to reduce Green House Gases (GHGs) during the cultivation of cotton and polyester production.1
- In November 2020, a new scientific paper and accompanying report were released that show the environmental benefits of organic cotton in the U.S.^{2 3}

We are further strengthening our impact data collection and its communication. Along with a few other cotton and coffee initiatives we are also piloting the methodology of the Iseal Delta Framework. We intend to trial these indicators for an initial round of data collection this year.

Q Subindu Garkhel. Fairtrade Foundation

Read full interview

The 13 associations VEJA works with are in the Brazilian backlands. a region that is economically poor but very well-known for its rich history and culture. These meetings are the moments when we can connect to VEJA's project, and we are able to see how fulfilled small rural families are to be practicing agroecology, respecting nature, and to be working with VFJA.

□ Ligia Zottin, VEJA

Read full interview

This year we're excited to trial a pilot on data collection and analysis of soil carbon indicators. That is just the start; we intend to focus on science-based targets to take the measurement of environmental indicators further and aim to start measuring impact data on other environmental indicators by 2022.

Ruud Shute, OCA



Read full interview

"Organic cotton production may alleviate the environmental impacts of intensive conventional cotton production," says a scientific study undertaken in collaboration with Iowa State University, which shows the multitude of beneficial practices used in organic cotton, from building soil health on the farm to using non-toxic methods of textile processing.

Jessica Shade. The Organic Center



Read full interview



UN's Fashion Industry Charter for Climate Action, 2021- Identifying Low Carbon Sources of Cotton and Polyester Fibers. Link.

- 2 Delate, Heller & Shade, 2020 Organic cotton production may alleviate the environmental impacts of intensive conventional cotton production. Link.
- 3 The Organic Center, 2020 Organic Cotton: One of the most important choices you can make for the environment. Link.

2019/20 organic cotton production

Photo: © Organic Cotton Accelerator | Father and son inspect organic cotton crop with field staff | India





2019/20 organic cotton production

GLOBAL OVERVIEW



The 2019/20 harvest year saw 229,280 farmers grow 249,153 tonnes of organic cotton fiber on 588,425 hectares (ha) of certified organic land in 21 countries. Compared to the previous year, this represents a three percent rise in farmer numbers, a four percent growth in fiber volume, a 41 percent increase in land area,¹ and two additional organic-cotton producing countries.

A record-breaking harvest

This is the fourth year in a row that organic cotton production has increased and - though at a steadier rate than in recent years - it was enough to make 2019/20 a record-breaking season with the biggest ever harvest of organic cotton.

This follows three years of strong growth; 31 percent in 2018/19, 55 in 2017/18, and 10

percent in 2016/17. In total, production has increased 112 percent in the previous four years, from 118,032 tonnes in 2016/17.

Organic cotton accounted for almost one percent of global cotton production in 2019/20, up from 0.5 percent in 2016/17.

The line-up

Two new countries joined the line-up of organic cotton producers in 2019/20; Uzbekistan, thanks to a new GIZ-supported project, and Myanmar, where the "Pure Sense Organics Myanmar" collaboration reached certification. Argentina's organic cotton production temporarily dropped out of certification, while Senegal, which did the same last year, came back on board.

1 As noted on page two, the land area figures in this report refer to total land certified to an organic standard by a producer group growing organic cotton. The figures can include rotation and other crops, too, and therefore do not usually reflect the land area used to grow only organic cotton. This is why land area does not directly correlate with production volume, and yield cannot be established using these figures.

		$\widehat{\mathbf{A}}$		
		Organic Cotton Fiber (tonnes)	Fiber Year-on-Year	Share of global organic cotton production
G	Global	249,153	3.9%	100%
۲	India	124,244	1.3%	49.8%
*)	China	30,589	-25.8%	12.3%
0	Kyrgyzstan	29,415	24.4%	11.8%
C *	Turkey	24,288	6.3%	9.7%
	Tanzania	11,285	113.7%	4.5%
4	Tajikistan	10,471	-14.0%	4.2%
	U.S.	6,913	33.9%	2.8%
Ø	Uganda	4,734	83.4%	1.9%
C	Pakistan	2,026	408.6%	0.8%
	Greece	1,720	47.2%	0.7%
	Benin	1,373	37.6%	0.6%
۵	Peru	712	27.7%	0.3%
*	Burkina Faso	574	26.6%	0.2%
ä	Egypt	238	-17.2%	0.1%
C.::::	Uzbekistan	165	n/a	0.1%
*	Ethiopia	148	13.8%	0.1%
♦	Brazil	134	37.8%	0.1%
	Mali	85	1.3%	0.03%
*	Myanmar	32	n/a	0.01%
	Thailand	5	-17.5%	0.002%
*	Senegal	3	n/a	0.001%





2019/20 organic cotton production

The top seven

Approximately 95 percent of global organic cotton production stems from just seven countries. This is down from the 97 percent that these seven countries have accounted for the last five years, as smaller organic cottonproducing countries scaled up.

Ranked by production, the top seven countries were India (50%), China (12%), Kyrgyzstan (12%), Turkey (10%), Tanzania (5%), Tajikistan (4%), and the U.S. (3%).

While the list of countries remained the same, Tanzania's impressive growth saw it jump another place from the sixth to the fifth largest producer of organic cotton globally.

Countries fueling the growth

The biggest contributors to the global growth seen in 2019/20 were Tanzania and Kyrgyzstan, with volume increases of 6,004 tonnes and 5,778 tonnes respectively. Other significant contributors, which each saw their production totals grow by between one and two thousand tonnes were Uganda, the U.S., Pakistan, India, and Turkey.

TOP FIVE BY FIBER VOLUME INCREASE



Four countries experienced a decrease in production in 2019/20: Tajikistan (-14%), Egypt (-17%), Thailand (-17%), and China (-26%). China and Tajikistan's decreases had the most significant impact on the global total as they are the second and sixth (previously fifth) largest producers, respectively.

Please read the individual country pages later in this report to learn the reasons behind each country's production increase/decrease.

Conversion to organic production

India once again had the most land in conversion to organic, with a total of 22,936 ha, followed by Turkey (9,014 ha), Tajikistan (8,595 ha), Tanzania (3,416 ha), and China (2,643 ha). The remaining countries together had 3,948 ha. Thus, a total of 50,552 ha of cotton-growing land was in conversion to organic in 2019/20, which is equivalent to nine percent of the total certified production area.

TOP FIVE BY IN-CONVERSION LAND AREA



Learn about harvest and planting times in each country with our new organic cotton field calendar. **Download here** ►



* "Others" includes: Uganda (4,734 tonnes); Pakistan (2,026 tonnes); Greece (1,720 tonnes) Benin (1,373 tonnes); Peru (712 tonnes); Burkina Faso (574 tonnes); Egypt (238 tonnes); Uzbekistan (165 tonnes); Ethiopia (148 tonnes); Brazil (134 tonnes); Mali (85 tonnes); Myanmar (32 tonnes); Thailand (5 tonnes); and Senegal (3 tonnes).

Regional trends

Sub-Saharan Africa saw the biggest growth in 2019/20 with production rising 91 percent, thanks primarily to the expansion of projects in Tanzania and Uganda. The region now accounts for seven percent of the global total.

The U.S. saw the second biggest rise in production, growing 34 percent, followed by Latin America & the Caribbean (27%) and EMENA, Central & Western Asia (10%).

The Southern & Southeastern Asia region, which accounts for just over half of global organic cotton production and which saw a momentous growth of 44 percent last year (primarily from India), experienced a steadier growth of three percent in 2019/20, with a large portion of this stemming from Pakistan.

China is the only region that experienced a decline in production.

2020/21 forecast

Organic cotton production is set to skyrocket in 2020/21, with an estimated 48 percent growth, stemming predominantly from India and Turkey. In India, this growth is largely a result of increased demand causing organic cotton prices to increase. This, in turn, makes it a more attractive option for farmers and is leading existing producers to dedicate a larger share of their certified organic land to growing cotton versus other crops. In Turkey, increased demand is also the main driver, but the growth is more a result of new producers starting up organic cotton production.



2019/20 organic cotton production

Historic trends







COMPARISON BETWEEN CONVENTIONAL AND ORGANIC COTTON PRODUCTION TRENDS (NOTE: DIFFERENT SCALES USED)



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Photo: © Klaus Mellenthin for Cotonea | Uganda









5-YEAR PRODUCTION TRENDS





Benin | 2019/20 organic cotton production



In Benin, 2019/20 saw 4,976 farmers grow 1,373 tonnes of organic cotton fiber on 7,185 hectares. Compared to the previous year, this represents a 13 percent rise in farmer numbers, a 38 percent growth in fiber volume, and an 85 percent increase in land area.

The season was one of the best in the last decade thanks to a very favorable climate, with normal and very well distributed rainfall. This allowed planting and other farm activities to be executed in a timely manner. Fortunately, the pest pressure was moderate, and the farm inputs used were sufficient.

Despite some organizational difficulties and the restrictions that came with the COVID-19

pandemic, producers - including and especially the farmers new to organic cotton production - were trained and advised on technical practices. Yet, producers in Benin still face funding and market access challenges, particularly when it comes to having a decent market outlet for rotational crops such as organic soybeans and shea butter, which makes the financial independence of producers difficult to achieve.

 Discover and connect with Benin's organic cotton growers via our Organic
 Cotton Producer Directory: <u>Organisation</u> Béninoise pour la Promotion de l'Agriculture
 Biologique (OBEPAB); <u>Union des</u> Producteurs de Cultures biologiques (UPC Bio Bénin) Photo: © OBEPAB | Benin Our cooperation with retailers and brands, for example Bestseller, is becoming more concrete. [...] We would like to deepen this kind of cooperation in the future

COTONNIER

champ: OROU MOUNOU

Our cooperation with retailers and brands, for example Bestseller, is becoming more concrete. [...] We would like to deepen this kind of cooperation in the future and extend it to other origins, suppliers and retailers. Therefore, Reinhart is committed to source a large share of the organic cotton from Benin, a project led by OPEPAB in consultation and through support of the Pesticide Action Network UK. Together with all parties involved, we are now looking into expanding the project and to increase the production over the coming years. <u>Find out more</u>.



Marco Bänninger Head Trader Hand Picked Cotton, Paul Reinhart AG Hear more in our Insider Series interview.



TAIRE

KASSAKOU

Burkina Faso | 2019/20 organic cotton production



In Burkina Faso, 2019/20 saw 7,931 farmers grow 574 tonnes of organic cotton fiber on 4,351 hectares. Compared to the previous year, this represents a 13 percent rise in farmer numbers, a 27 percent growth in fiber volume, and a 60 percent increase in land area.

In January 2020, a new gin that prioritizes organic cotton was launched, named SECOBIO. The gin has a capacity of 17,500 tonnes seed cotton per year - meaning there is now huge capacity for growth of the country's supply of organic cotton fiber. However, Burkina Faso continues to face serious security challenges. Many cotton farming families have been internally displaced and cannot find land in refugee camps to continue their farming activities.

A more positive highlight of the season was the favorable climate, which brought good and timely rainfall.

O Discover and connect with Burkina Faso's organic cotton growers via our Organic Cotton Producer Directory: <u>Union Nationale</u> <u>des Producteurs de Coton du Burkina</u> (<u>UNPCB</u>).





Ethiopia | 2019/20 organic cotton production



In Ethiopia, 2019/20 saw 200 farmers grow 148 tonnes of organic cotton fiber on 174 hectares. Compared to the previous year, this represents a 14 percent growth in fiber volume. Farmer numbers and land area remained the same.

Organic cotton is grown in Southern Ethiopia's Rift Valley. The season was not as good as expected due to heavy and unseasonal rainfall causing Lake Chame to expand and take with it 91 ha of the 200 ha planted with organic cotton, meaning only 109 ha could be harvested. The other challenge caused by the heavy rains and flooding was that the cooperative couldn't transport their seed cotton to the gin and therefore had to sell it as raw cotton, though they were fortunately able to get a good price for this.

 Discover and connect with Ethiopia's organic cotton growers via our Organic Cotton Producer Directory: <u>Shelle Mella</u> Organic Cotton Growers Cooperative.



PAN Ethiopia's farm family approach aims to generate additional income for women. Six hand-spinning groups benefit 160 members with joint savings accounts from sales of yarn and traditional shawls, while another 160 women have formed enterprises to clean and prepare seed from organic producers for sale to trained farmers, helping to address demand from project farmers for access to good quality seed of known origin.



Rajan Bhopal

International Project Manager (Supply Chains), Pesticide Action Network (PAN) UK

Hear more in our Insider Series interview.





Mali | 2019/20 organic cotton production



In Mali, 2019/20 saw 880 farmers grow 85 tonnes of organic cotton fiber on 12,563 hectares. Compared to the previous year, this represents a 75 percent fall in farmer numbers, a 1 percent growth in fiber volume, and a 59 percent increase in land area.

Last year, when the government announced that the farmgate cotton price would reduce, we predicted that some conventional farmers might convert to organic and Fairtrade production to benefit from the price guarantee.

However, there was a turn of events, as cotton farmers demanded the Government use stabilization funds to avoid the price reduction. Unfortunately, these funds were mis-managed,

and cotton farmers took the decision to boycott the 2019/20 season. In solidarity with these conventional farmers, many organic farmers also boycotted the season, hence the 75 percent drop in organic farmer numbers.

Mali's organic cotton sector has faced other challenges over recent years, largely a result of FENABE lacking funding and capacity to effectively support organic farmers. However, there are some funding opportunities on the horizon that could improve the situation.

Discover and connect with Mali's organic cotton growers via our Organic Cotton Producer Directory: <u>National Federation</u> of Producers of Organic and Fair Trade Agriculture (FENABE). The Organic & Fairtrade Cotton Coalition is a concerted effort to promote organic cotton systems and improve farmer skills in organic and Fairtrade cotton in West Africa. The coalition is sustained by cotton producer organizations from Mali, Benin, Burkina Faso, and Senegal, including AProCA. The coalition works closely with the national cotton societies while being supported by the Swiss based organizations ecos and FiBL and their partners from the international organic and Fairtrade movement.

All the producer groups from Mali, Benin, Burkina Faso, and Senegal have been able to sell their entire 2020/21 harvest (in total 2,100 tons of fiber) at a very good price. They are planning to produce more than 3,000 tons of fiber in the following season. The producers OBEPAB (Benin), FENABE (Mali), UNPCB (Burkina Faso) and FNPC/Fédération YNW (Senegal) are motivated to go into a growth phase in order to reach a target of 5% local market value by 2030 (which means about 100,000 farmer households).



Tobias Meier

Senior Project Leader Sustainable Textiles, ecos / CCBE Hear more in our Insider Series interview.



Senegal | 2019/20 organic cotton production



In Senegal, 2019/20 saw 96 farmers grow three tonnes of organic cotton fiber on 30 hectares. Senegal's organic cotton was not certified in 2018/19 so previous year comparisons cannot be drawn.

Senegal has a well-established coalition for organic cotton that has been trying to revive production in Senegal.

The coalition has ambitious plans as part of a GIZ funded project and, though the project has unfortunately been delayed, it will start in the coming years.

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If the demand is there for organic cotton from Senegal, the coalition is eager to do all they can to meet it and to revive the country's organic cotton sector.



Significant additional projects of the coalition include working on the transparency of the cotton (via traceability-tool tests) and adding local value. Currently, 97 percent of West Africa's cotton production is exported. The target is to use more organic and Fairtrade cotton locally, for textile production and handicraft.



Tobias Meier Senior Project Leader Sustainable Textiles, ecos / CCBE

Hear more in our Insider Series interview.




Sub-Saharan Africa

Tanzania | 2019/20 organic cotton production



In Tanzania, 2019/20 saw 18,945 farmers grow 11,285 tonnes of organic cotton fiber on 154,495 hectares. Compared to the previous year, this represents a 77 percent rise in farmer numbers, a 114 percent growth in fiber volume, and a 481 percent increase in land area.

The primary reasons behind this impressive production growth are the growing market demand for organic cotton and an attractive export market price (almost all of Tanzania's organic fiber is exported). As a result of these factors, the premium paid to organic cotton farmers for their seed cotton rose to 12 percent. Farmers are increasingly keen to grow organically as awareness rises of the environmental impacts of conventional agriculture.

One major challenge that Tanzania's organic cotton farmers continue to face is access to pest control measures on the local market. Producing homemade botanicals is labor intensive and often households don't have access to proper tools and equipment. Storage of homemade botanicals for use at the most appropriate time of the season is also a big challenge.

Discover and connect with some of Tanzania's organic cotton growers via our Organic Cotton Producer Directory, including: <u>BioSustain Tanzania Ltd.</u>; <u>Alliance</u> Ginneries Ltd.; and bioRe® Tanzania Ltd.



Soil is the basic component of living organisms on the earth. Soil must be cared for and kept safe to make it sustainable for the future of living organisms. Yet, different activities have been the source of soil destruction, making it unsuitable for living organisms. [...] To combat this, farmers in our area, especially organic farmers, have been trained in different practices that grow and maintain good soil health. These practices include avoiding deforestation practices, tree planting projects, prevention of soil erosion measures, minimum tillage, crop rotation, farm yard manure application, and intercropping with leguminous plants.



Marco Paul CO-CEO-Production and Administration, bioRe® Tanzania Ltd. Hear more in our Insider Series interview.



Sub-Saharan Africa

Uganda | 2019/20 organic cotton production*



In Uganda, 2019/20 saw 25,344 farmers grow 4,734 tonnes of organic cotton fiber on 39,741 hectares. Compared to the previous year, this represents a 24 percent rise in farmer numbers, an 83 percent growth in fiber volume, and a 286 percent increase in land area.

Uganda's organic cotton is grown by smallholder farmers in the Gulu District of Northern Uganda.

The reduction in the country's organic cotton production in 2019/20 is primarily due to the impact of the COVID-19 pandemic.



In Uganda our goal is to organize all farmers in small village cooperatives. Each cooperative receives a bank account. The farmers receive a training module about financial literacy. The Fair for Life premium is paid into the bank account and the farmers jointly decide what to do with the funds. No farmer needs to invest, nor take on a debt, at the start of the season.



Roland Stelzer Managing Partner, Cotonea/Gebr. Elmer & Zweifel Hear more in our Insider Series interview.





Sub-Saharan Africa Zambia | Pilot program

We are pleased to report that there is a new organic cotton project in Zambia.

The project is run by Alliance Ginneries Ltd with support from Paul Reinhart AG and financial support from the European Union. So far, 1,000 farmers have been registered and are growing cotton on 500 ha.

The project aims to grow organic cotton in four districts of the country. The districts weren't previously growing any cotton and the government has now made these districts "exclusion zones" meaning any cotton grown in there must be organic.

The project underwent trials in 2020/21 season and will significantly scale up production in 2021/22. The first in-conversion cotton is expected to be available in 2022/23, and the first fully certified cotton in 2023/24.

Our support covers long-term purchase guarantees and projects that increase the area under cultivation with adequate training of farmers. This is not a solo effort either. One of those projects which we support aims to boost organic cotton production in Zambia was recently launched by Alliance Ginneries Ltd with financial support of the European Union through the Enterprise Zambia Challenge Fund. Such projects have the potential to reach beyond cotton and aim to improve the nutritional intake of farmers. For example, Alliance Ginneries Ltd is in the process of entering the soybean market in Zambia to further support the farming base as soya is becoming a popular crop among Zambian small-scale farmers. We are confident that in 2022 / 2023, after the transition period, we will be able to export the first bales of organic cotton from Zambia.



Marco Bänninger Head Trader Hand Picked Cotton, Paul Reinhart AG Hear more in our Insider Series interview.



Sub-Saharan Africa

TextileExchange TEam insights | West Africa



Dr. Silvère Tovignan Textile Exchange Ambassador, Pan-Africa (lead on West Africa data and Q&A response)



Lazare Yombi Textile Exchange Ambassador, West Africa (West Africa data support)



What news can you share from West Africa's organic cotton sector from the last season?

West Africa's organic cotton production volume grew 15 percent in 2019/20, thanks largely to improvements in the organizational and technical capacities of the producer groups and the climatic conditions being very favorable throughout the season.

Promising news is that a number of new organic cotton projects are in the pipeline, supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) and Agence Française de Développement (AFD). If these become effective, West Africa's organic cotton production will soon reach new heights.

How do you see West Africa's organic cotton sector evolving over the next five years?

Since the organic cotton projects and programs of NGOs such as HELVETAS came to an end, producer organizations involved in the sector have encountered great difficulties

in producing and certifying their organic cotton. This remains a major constraint for the future of organic cotton in West Africa.

Fortunately, however, many new funding opportunities and buying partnerships are emerging. These will hopefully contribute to an increase in organic production in West Africa over the coming years.

What can the industry do to support and drive organic cotton production in West Africa?

The key drivers are ensuring:

- A guaranteed market through long-term buying partnerships.
- Price incentives.
- Pre-financing of farming activities and certification costs.
- Accessibility and availability of quality biological inputs such as organic fertilizers and pest management products.



To what extent has the ongoing COVID-19 pandemic affected organic cotton farmers and production in your region?

The pandemic limited the support available to producers for activities such as training, primary marketing, and physical monitoring of technicians. Due to COVID-19 restrictions, it was not possible gather more than 20 people for training sessions.

Additionally, some of the bigger farms that would normally hire labor from other countries were not able to do this due to closed borders and so some had to reduce their cultivated land area.



Sub-Saharan Africa TextileExchange TEam insights | East Africa



Leonard Mtama Agronomist and Organic Consultant | Textile Exchange Ambassador for East Africa

What's the latest news on organic cotton in East Africa?

Alongside the increase in production and land area under organic, we have recently seen a number of positive steps for organic cotton in East Africa. Firstly, we have seen the emergence of new producer groups - one in Zambia through Alliance Ginneries Ltd, and one in Tanzania. Secondly, it was announced that Laudes Foundation has extended its support of organic projects by BioSustain Tanzania Ltd and Alliance Ginneries Ltd to 2023.

We have also seen a more positive attitude from the government towards organic agriculture, and cotton in particular. Researchers in Tanzania have begun to study the efficacy of homemade botanical for the purpose of improving handling and shelf-life. The country's Cotton Board is also looking at the possibility of acquiring botanicals and making them available to smallholder growers.

What changes do you foresee over the next five years?

The positive attitude of the Tanzanian government towards organic is an indication

that the country's organic cotton production could continue to scale. The Cotton Board is negotiating with organic cotton exporters on how to improve farmer access to inputs that are recommended and allowed to be used in organic production.

Also, Tanzania's decision to suspend GM seed trials in January 2021 over concerns of the negative impact on farmers and a preference to conserve local seed varieties is positive news for the future of organic in this region.

What would you say are the key drivers for sustainably scaling organic cotton production in East Africa?

I see the four key drivers as being:

- Availability of high-quality cotton seed suitable for organic production
- Farmer access to research-approved biopesticides.
- Stable government policies that support organic agriculture
- Funding for research.

If realized, these drivers could really increase

production and establish East Africa as an alternative source of organic cotton for the world market to meet its growing demand.

The existing program in Tanzania has shown farmers and other local actors the viability of organic farming methods, with productivity being at least at the same level or even higher than conventional peers.

What are the main barriers faced by organic cotton producers in East Africa?

I see the main barriers as being:

- Limited access of farmers to bioinsecticides that are easy and ready to use.
- Lack of simple but effective equipment that may enable individual farmers to process their own botanicals from available materials within the vicinity.
- Weak market infrastructure, especially through cooperative societies that are obliged to collect all cotton from farmers before it is sold to ginners.

To what extent has the ongoing COVID-19 pandemic affected organic cotton farmers?

The biggest impact I have seen has been in Uganda, where there was a 70 percent reduction as a result of the pandemic.

Can you share some examples of organic cotton projects that are embracing Textile Exchange's Climate+ vision?

As part of the organic cotton project in Tanzania, funded by Laudes Foundation and implemented by GIZ and Helvetas, together with Alliance Ginneries Ltd. and BioSustain Tanzania Ltd., there is a project called "Climate-Smart Organic Cotton" that is working towards climate-smart, resilient organic cotton farming communities.

The project addresses climate change adaptation and resilience via organic farming methods such as diversified crop rotations, conservation tillage, and increased soil organic matter through farmyard manure. The practices on farmers' fields are consolidated and enhanced by collaborative efforts in the villages aimed at climate change adaptation specific to their landscape such as rainwater harvesting, water management, reforestation activities, and management of communal areas.



Latin America & the Caribbean



Photo: © Bergman/Rivera | Peru







Latin America & the Caribbean



Brazil | 2019/20 organic cotton production



In Brazil, 2019/20 saw 1,894 farmers grow 134 tonnes of organic cotton fiber on 12,348 hectares. This includes both thirdparty certified and production under the Participatory Guarantee System (PGS).¹ Compared to 2018/19, this represents a 0.5 percent fall in farmer numbers, a 38 percent growth in fiber volume, and a 496 percent increase in land area.²

Projects to support organic cotton in Brazil continue to advance, including those that have been established for some years such as the Paraíba Organic Cotton project encouraged by the state government, the project of VEJA, and the NGO Diaconia project supported by Laudes Foundation, as well as newer projects such as those of Lojas Renner and Redes Santa Luzia.

Climate is one of the main challenges for cotton production in Brazil's semi-arid regions. 2019/20 was characterized by regular rainfall, resulting in a relatively higher productivity than in previous years. However, the beginning of the 2020/21 season saw greater irregularity in rainfall, and it is expected that there will again be a reduction in productivity as a result. The worsening of the pandemic situation is also likely to reduce next season's production, despite the number of cotton farmers producing organically having increased.

1 Please see Methodology for details of the Participatory Guarantee System (PGS).

2 The dramatic increase in land area is a result of 1) improved measurement of existing farms and 2) new producers having much greater diversity in the organic crops they grow.

Through its Institute, Lojas Renner seeks to empower women throughout the textile supply chain. The Agroecological cotton project was started with the objectives of increasing the production of in-transition cotton in Brazil and empowering female leaders in the cultivation of this cotton. In the first year, the project supported a Quilombola community in the north of Minas Gerais, with a focus on developing female leaders in the production of this cotton. In 2020 and 2021, 6.5 tons of agroecological cotton were harvested and reached the final consumer.

PRENNER

Lojas Renner S.A. Hear more in our Insider Series interview.

VEJA's organic cotton supply chain is one of the main pillars of the brand. The company started in 2004 working with one association and a few families who supplied agroecological cotton to produce the twill and canvas used in VEJA's sneakers. Now, the company works with 13 associations in Northeast Brazil, and more than 1,100 families are part of the supply chain. VEJA encourages the practice of agroecology and has now bought more than 642 tons of organic cotton respecting fair trade principles.



Ligia Zottin Impact & Compliance Manager, VEJA Hear more in our Insider Series interview.

Discover and connect with some of Brazil's organic cotton growers via our Organic Cotton Producer Directory, currently including: ACEPAC; Coopnatural; and Norfil.



Latin America & the Caribbean

Peru | 2019/20 organic cotton production



In Peru, 2019/20 saw 195 farmers grow 712 tonnes of organic cotton fiber on 941 hectares. Compared to the previous year, this represents a 6 percent rise in farmer numbers, a 28 percent growth in fiber volume, and a 42 percent increase in land area.

The increase in production is thanks to the planning and effective work of Ecotton, which has been investing in encouraging producers, especially in the province of Ica, to increase their area in-conversion to organic. This is being done by maintaining attractive premium prices for producers, backed by long-term contracts with the brands that buy Peru's highquality organic cotton. The increase in productivity observed is due to a favorable climate during this harvest and to the growing experience of the producers.

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Unfortunately, the second half of 2020 and the beginning of 2021 witnessed a steady worsening of the COVID-19 pandemic in Peru, which has made it more difficult for technical support providers to be present and communicate with farmers despite their greatest efforts, and this may cause a temporary drop in production.

Discover and connect with Peru's organic cotton growers via our Organic Cotton Producer Directory: <u>Ecotton (Bergman/ Rivera).</u>



Ecotton's mission is to empower farmers to be economically sustainable by giving them the tools to grow crops that are more profitable. The basis of this is organic farming as it not only helps the farmers, but also the environment.

Ecotton has been working for the past 15 years with organic cotton farmers all around Peru. We help transition conventional cotton farmers to organic; give them technical assistance, financial aid, access to seeds and agricultural products. We are also committed to buy their transitional and organic cotton production, as well as finding them a market from rotation crops such as maize, beans and yam.



Orlando Rivera General Manager, Bergman/Rivera Hear more in our Insider Series interview.



Latin America & the Caribbean **TextileExchange** TEam insights



Silvio Moraes

Agronomist and Environmental Consultant, Textile Exchange Ambassador for Latin America

How do you foresee organic cotton production trends in this region changing over the next five years?

In Brazil, the advance of new projects linked to brands and retailers committed to sustainability points to a significant increase in the supply of organic cotton in the coming years.

There is news of another company returning to the organic cotton market in Peru, which is already working with some producers. If this is confirmed, there may be an increase in the supply of cotton in the medium term.

How is the policy landscape in this region with regards to organic cotton? Does it support its production, or hold it back?

A major differential of Peru in comparison with other countries in the region remains the fact that production with genetically modified seeds is not allowed. This makes Peru one of the safest countries when it comes to preventing GMO contamination. In most countries in the region, however, there is still little incentive to produce organic cotton. Countries such as Argentina, Paraguay, Ecuador, Colombia, and others could be important producers of organic cotton if there was more attention from government agencies and incentive programs for this production.

> What would you say are the key drivers for sustainably scaling organic cotton production in this region? What should the industry be doing to support it?

As stated many times by Orlando Rivera or Bergman/Rivera in Peru, one critical barrier to keep farmers producing organic cotton is the possibility to maintain stable prices. The way they are facing this challenge is through building long term contracts with brands and offering attractive premium prices to the farmers. One strategic point is to incentivize and maintain new in-conversion projects that can increase the organic cotton production area in the long term. The participation of the industry in this effort is crucial. What are the main barriers faced by organic cotton producers in this region and what are some of the initiatives in place to try to address these?

Greater integration between organic cotton producers and the industry and brands that buy this cotton is a key aspect of leveraging production in the region. This has already been proven by the major success cases developed over the years, especially in Peru and Brazil. We believe that Textile Exchange can assist in this integration by creating a regional working group and maintaining the Regional Organic Cotton Round Table (OCRT). The virtual Regional OCRT even held in December 2020 was greatly appreciated by all the groups, companies and people who participated and should be maintained and strengthened from now on.

To what extent has the ongoing COVID-19 pandemic affected organic cotton farmers and production in this region?

COVID-19 has strongly impacted the region. Early in the pandemic, thanks to digital tools such as social media, it was still possible to organize producers and provide the necessary technical orientation for the production of organic cotton.

Unfortunately, the situation of the pandemic continues to worsen, and organic farming communities have not been spared its impacts. In light of this, it is expected that there will be a momentary reduction in the production of organic cotton and its derivatives produced in the region.



Photo: © Kayla van Zielst for TOCMC | Organic cotton modules in the Texas sunset | U.S.







United States | 2019/20 organic cotton production



5-YEAR PRODUCTION TREND



¹ For the U.S., the organic certified land area figure provided is generally equal to the land area used to grow certified organic cotton. This is different to the data provided for most other countries, where the organic cotton land area figure is not available and so the organic certified land figure is used. See page two for more detail on land area calculations.









United States | 2019/20 organic cotton production

In the United States (U.S.), 2019/20 saw 83 farmers grow 6,913 tonnes of organic cotton fiber on 11,728 hectares. Compared to the previous year, this represents a 26 percent rise in farmer numbers, a 34 percent growth in fiber volume, and a 46 percent increase in land area.

This growth comes despite a second year of drought and is thanks in part to more farmers incorporating cotton into their organic peanut crop rotations.

The greatest amount of organic cotton production continues to take place in Texas, led by farmers of the Texas Organic Cotton Marketing Cooperative (TOCMC) and the Procot Cooperative program managed by Allenberg Cotton Company based at King Mesa Gin. Together, these two cooperatives accounted for almost 74 percent of all U.S. organic cotton production in 2019.

Most organic cottonseed is sold to organic dairies for use as feed, though several farmers catch and reuse their own cotton seed.

There was also an expansion of transitional (in-conversion) cotton. Not only were 366 ha of transitional upland cotton harvested in Texas, but transitional pima was also planted in the Central Valley of California with plans to expand considerably over three years to meet the increasing demand for organic pima from European brands. To address the ginning of California organic cotton, Mid-Valley Cotton Growers in Tulare, California, became the first Global Organic Textile Standard (GOTS) certified gin in the state. Overall, there were 11 gins ginning organic cotton in 2019/20.

The outlook for next season (2020/21) isn't so positive for U.S. organic cotton, much of which is grown on dryland – dependent on rains that didn't come. Indeed, TOCMC, 75 percent of which is dryland, lost half of its production. Procot fared better as 80 percent of its production is irrigated.

The big news of the coming season is a dramatic expansion in organic pima production, fueled by demand and price increases.

On the market side, organic fiber continues to be the largest and fastest-growing sector in the U.S. organic non-food industry (including organic textiles, household products, personal care products, supplements, pet food and flowers). According to the Organic Trade Association's 2020 Organic Industry Survey, organic fiber product sales increased 12 percent over 2018 to \$2.04 billion in 2019, with virtually of those sales in organic cotton.¹

Discover and connect with some of the U.S. organic cotton producers via our Organic Cotton Producer Directory, including: Texas Organic Cotton Marketing Cooperative; and Sun County Farm/ Green Planet Drip LLC.

1 Please note that OTA defines organic as >70 percent organic fiber that is fully certified across the supply chain, so these figures do not include any OCS certified products.

Founded in 1993, and headquartered in Lubbock, Texas, Texas Organic Cotton Marketing Cooperative (TOCMC) members produce organic upland cotton on the High Plains of West Texas. The cooperative has approximately 35 producer members who plant 17-20,000 acres of organic and transitional cotton each year.

Weather is always our greatest challenge. We have summer's heat, winter's cold, and every element in between - tornadoes, dirt storms, hail, strong winds, drought, and cold fronts.

In 2020, several companies sourced TOCMC's organic cotton for producing personal protection gear (masks). In addition, we had increased demand for use of our cotton in organic apparel, personal hygiene products, linens, mattresses, and more.

TOCMC growers utilize cover crops to aid in preventing water runoff and soil erosion as well as to create a healthy environment for the microbes in the soil.



Kayla Van Zielst Social Media Manager, Texas Organic Cotton Marketing Cooperative Hear more in our Insider Series interview.





Northern America United States | Program insights



Eight new variety candidates developed by Jane Dever's Texas A&M AgriLife breeding program, along with two varieties currently grown by US organic cotton farmers are planted in a demonstration plot at the AgCARES farm in Lamesa, Texas. Organic farmers will have an opportunity to provide input to the breeding program regarding which varieties they prefer be licensed for commercialization. Among the candidates are two okra-leaf, three high-fiber quality, one very early maturing nematode-tolerant, a productive wilt-tolerant, and a bacterial blightresistant line with similar growth habit, high productivity, and better fiber quality than the popular variety FM 958. All the candidates have characteristics important for organic production in Texas such as storm-proof bolls, good seedling vigor, and drought resilience.



Dr. Jane Dever Cotton Breeder/Professor. Texas A&M AgriLife Research



TextileExchange TEam insights



Sandra Marquardt

Senior Manager, Fiber and Communications, Textile Exchange

What's the latest news from the U.S. organic cotton sector?

A "fascinating focus" in 2020 was the expansion of organic pima production in the U.S., with production expanding from just New Mexico to also include Arizona, California, and Texas. This boom will likely continue as brands move away from sourcing in China and look for other sources for organic ELS cotton (as well as short, medium, and long-staple cotton). The higher prices are attracting additional farmers interested in incorporating cotton into their rotations. Water will continue to be the main obstacle to expansion.

How is the policy landscape in the U.S. with regards to organic cotton?

To ensure there will be enough organic cotton in the future, brands need to "plan their planting." In other words, they need to work with farmers to put contracts in place months before planting time in May to be able to plan for future availability. Currently, the U.S. organic law does not address transitional production. As such, several certification bodies, including CCOF, OTCO, and NSF, have developed private transitional programs to help farmers on their journey to organic.

With the new Biden Administration has come renewed interest in developing a transitional program. In the meantime, several brands are supporting farmers' transitional journey and becoming certified to the Organic Content Standard (OCS) and/or the Global Organic Textile Standard (GOTS), both of which permit transitional claims. However, as these claims currently are not permitted in the U.S., the organizations are reviewing the claims language in 2021.

What should the industry be doing to support organic cotton?

The most important goal for conventional U.S. cotton production is to reduce its use of nitrogen fertilizers, which harm the atmosphere and exacerbate climate change. The US Department of Agriculture records show that,

in 2019, more than two billion pounds of synthetic fertilizers were applied to domestic conventional cotton alone. Considering cotton is grown in so many countries, the impact on climate change of fertilizer use on cotton is a real concern.

Organic cotton prohibits the use of synthetic fertilizers. Brands wishing to support the conversion of conventional cotton to organic should consider entering long-term contracts with U.S. farmers - organic or transitional – with fair pricing.

Is there any impact data that shows the environmental benefits of U.S. organic cotton?

A new <u>scientific study</u> supported by The Organic Center (TOC) and published in Renewable Agriculture and Systems shows the multitude of beneficial practices used in organic cotton, from building soil health on the farm to using non-toxic methods of textile processing. Learn more from TOC Director of Science Programs, Jessica Shade, below.

While a broad array of research has shown that organic production in general can provide significant environmental benefits, few studies had actually looked at the specific practices used by organic cotton growers and processors in the U.S and documented real-world impacts those practices are having on the environment. Iowa State University researchers filled this gap by surveying organic cotton producers and processors as well as culling the Internet to better understand the specific approaches and methods used in organic cotton production and processing, and the environmental impacts of those techniques. We're proud that this study, published in Renewable Agriculture and Food Systems in November 2020, is the most extensive scientific study on organic cotton in the U.S. to-date.



Jessica Shade Director of Science Programs, The Organic Center Hear more in our Insider Series interview.



Eastern Asia

Photo: © CottonConnect | China





Eastern Asia

China | 2019/20 organic cotton production



5-YEAR PRODUCTION TREND









Eastern Asia China | 2019/20 organic cotton production

In China, 2019/20 saw 768 farmers grow 30,589 tonnes of organic cotton fiber on 15,862 hectares. Compared to the previous year, this represents a 40 percent fall in farmer numbers, a 26 percent reduction in fiber volume, and a 19 percent decrease in land area.

The decline is largely a result of some of China's main organic cotton producer groups substantially reducing their land area under organic cotton. There are two primary factors behind this trend.

First, there was a significant drop in the output of some largescale producers that grow organic cotton as feed for dairy cows in China. This decrease in production would have no impact on the supply of organic cotton to the global textile market.

Secondly, organic cotton farming in China operates in a dynamic contract farming model and one of the largest producers is in the process of changing its farming contract with purported plans to scale production. This is reflected in the substantial (2,643 ha) area of in-conversion land reported for China this year.

China's organic cotton production also became a little more concentrated in 2019/20, as some of the smaller producers either reduced or completely ceased their organic cotton farming operations.

Much of China's organic cotton fiber is sold for domestic consumption to local spinners or traders, and this has been relatively unaffected. However, demand from the international market for organic cotton from China has been impacted in part by the COVID-19 pandemic, which led to large orders being cancelled at the last minute, and in part by U.S. <u>sanctions</u> on Chinese products. This has led to a considerable quantity of organic cotton left in the warehouses of large producers.

Nevertheless, there continues to be new investment in organic cotton production in China. One existing grower has plans to expand, and there is one new grower of significant size.

However, availability of organic cotton seed is still the major impediment hindering such initiatives. It is therefore possible that new cotton producers will not limit themselves to production of organic cotton, but also develop their own ways of making non-organic cotton production more sustainable.

According to growers, input costs are another challenge as they are rising rapidly, and this may affect production. Growers are also finding it increasingly difficult to acquire farmland to expand organic cotton production due to competition from bigger companies.

Discover and connect with some of China's organic cotton growers via our Organic Cotton Producer Directory, currently including: CottonConnect; Natures Purest Textile Co.; and Xinjiang Good Harvest Agriculture Development Co.

TextileExchange TEam insights



Jun Zhao Textile Exchange Consultant, China

How do you foresee organic cotton production trends in China changing over the next five years?

I expect to see organic cotton production at least remain stable, if not increasing. Next year, the year 1 in-conversion cotton will increase by about 2,400 ha, a significant increase.

There are also a few investors taking new interest in organic cotton operations. This may lead to expansion of existing organic cotton operations or the development of new ones. However, due to challenges such as the lack of availability of organic cotton seed, there is the possibility that they may invest in their own cotton standards.

What would you say are the key drivers for scaling organic cotton production in China? What should the industry be doing to support it?

The most important factor is the security of orders. Last year, some growers were very frustrated and worried about their survival due to the cancellation of large orders by international brands.

Another important driver is input costs. Almost all cotton growers – including organic growers

 now experience rapidly rising production costs triggered mainly by the stimulus plans implemented as a response to COVID-19 by governments across the world, which will result in global inflation.

> To what extent has the ongoing COVID-19 pandemic affected organic cotton farmers and production in your region?

Organic cotton farmers were not affected significantly by the pandemic as contract farming is the prevailing model applied.

Why are organic cotton prices so much higher in China than the rest of the world?

China's cotton price (organic and conventional) has been higher than the global average for quite some time due to its import restriction and subsidy policy; the former has created a wedge between global and domestic prices, and the latter has been implemented to secure the cotton price so that cotton growing remains attractive to farmers. This is the same for the organic cotton price. In particular, in Xinjiang, the cotton growing is heavily subsidized.











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Egypt | 2019/20 organic cotton production



In Egypt, 2019/20 saw 12 farmers grow 238 tonnes of organic cotton fiber on 198 hectares. Compared to the previous year, this represents a 33 percent fall in farmer numbers, a 17 percent reduction in fiber volume, and a nine percent decrease in land area.

Egypt's organic cotton is also biodynamic and farmers rotate crops regularly, which explains why organic cotton volumes fluctuate. Additionally, regulations make it difficult to add new organic fields meaning expansion of organic cotton production requires motivating conventional farmers to convert to organic. The current growth in demand for organic cotton should incentivize this. A major challenge faced by farmers in Egypt is pollution in the Delta area, which affects organic cultivation as well as the health of people. In response, SEKEM is trying to encourage conventional farmers that neighbor the organic farms to transition to organic to reduce pesticides in the soil and water.

SEKEM remains Egypt's primary producer of organic / biodynamic cotton, but two new farms became certified to grow organic cotton in 2020, so Egypt's production landscape may expand in the coming years.

Discover and connect with Egypt's organic cotton growers via our Organic Cotton Producer Directory: SEKEM / Naturetex



Coming from Egypt, Egyptian cotton is a powerful symbol of what Egypt's land has to offer, but we rarely see the stories of the people behind these products being sold all over the world. Our inspiration is always the farmers who are mindful of their impact on the environment and take the difficult path of growing organic cotton. Additionally, it is seeing companies and local brands emerging in Egypt who are striving to create a business that actually serves its employees and the surrounding community and creates a positive impact. This supply chain for us is an inspiring community, and we want to play a role in empowering it and making it stronger.



Mariam Soliman Communication Specialist, Economy of Love Hear more in our Insider Series interview.





Greece | 2019/20 organic cotton production



In Greece, 2019/20 saw 1,720 tonnes of organic cotton fiber grown on 2,150 hectares. Compared to the previous year, this represents a 47 percent growth in both fiber volume and land area.

There is not much visibility of organic cotton production in Greece due to the fact, despite it being certified organic at farm level, the organic cotton is mixed with conventional cotton at the gin and sold on the conventional market. This is due to quantities rarely reaching processing minimums; less than 0.5 percent of Greece's total cotton production is organic. While producers are subsidized for producing organically, the country lacks a structured market for organic cotton and would need a dedicated association or cooperative to collect and process the cotton as organic. While none such organization exists yet, there is an ongoing discussion on the possibility of increasing organic cotton volumes to a marketable level, and indeed we can see that production is on the rise.



Kyrgyzstan| 2019/20 organic cotton production



In Kyrgyzstan, 2019/20 saw 504 farmers grow 29,415 tonnes of organic cotton fiber on 18,416 hectares. Compared to the previous year, this represents a 129 percent rise in farmer numbers, a 24 percent growth in fiber volume, and a 43 percent increase in land area.¹

Kyrgyzstan's organic cotton is produced by a number of projects, including some run by Turkish companies producing organic cotton in Kyrgyzstan for export to Turkey.

Some organic producers in Kyrgyzstan are scaling back cotton production in favor of

growing different organic crops such as fodder and vegetables.

Fairtrade Foundation, which actively supports the long-running organic and Fairtrade cooperative, Biofarmer, has set up a Women's School of Leadership for farmers in Central Asia. Read more opposite.

Discover and connect with some of Kyrgyzstan's organic cotton growers via our Organic Cotton Producer Directory, currently including: <u>Akasya Tarim</u>

1 Kyrgyzstan production is derived from data reported by one producer and two certification bodies. At the time of reporting, there remains pending issues that may result in a +/- 1 percent variance.

2 The percentage of a country's cotton that is organic is usually derived from the difference between Textile Exchange's reported organic cotton production and ICAC's country total for cotton production. In the case of Kyrgyzstan, there is a significant discrepancy between the two. We are trying our best to understand more about this discrepancy. You can learn more about Textile Exchange's data collection methodology here, and about the sources of ICAC's cotton statistics here.



Fairtrade is helping to challenge the gender gap, enabling women to stake their claim and succeed on their own terms. Fairtrade Producer networks are rolling out women's schools of leadership, enabling women to learn business, negotiation and finance skills. Many of these women go on to take on leadership and committee positions within their cooperatives and communities. For example, the Women's School of Leadership in Central Asia provides practical training in skills such as finance, negotiation and group decision-making, and creates awareness of gender equality. The school also trains men, helping them better understand the challenges women face, become role models themselves and promote gender equality in their communities.



Subindu Garkhel Senior Cotton and Textiles Lead, Fairtrade Foundation Hear more in our Insider Series interview.



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Tajikistan | 2019/20 organic cotton production



In Tajikistan, 2019/20 saw 1,169 farmers grow 10,471 tonnes of organic cotton fiber on 8,145 hectares. Compared to the previous year, this represents a 22 percent rise in farmer numbers, a 14 percent reduction in fiber volume, and a 0.4 percent increase in land area.

As in Kyrgyzstan, Tajikistan's organic cotton is also produced by a number of different projects including some run by Turkish companies producing organic cotton at large scale for export to Turkey.

In addition, there is Bio-Kishovarz, the longstanding organic and Fairtrade cooperative, which welcomed 60 new farmers this year (read more opposite); and a new producer starting in 2020/21 called Farnico Tajikistan, which is part of the British-Norwegian family-owned Farnico International group. In 2020/21, Farnico is partnering with 19 growers to process 350 tonnes of certified organic cotton fiber, and has plans to increase this to 1,000 tonnes in 2022 with the collective support of family, farming communities, and customers.

© Discover and connect with some of Tajikistan's organic cotton growers via our Organic Cotton Producer Directory and Insider Series, currently including: <u>Bio-Kishovarz</u>; Farnico.



In 2012, with support of HELVETAS and GIZ, the Bio-cooperative "Bio-Kishovarz" was founded in the region Sughd, Tajikistan. Reinhart supports the cooperative with pre-financing during the harvest, provides up-to-date market information and supports the farmers in the marketing of their cotton. Today, the project covers 1,400 farmers with 4,000 hectares and produces about 1,000 tons.



Marco Bänninger Head Trader Hand Picked Cotton, Paul Reinhart AG Hear more in our Insider Series interview.





Turkey | 2019/20 organic cotton production



In Turkey, 2019/20 saw 600 farmers grow 24,288 tonnes of organic fiber on 11,551 ha.¹ Compared to 2018/19, this represents a 56 percent rise in farmer numbers, a six percent growth in fiber volume, and an eight percent increase in land area.

Due to the global supply shortage, more companies are turning their attention to alternative sourcing regions, particularly Turkey, and this induced a price increase that is fueling the country's production growth. Eleven new producer groups became certified in 2020 and, as a result, we expect to see Turkey's organic cotton production grow dramatically in 2020/21 - by an estimated 177 percent.

Producers in Turkey are not new to organic cotton, and most are very flexible and adapt

their crop choices quickly depending on the market. However, contract farmers do not always have adequate technical or financial training and there is a lack of opportunities in this regard. There is also a lack of opportunity for farm groups to gather in unions or similar support structures, and there are no institutions to bring the organic cotton community (agronomists, farmers, suppliers, manufacturers, etc.) together, not even through the National Cotton Council. Therefore, while Turkey's organic cotton sector is established and growing, there is much need for improvement.

 Discover and connect with some of Turkey's organic cotton growers via our Organic
 Cotton Producer Directory: <u>Akasya Tarim;</u> Hakan Organik Tarim Tekstil; Kadıoglu Tarım. Our organic farmers are experienced and versatile. They have practiced organic agriculture for many years, following crop rotation practices and green manure cropping in between for soil health. We are providing organic and natural fertilizers to stimulate plant growth and increase nutrient uptake and yield. These practices also improve soil health and increase microbiological activity, promote root development and increase water holding capacity.



Aydin UnsalOwner, Chairman of the board,Egedeniz TekstilHear more in our Insider Series interview.

As Sanko Textile we have the power to create a positive mass impact and we do not want to lose that chance for our future generations. As a family-owned-company for over a hundred years we value this legacy, and we want to leave the world in a better state than when we found it. For this reason, we became the one of the first organic cotton yarn producers in 90s and with this pioneering perspective, we want to continue to develop projects that will contribute to our environment.

SANKO

Sanko Textile Hear more in our Insider Series interview.



Uzbekistan | 2019/20 organic cotton production



2019/20 marks the first year that certified organic cotton was produced in Uzbekistan. In total, 24 farmers grew 165 tonnes of organic cotton fiber on 193 hectares.

The production is part of GIZ's "<u>Sustainability</u> and Value Added in the Cotton Industry in Uzbekistan" project, which started in September 2019 and comprises all steps of the value chain.

Training and technical advice for the project is provided by <u>FiBL</u>, with the aim of introducing knowledge and skills about the organic cotton

standard as well as the implementation of this standard in the four target regions of Jizzakh, Samarqand, Tashkent and Navoiy region.

According to FiBL, there are two clusters involved in organic cotton production in Uzbekistan, each producing cotton on over 10,000 ha, though only a small portion was certified organic in the 2019/20 season. The clusters are also cultivating some areas in accordance with the Better Cotton Initiative (BCI). During the first half of the project, 190 farmers and cluster managers took part in courses on organic cotton cultivation or cultivation in accordance with BCI.



As the seventh largest cotton producer in the world, the Uzbek cotton and textile sector employs around 30 percent of the country's workforce. This results in both the economy and society in a large part being depended on the cotton sector. The liberalisation of the country, initiated in 2017, has introduced a correction of the social, economic and ecological circumstances in the sector. In addition to an environmental approach including the abolition of sales quotas and the criminalisation of forced labour, this also comprises a vertical integration of textile production and opening-up to other markets. The GIZ project supports this process in cooperation with partners from civil society, the economic sector and state ministries.

An extract from a GIZ factsheet on its cotton project in Uzbekistan





Atila Ertem Textile Exchange Ambassador, EMENA & Central Asia



Ömür Suner Textile Exchange Regional Assistant, EMENA & Central Asia



We expect to see increased production trends in alignment with the increased demand for organic cotton of the global textile sector.

How is the policy landscape with regards to organic cotton? Does it support its production, or hold it back?

The policy landscape in Turkey does not effectively support organic cotton farmers. The subsidies and financial support provided by the government are not satisfactory and organic farming regulations are rather complicated, which holds farmers back. What should the industry be doing to support organic cotton production in this region?

What farmers need most are commitments and incentives from brands, retailers, and suppliers to grow organic cotton. These companies should visit the fields and build effective and direct connections with farmers.

> What are the main barriers faced by organic cotton producers in this region and what are some of the initiatives in place to try to address these?

Many farmers in Turkey do not yet view growing organic cotton as a sustainable source of income. To maintain or grow production volumes, farmers need better government support and longer term buying commitments from brands, retailers, and suppliers. Another barrier is farmer training. The general model of organic cotton projects in Turkey is to use contracted cotton farmers. However, these farmers do not always receive sufficient training in organic farming methods such as water management or organic fertilizers. These farmers need to receive technical training on irrigation, fertilization, pest control, and harvesting and informed in all organic cotton production processes.

How is the ongoing COVID-19 pandemic affecting Turkey's organic cotton producers?

As organic cotton is collected by hand in Turkey, labor is crucial. The COVID-19 pandemic has affected the communities that make a living from this work. Additionally, the government asked some organic farmers to plant other strategic crops such as wheat and corn instead of cotton, given the economic damage caused by COVID-19. Can you share some examples of organic cotton projects embracing Textile Exchange's Climate+ vision?

Some suppliers do comprehend the importance of organic agriculture in climate mitigation and are taking steps to expand and support organic cotton production as a result. Examples are Sanko Textile and Egedeniz Tekstil, which you can read about in our <u>Insider</u> Series interviews.



Photo: Courtesy of Laudes Foundation | India







India | 2019/20 organic cotton production



In India, 2019/20 saw 164,677 farmers grow 124,244 tonnes of organic cotton fiber on 285,196 hectares. Compared to the previous year, this represents a 1.3 percent fall in farmer numbers, a 1.3 percent growth in fiber volume, and a 5.8 percent decrease in land area.

This growth mirrors the overall trend in organic agriculture in India, where there was a 19 percent growth in organic farming certification. In 2019/20, more than 163,509 farms growing cotton were part of Internal Control Systems (ICS)¹ that had both NPOP and NOP certification. These farms had a total of 285,196 ha of land certified as organic, with approximately 197,704 ha (70 percent) dedicated to growing cotton. This highlights an interesting trend whereby, between 2014/15 and 2019/20, farmers have increased the proportion of organic land that they allocate to growing cotton from an average of 54 to 70 percent.

Despite India's total organic cotton production increasing only 1.3 percent in 2019/20, we have seen a shift in where this production takes place. The map opposite shows the state breakdown.

Globally, we are seeing huge growth in demand for organic cotton and, as such, organic cotton

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2 The estimated growth in India's 2020/21 fiber production is calculated based on public data from India's Ministry of Commerce & Industry on certified and in-conversion organic seed cotton for 2020/21 (811,008 tonnes), on the assumption (derived from certification bodies) that approximately 70 percent will be produced by certified organic producers and the remainder by in-conversion producers.



prices in India have risen considerably. This, in turn, makes organic cotton a more attractive option for farmers to grow compared to other crops, meaning they are dedicating an increasing share of their organic land to cotton.

Additionally, most implementing partners are increasing capacity to meet future demand.

We have seen around 150 new ICS register for certification, and approximately 200 ICS are planning to allocate new land for organic cotton that was previously only used to grow organic food crops. As a result, India's organic cotton production is set to skyrocket in 2020/21, with an estimated 48 percent growth in fiber volume.²



¹ See Methodology for definition of Internal Control Systems (ICS)



India | Program insights

- O Discover and connect with over thirty of India's organic cotton producer groups via our Organic Cotton Producer Directory, including:
- <u>Action for social</u>
 <u>Advancement (ASA)</u>
- <u>Adesar Vistar Khet</u>
 <u>Utpadan Producer Co.</u>
 <u>Ltd</u>
- Aga Khan Foundation
- <u>Anandi Eco Farms (A unit</u> of Anandi Enterprises)
- bioRe India Ltd
- <u>Chetna Organic</u> Agriculture Producer Company Ltd
- <u>CottonConnect</u>
- <u>EcoFarms India (managed</u> by CottonConnect)
- ECOfashion Corp / MetaWear
- <u>Farmer Association</u>
 <u>For Rural Management</u>
 <u>(FARM)</u>
- Grameena Vikas Kendram Society for Rural Development (RESET)

- Harman Group
- I&A Foundation
- ISHIKA EXPORTERS
- Kowa India Private Limited
- KRISHNA BIOTECH
- Maa Ganga Cotton
- Mahiti Dholera
- Noble Ecotech (managed by CottonConnect)
- <u>OM Organic Cotton Pvt.</u> Ltd.
- Pratibha Syntex
 Ltd. (managed by
 CottonConnect)
- Pratima Organic Grower
 Group (managed by
 CottonConnect)
- Puneet Enterprises
 (managed by
 CottonConnect)
- Rapar and Dhrangadhra
 Farmers Producers
 Company Ltd. (RDFC)

- Sanjeevani Institute for Empowerment and Development
- <u>Shree Ambica Agro</u> Industries (P) Ltd.
- Shree Ram Fibres India
 Pvt. Ltd. (managed by
 CottonConnect)
- Spectrum International Pvt. Ltd. (managed by CottonConnect)
- SRIJAN (Promoted by <u>WWF)</u>
- Suminter India Organics
 Pvt Ltd. (managed by
 CottonConnect)
- <u>Vivekanand Research and</u>
 <u>Training Institute</u>
- Welspun Foundation for Health and Knowledge (WFHK)



There are many challenges in organic cotton, related to both the cotton production and the market. It can be difficult to access quality non-GM cotton seeds, and there is a lack of quality inputs at the grass roots level. That is why in our Organic Farmer Training Program we have been helping farmers to become self-reliant by producing their own organic inputs and selling the surplus at organic input production centres. This addresses the challenge of access to quality inputs and provides a boost to skills and income.



Hardeep Desai

Head of Farm Operations, CottonConnect South Asia Private Ltd. Hear more in our Insider Series interview.

Photo: ©CottonConnect | India







India | Program insights

Like everyone, the biggest focus for us has been the pandemic, and to support Fairtrade producers in managing the crisis. [...] We secured additional funds to support cotton farmers in India with food and income security. This project ran in 2020 in Madhya Pradesh, Gujarat and Tamil Nadu and provided farmers with cotton seeds, agricultural inputs and technical training to support ongoing sustainable cotton cultivation during the pandemic. [...] Farmers also received packets of vegetable and crop seeds and training on cultivating vegetable gardens to provide additional food security for their families and diversify their production.



Subindu Garkhel Senior Cotton and Textiles Lead, Fairtrade Foundation Hear more in our Insider Series interview.

Our main focus at the moment is securing the best quality GMO-free seeds for our farmers. For this we started a breeding and evaluation program with UAS Dharwad, under the leadership of Dr SS Patil. Today, we are on the brink of producing seeds from 5 TFL released cultivars from our research. Our focus is to promote these seeds with our farmers, as the availability of non-GM seeds on the market is very limited.



Vivek Rawal CEO and Managing Director, bioRe India Ltd Hear more in our Insider Series interview.





India | Program insights

Over the last year, we have witnessed a growing interest in the organic cotton sector in the geographies we work in. [...] In India, we witnessed a partnership between DBS Bank, Inditex and Action for Social Advancement (ASA) launching an organic cotton procurement financing pilot programme to strengthen and scale India's organic cotton industry. We also saw significant growth in farmer numbers and production from our programme with GIZ & Helvetas in Tanzania and an increased interest and demand for organic cotton from Africa. Our programmes in Brazil with Diaconia and Esplar continued to grow with brands such as VEJA procuring and supporting farmers.



Varun Joseph Programme Officer - Materials, Laudes Foundation Hear more in our Insider Series interview.

Our model at FARM is focused on natural resource management. We care for life on land and life under the water. Our small efforts on each farm, in each village and with each community, brings many visible and invisible changes. The impacts of organic and regenerative cultivation practices are not limited to economic benefits, but also contribute towards meeting 12 of the 17 SDGs.



Amitabh Singh Founding Member, Farmer Association for Rural Management (FARM) Hear more in our Insider Series interview.



OCA's Farm Programme aims to directly improve the profitability and prosperity of the organic cotton farmers we source from and build integrity at farm level. The Programme achieves this by linking brands to nominated farm groups, creating a secure market and premium payment for the farmers, facilitating third-party validated impact data and making future investments in farmer training. The 2019/2020 cotton season marked the third year of OCA's Farm Programme implementation in India. The programme covered a total of 12,271 organic farmers across 13,968 hectares of land in 13 districts and 5 states.



Ruud Shute Program Director. Organic Cotton Accelerator Hear more in our Insider Series interview.



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Myanmar | 2019/20 organic cotton production



2019/20 marks the first year that certified organic cotton was produced in Myanmar following the conversion period of a new project. In total, there were 51 farmers growing 32 tonnes of organic cotton fiber on 50 hectares.

The project, based in the Mandalay region, is called Pure Sense Organics Myanmar Ltd and is a JV partnership between Welspun India Ltd. & Sense Organics Import & Trading GmbH. Production in 2019/20 is lower than had been predicted last year due to a few farms having dropped out of the program.

In April 2019, one non-GM seed variety was registered with the Ministry of Agriculture and Irrigation and a further three varieties were being trialed on government farms.

Crops commonly rotated with cotton in Myanmar include black gram, green gram, sesame, groundnut, pigeon pea, and onion.



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Pakistan | 2019/20 organic cotton production



In Pakistan, 2019/20 saw 889 farmers grow 2,026 tonnes of organic cotton fiber on 3,064 hectares. Compared to the previous year, this represents a 409 percent growth in fiber volume, a 78 percent drop in farmer numbers (caused by in-conversion farmers dropping out of the program), and a 292 percent increase in land area.

This production is a result of WWF-Pakistan's project in Balochistan, which is financially

supported by Laudes Foundation and involves partnerships with the Department of Agriculture Extension at the Government of Balochistan, CAB-International, CCRI-Multan, and local Textile groups Artistic Milliners and Soorty Enterprises. Learn more about the project opposite.

Discover and connect with Pakistan's organic cotton growers via our Organic Cotton Producer Directory: WWF Pakistan. In our organic cotton programme in Pakistan, which was initiated with WWF Pakistan and Department of Agriculture (extension wing) in 2014, we reached a significant milestone last season as we achieved the largest quantities of organic cotton production. This has encouraged businesses such as C&A and BESTSELLER to support the smallholder farmers, further catalysing this sustainable shift to organic cotton. We see growing interest from private sector including industry leaders such as Soorty and Artistic Milliners who partnered with WWF Pakistan to further accelerate the investment and strengthen the growth of organic cotton in this region.



Varun Joseph Programme Officer – Materials, Laudes Foundation Hear more in our Insider Series interview.

Milliner Organic is the first direct intervention of a value chain partner in organic farming in Pakistan. The project is located in the Kohlu region of Baluchistan on over 10,000 acres. 2,000 farmers will be enrolled in the project with a projected yield of 9,000 tonnes in the course of four years. Artistic Milliners has partnered with WWF-Pakistan and the Government of Baluchistan to run this project.

As the project has just commenced, our focus right now is the training and development of new farmers on organic farming methods.



Syeda Faiza Jamil Corporate Responsibility & Communications GM, Artistic Milliners Hear more in our Insider Series interview.



Thailand | 2019/20 organic cotton production



In Thailand, 2019/20 saw 42 farmers grow 5 tonnes of organic cotton fiber on 44 hectares. Compared to the previous year, this represents a 9 percent fall in farmer numbers, a 17 percent reduction in fiber volume, and a 5 percent decrease in land area.

Thailand's organic cotton is grown along the banks of the Mekong river in Rim Khong by farmers of the Green Net Cooperative, who traditionally make their living with fishery activities and produce food and fiber crops for their own use. The production uses the Participatory Guarantee System (PGS),¹ rather than third-party certification.

Unfortunately, the cooperative's 2020/21 production has been severely affected by climate change (see opposite), so we expected a reduction in the reporting next season.

 Discover and connect with Thailand's organic cotton growers via our Organic Cotton Producer Directory: <u>Rim Khong</u> <u>Cotton Group</u>.

¹ Participatory Guarantee Systems (PGS) are an alternative to third-party certification. As per IFOAM - Organic International's definition, PGS are locally focused quality assurance systems that certify producers based on the active participation of stakeholders and are built on a foundation of trust, social networks, and knowledge exchange. IFOAM - Organics International has a list of recognized PGS programs.



Climate change almost wiped out Green Net's [2020/21 harvest of] organic cotton. Yields dropped by 80-90 percent as the Mekong River dried up. Relying only on the water of Mekong River, the organic cotton crop of 2020/21 almost completely failed. In response, Green Net distributed free sticky rice to all members and their families to help compensate for their loss.

Thailand has suffered for the last two years from a prolonged dry season. Additionally, the Mekong water is highly regulated through several dams upstream, changing the seasonal flow and making it difficult for farmers to predict when and how much water will be available to them.



Vitoon Panyakul Director, Green Net Cooperative Hear more in our Insider Series interview.




Southern & South-eastern Asia

TextileExchange TEam insights



Amish Gosai

South Asia Manager, Textile Exchange

What are the latest updates on organic cotton production in this region?

In 2020/21, the world has seen a massive rise in demand for organic and, in-conversion cotton. South Asia is a strategic location; countries like India and Pakistan are on the priority list of sourcing locations for many brands.

Several brands, suppliers, and implementation partners are finding a new business model for sourcing by securing supply, quality, price, and delivery. We have seen a considerable increase in the number of ICS for in-conversion to meet the future demand.

Also, India's Agricultural and Processed Food Products Export Development Authority (APEDA) has launched a <u>voluntary NPOP</u> Textile certification.

What are the key drivers for sustainably scaling organic cotton production and how can the industry help achieve this?

A successful business case is a crucial driver of any commodity. The recent surge in demand has temporarily increased the product price, but this will not be sustainable in the long run.

Key drivers that the industry must deliver on include investment in capacity building, training, awareness, a fair price for everyone, and impact measurement - particularly of longterm climate benefits.

A good starting point is to start buying inconversion cotton as well as organic. Work on an incentive mechanism to provide fair price for each supply chain actor and start to source directly from farmer groups with the help of your suppliers. What are the main barriers faced by organic cotton producers in this region and what are some initiatives working to tackle these?

- Seed: Access to quality organic / non-GM seed is crucial for reducing the issue of GM contamination and can increase productivity. There are projects such as OCA and FiBL's "Seeding the Green Future" project, and some seed suppliers like Partech Seed are working closely with implementing partners to increase availability of quality non-GM seed.
- 2. Market linkages: Direct connections between farm groups or implementation partners and brands / retailers is another crucial area to improve. Textile Exchange is creating an Organic Cotton Producer Directory to link buyers directly to raw material producers.

3. Barriers to the purchase of inconversion cotton. A number of organizations have started raising awareness of how important sourcing inconversion cotton is for the future supply of organic cotton. Textile Exchange's OCRT is one example, having recently conducted an E-learning series on the topic.

> Can you share some examples of organic cotton projects that are embracing Textile Exchange's Climate+ vision?

Currently, four projects have shown interest in working more closely on the Delta Framework project, which monitors a large number of indicators including the key impact areas that are part of Textile Exchange's Climate+ strategy - soil health, water, climate, and biodiversity.



Standards & certification

Photo: © ecos | Truck of organic cotton at ginnery | Burkina Faso





Standards & certification

International voluntary standards

Organic output is subject to national laws governing organic production, including:

- The European Union's Organic Regulation 834/2007 (EU-Reg)
- India's National Programme for Organic
 Production (NPOP)
- USDA's National Organic Program (NOP), used globally
- China's National Organic Product Standard (GB/T 19630-2011)

International voluntary standards, the Global Organic Textile Standard (GOTS) and the Organic Content Standard (OCS), provide chain of custody assurance from the farm to the final product, with GOTS also addressing textile processing.

Both GOTS and OCS accept organic output from any of the IFOAM family of standards.

Global Organic Textile Standard



dyeing, and manufacturing) of apparel and home textiles made with certified organic fiber (such as organic cotton and organic wool) and includes both environmental and social criteria.

The aim of the standard is to define world-wide recognized requirements that ensure the certified organic status of textiles, from the harvesting of the raw fiber, through environmentally and socially responsible manufacturing up to labelling in order to provide credible assurance to the end consumer. Textile processors and manufacturers are thus enabled to export their organic fabrics and garments with one certification accepted in all major markets.

2020 saw record growth for GOTS certified facilities, with the total growing 34 percent, from 7,765 in 2019 to 10,388 in 2020. See overleaf for full details.

Find GOTS certified suppliers using the <u>GOTS</u> <u>Certified Suppliers Database</u>.

Organic Content Standard



The <u>Organic Content Standard</u> (OCS) sets requirements for third-party certification of certified organic input and chain of custody. The goal of the OCS is to increase organic agriculture production. The objectives of the OCS are to:

- Provide the industry with a tool to verify the organically grown content of the products they purchase.
- Provide companies with a trusted tool to communicate organically grown content claims to the industry.
- Provide organic fiber farmers with broad access to the global organic market for their products.

2020 saw record growth for OCS certified facilities, with the total growing 40 percent, from 6,181 in 2019 to 8,638¹. See overleaf for full details.

In January 2021, Textile Exchange <u>released</u> <u>guidance</u> that permits material which is in-conversion to be verified under the OCS, including from OCS-recognized organic standards – such as the U.S. National Organic Program – that do not recognize in-conversion material. This is a temporary exemption that will last through July 31, 2021, after which Textile Exchange will present the findings of the spring 2021 harvest to the OCS International Working Group and decide whether this will be a permanent part of the standard.

Find suppliers certified to the OCS using Textile Exchange's Find a Certified Company tool.

¹ OCS certified facilities figures for 2020 are estimates due to a delay in receipt of some data.



Standards & certification OCS & GOTS certified facilities 2020





- 4 India: ↓ 7%
- 5 Portugal : 1 435%

⁹ Italy: ↑ 171%

10 Germany: **↑** 70%

- 6 South Korea: ↑ 64%
- 7 Portugal: ↑ 49% 7 Pakistan: ↑ 49%
- 8 Pakistan: ↑ 42% 8 Japan: ↓ 46%
- 9 U.S.: ↑ 14%
- 10 Sri Lanka: 1 103%

In 2020, GOTS had 10,388 certified units across 72 countries, while OCS had 8,638² units across 56 countries. This map shows the top 10 countries for each and their respective number of certified units.

TOP 10 COUNTRIES USING OCS & GOTS

1



¹ Please note that the figures detailed on this page reflect the number of facilities certified to produce GOTS and OCS products in 2020, which may differ from the number that actually produced GOTS / OCS certified products that year.

² OCS certified facilities figures for 2020 are estimates due to a delay in receipt of some data.



Standards & certification Global ISO IWA 32:2019 Proficiency Test Initiative

Organic cotton is a claim that genetically modified organisms (GMOs) are not deliberately or knowingly used and that organic producers take far-reaching steps to avoid GMO contamination along the organic cotton value chain, from farmers to spinners, to brands. To manage this, it is essential that organic cotton stakeholders can reliably test their products for the potential presence of GM cotton.

The Global ISO IWA 32:2019 Proficiency Test Initiative 2021 is a collaboration between the Global Organic Textile Standard, the Organic Cotton Accelerator and Textile Exchange with the technical support of Wageningen Food Safety Research, which brings clarity with regards to the laboratories that can carry out qualitative GMO testing in greige cotton products as per the ISO IWA 32:2019 worldwide.

The ISO International Workshop Agreement 32:2019(E) on "Screening of genetically modified organisms (GMOs) in cotton and textiles" is an international reference protocol developed in April 2019 under the initiative of the Organic Cotton Accelerator, together with the organic cotton sector and after initial conceptualization by the Global Organic Textile Standard (GOTS), with the aim of creating a common language amongst laboratories when testing for GMO presence in greige cotton samples. This protocol for qualitative GMO-screening in cotton and textiles provides requirements and recommendations to laboratories that perform GMO analysis in cottonseed, cotton leaf, cotton fiber and chemically unprocessed cotton fiber-derived materials up to greige yarn and fabric.

With more laboratories implementing the ISO IWA 32:2019 worldwide every year, our three organizations join forces to provide the organic cotton sector with an up-to-date global overview of the laboratories that can currently conduct qualitative GMO testing as per the ISO IWA 32:2019 protocol based on a solid proficiency test process.

The technical process of the proficiency test is managed by Wageningen Food Safety Research (WFSR), the organization that acted as a project leader for the development of the ISO IWA 32:2019 and is accredited for performing proficiency tests according to the ISO/IEC 17043:2010 on 'Conformity assessment — General requirements for proficiency testing' (not specifically in the field of GMOs).

Open call for lab participation

To ensure a successful participation rate of laboratories in the Proficiency Test Initiative 2021, OCA, Textile Exchange and GOTS will carry out a joint open call for lab participation.

The following messaging will be used in the newsletters of each respective organization.

The ISO/ IWA 32:2019 is the world-recognized standard for GMO testing in the cotton supply chain developed by GOTS, OCA and Textile Exchange. Following the successful implementation of the global ISO IWA 32 proficiency test initiative 2020, we are now seeking candidates for the 2021 iteration of this initiative, in addition to the laboratories that participated in 2020. If you are a laboratory that has already implemented or is in the process of implementing the ISO IWA 32:2019 method worldwide by the end of 2021, this is a great opportunity for you to participate. Passing the proficiency test will give your laboratory more visibility for organic cotton testing.

Sign up for the test today by contacting Mathilde Tournebize at: secretariat@organiccottonaccelerator.org

Your participation is a key step towards the widespread use of a homogeneous GMO screening protocol for cotton samples worldwide.

Disclaimer: This proficiency test is organized annually to obtain an up-to-date overview of the laboratories that can conduct GMO testing as per the ISO IWA 32:2019 protocol. The results have been made publicly available for informational purpose only. No radical business decision should be made from the results of this proficiency test regarding the current or future cooperation with laboratories that did not participate or do not appear in the shortlist of laboratories that succeeded in the proficiency test.



Get involved

Photo: © Textile Exchange | 2019 Organic Cotton Round Table Summit | Vancouver, Canada



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Organic Cotton Round Table Platform for collective action and incubator for great ideas

Organic cotton is a gatekeeper of traditional knowledge, science, technology, and social innovation, steeped in the principles of ecology, health, fairness, and care. Yet, growers, processors and vendors of organic cotton operate in a highly autonomous market environment. This autonomy allows independence and a market-driven approach to address sustainable development and, as seen in this report, there is a diversity of tailored initiatives to support the community.

Textile Exchange's <u>Organic Cotton Round</u> <u>Table</u> (OCRT) provides an inclusive space for all organic cotton stakeholders to come together, share experiences and address issues facing the organic cotton sector, and to find ways to collectively take action. The OCRT includes both global and regional platforms that bring together experts, organizations, farmers, and brands to overcome regionally-specific barriers. The OCRT is currently focused on scaling in-conversion cotton to sustainably address the surging demand for organic. In early 2021, we launched a new e-Learning series, with <u>Part 1</u> and <u>Part 2</u> focused on in-conversion cotton and rethinking sourcing models to sustainably secure organic cotton supply.

How to get involved

Join the OCRT community to take part in:

- The OCRT HUB
- OCRT Summits
- e-Learning series and webinars
- Working Groups

The OCRT HUB is where you'll find the latest information on OCRT activities. It's also where you can connect with other members, engage in topical discussions, and find resources in our library.



Graphic recording © Carlotta Cataldi

Organic Cotton Producer Directory

The Organic Cotton Producer Directory,

launched in 2020, is a public tool shared by Textile Exchange to help the industry connect directly with producers of organic cotton around the world. The tool allows users to search for voluntarily listed producers based on specific search criteria and connect with them directly using the contact information provided.

Farm-level organic cotton producers can apply to be listed by completing the consent form, available in a number of languages: English; French; Spanish; Portuguese; Chinese; Turkish.

Further resources

Organic cotton

- Previous Organic Cotton Market Reports (2020) (2019) (2018) (2017)
- Cotton in Africa: Sustainability at a Crossroads white paper (pdf)
- Achieving the SDGs through Organic Cotton (webpage) (pdf)
- Turkey Organic Cotton Sourcing Guide
 (pdf)
- Kering & Textile Exchange | Organic Cotton Fiber Classification Guide (pdf)
- Kering & Textile Exchange | A Best Practices Guide for Organic Cotton Trade Models (pdf)



- Life Cycle Assessment of Organic Cotton
 (full report)
- Organic Cotton Sustainability Assessment Tool (online tool) (summary)
- Organic Cotton Material Snapshot (pdf)
- Organic Cotton Material Summary (pdf)
 Preferred cotton
- Preferred Fiber & Materials Market Report (pdf)
- 2nd Annual 2025 Sustainable Cotton Challenge Report (pdf)
- Textile Exchange Learning Center (<u>Hub</u> member only)



Material Change Index

Textile industry's largest peer-to-peer comparison initiative

By benchmarking the industry and providing actionable tools for improvement, Textile Exchange is pushing a race to the top.

A vital part of the Corporate Fiber & Materials Benchmark (CFMB) program, Textile Exchange's Material Change Index (MCI) is the largest peer-to-peer comparison initiative in the textile industry. It tracks the apparel, footwear, and home textile sector's progress toward sourcing more preferred fibers, including organic cotton, as well as alignment with global efforts like the Sustainable Development Goals and the transition to a circular economy.

Last year, 191 companies (including subsidiaries) voluntarily participated, including iconic fashion, home, and sports brands like C&A, Tchibo, Nike, Patagonia, H&M, Gap, Gucci, Ikea, Target, New Balance, Adidas, and Burberry.

34 participants (featured opposite) made it into our "100% club" which celebrates those whose entire¹ cotton supply is organic, Organic Fair Trade, recycled, or Regenerative Organic Certified (or a combination of these).

Respondents reported that 11 percent of cotton sourced in 2019 was organic, and though BCI ranks higher by uptake volume than organic cotton, twice as many companies use organic than BCI (88 percent use organic vs 47 percent BCI).

Gain insight

MCI Leaderboard -Interactive, online tool showing how companies performed and where they are focusing their efforts in sustainability. You can also access each company's progress cards.



MATERIAL CHANGE

2020

<u>Materials Impact Dashboard</u> - A key online tool visualizing the sustainability outcomes and impacts of the actions taken by <u>participating</u> <u>companies</u> through their use of preferred materials towards the Climate+ Strategy.

2025 Sustainable Cotton Challenge

The CFMB program is used to track the cotton consumption of companies that have signed up to the <u>2025 Sustainable Cotton Challenge</u>. The Challenge serves as a cornerstone for change in the apparel and textile industry by encouraging brands and retailers to commit to source 100 percent of their cotton from most sustainable sources by 2025. To date, the Challenge has 128 signatories. Sign up using the form at the bottom of the webpage.

¹ A 3 percent allowance is made to allow for trims and threads, so the actual threshold for eligibility in the 100% Club was 97 percent.

100% Club

These companies made it into our "100% club" in 2020, which celebrates participants whose entire¹ cotton supply is organic, Organic Fair Trade, recycled, or Regenerative Organic Certified.



Sign up to participate in the 2021 MCI survey

The 2021 submission window is open to brands, retailers, manufacturers, and suppliers until mid-September. It's voluntary, free, and participants receive a confidential scorecard and the opportunity to show leadership through the <u>MCI Leaderboard</u>. Participants tell us that just the act of completing the survey provides a valuable roadmap for improvement. Please contact CFMB@TextileExchange.org or click here for more information.



Textile Exchange Membership

Connect, Collaborate, Accelerate,

Textile Exchange Membership connects you to a powerful community of brands, suppliers, and companies, large and small, from across the textile value chain, all seeking to create a more sustainable and responsible fiber and materials industry. Members gain access to learning opportunities, tools, relevant data, insight reports, industry networks, connections, and, above all, the opportunity to take action, individually and collectively.

Benefits of Membership:



Unlock the Power of Community

Connect, Collaborate, Accelerate,

Join a community that can collectively accomplish what no individual or company can do alone. Gain access to The Hub, our Membership Community Portal.



Convene & Connect

Expand your organization's network through our member-only online community portal, The Hub, exclusive members-only events, webinars, and publications. Benefits include free or discounted tickets to our annual conference, depending on the level of membership.



Access to Expertise

Dedicated support from Textile Exchange's staff (900 years of combined experience) via The Hub. Individual team access and virtual training for our Partner-Level Members, Access our Member-only Fiber & Materials resources.

- Sourcing Journal 😒

"With buy-ins from Industry leaders like H&M, Inditex,

like a who's who of the garment and Textile Industry."

Nike and Lenzing, Textile Exchange's membership reads



Show Leadership & Gain Exposure

Be featured in Textile Exchange's member-focused communications, including exposure on our website, social media, member-only reports, and member spotlights*.

> * Member spotlights reserved for Partner-Level members.



Develop, Measure & Track Progress to a Preferred Fiber Strategy

Demonstrate progress and industry leadership towards achieving the Climate+ goals.

All members participating in the Corporate Fibers and Materials Benchmark have access to advanced report cards.

Contact the Membership Team





Céleste Lilore Global Director of Membership and Corporate Engagement -

Ricardo Garay Manager of Membership and Corporate Engagement - EMEA & APAC



Renske Koster Coordinator of Membership and Corporate Engagement



Valentina Zarew Ambassador and Strategist – Oceania









ORGANIC

Textile Exchange is in the unique position of being the only organization currently reporting on the global organic cotton supply and trends on an annual basis. Our priority is to ensure the accuracy and quality of our data, management systems, and reporting. In 2018, with the sponsorship of C&A Foundation, Textile Exchange achieved independent third-party verification on its organic cotton data processes to the Global Reporting Initiative (GRI) standard and Accountability Principles for the Organic Cotton Market Report. Textile Exchange has since adhered to the same verified process for its organic cotton data collection. The following sections set out the abridged methodology used to collect, analyze, and crosscheck the data on the production of organic cotton fiber.

Key terms and definitions

Organic cotton: Organic cotton is cotton that is produced according to the IFOAM Principles of Organic Agriculture and certified to the IFOAM Family of Standards at the farm level. At present, the main farm standards include the EU Organic Regulations in Europe (EU-Reg), USDA National Organic Program (NOP) in the U.S., the National Programme for Organic Production (NPOP) in India, and the China National Organic Product Standard (GB/T 19630-2011).

Participatory Guarantee Systems: Participatory Guarantee Systems (PGS) are an alternative to third-party certification and fall outside of IFOAM's family of standards. Organic cotton production reported from PGS in Thailand and Brazil are specifically mentioned. As per IFOAM - Organic International's definition, PGS are locally focused quality assurance systems that certify producers based on the active participation of stakeholders and are built on a foundation of trust, social

networks, and knowledge exchange. IFOAM -Organics International has a <u>list of recognized</u> PGS programs. Organic cotton is grown as part of a production system that sustains the health of soils, ecosystems, and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects, and is grown in rotation with other crops that replenish the soil. Organic cotton requires a third-party certification from an independent, accredited certification body (CB). Organic cotton growing practices may vary slightly from country to country but common to all is the avoidance of the use of toxic and persistent synthetic agrichemicals (pesticides and fertilizers) and genetically modified seeds.

Seed cotton: Seed cotton is the raw cotton, including fiber and seeds (i.e., pre-ginning cotton).

Cotton fiber / lint: Cotton fiber/lint is cotton that has gone through the ginning process to remove seeds, leaves, and casings (i.e., post-ginning).

Organic certified land / land area certified to organic: Organic cotton must be grown on land area certified as organic to the IFOAM Family of standards. However, as organic cotton is grown within a rotation system to build soil fertility, depending on soil and climatic conditions, the same piece of land may also grow a variety of other crops such as groundnuts, maize, and beans. As the scope of organic certification covers the variety of crops grown, the land area recorded during a certification process is referred to as organic certified land.

In-conversion land: In-conversion land refers to land that is undergoing the required three-year conversion period from conventional to organic as required by all organic standards. While no toxic chemicals are allowed during this time, the conversion period is required to eliminate remaining residues left in the soil from past conventional practices. Land undergoing the first, second, and third year of this conversion period is referred to as Year 1 (Y1), Year 2 (Y2), and Year 3 (Y3) In-conversion land, respectively.

Yield: Yield refers to the amount of cotton produced (in kilograms) per hectare (ha) of land farmed. Yield is typically measured at two levels: Seed Cotton Yield (i.e., pre-ginning) and Cotton Fiber Yield (i.e., post-ginning).

Metrics (ha, kg, tonne, m, b): This report uses the metric system for measurements and units have been abbreviated as follows. Local units are converted into international, harmonized units: ha = hectare (1 hectare = 2.47 acres); kg = kilogram (1 kg = to 2.20 lbs. = 0.0045929637955183 US bales = 0.005882353 Indian bales); tonne = 1,000 kg; m = million (1 m = 1,000,000); b = billion (1 b = 100,000,000).

Internal Control System (ICS): "An Internal Control System (ICS) is the part of a documented quality assurance system that allows an external certification body to delegate the periodical inspection of individual group members to an identified body or unit within the certified operator. This means that the third-party certification bodies only have to inspect the well-functioning of the system, as well as to perform a few spotcheck re-inspections of individual smallholders." [IFOAM - Organics International].

Reporting boundaries, completeness, and accuracy

Reporting period: The data are collected over a 12-month cycle and are based on the International Cotton Advisory Council (ICAC) harvest year of August 1 to July 31. In 2021, data for the 2019-20 harvest year were collected. In countries, such as Tanzania, where the cotton is picked between July 2019 and August 2020 (i.e. covering 2 ICAC years), the data is allocated to the first year (e.g., 2019). In countries, such as the U.S., where the cotton is picked in October 2020 to December 2020, the data to the previous calendar year (e.g., October 2019 – December 2019) is reported.

Cotton producing countries / production: In

2020, Textile Exchange's systematic collection, review and reporting of organic cotton production covers 96 percent of overall cotton production volume and 56 percent cotton producing countries. In all, 34 of the 61 cotton producing countries have been identified as potentially relevant for organic cotton production and covered by an independently verified systematic data process. This identification process has been based on data collected, publicly available records, interviews, and correspondence with various stakeholders.

Standards (cultivation): Textile Exchange applies a complete list of all standards accepted in accordance with "IFOAM Family of Standards." A systematic completeness check was carried out on all data collected against published data by 53 certification bodies across 48 IFOAM Family of Standards.

In-conversion land: Textile Exchange makes all attempts to collect data on organic inconversion land through its systematic data collection process. However, it should be noted that our process focuses primarily on countries and producer groups that are currently certified. Countries and producers that are not currently certified may fall outside of our reporting bandwidth. As with organic certified land, inconversion land also covers a variety of crops grown. Whether the land that is in-conversion will be used to grow cotton will ultimately depend on market factors such as price and demand. Conversely, in-conversion land that is scoped to produce other crops may in later years be used to grow cotton if market factors are favorable.



Country	Status	GOV	СВ	OCP	Gin	Other	Confidence
Argentina	NIP			Р			High
Australia	NIP					Р	High
Bangladesh	NIP		Р				High
Benin	IP		S	Р			Medium
Brazil	IP			Р			High
Burkina faso	IP		S	Р			Medium
China	IP	Р	Р	S			Medium
Colombia	NIP			Р		Р	High
Egypt	IP		S	Р			Medium
Ethiopia	IP			Р			Medium
Greece	IP	Р					High
Haiti	NIP			Р			High
India	IP	Р	Р	S			High
Israel	NIP	Р					High
Kyrgyzstan	IP		Р	Р			Low
Madagascar	NIP		Р				High
Mali	IP		S	Р			Medium
Mexico	NIP					Р	High
Myanmar	IP		Р				High
Nicaragua	NIP					Р	High
Pakistan	IP		S	Р			High
Paraguay	NIP			Р		Р	High
Peru	IP		S	Р			High
Senegal	IP		S	Р			High
South Africa	NIP					Р	High
Tajikistan	IP		Р	Р			Low
Tanzania	IP		S	Р			Medium
Thailand	IP			Р			High
Turkey	IP	S	Р				High
Turkmenistan	NIP	Р					High
Uganda	IP					Р	Medium
USA	IP	S		S	Р		High
Uzbekistan	IP					Р	High
Zambia	NIP					Р	High

Table: A breakdown ofdata sources used foreach of the 34 countriescovered by the 2021Organic Cotton MarketReport alongside aconfidence level on thedata received based onresults of triangulation.

IP	In production (of organic cotton this reporting year)
NIP	Not in production (of organic cotton this reporting year)
GOV	Government agency
СВ	Certification body
OCP	Organic cotton producer
Ρ	Primary data source
S	Secondary data source

Data sources

Organic cotton data is collected from governmental agencies, certification bodies, organic cotton producers, gins, and initiatives/ brands. Wherever possible, data from each country is collected from more than one source and validated against each other. In selected cases where data can only be obtained from one source, triangulation and validation of data may not be possible and the data is accepted as it is. While primacy is given to data supplied by government agencies and certification bodies, data from organic cotton producers continues to play an important function for cross-validation and to understand farm level scenarios, as certification body data is limited to a small set of indicators. Collection methods range from public database search, telephone interviews, site visits and email correspondence between January and June 2021. The table on the left provides a breakdown of data sources used for each of the 34 countries covered in the 2021 Organic Cotton Market Report alongside a confidence level on the data received based on results of triangulation.

For the 2021 Organic Cotton Market Report, the final organic cotton production data was based on data sourced from Government Agencies (15 percent), Certification Bodies (41 percent), Organic Cotton Producers (47 percent), Ginners (3 percent), and Others (6 percent). Note that in some countries, data may be combined from more than a single source.

Data analysis and checks

Textile Exchange makes every attempt to obtain a single complete data set per country from Certification Body, a secondary data source from an Organic Cotton Producer, and where possible, a third data source from alternative stakeholders. The different data sets are harmonized for metric consistency, and in the case of missing data or data deviation, scenarios, or average data are used. Collecting data from multiple sources allows Textile Exchange to triangulate the information from different providers and crosscheck against data reported in the past. In the case of inconsistencies, rationales for decisionmaking are defined in a systematic process and documented. In case of data gaps, where possible historical data and industry averages are inferred. Where data gaps cannot be filled, partial data is reported and marked as a general indication. The final aggregates are proofed by industry experts.

Special remarks - supply side

Production volume: A Certification Body estimates the production volume of an Organic Cotton Producer at the time of audit. Within the certification process, a variance of up to 10 percent is permitted between estimated production (at time of audit) and actual harvest (post-audit). As at time of data collection, Organic Cotton Producers would have realized its harvest, data collected from Organic Cotton Producers is likely to be based on actual production, whereas data reported by Certification Bodies is likely to be based on estimated production. Production volume collected from varying data sources is reported in the Organic Cotton Market Report on an as-is basis and does not account for any variance between estimated and actual production.

Historical or average yields: Where data is only provided for land area but not the production volumes, historical yields known for the specific project or locality or annual national average yields (as agreed by the government and applied by certifying bodies) have been used to calculate the production volume.



Land area certified to organic: In selected cases where the land area under organic cotton is reported and total land area certified to organic is reported, the latter is estimated to be equal to the former.

Ginning outturn: Where only seed cotton data is available, lint production is estimated using the ginning outturn known for the country.

Estimation for intercrops: Where only total certified land area was reported, the average rate of intercrops was applied to derive fiber production (e.g., in India, the estimate is 33 percent as per Certification Body methodology).

Land in-conversion: In selected cases where inconversion organic cotton fiber production from land area in-conversion is reported and land area in-conversion is not reported, the yield is applied as the divisor to derive land area in-conversion.

Reporting limitations

- The integrity of organic cotton is assumed addressed through the certification process and that all organic cotton production data provided by data sources are certified.
- Production data provided by data sources are accurate, true, and complete to the reporting period specified.
- The variance between estimated production captured at audit by a Certification Body and the actual harvest volume reported by Organic Cotton Producers is acceptable (per the certification process).

 Research findings are dependent on publicly available data, and it is the responsibility of Certification and Accreditation Bodies to make available all pertinent data and information.

Disclaimer

Textile Exchange collects and reports production of certified organic cotton data from Accreditation Bodies. Certification Bodies, Organic Cotton Producers as well as other stakeholders on an as-is basis. Data reported is intended as a snapshot of production and makes no representation on total supply. While Textile Exchange carries out a systematic completeness and accuracy check on its data collection process; we rely on our data providers for data accuracy and integrity. Where data gaps exist, Textile Exchange attempts to replace these values with best estimates from historical or comparable proxies. Data reported may change due to corrections or updates from data sources.

For the purpose of the Organic Cotton Market Report, organic cotton does not include any uncertified naturally grown cotton, nor does it make any statement regarding the integrity beyond its certification, and reported numbers, as reported by our data providers.



Acknowledgments

It has been a privilege to work alongside the committed community of organic cotton farmers, manufacturers, brands, retailers, certifiers, and other stakeholders to generate this report. We would like to extend our sincere gratitude to all that have contributed data, expertise, updates, and photos for their continued and valuable co-operation, including but not limited to:

5 Loc Cotton	Control Union	Management (FARM)	Meadow Farmers Coop	Ten Hi Gin
Akasya Tarim	Cotonea / Gebr. Elmer & Zweifel	Farmers Coop Society #1	Mesa Farmers Cooperative Gin	Texas A&M AgriLife Research
Allbright Cotton	GmbH & Co. KG	FENABE	Mid-Valley Cotton Gin	Texas Organic Cotton Market
Alvarez Farms	CottonConnect	Five Points Gin	Mid-Valley Cotton Growers	Cooperative
APEDA	ECOCERT	FNPC	OBEPAB	The Organic Center
Artistic Milliners	Economy of Love	Global Organic Textile Standard	OneCert	UNPCB
Basak Ekolojik	ecos / Organic & Fairtrade Cotton	(GOTS)	Organic Cotton Accelerator	UPC Bio
Bergman Rivera	Coalition (CCBE)	Green Net Cooperative	Owens Cooperative Gin	USB Certification
Biofarmer cooperative	Egedeniz Tekstil	Kadio lu Tarim	Pesticide Action Network (PAN)	VEJA
Bio-Kishovarz Cooperative	EKOTAR	King Mesa Gin	Ethiopia	West Gin
bioPo® Equipation	EMBRAPA Algodão	Laudes Foundation	Reinhart	Woolam
	ESPLAR	Lojas Renner	SANKO	XIT Gin
DioSustain	Etko	Louis Dreyfus Company/Allenberg/	Sekem	Plus all producers that have share
Bioteam	Fairtrade Foundation	Procot	SODEFITEX	their information for our <u>Organic</u> <u>Cotton Producer Directory</u> .
Bowles Farming Company	Farmer Association For Rural	Magenta/BioAgriCert		

Report	production

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For the largest peer-to-peer comparison initiative in the textile industry, check out Textile Exchange's <u>Material Change Index</u>.



