





Foreword from La Rhea Pepper

Towards a more connected community

The organic cotton sector has been working diligently to improve livelihoods and agricultural impacts for the past 25 years. All of us care deeply about the vibrancy of the sector and its leading role in the sustainable textile journey yet, for the past number of years, the organic cotton sector's growth hasn't been reflecting this. Earlier this year, we asked - would a more connected community support organic cotton to have a larger collective impact?

As a part of this deep reflection, we spoke with many of you, hearing directly and indirectly some clear desires. While we know impressive work is being done and organic cotton production is up this year, we also know we are nowhere near where we need to be to have the level of impact we know the sector could have. One concern we have heard loud and clear is the fragmentation of the sector and lack of required aligned leadership.

We therefore looked for best practice models that demonstrate what it takes to move from isolated impacts to a collective, connected impact. It turns out there are five key conditions needed:

- 1. A Common Agenda
- 2. Shared Measurement
- 3. A Mutually Reinforcing Action Plan
- 4. Continuous Communication
- 5. A 'Backbone' Structure to support it

Starting with the Organic Cotton Accelerator (OCA) and Textile Exchange's Organic Cotton Round Table (OCRT), discussions are in place to plan on how to work more closely to support a more connected community and sector-wide collective impact. How can the OCRT's convening, catalyzing and educating work compliment OCA's work investing in key issues and farm end support to lead to a greater collective impact?

We are very excited about this direction and look forward to your input and help in connecting the sector for greater impact. Stay tuned for more information on this following the 2018 Global OCRT in Milan on 22 October.



La Rhea Pepper Managing Director, Textile Exchange

Call to action



SET A TARGET

Commit to transitioning your cotton usage to organic and set quantitative, time-bound targets to help track progress.

BE CONFIDENT IN YOUR CONTENT CLAIMS

Use a chain of custody standard to track your product to market.

MAKE AN IMPACT

Work with suppliers to build transparency and ensure impact on the ground.

INVEST IN TRANSITIONAL

Looking for innovative ways to do great things? Invest in cotton in transition-toorganic, blended with your certified organic.

DIVERSIFY YOUR SOURCING

Consider a diverse approach to building your organic supply base, different regions offer different opportunities.

DO BUSINESS DIFFERENTLY

How do you re-engineer your sourcing practices? OCA, ChetCo, OrganiMark's "cluster" program - each help brands and suppliers leverage scale they create together.

TAKE YOUR SEAT AT THE TABLE

Join our Global and Regional <u>Organic Cotton</u> <u>Round Tables</u>.

Independent review

BSD Consulting performed an independent review of the data collection process used by Textile Exchange in compiling data for the annual Organic Cotton Market Report (OCMR). The objective of the critical review is to provide Textile Exchange's stakeholders with an independent opinion about the quality of the reported data and the adherence to the principles of international benchmarks such as the AA1000APS (2018) and the GRI Standards. The full statement is available here.

BSD Consulting considers the total of 117,525 MT of organic cotton for the production year 2016/17 reported in the OCMR 2018 to be an accurate and reliable estimation. Textile Exchange has made a major effort in obtaining more data from Certification Bodies (CBs) and, at the same time, improved the quality of producer data, by establishing direct relations with the groups through visits or using data from existing partner programs to confirm the data sets derived from producer sources. The data collection process also satisfied the completeness principle to a great extent as it covered 32 out of 64 cotton producing countries, representing nearly 95 percent (21,936,000 MT) of the total production registered by the International Cotton Advisory Committee (ICAC). The data has been compiled using three different sources: Data delivered directly by producer groups, data from official governmental agencies registering certified production and data provided by certification bodies.

BSD has verified a sample of templates used by the ambassadors for data collection and confirmed that triangulation and quality checks have been used to guarantee accuracy of the data to the extent it was technically possible for Textile Exchange. BSD Consulting evaluated the application of the four Accountability Principles and considered that the report has satisfied the Inclusivity and Responsiveness principles in full. A total of eight local ambassadors have been involved in this year's data collection process. With the help of this support staff and partner organizations, Textile Exchange was able to establish a strong network of partners allowing it to approach the data collection from different perspectives. During the production year, many producer groups have been visited in loco, which allowed first-hand confirmation of numbers. Furthermore, Textile Exchange has made updates in the data collection methodology applied in the prior report and presented a revised version in order to conduct the data collection of this report during our review process.

With reference to the Impact principle, the OCMR 2018 is providing case studies to document the evolution and development of organic cotton in all covered regions and also predicts a significant increase of converted areas in the coming years. So far, anecdotal references on how organic cotton will contribute to the Sustainable Development Goals suggest that cotton will have a strong positive impact on society and environment.

For the next reports, we recommend that Textile Exchange gather objective data from impact studies that can corroborate this impact. Given the fact that consumers often do not make a clear distinction between organic and less rigid sustainability certifications, such impact data can prove that organic has stronger positive footprint and is key to further increasing organic certified cotton production. After careful revision of the OCMR 2018 and its underlying data collection process, we can affirm that Textile Exchange was able to improve the accuracy and completeness of the presented data and deliver a reliable picture of the current state of organic cotton production. Using data triangulation and investigation, the team put a considerable effort in compiling the global data.

To further benefit from this effort, we recommend that Textile Exchange expand the report in future cycles with impact data that can distinguish the importance of organic certified production in an environment of increasing sustainability claims of market partners and related certification schemes with less rigid benchmarks for production.



Beat Grüninger Director, Group Partner, BSD Consulting





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Welcome to the 2018 Organic Cotton Market Report

Welcome back to Textile Exchange's 13th Organic Cotton Market Report (OCMR).

Our 2018 report is packed with even more data and analytics, alongside the ever-popular country roundups and bite-sized, yet totally inspiring, stories from the organic field.

Globally, organic cotton production grows ten percent.

We are pleased to announce a ten percent growth in organic cotton fiber production in 2016/17, over the year before. The biggest volumes are coming from India, China, Turkey and Kyrgyzstan.

Many countries have growth in the double-digits.

We witness strong growth in China, the USA, and Brazil this year, with Uganda, Tanzania, and Benin also achieving high growth on the African continent.

While organic still occupies less than one percent of global cotton production, it's interesting to look at the organic share within each country. Tanzania and Tajikistan are producing between seven and ten percent of their overall cotton supply organically, while Kyrgyzstan's organic was calculated at an impressive 66.8 percent of the country's overall production.

In-conversion figures reveal serious growth is just around the corner.

One of the most exciting observations is the potential for growth we are seeing through reported in-conversion figures, which reveal that a whopping 217,721 ha (50 percent of the current land area) are in conversion to organic. The largest areas of in-conversion land can be found in India, Tanzania, and Pakistan, with China, Turkey and Kyrgystan also reporting substantial areas.

Our mantra: Growth must come with Integrity.

In this report you will find many fine examples of organic cotton programs across the globe. You will see they are transparent, otherwise they would not be featured. These champions, among others, work hard to grow the sector with integrity and respect for their fellow partners, their communities, and the environment.

We are proud to be independently verified.

After two years of intensive work with BSD Consulting, supported by the C&A Foundation, we have some big news to report this year. We are extremely proud to announce that our data collection and management systems have been independently assessed by BSD's auditing arm and found to be GRI compliant. This is a rewarding moment for Textile Exchange, especially for our data and analytics team and regional ambassadors who have worked so hard for this recognition.

Reserve your place at the Table.

Whether it's Milan, Izmir, or Koudougou, there's a place for all at Textile Exchange's <u>Organic Cotton Round</u> <u>Table</u>. Join us and you will receive a warm welcome! We hope to see you soon.



Liesl Truscott

Director of Europe & Materials Strategy, Textile Exchange We are happy to note that this year's OCMR and the processes leading up to putting this report together have been GRI compliant. This improvement fills a critical data gap in the sector and C&A Foundation is glad to have supported Textile Exchange on this journey. We hope that this trajectory continues allowing the industry to make informed choices based on credible data.



Anita Chester Head of Sustainable Raw Materials, C&A Foundation

Key findings



Organic cotton production grows ten percent globally.

In 2016/17, global organic cotton production reached 117,525 MT fiber, representing a ten percent growth. This stems, for the most part, from China, fuelled by growing demand both from the organic dairy industry and the domestic textile sector. Other countries that contributed significantly to the growth include Tanzania, Uganda, Benin, Turkey, and the USA.

More brands are committing to organic.

A growing number of brands and retailers are setting targets and signing commitments to increase their use of organic cotton, either under their own steam or as part of public, group commitments such as the German Textile Partnership or the Sustainable Cotton Challenge. Such commitments are driving change in supply chains as brands invest in finding innovative and longterm solutions to secure supply and build greater transparency.

Substantial areas of land are in transition to organic.

213,566 hectares of cotton-growing land were in transition to organic in 2016/17, almost 50 percent of the current certified land area. This indicates strong growth over the next few years as this land reaches certification. The vast majority of in-transition land is in India, with the remainder stemming predominantly from Pakistan, China, Tanzania, and Turkey.

Promising developments from organic cotton initiatives span the globe.

From brand commitments and government-backed initiatives to industry collaborations and strategic partnerships, there has been a surge in the efforts being made across the globe to grow and support the organic cotton sector. In this report, you will find directories at the end of each section showcasing just some of this great work.

The year in numbers



TOP 5 PRODUCING COUNTRIES:



TOP 5 PRODUCING COUNTRIES BY:

IN-CONVERSION (HA LAND)			GROWTH (% VOLUME)	
India	172,180	Senegal	+427%	
Tanzania	18,409	Brazil	+155%	
Pakistan	12,283	Uganda	+155%	
China	5,108	Benin	+72%	
Turkey	2,721	Egypt	+70%	



Organic Certified Land (ha)

GROWTH IN GOTS CERTIFIED FACILITIES:



5,024 Certified Facilities

Snapshot of the wider organic sector

The wider organic sector continues to expand globally, with a 15 percent rise in organic farmland and a 12.5 percent rise in the number of organic producers from 2015 to 2016.

This page provides a snapshot of the wider organic sector in 2016 (the most recent statistics available). It's useful to have these trends in mind as we dive into the growth trends in organic cotton in the remainder of this report.

FARMERS

The number of organic producers is increasing.





Cereals Green fodders Oilseeds Dry pulses Textile crops Om ha 1.5m ha 3.0m ha 4.5m ha

KEY ARABLE CROPS

CERTIFIED LAND

57.8m ha organic farmland (incl. in-conversion)



+15% over 2015

KEY PRODUCING REGIONS (LAND)



MARKET

The global organic market is growing and consumer demand is increasing.

\$91.4b US global organic food market 2016

+12% over 2015



1. FiBL & IFOAM - Organics International, 2018, The World of Organic Agriculture: Statistics & Emerging Trends 2018

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Global organic cotton production

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2016/17 organic cotton production

A global snapshot

2016/17 was an exciting year for the organic cotton community. As well as seeing promising developments from organic cotton initiatives across the globe, we also saw a ten percent growth in global fiber production, which reached 117.525 MT.

This growth stems for the most part from China, fuelled by growing demand both from the organic dairy industry and the domestic textile sector. Other countries that contributed significantly to the global growth include Tanzania, Uganda, Benin, Turkey, and the USA.

Another noteworthy trend this year is the substantial area of cotton-growing land in transition to organic, which totalled 213,566 ha, suggesting strong growth over the next few years. To put this figure into perspective, it is equivalent to over 50 percent of the current certified land area. Over 80 percent of this in-conversion land is in India, with the remainder stemming predominantly from Pakistan, China, Tanzania, and Turkey.

In total. there were 220,478 farmers producing organic cotton in 2016/17, spread across 18 countries. Together, they produced 117,525 MT organic cotton fiber on a total certified land area of 472,999 ha.

Textile Exchange relies on its data providers for data comprehensiveness, accuracy and integrity. Whilst we carry out a systematic completeness check on our data processes, this is done on best available information at time of reporting. For this reason, as we gain further insights and information from our data sources each year, previously reported data is corrected and revised to accurately reflect historical trends and growth rates. The following revisions are made this year:

- 366mt fiber reported for Pakistan in • 2015/16 was transferred into Year 3 in-conversion.
- 4,524mt fiber reported for USA in • 2015/16 was adjusted to 3,599mt.
- Fiber production for Greece was updated to 1,114mt, 1,155mt, 990mt, 686mt, 517mt, 1,320mt and 1,403mt between 2010/11 and 2015/16, respectively.
- 275mt fiber reported for Kyrqyzstan in 2013/14 was adjusted to 335mt.
- Fiber production for Kyrgyzstan, Tajikistan and Turkey reported for 2015/16 should be for 2016/17. As retrospective data was not available, the data was not adjusted.





472.999 Organic Certified Land (ha)



↑ 10%

Fiber Growth Over

2015/16 (MT)

213,566

Organic In-Conversion Land (ha)

Cotton Globally Is Organic (ranging from <1-67%)

0.5%

117.525

Organic Cotton Fiber (MT)

18 Countries

Producing Organic Cotton

Global Production Comes From Just 7 Countries*

97%



*The remaining 11 countries (and their global mark share) are: Egypt (1.5%); Greece (0.7%); Uganda (0.7%); Benin (0.6%); Burkina (0.4%); Peru (0.29%); Mali (0.1%); Brazil (0.04%); Senegal (0.004%); Thailand (0.004%); Argentina (0.0003%).

2016/17 organic cotton production

Global trends



COMPARISON BETWEEN CONVENTIONAL AND ORGANIC COTTON PRODUCTION TRENDS



REGIONAL ORGANIC COTTON PRODUCTION - 5 YEAR TRENDS



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Q&A with Anita Chester



Anita Chester Head of Sustainable Raw Materials, C&A Foundation

Where is C&A Foundation in its journey of its organic cotton program?

The case for organic cotton may not be immediately evident, but its restorative and regenerative nature presents an incredible opportunity to radically transform the textile industry's impact on both the environment and farmers' lives. In 2014, C&A Foundation began its journey of supporting farmers to adopt organic cotton farming practices. Already the foundation, along with nine partner organizations, has made it possible for approximately 54,000 smallholder farmers across Brazil. China, India, Pakistan and Tanzania to transition to organic cotton. Once fully certified, these farmers will constitute an additional 20 percent of the existing global organic cotton farmers.

In India, where C&A Foundation started its organic cotton work, farmers are beginning to see the economic benefit of organic cotton. In 2017-18, foundation partners in India reported that organic cotton farmers in their programs have seen an income increase of over 25 percent compared to conventional farmers in the same areas, thanks to around 50 percent decrease in input cost. This, when the reported yield even after four years was 3 percent less than their conventional neighbours. Further, a recent Life Cycle Assessment study supported by C&A Foundation reveals the substantially reduced environmental footprint for organic cotton compared to conventional.

Additionally, C&A Foundation's work with the Organic Cotton Accelerator (OCA) has been critical to move the entire industry, as has our continuous engagement with governments, which has yielded initial positive results in terms of policy level support

What have been the lessons learnt in the journey above?

Even though there is renewed interest in organic cotton, challenges remain. While

each of the regions that we work in are unique in their agro-climatic and socioeconomic contexts, they experience a common thread of challenges. Lack of access to good quality nongenetically modified (non-GM) cotton is easily the greatest obstacle that holds back organic cotton. This is not just a problem in India; it is a challenge even in countries where GMOs have not been approved. This is not surprising as research has mostly been biased in favour of GM cotton seeds, and there has been limited investment and research on indigenous cultivars.

Other challenges include i) the lack of support systems for farmers that enables access to good quality bio-pesticides and bio-fertilisers, and knowledge on organic cotton practices; (ii) weak market signals and a fragmented supply chain, which makes market access for organic cotton farmers difficult; and (iii) a weak policy environment for organic cotton. These common factors that resonate with the Indian experience, teach us that there is a lot to be done, and organizations need to come together and pool their collective resources and efforts to create synergies.

Where do you go from here?

We are deepening our work both in India and globally. While continuing to increase the number of organic cotton farmers, we also focus on strengthening farmer collectives. We need to drive a shift from philanthropic to market based models. Simultaneously, we will continue to support OCA's work to bring the industry together and embed newer business models in the sourcing operations of brands. These business models are aimed at both improving the business case for farmers as well as the integrity for brands. OCA will also coordinate industry investments into areas, such as seed research and breeding. While actively engaging with agriculture universities, research institutes and seed companies to address the seed challenge, C&A Foundation is committed to contributing towards a robust global strategy for non-GM seed. Collaboration is critical to make organic cotton thrive.

For more information on the C&A Foundation's work in organic see the Foundation's <u>2017 Annual Report</u>

Read more inspiring stories from Textile Exchange's Insider Series here, which showcases an eclectic mix of industry leaders speaking from "inside" their organizations.

Organic Cotton Round Table



The Organic Cotton Round Table continues to regionalize

Textile Exchange's Organic Cotton Round Table (OCRT) provides the shared space needed for the organic cotton community to convene, learn more about issues facing the organic cotton sector and, most importantly, find ways to take action.

After six years of approaching barriers to growth in organic cotton at the global level, the benefits of regionalizing strategies has become increasingly apparent. Ultimately, the same issues and opportunities exist for all, but each region is at a different stage of development and therefore requires a different strategy, alongside designated resources, investment models, and networks of supporters.

Textile Exchange has found that bringing people together at the regional level from all parts of the supply network is a powerful way to catalyze action by bringing region-specific opportunities into focus, strengthening existing efforts and initiatives, and shaping customized approaches.

Textile Exchange first introduced the concept of the <u>Regional OCRT in Izmir</u> in 2017. In partnership with Izfas, it was designed to explore opportunities for organic cotton in Turkey, Egypt and Central Asia, returning again in May 2018 (more on page 42). The success in Izmir has now led to the launch of the <u>Regional OCRT Burkina Faso</u>, part of a new collaboration with Catholic Relief Services on a series of organic cotton focused activities in West Africa (more on page 26).

We are at an exciting stage now where we can learn from our collective experience in other regions, tap into what works, and fast-track innovation and action!



Global OCRT Milan 2018: launch of the global assembly

In line with the OCRT's current regionalization strategy, the <u>2018 Global</u> <u>OCRT in Milan</u> will put the spotlight on the great work and collaborations taking place in each region.

This will be achieved through the cocreation of a General Assembly for Organic Cotton. Delegations from each region will come together alongside brands, retailers and other stakeholders, to report on and discuss globally their regional updates, activities and successes. The General Assembly will take the informal linkages of the current OCRT to a more focused and mindful model of engagement between stakeholders, encouraging a two-way flow of information between regional communities. All of the ingredients that make the OCRT so valuable to stakeholders will remain, such as the multi-stakeholder, accessible, and catalytic principles, with the added impact of strengthened interaction

between regions, supply networks and global thinking to develop the pathway to regional growth.

OCRT Scholarship Fund

Textile Exchange has always striven to ensure that the OCRT is as inclusive as possible and, with the new General Assembly approach this year, it is more important than ever to have voices from each region and part of the supply network in the room. We have therefore established the OCRT Scholarship Fund, contributions to which will go towards providing support to farmers and other regional representatives who wouldn't otherwise have the means to travel to Milan to participate in the 2018 OCRT. Benefits also flow back to brands and other stakeholders, who gain the opportunity to meet and learn from a wider range of producers and regional representatives.

Organic cotton & the Sustainable Development Goals



The U.N. Sustainable Development Goals — also known as Global Goals or the SDGs — is an inter-governmental agreement of the United Nations and 193 countries that provides a framework of 17 specific, aspirational goals that address the social, economic and environmental dimensions of sustainable development.

Organic cotton can play an important role in helping countries achieve the SDGs. Millions of people around the world live in rural communities dependent on agriculture. Holistic organic farming systems based on the organic principles of health, ecology, fairness and care build thriving and resilient communities that attract people to stay on the land rather than move to cities, regenerating and nurturing the earth, its resources, and its people.

The UNDP has identified three priority SDGs as central to its strategic plan - 1: End Poverty, 10: Reduced Inequalities, and 16: Peace, Justice and Strong Institutions. Organic cotton makes a significant contribution to all three providing a market-driven solution to poverty, reducing inequality by raising farm incomes, and promoting inclusive societies through its reliance on cooperative working. Organic cotton is the vehicle to organic communities, and success depends upon SDG 17: Partnership for the Goals, building committed, interdependent supply networks that share risk and reward.



Learn how organic cotton helps achieve the SDGs:

- Achieving SDGs Through Organic Cotton (webpage)
- Achieving SDGs Through Organic Cotton (pdf)
- Global Organic Textile Standards & the SDGs
- How Textile Exchange is supporting the SGDs



How can the textile industry advance these targets?

KPMG and Textile Exchange have just released a report entitled "<u>Threading</u> <u>the Needle: Weaving the SDGs into the</u> textile, retail and apparel industry".

A culmination of industry interviews, NGO input, and desk research, the report highlights shared value examples for companies in the sector grappling with how to integrate the SDGs into their core business and global supply chain. The report builds on the SDG Industry Matrixes, by taking a value chain approach to corporate action on the SDGs specifically in the apparel sector.



Brand commitments to organic cotton

Where organic cotton was once seen as "niche," today, brands of all sizes are making it a major component of their fiber and material portfolios. More and more brands and retailers are setting targets and signing up to commitments for increasing their use of organic cotton, encouraged by growing evidence of the sustainability benefits of the fiber, and by the millennial generation bringing its buying power to the market.

According to the Key Insights Report from Textile Exchange's 2017 Preferred Fiber & Materials Benchmark, 60 percent of participants who completed the organic cotton module said they have set SMART targets for uptake of organic cotton. Many are also part of public, group commitments such as the German Textile Partnership or the Sustainable Cotton Challenge. Such commitments are driving change in supply chains as brands invest in finding innovative and long-term solutions to secure supply and build greater transparency. Superdry, for example, has said it will be working with farmers and suppliers to support and help grow the organic cotton sector in order to be able to reach their ambitious goal of using 100 percent organic cotton by 2040.

Other brands are making strong commitments too, including (but far from limited to): Skunkfunk, Stella McCartney, and EILEEN FISHER, who have all committed to sourcing 100 percent organic cotton by 2020; Mantis World, who commits to 100 percent organic cotton by 2021; and Nudie Jeans Co, who committed to 100 percent organic cotton by 2017, a target they have now achieved.

Many more brands are committing to using organic cotton as part of their wider commitments to source all of their cotton from more sustainable sources, such as those brands that have signed up to the Sustainable Cotton Challenge or are part of the German Textile Partnership.

German Textile Partnership's big shift towards organic cotton

The German Textile Partnership is a multi-stakeholder partnership with the objective of achieving social, environmental and economic improvements all along the textile supply chain. Partners include the following stakeholder groups: business sector; non-governmental organizations; trade unions; standards organizations; and the German government. From 2018, the Partnership for Sustainable Textiles will have binding deadline and volume targets for all members. Alongside individual goals, Partnership members have jointly agreed to use at least 35 percent sustainable cotton by 2020, with 10 percent of the total volume being organic cotton. The aim is to increase the proportion of sustainable cotton to 70 percent by 2025, with 20 percent being organic cotton.

2025 Sustainable Cotton Challenge

In May 2017, 13 of the world's most renowned clothing and textile companies, in the presence of His Royal Highness The Prince of Wales, signed up to the <u>2025 Sustainable</u> <u>Cotton Challenge</u>. In October 2017, 24 more companies signed up at Textile Exchange's annual conference. C&A also joined in January 2018, bringing the total number of companies to 38.

The initiative is a catalyst to spur a shift in the market towards the use of more sustainable cotton. Through this challenge, these companies have committed to ensuring that 100 percent of the cotton they use comes from sustainable sources by 2025. In March 2018, it was decided that the International Sustainability Unit would close. Given this decision, it was agreed that Textile Exchange would take over the role of the initiative's Secretariat, and we are thrilled to help keep this great momentum going.

If your company is interested in signing up for the 2025 Sustainable Cotton Challenge, please fill out the Pledge on the initiative webpage.

Participating companies are required to independently publish their progress through Textile Exchange's <u>Preferred</u> Fiber & Materials Benchmarl Program.

Q&A with Crispin Argento



Crispin Argento Executive Director, Organic Cotton Accelerator

Q Tell us about your vision for the organic cotton sector

At OCA, we are committed to creating a prosperous organic cotton sector that benefits everyone — from farmer to consumer. To drive this commitment, OCA Affiliates and Partners have come together to make organic cotton a viable, scalable and impactful solution for all. OCA is focused on accelerating investments and interventions that serve the sector – addressing challenges throughout the supply chain with emphasis on the farm and farmers.

As a global platform, OCA celebrates the diversity within the cotton sector; we value the contributions that sustainable cotton has made to advancing positive impact all over the world. Our larger vision recognizes organic cotton's role in meeting 2030 Sustainable Development Goals and we take special pride in the vital role OCA plays in driving all sustainable cotton forward.

What are you most excited about doing in your new role?

I am thrilled to be leading OCA at a time when the sustainable cotton sector is gaining that critical momentum to bring lasting change. Personally, I am humbled and honored for the opportunity to work with people across the sector and around the world, who have dedicated their lives to advancing organic cotton from farmers to spinners, brands to activists, to the people on my team. It is their vision, expertise and commitment that inspires my dedication to OCA's and the sector's success. That is what truly excites me.

What is the key role you see OCA playing?

As an accelerator, OCA was formed to drive the solutions in the sector that will lead to systemic and lasting changes through its investments and interventions

Read more inspiring stories from <u>Textile Exchange's Insider Series here</u>, which showcases an eclectic mix of industry leaders speaking from "inside" their organizations.

at the farm. Through our mission, we are focused on integrity, supply, quality and impact. Our "farm first" approach brings together the entire supply chain to invest in programs and innovations and support the farmers that dedicate themselves and their families to growing this extraordinary fiber for our benefit and enjoyment.

As we continue to come together as a sector around a shared vision and platform through OCA, we will finally realize the full potential of organic cotton and its contributions for people, planet and long-term prosperity for generations to come.

What have been the key learnings in the journey above?

OCA is focused on engaging and developing farmers, seed and scaling investment in the sector to accelerate integrity, quality, supply and impact globally. This includes a cutting- edge direct brand-to-farm sourcing service, farmer capacity building, industryleading farm business intelligence and impact data, investments in non-GMO seed innovations, integrity and product traceability as well as the development of a fund to empower farm groups and scale sector investments.

Where do you see OCA in a year's time?

OCA is the first market-driven multistakeholder initiative dedicated entirely to the enrichment and promotion of organic cotton. Since its inception at the Organic Cotton Round Table (OCRT), OCA has set ambitious goals around growth, but recognizes there are many immediate solutions that will lead to real impact in the near future.

Over the course of this year and the next, it is OCA's primary responsibility to bring the sector together to leverage our collective expertise, mobilize resources and continue to demonstrate through our programs and interventions that organic cotton is a viable and scalable solution from farmer to consumer.

OCA is a movement, a platform and a tool to make organic cotton a success. Where and how far we go as a sector will be entirely up to those that have made organic cotton their business. It is our willingness, together as representatives of the sector, to work and invest in its future. What that looks like I don't know, but I imagine it includes a future where organic cotton is synonymous with positive economic, social and environmental impact for all.

For more information, visit the <u>OCA</u> website.

Stakeholder directory

Who's doing what across the globe?

This map locates the headquarters of some of the key international organizations working on organic cotton. Region-specific activities are detailed later in this report.



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SWITZERLAND

Non-profit

bioRe Foundation

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Organic cotton pricing

There is no universally accepted definition or formalized mechanism for arriving at a price for organic seed cotton or fiber.

The rule-of-thumb is to take a reference price (this is usually the conventional cotton price quoted in the country of origin or on the international commodity market at a set time) and add a percentage increase to cover the organic value addition, and possible compensation for a loss in yields.

This differential is often called a "price premium", at Textile Exchange we refer to it as a "price differential." It is agreed to between buyer and seller, yet heavily influenced by conventional commodity market prices.

Differentials on the seed cotton or on the lint (ginned fiber) can range depending on factors such as:

- Market conditions and price elasticity, and market variances (in the supply and demand cycle)
- Quality and staple length
- Country of origin
- Amount of trash or contamination

- Trade agreements between producers and buyers
- Fairtrade certification on top of organic certification.

The average price differential is somewhere between 5 and 20 percent, but can be as little as one percent or as large as 100 percent.

The price differential is supposed to cover:

- Cost of production (and any losses in yield)
- Internal Control System (ICS), certification and inspections
- Training and extension services
- Investment in farming operations
- A percentage may also go towards the collective needs of the community such as schooling, health care, and housing
- Research, development and investment in seed and farm innovations

The seed cotton price is the amount paid for the harvested cotton bolls (with seed still attached). It is the seed cotton price that is most important to farmers who are trading at the farm gate, often receiving their annual income in one lump sum. Farmers sell to aggregators, ginners, mills, occasionally to brands, and also to traders in the open market.

If farmers are vertically integrated into the mills, or they have agreed trade and price arrangements with a buyer, partner company or organization, the price can be decoupled from the commodity market, or at least a minimum price is agreed upfront, alongside other terms and conditions of trade.

Costs during manufacturing, such as factory certification, bookkeeping, chain of custody, product segregation, possibly machine cleaning and running smaller volumes, need to be part of the final costing, but it is the value-addition at the growing stage where the majority of the organic benefits are made.

[See more on pricing models here: <u>A World Beyond Certification: A best</u> <u>practices guide for organic cotton</u> <u>trading models, Textile Exchange and</u> <u>Kering, page 21-25.]</u>

Country	Fiber type	Seed US\$/kg Avg.	Lint US\$/kg Avg.
Benin	S-M-L	0.55	2.10
Brazil	S-M-L	0.80	2.40
Burkina Faso	S-M-L	0.60	
China	L-ELS		3.39
China	S-M-L		2.93
Egypt	L-ELS	1.39	4.13
India	S-M-L	0.72	1.90
India	L-ELS	0.88	2.15
Kyrgyzstan	S-M-L		1.80
Mali	S-M-L	0.60	
Pakistan	S-M-L	0.55	1.45
Peru	L-ELS	0.94	2.79
Senegal	S-M-L	0.60	
Tajikistan	S-M-L	0.55	1.88
Tanzania	S-M-L	0.58	
Turkey	S-M	0.71	2.08
Turkey	M-L	0.78	2.17
Uganda	S-M-L		1.52
USA	S-M-L		2.55
USA	L-ELS		3.33

Note: This organic cotton pricing tables above and over page provide estimated figures only, based on conversations with local experts. In 2016/17, according to our information, organic cotton prices ranged from US\$/kg 1.45-3.33 (average of 2.34) compared to the Cotlook Index that ranged from 1.71-1.95 (average of 1.82) over the same time period. Please refer to graphs over page, and accompanying text that explains factors affecting price, alongside organic differentials.

ORGANIC SEED COTTON & ORGANIC LINT COTTON PRICES (2016/17)



The organic lint price is the market price of post-ginned cotton fiber. The seeds have been removed (for seed selection breeding or for processing by the organic food or feedstock sector). The fiber is compressed and baled for the textile industry. This is the product that feeds spinning mills, sold to spinners by either farmers, ginners, or traders.

Turkish organic lint prices averaged 2.17 USD/kg, ranging from 1.90 to 2.32 USD/kg, depending upon quality and staple length. Turkish organic fiber averaged 10 percent higher than conventional prices on the Izmir Commodity Exchange.

In China, organic fiber prices averaged 2.93 USD/kg (differentials ranging 15-35 percent over conventional). Organic ELS prices averaged 3.28 USD/kg, up to 60 percent higher than conventional ELS.

USA organic upland averaged 2.55 USD/kg, around 40 percent over the Cotlook Index. USA organic Pima sold at 3.33 USD/kg.

In India, sales of organic (short, medium, long) fiber averaged 1.90 USD/kg, around 7% more than conventional. ELS fiber averaged 2.15 USD/kg.

Peruvian organic (high quality ELS pima) lint prices averaged USD 2.79, but prices varied through the year from USD 1.95 to 3.63.

Brazil produced Fairtrade organic cotton in North West of the country. The fiber prices ranged between USD 1.80 and 3.00 per kg, averaging 2.40 USD/kg.

Organic fiber from Kyrgyzstan, Tajikistan and Pakistan was priced between 1.45 and 1.60 USD/kg.







Fiber classification



Photo: C&A Foundation, Tanzania





In East Africa, Tanzania continues to account for the vast majority of the region (as well as the continent's) organic cotton production, followed by Uganda. Ethiopia will also join the mix in 2017/18 as PAN UK's project reaches certification.

In West Africa, the 2016/17 season saw favorable climate conditions which, combined with training and support received by farmers in Benin and Burkina Faso, resulted in an increase in production in each country except Mali, where investment is lacking.

While farmer numbers in the region decreased by 2 percent, production increased by 33 percent, reflecting improvements in yield experienced in Benin and Burkina Faso. These two countries accounted for the majority (53 and 37 percent, respectively) of West Africa's total organic cotton production in 2016/17.

BENIN

In Benin, the partnership between the national Organization for the Promotion of Organic Agriculture (OBEPAB) and PAN UK enabled the recruitment of two additional female field agents. Farmers have been trialing new methods, such as using palm oil processing residue as fertilizer. As a result, producers achieved the highest organic cotton yield in the West Africa region, at 226 kg fiber/ha.

BURKINA FASO

In Burkina Faso, the RECOLTE project, led by Catholic Relief Services (CRS), continues to support farmers of the National Union of Cotton Producers of Burkina (UNPCB) in training to improve production techniques. This resulted in an impressive yield increase of 63 percent in 2016/17. RECOLTE is also involved in developing the first organic cotton gin in West Africa, as well as a new seed development initiative that aims to improve the quality and quantity of non-GMO seed in Burkina Faso.

Textile Exchange is partnering with CRS on a series of activities in Burkina Faso in 2018, including a Regional Organic Cotton Round Table. Read more about this and other CRS/ RECOLTE project updates on pages 26 and 28.



MALI

Mali's production of organic cotton, which reduced significantly in 2015/16 when the group MOBIOM ceased production, remained stable in 2016/17. However, it is expected to decrease again next year, largely due to reduced farmer training and support. This support was previously provided by HELVETAS' organic cotton program, which has now ended. The National Federation of Producers of Organic and Fair Farming in Mali (FENABE), which is made up of some of MOBIOM's previous farmers but also many newcomers, sells its organic cotton through The Malian Textile Development Company (CMDT) but is finding it lacks the support required to grow the project. There is, however, a new project being initiated that could turn this situation around (see page 28).

SENEGAL

In Senegal, Yakaar Niani Wulli (YNW), which was the main producer group in previous years, has ceased producing organic cotton after struggling to find a market for it.

A new farm group was created named SODEFIX, located in the district of Missirah Wadene in the west of the country. SODEFITEX produced 4 MT of organic cotton fiber in 2016/17 but, unless the market situation changes, little growth is anticipated in the near future.



Photo: Pesticide Action Network UK, Ethiopia

TANZANIA

In Tanzania, an impressive 9.2 percent of the country's overall cotton production is organic, which is the second highest rate globally (after Kyrgyzstan). This figure is expected to grow further in the coming years, with both of the countries' organic cotton producer groups, bioRe Meatu and BioSustain, expanding their production.

bioRe Meatu has over 1,000 ha currently in conversion to organic. The group buys cotton from farmers based on floor prices set by the government every season, with a 15% premium added based on the average price of the last five years.

BioSustain is collaborating with the C&A Foundation and Cotton House Africa, with plans to significantly expand its land area and farmer numbers over the coming years.

UGANDA

Gulu Agricultural Development Company (GADC), which accounts for all of Uganda's organic cotton production, saw an additional 2,319 farmers become certified in 2016/17, resulting in a 155 percent increase in production, from 300 to 765 MT fiber. This follows a recent development project that included agricultural training for farmers. 2017 saw the start of a 3-year support program, which aims to strengthen village communities, provide financial training, and establish self-organized support groups.

This year's crop has confirmed the good performance of the newly introduced seeds with all organic farmers registered with bioRe Tanzania Ltd. The higher yields as well as the good fiber quality (28mm) are benefitting both the farmers and the industry alike. It is a great success of the team of bioRe Tanzania Ltd. that the efforts of more than twenty years of promoting organic practices are now materializing in improved livelihoods of farmers.

Christa Suter Managing Director, bioRe Foundation



Photo: Top and bottom left: bioRe, Tanzania; Bottom right: C&A Foundation, Tanzania

Q&A with Prama Bhardwaj



Prama Bhardwaj

CEO and Founder, Mantis World | Chair of Textile Exchange's Pan-Africa Sourcing Working Group

Why Africa?

In 2015 I was chairing a breakout session on Africa at the OCRT in Hamburg. There was a strong desire from brands and retailers to explore sourcing from Africa and from farming groups who needed markets for their organic cotton, but no one really knew how to connect and where to go. As a result the Pan Africa Sourcing Working Group was created to map, connect and grow sourcing of organic cotton and sourcing in Africa. The interest in the work of the Group demonstrates clear signals for growth and understanding of this sector.

Sub-Sahara Africa affords several benefits for sourcing organic cotton. Many countries have banned GMO cotton, and because of the small number of actors in the field, transparency and integrity are assured. There is huge potential for poverty reduction without the damaging environmental impact we have seen in other regions where intensive farming of conventional cotton has been the norm.

At Mantis World we have always sourced from Tanzania since we started 18 years ago. Not just the raw material, but finished garments and we have now switched all our Tanzanian production of garments to organic cotton certified to GOTS and OCS standards. So we know that it is possible albeit not without challenges and hope to act as an example and source for other brands and retailers.

How Far have we come as an industry?

Interest in the region has never been stronger. At Mantis World, we have more customers than ever asking for "made in Africa" garments. We are seeing huge growth of organic farmers in Tanzania and Uganda, the regional OCRT bringing together actors in West Africa and an exciting project of in conversion cotton in Ethiopia. There has also been a dramatic rise in manufacturing facilities in some countries – notably Kenya and Ethiopia.

However there is so much more to do to increase yields, provide support for farmers and to create markets for the cotton. In some countries, there are many multi sector actors who are working collectively in the region from NGOs, brands and retailers, Government agencies, producers and suppliers. This is the sort of collaboration needed to bring about meaningful and sustainable long term growth across the region.

Q Where next?

Sub sahara Africa is diverse and young – the average age is 18 compared with the average age in Europe of 40. So many of tomorrow's consumers and innovators will be African. I hope to see consolidation and growth of trade within the region as African consumers will need supply of textiles, and a growing number will want to move away from buying the fast fashion castoffs from the West. Similarly, brands and retailers in the West would be wise to consider new supply lines from Africa where transparency is readily available and lessons can be learned from other textile producing regions. The availability of raw material including organic cotton already exists – I hope in the medium term we will see the development and growth of a high quality supply chain.

Through multi stakeholder discussion, I believe Governments will hear a loud and clear message of what is needed at the policy and implementation level to really propel growth. The supply chain needs to be developed so that much needed value addition is kept within the region, bringing with it technology, employment and development. The work Mantis World is doing with vertically integrated factory Sunflag Tanzania keeps the whole value chain in one country in Africa and so we know that it is possible. What will be needed is more investment along with a favourable policy climate to really grow the sector and make it more commercially viable.

Read more inspiring stories from <u>Textile Exchange's Insider Series here</u>, which showcases an eclectic mix of industry leaders speaking from "inside" their organizations.



What Textile Exchange is doing

Regional Organic Cotton Round Table | Burkina Faso September 28, 2018

Textile Exchange is delighted to be collaborating with Catholic Relief Services (CRS) on a series of organic cotton focused activities in West Africa. These include the launch of a new <u>Regional Organic Cotton Round</u> <u>Table</u> (OCRT) in Koudougou on 28th September 2018, a Market Opportunity Scoping Project (MOSP), and a documentary-style video. The agenda for the Regional OCRT will be framed around the results of the research interviews that were carried out for the MOSP by Change Agency.

Held during the Salon International du Coton et du Textile (SICOT, 27-28th September), the Regional OCRT is part of four days of events focused on organic and fair trade cotton in West Africa, including a workshop of the Organic and Fairtrade Cotton Coalition West Africa on 26th September, and a field trip on 29th September.

Pan-Africa Sourcing Working Group

Textile Exchange's Pan-Africa Sourcing Working Group was initiated at the 2016 Organic Cotton Round Table in Hamburg, when it was proposed that a group be established to work on the various priorities that had been identified for expanding organic cotton production in Africa and better connecting to supply networks. The group is chaired by Prama Bhardwaj, CEO of Mantis World, and currently has 23 members. Virtual meetings are held quarterly, with occasional in-person meetings, usually held during the annual Global OCRT. The ultimate objective of the group is to develop and support the market for preferred/more sustainable cotton produced in Africa. The current focus of the group is to map the African cotton and sustainability sector by building a stakeholder map and a supplier directory.



We are excited and eager to partner with Textile Exchange in growing the organic cotton sector in Burkina Faso and the region. Connecting to different markets, thousands of organic cotton producers, more than half of whom are women, for inclusive and sustainable development are our common goals.

Boubacar Kamissokho

Chief of Party, CRS RECOLTE Project Burkina Faso

Organic and Fairtrade Cotton Coalition West Africa



The Organic and Fairtrade Cotton Coalition West Africa was launched in December 2017 by six producer organizations from Mali, Burkina

Salon International du Coton et du Textile

The <u>Salon International du Coton et</u> <u>du Textile</u> (SICOT) aims to expose and promote Burkina cotton as an industry for capital investment into cotton processing. It will be an opportunity to Faso, Senegal and Benin together with Aproca, ecos and FiBL and in partnership with Fairtrade International and Textile Exchange. The aim of this initiative is to establish and maintain market access for tens of thousands of small farmer families in West Africa producing organic-fairtrade cotton and other organic crops.

increase international trade by creating linkages between cotton companies, the National Cotton Producers Union of Burkina (UNPCB), and buyers from all over the world.

If you'd like to find out more about Textile Exchange's Pan-Africa Sourcing Working Group or Regional OCRT, please contact <u>Materials@TextileExchange.org</u>.



Photo: Pesticide Action Network UK, Ethiopia

Pesticide Action Network supports 200 cotton farmers in Ethiopia to achieve organic certification

Since 2013, with financial support from TRAID, Pesticide Action Network (PAN) has been providing support in the form of finance, technical assistance and market linkages to over 2,000 smallholder cotton farmers in southern Ethiopia. Organic cotton production requires confident, well-trained farmers with crop and pest management and problem-solving skills.

The training offered by PAN through its Farmer Field Schools demonstrates the benefits of good crop husbandry, Integrated Pest Management (IPM), and soil improvement without the use of expensive and hazardous pesticides.

In December 2017, 200 of the farmers in this project gained organic cotton

certification. By learning to farm sustainably, these farmers are not only protecting their health and that of the planet but are also achieving yields over 100 percent higher than untrained farmers in the same area.

As of early 2018, there is a total of 2,883 smallholder farmers involved in the project, with even more expected to join over the coming year. There is potential, therefore, that this region's production of organic cotton could grow significantly, though it is important to note that the decision on whether or not to certify to organic is entirely up to the individual farmer, so the extent of this growth in not yet certain.

C&A Foundation's organic cotton program, Tanzania

2017 marked the beginning of C&A Foundation's organic cotton program in Tanzania. The program, implemented by GIZ, currently trains over 5,000 cotton farmers on organic cotton cultivation practices. Two progressive cotton companies – Alliance and BioSustain – are facilitating the training and ensuring that the farmers have access to seeds and bio-pesticides.

These companies have been leaders in Tanzania's sustainable cotton movement and, through their support, it is expected that, in its first year, the program will yield 1,200 MT in-conversion cotton lint.



Photo: Top & bottom left: C&A Foundation, Tanzania; Bottom right - Pesticide Action Network UK, Ethiopia

Pesticide plants for organic cotton in Mali

The Royal Botanic Gardens at Kew in the UK is carrying out a Pesticide Plants Project for the production of organic cotton in Mali, funded by the Darwin Initiative and TRAID. The project is working with local farmers and national institutions in-country to understand the current use of pesticide plant species. It will not only identify those pesticide plant species and their active compounds, but help cultivate them, optimize their use and promote awareness of biodiversity and pesticide plants among policy makers and local people.

The first organic cotton gin in West Africa

On February 15th, 2018, the groundbreaking ceremony took place for the first organic cotton gin in West Africa, located in Koudougou. The gin is a collaboration between the USDA-funded RECOLTE project, CRS, UNPCB, and SOFITEX. It is hoped that the gin will be up and running by early 2019.

The installation of the plant will enable UNPCB (National Union Of Cotton

Growers Of Burkina) to resolve bottlenecks related to delayed ginning of organic cotton. This, in turn, will encourage growth in organic cotton production and international trade. Currently, organic cotton is ginned six months later than conventional cotton, which delays the entire production chain and payment to producers and, in turn, discourages timely organic cotton production and participation.



Photos: Top & bottom left - Textile Exchange, Burkina Faso; Right - RECOLTE Project/ Catholic Relief Services, Burkina Faso



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个 52% Fiber (MT) Year-On-Year Growth





19% Share of Global Organic Cotton Production





There are three main provinces producing organic cotton in China -Xinjiang, Gansu and Hubei - though the majority of production takes place in Xinjiang. There was a significant increase of 52 percent in the country's production of organic cotton in 2016/17, particularly of cotton certified to China's National Organic Program (NOP). This took China's total production to 22,521 MT, 19 percent of the global total.

This increase in production is, for the most part, fueled not by the textile industry but by demand from the organic dairy industry, which uses organic cotton seed as feed for dairy cattle, particularly in the Xinjiang region.

China has a significant area of land in conversion to organic, totaling 5,108 ha in 2016/17, which will reach certification over the next couple of years, indicating that the current growth trend in China's organic cotton production looks set to continue. In China, to sell a product as organic, brands and retailers need to be certified to China-NOP (GOTS and OCS cannot be labeled). As a result, local brands, particularly SMEs, have also begun to adopt the China-NOP for the domestic market. The China NOP standard is much more strict in terms of requirements, for instance allowing only natural dyes and requiring the cotton used in the product to be 100 percent organic.

In terms of organic cotton pricing, the gap between China and India seems to have narrowed compared to last year, though is still significant. A number of farms are focusing on growing ELS organic cotton as a way to combat the price differential between China and India.

Suppliers in China have noted that brands are beginning to ask more frequently about sourcing organic cotton from within China, but quantity remains an issue. Demand aggregation and clustering is something that Textile Exchange's China Working Group will be looking at as a potential solution.



What Texile Exchange is doing

China Working Group

Textile Exchange's China Working Group was formed following the Regional Strategy Meeting for China held during the 2017 Organic Cotton Round Table in Washington D.C. At this meeting, many questions arose and the need for a region-specific working group became apparent.

Though Textile Exchange already has fiber-specific working groups, it was decided that a cross-cutting, multi-fiber working group was needed for China. This was due to the country being the biggest producer and user of many of the world's major fibers and materials, and also having a large and growing fashion and apparel market.

Though relatively new, the China Working Group already includes members from brands, suppliers, manufacturers and industry organizations. The aim is to create a framework, network and business case on which China has the knowledge, confidence and supply chain connections to collectively move from conventional to preferred fibers and materials at scale, resulting in substantial reductions of environmental impacts.

Key focus areas for the group include:

- Education and training to engage consumers, the market place, suppliers and manufacturers.
- Harnessing the momentum of the SDGs, which China is leading on.
- Supplier mapping to build networks and supporting suppliers in the adoption of preferred fibers and materials.
- Transparency and traceability to ensure integrity.
- Clarification on regulations to address misconceptions.

If you'd like to find out more about Textile Exchange's China Working Group, please contact Evonne Tan: <u>Evonne@</u> <u>TextileExchange.org</u>



Q&A with Veronica Yow



Veronica Yow

Manager, Sustainable Markets & Finance, Rare

Q What was great about 2017?

Meeting Qi Sugin for the first time during the brands site visit that we organized. Ms. Qi is a farmer and also the Campaign Manager for Rare's "Let's Farm Organic" project which is funded by C&A Foundation. She helps to promote organic practices among her peers at our partner farm. I've known of Ms.Qi for a couple of months then but have not met her vet. When I saw her, she immediately embraced me like an old friend even though we've never met. Through that site visit, we secured a 3-year purchase agreement from a local Chinese brand for that farm. Although the quantity isn't big, it's a good beginning to get more brands to support organic/in transition particularly in China.

What are you working on right now?

We are supporting farmers to transition Extra Long Staple cotton towards organic cultivation in Xinjiang, China and promoting organic and climatesmart practices that improve the soil such as compost and improved residue management.

We also begun a new and exciting partnership with Shokay, which specializes in yak wool to develop a Yak Cotton blend from in transition cotton from our partner farms to offer more varieties of organic/in transition products, especially for smaller brands which normally only source fabric. More information is available here.

What was the most important lesson you've learnt since starting your work in organic cotton?

Feed the soil and let the soil feed the plants. Organic certification serves a certain function but is not a true proxy for environmental outcomes. We need to align intention and incentives to actively support farmers adopt practices that will restore soil health and there needs to be a financial mechanism that meets this need. Organic premium again is based on production. Models like carbon insetting helps companies to invest in practices that reduce carbon emissions within their supply chain while supporting farmers to adopt carbon farming practices. This helps companies to meet both sustainable sourcing and climate goals.

What ilnspires and excites you to keep going?

Seeing the difference in the soil when compost is applied vs. commercial organic fertilizer vs. chemical. The color, the texture, the moisture in the soil and when you smell the soil, you smell life. And especially when farmers see and understand this.



Photos: Rare, China

Read more inspiring stories from <u>Textile Exchange's Insider Series here</u>, which showcases an eclectic mix of industry leaders speaking from "inside" their organizations.



C&A Foundation organic cotton program in China

C&A Foundation supports organic cotton cultivation in China in collaboration with two key partners – CottonConnect and Rare. Currently C&A Foundation's partners support farmers with organic cotton cultivation in three provinces – Hubei, Shandong and Xinjiang. Across these three regions 347 Hectare area is under organic cotton cultivation yielding 4 MT lint certified and 186 MT lint in conversion. The foundation's efforts have motivated the commitment of supply chain actors, with additional investment support coming in from Huiton – a spinning mill based in Shandong, and Organic Cotton Awareness – a local Chinese brand to the farmers in these programs.



Photo: CottonConnect, China

CottonConnect's activities in China

CottonConnect works closely with brands on interventions aimed at improving productivity and reducing environmental impacts in cotton production in China, through REEL Cotton, BCI and organic programs. CottonConnect implements projects in the Xinjiang, Hebei and Shandong regions.

Women account for 45 percent of the total employed population in China. Fewer female farmers than male farmers attend CottonConnect technical training, though they are major workforce in cotton farms. CottonConnect therefore introduced the Women in Cotton program into China, consisting of Farmer Business School and Rights and Life Skills. Farmers Business School encourages farmers to see their farm as a business and CottonConnect has introduced them to new technologies, microfinance and credit options. It is a first step towards long term resilience for communities, providing a platform for access to finance and community organization. The Rights and Life Skills training Women in Cotton communities are trained and empowered with the skills to take action in their lives, and are respected.

Together with C&A Foundation, CottonConnect provides technical and financial support to farmers in China, enabling them to convert to organic and become certified.

To find out more about CottonConnect's activities in China and other cotton growing regions visit their website: cottonconnect.org



Photos: CottonConnect, China

Rare's extra-long-staple organic cotton

Since 2015, Rare, as part of a program funded by C&A Foundation, has leveraged its renowned community behavior-change approach to help establish an organic cotton presence in China. In 2018, Rare partnered with two large farms in the Xinjiang region to begin producing organic Extra-Long-Staple (ELS) cotton. ELS cotton is the prominent textile for luxury products. Its high staple-length allows for a finer yarncount, ensuring a more premium feel, and greater longevity. China's particular variety of ELS (grown exclusively in Xinjiang) is comparable with the prestigious Peruvian Pima, Indian Suvin, and Egyptian Giza cotton varieties.

The first farming partner, Luthai Farm, was the first Better-Cotton-Initiative (BCI) farm in China, and remains the nation's largest (conventional) ELS cotton grower. In collaboration with the Fujian Academy of Agricultural Sciences, Luthai now practices biological pest control, introducing predatory mites, spraying BT bio-pesticides, and planting corn as a trap-crop. Vertically integrated from farm to manufacturing, Luthai has transitioned 207 of its 6,667 hectares of land to organic ELS cotton this past year.

The second farming partner, Jintian Farm, is one of the few farms in Xinjiang to practice crop rotation (alternating between rice and cotton every three years). Established in 2004 as a family-business, Jintian adopted Rare's community-based approach to engage the now 200+ Jintian farmers in adopting organic farming practices. Jintian transitioned 58 of its 1,467 hectares of lands to organic ELS cotton this past year. Jintian is also located on the path of migratory birds.

Both farms remain deeply excited about the prospects of their premium, environmentally conscious fiber.



Photos: Rare, China
Stakeholder directory

Who's doing what in China?

This map highlights some of the key organizations working to support organic cotton in this region.



 Supply Chain Intervention:
 Image: Standards/Chain of Custody
 Image: Market making

 Field-level Intervention:
 Image: Field data & analytics
 Image: Development
 Image: Field capacity building & training
 Image: Convening:

 Informing & Convening:
 Image: Education & awareness raising
 Image: Market research & analytics
 Image: Market research & analytics
 Image: Market research & analytics

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Photo: Cotonea, Kyrgyzstan

2,614 Organic Farmers



24,756 Organic Cotton Fiber (MT)

3,887 Organic In-Conversion Land (ha)

17,407

Organic Certified Land (ha) Fiber (MT) Growth Over 2015/16

21%

Share of Global Organic

Cotton Production



5-YEAR PRODUCTION TRENDS



Please note that, since publication of the 2017 OCMR, it has come to our attention that the data reported for Turkey, Kyrgyzstan, and Tajikistan's 2015/16 production was incorrect. Additionally, it has since been discovered that Greece also produces some organic certified seed cotton, though it is not separated at the gin and is therefore not currently sold as organic cotton fiber on the market.

REGIONAL PRODUCTION



Overall, this region experienced a seven percent rise in organic cotton production in 2016/17. Though Central Asia (in this case Kyrgyzstan and Tajikistan) experienced a marginal decline in production following the considerable spikes seen over the previous two years, Egypt and Turkey both saw increases. Additionally, it came to our attention that Greece is also producing organic cotton (read more opposite), which further bumped up volumes.

EGYPT

In Egypt, there is exciting news from FILMAR SpA's Cottonforlife project, which recently announced that it is being scaled up to a National Project through the United Nations Industrial Development Organization (read more on page 44).

There was also good news from SEKEM, which saw its total organic cotton production more than double.

GREECE

It came to our attention this year that there is cotton being grown organically in Greece, though it is not separated at the gin due to the quantities rarely reaching processing minimums and is, therefore, not currently sold as organic cotton fiber on the market. For manufacturing organic cotton yarn, Greece currently imports organic fiber from Turkey.

According to the Greek Ministry of Rural Development and Food, there were 1,153 ha of land growing organic cotton in 2016/17. Total production is estimated at 2,500 MT seed cotton, which would be equivalent to around 850 MT fiber.

Greece's most important area for cotton production, and where the organic cotton is also grown, is Larissa and Karditsa in the center of the country.

Organic cotton production in Greece is subsidized by the European Union at approximately 500€/ha. The Cotton Committee, organized by the Greek Ministry, is trying to include organic cotton production as part of the Greek Cotton Trademark strategy, but this is still in development.



KYRGYZSTAN

TAJIKISTAN

Last year, Kyrgyzstan experienced significant growth. This stabilized in 2016/17: however, another 991 ha is in conversion to organic, suggesting further growth in the coming years. This trend is being fueled largely by projects implemented by Turkish mills. Almost all of this production is exported to Turkey to be processed after ginning, though the organic Fairtrade cotton produced by BioServices, the initial pioneer of organic cotton in Kyrgyzstan and previously backed by HELVETAS, goes mainly to mills in Eastern Europe. BioServices remains very active and experienced a 21 percent growth in production of organic cotton in 2016/17. Tajikistan, which last year saw a considerable spike in production, experienced a marginal decline in 2016/17. A large portion of Tajikistan's production stems from the DoCotton Group, which came on board last year and produce organic cotton for Turkish mills. Bio-Kishovarz, the longstanding Fairtrade producer group located in Khujand, where production is carried out on smallholder - or "Dekhkan" – family farms, remains very active. Though experiencing a slight decline in production this year, it has another 175 ha in conversion to organic.



Photo: HELVETAS Swiss Intercooperation, Kyrgyzstan

TURKEY

Between 1995 and 2016, Turkey's overall (conventional) cotton cultivation area reduced dramatically from 757,000 ha to 416,000 ha, despite demand for cotton having increased. However, 2017 marked a change in this trend, with an increase in cotton production of nine percent and growth also anticipated for 2018.

One of the main reasons for this is that Turkey's Ministry of Food, Agriculture and Livestock changed its support policy against maize and in favor of cotton. The support premium paid per kg of seed cotton was 42 kurus in 2011, rising gradually each year to 75 kurus in 2016. In the same period of time, the premium paid per kg of maize remained consistent at 4 kurus, until 2016 when it was halved to 2 kurus. Turkish farmers are naturally very responsive to market fluctuations and so this policy change is leading to growth in domestic cotton production; a trend that is seen for both conventional and organic cotton.

In 2016/17, 7,741 tons (1.1 percent) of Turkey's overall cotton production was organic, representing growth for the second year running. Though only 2 percent in 2016/17, a sharp rise is expected in this growth trend 2017/18, as some of the 2,721 ha of land currently in conversion to organic reaches certification.

This trend is also likely to impact the import/export markets, with a decrease in cotton imports and an increase in maize imports. At present, approximately half of Turkey's 1.5 million MT annual cotton consumption is imported.

Turkey retains its unique status of being GMO-free and, as GM cotton production spreads rapidly across the globe (now accounting for around 77 percent of global cotton cultivation), the major problems experienced with GM cotton in some countries indicate how important Turkey's GMO-free status is for the global cotton industry (both conventional and organic). In recent years, the Turkish National Cotton Council has been working to create an identity for "GMO-Free Turkish Cotton."

What Textile Exchange is doing

Second Regional Organic Cotton Round Table, Izmir

Textile Exchange first introduced the concept of the Regional Organic Cotton Round Table (OCRT) in Izmir in 2017. Met with great interest, a second Regional OCRT in Izmir was held on 10th May 2018 during the 9th EKOLOJI Trade Show, hosted and sponsored once again by our key collaboration partner, IZFAS. We were honored to have Helmy Abouleish, CEO of the SEKEM Initiative and recently elected President of Demeter International, join us as keynote speaker, alongside over 100 representatives from brands, producer groups, NGOs, government agencies and industry organizations, including GOTS, H&M, HUGO BOSS, IFOAM – Organics International, Nudie Jeans, and Stella McCartney. You can read their inspiring insights in the <u>2018</u> <u>Highlights Report.</u>



WAPRO: The integration of water stewardship into organic cotton projects

Water consumption for irrigation purposes has been regarded as weak point of cotton even under organic cotton farming conditions. Doubtless, organic cotton production may bear potential water related benefits created by less water demand within the overall crop rotation, higher soil water retention capacities due to higher organic matter content and particularly qualitative advantages due to non-contamination of run-off water. Nevertheless, there is room for improvement by adopting modern approaches of water stewardship thereby addressing also issues of water governance and water distribution via collective action of cotton farmers.

The WAPRO project's name is derived from an acronym of WAter and PROductivity. It is a multi-stakeholder initiative funded by the Swiss Agency for Development and Cooperation (SDC), with HELVETAS Swiss Intercooperation as consortium leader, and is an attempt to combine value chains in the rice and cotton sector with water stewardship.

The first phase of WAPRO ran from 2015 till 2018 and was implemented in six-subprojects in the four countries of India, Pakistan, Kyrgyzstan and Tajikistan. Organic cotton farmers in Kyrgyzstan and Tajikistan were integrated into the water stewardship work.

The first WAPRO phase generated a wealth of knowledge regarding water saving measures and technologies on field level as well as valuable lessons on how to moderate and implement water stewardship processes and communicate them on relevant policy levels.

The second phase of WAPRO is now in its final planning stages. Aimed to run until end 2021 with an overall budget of 15 Million US\$ it will be comprised of ten subprojects, two of which being fully organic and another two (Kyrgyzstan and Tajikistan) having a majority of the farmers as organic cotton farmers.



Photo: HELVETAS Swiss Intercooperation, Kyrgyzstan

Q&A with Aydin Unsal



Aydin Unsal Owner and President of the Board, Eaedeniz Textile

Q Can you tell us a little bit about Egedeniz Textile?

Egedeniz was the first certified organic textile company in Turkey. We have contracted farmers for organic agriculture, and sell organic cotton as fiber, yarn, knitted and woven fabrics, and garments to many well-known brands around the world.

Q What were the highlights of 2017?

In 2017, we developed a Living Wage project with one of our customers for the workers who are involved in the manufacturing of our products. This project will continue over the coming years.

We also added 6 large-scale farmers to our organic project, increasing our current production by 50 percent. These farms will be certified organic from the 2019 crop year. Q What are you most proud of?

We recently decided to start measuring and managing our social footprint, starting from the 2018 crop year.

We are also a strong supporter of the SDGs, and have a robust CSR agenda that we have been <u>mapped to the</u> <u>SDGs</u>.

What does the future hold?

Global organic cotton consumption growth is still at very slow pace, just like Turkish domestic market. Despite this slow growth, we are receiving increasingly enquiries from many different countries around the world, mostly from start-up companies.

We are also developing yarns/fabrics from recycled materials as demand for these grows, including some blends with organic cotton. I believe Turkey has the potential to become a leader for these qualities.



^{3.} Shift, 2018, Egedeniz Textile's Living Wage Project

Read more inspiring stories from <u>Textile Exchange's Insider Series here</u>, which showcases an eclectic mix of industry leaders speaking from "inside" their organizations.



Cottonforlife partners with UNIDO to scale up organic cotton production in Egypt

Cottonforlife, a private sector initiative of FILMAR SpA that has been supporting a group of contracted farmers in Egypt to grow long and extra-long staple organic cotton for the last three years, recently announced that it is being scaled up to a National Project through the United Nations Industrial Development Organization (UNIDO) in response to growing consumer demand and sustainability commitments of brands.

Through the national project, UNIDO and FILMAR are working in coordination with institutional counterparts such as Egypt's Ministry of Trade & Industry and Ministry of Agriculture and Land Reclamation, as well as other national stakeholders, to improve transparency, traceability and sustainability in Egyptian cotton production and industrial processing. The aim is to promote organic and non-contaminated long and extra-long staple Egyptian cotton by improving the economic, social and environmental performance of cotton growers and processors and strengthening support institutions. The activities will be carried out in coordination with the Cotton Egypt Association to protect the purity of Egyptian cotton and to build new business models with everyone involved in the supply chain, both local and international.

Cottonforlife currently cultivates organic cotton on around 120 ha in Damietta, northeastern Egypt, in partnership with Sekem. The new partnership with UNIDO will allow these demo plots to be rolled out more widely, and the potential to benchmark practices to international standards is also being explored.



Photo: CottonForLife/ UNIDO, Egypt



Photos: CottonForLife/ UNIDO, Egypt

Stakeholder directory

Who's doing what in EMENA & Central Asia?

This map highlights some of the key organizations working to support organic cotton in this region.





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KYRGYZSTAN

Bio Services Service Company

G3

Latin America & the Caribbean

Photo: Tatiana Cardeal for C&A Foundation, Brazil





Latin America & the Caribbean

Organic cotton production in Latin America is characterized by smallholder family farms organized in groups, usually supported by NGOs or traders. The production is rainfed and therefore very dependent on the climate situation. Since 2013, the region has been affected by the natural phenomenon "el Niño," which resulted in several years of severe drought in producing regions. Peaking in 2016, the drought significantly affected production of organic cotton.

2017 saw the beginning of a transition back to a more typical climate, but farmers were still very affected by losses from previous years. Lack of investment, a shortage in supply of good quality seed, and a great deal of uncertainty meant that the strong growth anticipated for this region has not yet been realized. Economic instability in countries such as Argentina, Colombia, and Brazil over the last year didn't help the situation. The lack of effective governmental programs or investments from the textile industry in the organic sector was again sorely felt.

In spite of this, the region still experienced a 16 percent growth in production of organic cotton overall, with production taking place predominantly in Perú and Brazil, and a small amount also in Argentina. Momentum in the region is building, with a growing number of strategic events and movements underway related to organic and more sustainable cotton, and a number of institutes associated to big retailers already having expressed agendas to develop more sustainable supply chains. The potential for organic cotton in this region is certainly looking bright.



Latin America & the Caribbean

ARGENTINA

For many years, since the end of a project known as "Another South Market," there was no significant organic cotton production in Argentina. Notwithstanding the unfavorable political and economic situation in the country, a project began in the Chaco province and 2017 saw the first biodynamic certified organic cotton produced in the country. The company Stay True developed a beautiful project in the native community QOM and five farmers of the project produced the first 0.4 MT of organic cotton fiber from 2.5 ha of land (part of a total production area of 100 ha). The project is growing and it is estimated that production will reach 10 MT in 2018.

BRAZIL

In Brazil, drought in the northeast region lingered on for a fifth year, but at last gave some signs of ending. There was a significant increase in the number or organic cotton farmers in 2016/17 reaching 308 (up from 232 the previous year), thanks in particular to the work of ESPLAR in Ceará and EMATER in Paraíba. This resulted in 43 MT organic cotton fiber cultivated on 220 ha (part of a total production area of 496 ha). Another 155 ha is growing cotton in transition to organic. 2017 saw the launch of the first Brazilian Eco Fashion Week, with tremendous coverage in the media.

PERU

In Perú, Bergman Rivera/Ecotton remains responsible for the country's production of organic cotton. Working with producer groups in different regions of the country, they assisted and bought organic cotton from 161 farmers who, in 2016/17, produced a combined total of 338 MT fiber on 311 ha (part of a total production area of 630 ha). Another 305 ha of cotton growing land area is in transition to organic.

What Textile Exchange is doing

Organic Cotton Round Table Regional Strategy: Latin America

At the 2017 Organic Cotton Round Table (OCRT), held in Washington D.C. on October 12, Textile Exchange hosted a Regional Strategy Meeting for Latin America, with participation from stakeholders including C&A Institute, Natural Cotton Colors, Timberland, Smallholder Farmers Alliance Haiti, Bergman Rivera/Ecotton. VEJA/VERT Shoes, SOCiLA and COSA.

The participants of this important meeting expressed the necessity to increase organic cotton production and processing in Latin America and the Caribbean's textile industry. Also discussed was the fundamental importance of creating a Platform to improve awareness of the potential of organic cotton as a sustainable value chain, and to promote and divulge related projects, partnerships and business opportunities in the region. Textile Exchange, with its growing experience in catalyzing and developing regional strategies for organic cotton, is keen to progress this platform, but regional partners and funders are needed in order to achieve this.

Join us for the <u>2018 OCRT in Milan</u> on October 22 to continue the discussions on creating a regional strategy for Latin America and the Caribbean.

Q&A with Orlando Rivera



Orlando Rivera Managing Director, Bergman Rivera



We have noticed that the final consumer is getting more interested in the supply chain and traceability behind the products they purchase. Awareness in fair social practices, sustainability and transparency have become an important ally in the growth of organic cotton. I think that we have educated our consumers and in these times when information is open to everyone our open doors policy is more valued.



What achievements are you most proud of, and have there been any big challenges?

We have to comment about our most valued partners: the farmers. They have learnt to appreciate the knowledge that our technical team gives them and applied in their farms everything we've taught them. Having crops with better yields each year and also working with rotation crops that are beneficial for soil health and translates into more income for them. One of our biggest challenges is not having a market for cotton seed, which represents 2/3 of the cotton branch weight.

What does the future hold for Bergman Rivera?

Our main focus is to expand our organic cotton project as we are experiencing a high increase in demand. In order to achieve this, we need to develop a long term relationship with new groups of farmers that are willing to work with organic cotton.

Growing cotton, as you know, is very challenging due to pricing and labor demand in comparison to other crops. Therefore growing our organic cotton areas is a constant goal that we have. We also believe in strong partnerships with brands which is crucial to achieve this vision and plan for the future.



Photos: Bergman Rivera, Peru

Read more inspiring stories from <u>Textile Exchange's Insider Series here</u>, which showcases an eclectic mix of industry leaders speaking from "inside" their organizations.

C&A Institute, Brazil

C&A Foundation has been working with ESPLAR and EMBRAPA Cotton to expand production of Mocó organic cotton supply (multi-annual cotton variety, with long fiber that is more resistant to drought). This initiative currently engages 300 farmers in Ceará province. Starting in 2018, the foundation will also support DIACONIA in engaging 750 smallholder farmers on organic cotton cultivation across the states of Alagoas, Ceará, Paraíba, Pernambuco, Piauí, Rio Grande do Norte and Sergipe.



Photos: Left - ESPLAR/ C&A Foundation, Brazil; Right - Tatiana Cardeal for C&A Foundation, Brazil

The FAO's South-South Cooperation

The FAO was also active in the region in 2017 with its Strengthening the Cotton Sector through South-South Cooperation program, which generated a partnership with Brazilian research institute EMBRAPA and resources such as a publication about Brazilian experience in organic colored cotton production.



Photo: ESPLAR/ C&A Foundation, Brazil

Potential for Organic Cotton in Haiti

Another promising initiative is launching in Haiti, where the Smallholder Farmers Alliance, in partnership with Timberland, is re-introducing cotton production to the country after 30 years. The goal is to chart new territory for sustainable cotton production by creating a business model that also integrates organic cotton with combating climate change, improving food security and empowering women. In 2017, the project ran a field-study to test the adaptation of different cotton varieties, including some organic cottonseed from Brazil and also varieties from India and the USA. The study's findings will inform the first commercial planting by up to 500 farmers in 2018.

The project is also exploring the use of blockchain technology to integrate data, traceability, transparency and efficiency into a smallholder supply chain in Haiti.



Photo: Tatiana Cardeal for C&A Foundation, Brazil

Stakeholder directory



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South & Southeast Asia

Photo: C&A Foundation, India

South & Southeast Asia

REGIONAL PRODUCTION



India Thailand

2016-17



2012-13

2013-14

2014-15

2015-16

Fiber Production (MT)

20,000

0

South & Southeast Asia





INDIA

Organic farming in India is certified under the National Program for Organic Production (NPOP) and, as in other countries where organic cotton is a small holder crop, it is carried out with the aid of an Internal Control System (ICS). This allows producer groups to practice group certification, where individual certification would be onerous and costly.

In 2016/17, there were 1 million organic farmers growing food and fiber certified to NPOP by 28 accredited certification bodies. The total land area certified was 1.44 million ha, with the major crops grown being sugarcane, oil seeds, cereals, millet, cotton, pulses, medicinal plants, tea, fruits, vegetables, spices, and coffee. In 2016/17, the total land area of all organic cotton-growing ICS was 386,464 ha, of which it is estimated that 43-45 percent (168,654 ha) was actually planted with organic cotton.

Madhya Pradesh continued its significant leadership in terms of the amount of organic cotton fiber produced, accounting for 47 percent of India's total production, followed by Odisha (26 percent), Gujarat (14 percent), and Maharashtra (11 percent).

Between 2012/13 and 2016/17, there has been growth in the number of

farmers in India joining organic cultivation systems. However, during this time, production of organic cotton in some areas was replaced by production of other organic crops, as farmers respond to changes in the market. Additionally, a small but important portion of previously certified farmers have been demoted back to in-transition status as they resolve contamination problems. As a result, India's organic cotton production experienced an overall decline during this period, but that trend is now stabilizing. The decline between 2015/16 and 2016/17 was only 1.2 percent, compared to 20 percent the previous season, and the future looks bright as strong growth is forecast over the next few years.

Thanks to the efforts of organic producer groups and organizations such as the Organic Cotton Accelerator and the C&A Foundation, as well as the continued engagement of brands and retailers at the farm and supplier level, huge areas of land are in conversion to organic. Based on current projections, it is estimated that organic cotton production will grow 35-40 percent by 2020.

Farm engagement

Over the last year, Textile Exchange has continued its push to strengthen its data collection systems and processes, particularly in India, as part of its Data Investment Initiative, supported by the C&A Foundation. As a result, we were able to achieve even greater clarity by

collecting data directly from 100 percent of India's organic cotton farm projects (82 percent visited in person), as well as from APEDA and almost all certification bodies. This data is cross-checked between the various sources before being reported.

Global Organic Cotton Round Table

At the 2018 Organic Cotton Round Table (OCRT) in Milan, Textile Exchange is introducing a new "General Assembly" approach that will provide space for delegations from each organic cotton producing region, including South &

Southeast Asia, to report out on and discuss progress/challenges with a global audience, with the focus on enabling both visibility of all regions and cross-learning between.

Industry engagement

Textile Exchange continues to support supply chain mapping for a number of its members and, now with a full time Country Program Manager based in Bangalore, also actively participates in many more regional events and

meetings, such as those hosted by OCA, C&A Foundation, brands and retailers, certification bodies, and the Organic and Fair Cotton Secretariat (OFCS) of which we are an active member.

PAKISTAN

There was no certified production of organic cotton in Pakistan in 2016/17. However, there are over 12,283 ha growing cotton in conversion to organic as part of the C&A Foundation/ WWF project that is due to reach certification in the 2019/20 harvest year. There

THAII AND

The Green Net Cooperative, first introduced in last year's report and Thailand's only known organic cotton producer, is part of the Rim Khong Organic Agriculture Project. The Cooperative had a successful year in 2016/17, with record-high yields as a result of cool weather and plentiful water during the growing season. This led to a growth in production from 2.8 to 4.2 MT organic cotton fiber, which was grown on 76 ha.

Though a small-scale project, 66 traditional fishing families benefit from the additional income bought in by utilizing their small plots of land alongside the

is also a project by Pakistan's Rural Business Development Center (RBDC) and Lok Sanjh Foundation that is initiating the organic certification process for its cotton production this year. Read more about these initiatives on page 63.

river to grown organic cotton. Thanks to the organic and fair trade scheme implemented by Green Net, farmers receive a good price for their cotton. Green Net recently supported the transition from a third-party certification system to a local Participatory Guarantee System (PGS), which works well for these farmers. Existing customers having trust in Green Net's PGS and therefore have continued to purchase the cotton, and new customers are also showing interest, drawn in by the fact that the supply chain is very localized. Ginning is carried out in the village, and cotton bales are then transported to a factory 500km away for processing.

Climate change is a harsh reality now in India as elsewhere. While everyone is impacted, farmers suffer the most especially in rainfed agricultural scenarios. If we want cotton in the future to be available to the industry and not transform into a luxury, we will need assured supply chains that are nurtured, with farmers being taught the skills to adapt. Needless to say concerted efforts to improve seed R&D and seed availability, especially for the organic sector, are key. The industry needs to recognize and act upon this gap in a collaborative manner, as it has significant implications for the future.

Prabha Nagarajan Organic Cotton Expert, India

CottonConnect's activities in India

Together with C&A Foundation, CottonConnect is promoting organic cotton production, training cotton farmers in Gujarat, Madhya Pradesh, Rajasthan and Maharashtra. CottonConnect also runs sustainable organic projects in Madhya Pradesh, enabling cotton farmers to connect with global supply chains and providing gender training to women. Transparency and verification is important in cotton production so CottonConnect developed the traceability software tool called Tracebale, which provides reassurance of sustainable cotton supply.

CottonConnect is also now working with Kering on a project in India in which all

supply chain partners are collaborating to create a robust supply network, in an effort to secure a traceable and reliable organic cotton supply for its brands. A case study exploring the learnings from this pilot will be released soon, and is intended to be a useful resource for companies seeking to bring supply chain partners together and build connected supply chains.



Photo: CottonConnect, India



Q&A with Arun Ambatipudi



Arun Ambatipudi Executive Director. Chetna Organic

ChetCo Model?

The Chetna Coalition (ChetCo) collectivizes SME brands and manufactures for effective supply chain risk management at the cotton source: the organic farming community.

ChetCo acts as a coalition to grow, scale, and organize their communal demand to reliably off-take the full community harvest volume each season. Members act collaboratively to produce value and reduce risk. Each season, members grow the value of cotton, their cooperative, and their farming community. The members work together in efforts to continuously enhance the quality, integrity, traceability, and transparency of their fiber. At the same time, members send strong market messages and support sustainable community development through efforts in seed purchase, healthcare, education, and livelihood initiatives for farmers.

Together, individual ChetCo companies can effectively address, and continue to improve upon, the factors that underpin both the supply sustainability and impact value of their cotton. Namely: the economic stability and resiliency, environmental health, and social welfare benefit that farming communities need Can you tell us a bit about the for growing high-quality organic cotton over the long term.

> Together, ChetCo members agree to participate in, but are not limited to, four categories of cooperative-action mandates to make year-on-year improvements to the sustainability, resiliency, and value of their marketplace, their coalition, and their farming communities.

What were the highlights of

This year, our value chain coalition ChetCo had 70 percent uptake against production of Chetna Organic's nearly 8,000 smallholder cotton farmers. This has grown from 15 percent prior to ChetCo's formation five years ago.

Approximately INR 5,500 (\$76) was paid per quintal (100 kg), with a premium of INR 250-600 (\$3.47 - \$8.32). An additional INR 176,000 (\$2,580) per quintal was paid in Fairtrade premiums on around 3.000 MT of seed cotton.

ChetCo now has nearly 25 brands, spanning 11 countries and four continents, including two new brands -No Nasties and Soul Space - selling on the domestic market in India.

What are you most proud of that these initiatives have achieved over the years?

Access to finance. Chetna has received 13 Croles (~\$2 million) working capital finance with collateral of less than 10 percent this year. This was made

possible by uptake commitments from brands and manufactures.

What does the future hold?

Both Chetna and ChetCo will act as best practice teaching/learning institutes for producer organizations and emerging sourcing coalitions around the world. A partnership has just been announced with the West Africa Sourcing Coalition, with others to come.



Photo: Chetna Organic, India

Read more inspiring stories from Textile Exchange's Insider Series here, which showcases an eclectic mix of industry leaders speaking from "inside" their organizations.



Organic and Fairtrade Cotton Secretariat, Madhya Pradesh

The Organic and Fairtrade Cotton Secretariat (OFCS) in India, incubated by C&A Foundation, having now entered its third year in Madhya Pradesh, has been able to successfully show that the whole is greater than the sum of its parts. Active participation of its diverse stakeholders in Madhya Pradesh, including seed companies, farm groups, ginners and spinning mills; representatives of research and academia; policy makers; as well as brands and retailers has resulted in leapfrog advancements for organic cotton in the the state. This has significant implications for the global organic cotton industry, considering that nearly a quarter of the world's organic cotton is cultivated in Madhya Pradesh.



Photo: C&A Foundation, India

Key developments in 2017-18 include:

- Approval from the government to set up India's first center of excellence on organic cotton research at Madhya Pradesh's leading State Agriculture University.
- Commitment by the government to establish at least 100 organic cotton clusters across Madhya Pradesh.
- Allocation of a separate auction platform for organic produce in state-operated agricultural markets.
- Deepened industry-academia collaboration on non-GM seed breeding research.

On May 8, 2018, C&A Foundation and the Government of Madhya Pradesh co-organised a day long celebration on organic cotton called <u>Cotton Trailblazers</u>. This event, dedicated to celebrating Madhya Pradesh's global leadership in organic cotton production, brought together organic cotton farmers, civil society actors, government and industry representatives on one platform. The event has fuelled many conversations between stakeholders, including farm groups and brands that shall further the cause of organic cotton cultivation.

C&A Foundation's organic cotton program in India

The C&A Foundation's organic cotton program in India adopts a hotspot approach to improve the livelihood of smallholder organic cotton farmers with a vision to contribute towards resilient communities and landscapes.

In this journey, C&A Foundation has supported four partners – Action for Social Advancement, Aga Khan Foundation, CottonConnect and WWF-India - in training and certifying over 34,000 in-conversion cotton farmers, mainly in the hotspot of southern Madhya Pradesh (also known as the Nimar region). In 2018, the Foundation also started a program with Solidaridad in a second intended hotspot in the state of Maharashtra with the eventual aim of engaging 10,000 farmers in organic cotton cultivation. The organic cotton program here will be complemented by additional efforts by Solidairdad on addressing the water stress challenge in the region by promoting micro-irrigation and rainwater management solutions.

Collectively, at present, the farmers supported by C&A Foundation and partners cultivate 23,378 ha of cotton area yielding 6,977 MT lint certified and 3,224 MT lint in conversion. The goal is to help establish independent selfsufficient farmer collectives (comprising of organic cotton farmers) in these hotspots that can engage directly in the organic cotton supply chain. As the foundation supports a holistic multicropping landscape approach to organic cotton farming, these farmer collectives also stand to gain additional income from accessing markets for other organic produce.



Photo: C&A Foundation, India

Second phase of Seeding the Green Future

"Seeding the Green Future," a project of the Research Institute of Organic Agriculture (FiBL) is entering into its second phase of <u>Green Cotton</u>, co-funded by Mercator Foundation Switzerland and the Organic Cotton Accelerator, which will run from 2018-2022.

The overall goal of this participatory breeding project is to improve the livelihood of organic cotton growers through improved non-GM cotton cultivars with genetic diversity for adaptation to changing climate. The participatory research model of this project helps to empower female and male farmers through enhanced collaboration with researchers, breeders, seed companies, advisors, and the textile industry. Current partners include Chetna Organic, Pratibha Syntex, CottonConnect, Action for Social Advancement, University of Gwalior, University of Akola, and the Center for Sustainable Agriculture. Additional funding would enable us to engage additional farmers in other cotton growing region of India.



Photo: Green Cotton, India

bioRe's non-GMO seed program

As the availability of GMO-free cotton seed in India remains a big challenge, the bioRe® Foundation and its partners conducted their own seed research at bioRe® in India. Now, after eight years of extensive work, the project has completed the required multi-location trials to sustain its results and is on the verge of having new, GMO-free cotton genotypes for release in 2018.

The multiplication of selected seeds is already in progress. Over the next year,

the project expects to distribute and sell the multiplied seeds to bioRe® farmers and other interested farm groups.

The successful research at bioRe® in India involves the active participation of farmers, and is focusing particularly on the evaluation of cotton genotypes under organic conditions. The seed evaluation program is currently in its third phase, and is collaborating closely with Dr. S.S. Patil from the University of Agriculture Dharward.



Photo: bioRe India

C&A Foundation study on cotton cultivation systems in Madhya Pradesh

While the impacts of different cotton farming systems on farmers, their livelihood and the environment may be broadly understood, there is lack of credible data to support how smallholder cotton farmers are impacted. As a step forward to address this gap, C&A Foundation commissioned two separate but interrelated studies – one to assess the socio-economic impacts, and another to assess the environmental impacts of three cotton cultivation systems- BCI, Conventional & Organic in Khargone district of Madhya Pradesh, India.

The socio-economic study covered about 1,200 farming households from each of the cultivation systems. The environmental study which was a Life Cycle Assesment of 1 metric tonne seed cotton, covered 100 households from each of the cultivation systems.

Some key highlights of the study were:



Photo: C&A Foundation, India

Environmental Impacts:

- Compared to conventional cotton, organic cotton shows lower negative environmental impacts.
- The acidification potential for organic cotton is 22 times more for conventional cotton compared to organic cotton.
- The global warming potential for organic cotton is 50 percent lesser than conventional cotton.
- The fresh/blue water consumption for organic cotton is 41 percent less than conventional cotton.



Photo: C&A Foundation, India

Socio-economic Impacts:

- Farmers often learn of organic cotton through social networks.
- Farmers largely perceive organic farming in terms of the potential economic benefits.
- Exclusive organic cotton cultivation is less likely to use pesticides, but some farmers self-reported use this needs to be validated through soil testing.
- Organic cotton farmers are more likely to be in debt and have higher debts than conventional cotton farmers.
- In 2016-17, 49 percent of the organic cotton farmers made profit from agriculture; however, on an average both conventional and organic farmers made losses. Thus, it is important to create incentives to motivate farmers to continue cotton farming.
- Organic farmers reported significantly lower yields than conventional counterparts.

RESET for regenerative organic in India

MetaWear and Grameena Vikas Kendram Society for Rural Development have co-created RESET, a program that targets tribal cotton farmers in India's cotton belt, supporting them and their communities as they adopt regenerative organic farming practices. RESET aims to make farming a win-win-win for the environment, society, and economy. As the first vertically-integrated regenerative program, RESET is uniquely positioned to have lasting impact in these three areas.

Highlights of the pilot program include:

2016-2017 | Two successful pilot seasons representing 88 tribal farmers receiving price premiums

for RESET regenerative organic "in conversion" cotton.

- 2018 | Support secured from Control Union, the Textile Exchange, and the Rodale Institute to develop the first-ever Regenerative Organic In Conversion farming standard to be piloted on RESET farms during the 2018/2019 season.
- 2018 | Guaranteed demand from USA and EU markets, ensuring price premiums to farmers.
- 2018 | Initial investment and operations support from the government of Andhra Pradesh.



After more than a decade of supporting Organic Cotton farming in India, three years ago, Sense Organics and Armstrong Spinning Mills began to develop an organic cotton program in central Myanmar. While the country has many challenges, the plight of the cotton farming communities is considerable with no access to high value markets, extension services or quality inputs. In addition to this, the cotton price fluctuates extremely aggressively and with no minimum support price, the business case for farmers has been very weak keeping many trapped in a cycle of poverty.

Today, the project has secured financial support from C&A Foundation and the UK's Department for International Development, with technical support from Peterson and certification and compliance from Control Union. So Pure Myanmar, a Myanmar registered subsidiary of SO Germany is now conducting seed trials on Government and small holder farms covering 50 acres in organic conditions. With a focus on seed development and multiplication, extension services, trade finance, multi-cropping, market access and full item level traceability, next year they aim to plant over 1500 acres under small

holder farms certified to organic GOTS with the plan to double each year for five years. By putting farmers first in this program, early indications are that income levels will increase by at least 25 percent and progress will be measured against the Sustainable Development Goals while the lint price will still be competitive with global price of organic cotton.

With over a quarter of the world's population on its borders, an available 15,000 acres of rainfed land without GMO contamination and ready for organic GOTS certification, a huge willingness from farmers, eager to sew the benefits of organic cotton farming into their communities, close trade links with India, Bangladesh and China and one of the fastest growing garment industries in the world.

To learn more, please contact Kirsten Weihe - Keidel.











Photo: RESET. India

C&A Foundation's organic cotton program in Pakistan

In Pakistan, C&A Foundation is testing the feasibility of organic cotton production in the world's fourth largest cotton producing countries. The foundation is currently supporting 4000 farmers in Balochistan province to transition to organic cotton production on 19,895 hectares yielding 9,143 MT lint. The program is implemented by WWF- Pakistan in collaboration with the Agriculture Extension Department (AED),

Balochistan. This greenfield program is galvanising interest from the government on creating enablers for organic cotton including supply of non-GM seed, from many reputed research institutions, such as Lasbella University for research on organic pesticides; Central Cotton Research Institute on non-GM seed breeding and from supply chain actors.

Progress for Pakistan's Rural Business Development Center

Dr. Shahid Zia, Managing Director, RBDC

The Rural Business Development Center (RBDC) in Pakistan continues to promote organic cotton production in the country. Though lacking sufficient funding to scale up the project, some recent developments have raised hopes.

The research project that was initiated by RBDC with Government of Punjab in 2017 went very well. The cotton varieties that farmers in the area generally use to produce organic cotton are of short staple length but, in this research, varieties with reasonable staple length (29 to 31) have been grown successfully. Additionally, RBDC has been partnered by Saif Group (a national company dealing with cotton processing and trade) to support organic cotton production in this area, with Saif Group having agreed to buy all organic cotton and in-transition cotton from the farmers. With their support, RBDC is organizing farmer groups for training who plan to grow organic cotton next year.

SIA Foundation Pakistan

Imran Asgher, SIA Foundation Pakistan

SIA Foundation Pakistan was founded by like-minded textile professionals aware of the upcoming challenges being faced by the textile industry in Pakistan.

The Foundation's Organic Cotton Cultivation (OCC) program launched in 2017, with a pilot project initially for multiplication of non-GMO organic seeds for large scale organic cotton cultivation in the country. This pilot, which is located in the village Veyaro, Lesbela district of Balochistan, is set to expand up to 5,000 ha over the next two years.

SIA Foundation is committed to train around 2,500 farmers for organic cotton cultivation and expand gradually over the coming five years. The Foundation will support farmers through their first, second and third year conversion from conventional to organic certification. The aim of the expansion is to convert 6,000 cotton farmers to organic cultivation.

SIA Foundation achieved a key milestone by establishing a partnership with Agriculture Extension Department (AED) of Balochistan within the first year of its foundation. A memodrandum of understanding has been signed to promote organic cultivation within Balochistan with support of the AED team on the ground.

SIA Foundation is also committed to planting neem trees in targeted project areas. Neem is a natural pest deterant used to minimize pest attacks on the cotton crop.



Photo: SIA Foundation, Pakistan

Stakeholder directory

Who's doing what in South & Southeast Asia

This map highlights some of the key organizations working to support organic cotton in this region.



Field-level Intervention: 🗠 Field data & analytics 👶 Development 🚳 Seed breeding 😻 Field capacity building & training 🚳 Cotton cultivation/processing

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United States of America

Photo: Texas Organic Cotton Marketing Cooperative, USA

United States of America

REGIONAL PRODUCTION





Adjustment: Please note that the production data reported for the United States in the 2017 OCMR was incorrect, and has been retrospectively adjusted.



In 2016, 8,369 hectares were planted with organic cotton in the USA. This yielded approximately 20,400 bales of organic cotton, equivalent to 4,529 MT of fiber.

The Texas Organic Cotton Marketing Cooperative (TOCMC), a co-op of 35 family farmers based in the West Texas High Plains, grew 84 percent of all the organic cotton harvested in the USA in 2016. TOCMC grew 17,055 bales (3,799 MT) from 14,967 harvested acres (6,057 ha) for an average of 1.1 bale per acre. Approximately 2,510 acres were lost to harsh weather, including hail and wind. Fifteen other Texas farmers grew 422 MT on 840 ha in the High Plains area, representing ten percent of the country's total organic cotton growing land area.

In New Mexico, approximately 307 MT of organic cotton fiber (seven percent of the national total) was grown on 458 ha by three farming families, two of which grew Pima cotton. In North Carolina, a small amount (0.65 MT) of upland organic cotton fiber was grown on 1.2 ha.

TOCMC, in particular, continues to transition additional acreage into organic production, planting organic cotton on 1,225 transitional acres (496 ha) in 2016. Several other High Plains farmers have limited acreage in transition.



Photo: On the Mark PR

USA-based Textile Exchange members educated USA senators about organic fiber and textiles.



Comparing fiber characteristics and price of organic and conventional USA cotton

Fiber characteristics

Price

The quality of TOCMC's organic cotton is very similar to the non-organic cotton grown in the area when it comes to length, micronaire, strength, and uniformity. For example, for the 2016 crop, TOCMC's average staple length was 29.3 mm compared to a 28.8 mm average for all the cotton in the area. Color grade is the only quality characteristic for which the organic cotton tends to run slightly lower. This is a result of the fiber usually having to remain in the field on the stalk for an extra 4-6 weeks while waiting for a freeze to defoliate the plants to facilitate mechanical harvest.

New Mexico's long staple pima cotton had a staple length of approximately 36-40 mm, while the upland Acala variety was 31-34 mm.

The average length for North Carolina white upland cotton fiber was 31 mm.



Photo: Dosi and Norma Alvarez

The cotton plant yields two crops – fiber and cottonseed. Organic cottonseed sales, for use as dairy feed, is a vital part of the financial equation for organic cotton farmers, and expanding organic dairies are eager to use it as a fiber- and protein-rich feed for cattle.

In Texas, the price for the 2016 TOCMC organic cotton crop was \$1.10-1.35 per pound of lint fiber. For the 2017 crop, the price increased to \$1.20-1.45 per pound. The USA average per pound price for 2016 crop conventional cotton was approximately \$0.68 per pound.

In New Mexico, the price of organic pima was approximately \$2.10 per pound in both 2016 and 2017. The price of upland Acala was approximately \$1.30/pound. In 2017, the price for conventional pima was approximately \$1.20 per pound and \$0.75 per pound for upland cotton.

The average organic cottonseed prices for the Lubbock, Texas, area for both the 2016 and 2017 crops was \$500 per ton versus conventional cottonseed prices of \$242 for 2016 and \$193 for 2017.



Photo: Texas Organic Cotton Marketing Cooperative, USA

Texas A&M AgriLife's cotton breeding program

In 2017, the cotton breeding program at Texas A&M AgriLife Lubbock Research and Extension Center (LREC) released two germplasm lines under development for several years - CA 4005 and CA 4006 - that can be used to breed cultivars with host plant resistance to thrips insects that cause damage to young cotton seedlings, especially in organic cotton where systemic insecticide seed treatments are not used. Young seedlings grown from the seed of both newly developed lines exhibited substantially improved resistance to thrips feeding injury at the field level compared with commercial cultivar standards adapted for the Texas High Plains. They are also comparable (and in some cases, superior) in overall

agronomic performance and/or fiber quality to these same standards.

The germplasm lines were developed and tested on organic cotton farms (including those in TOCMC) with funding from USDA's Organic Agriculture Research and Extension Initiative. The resistant lines provided an average of 37 percent reduction in thrips damage and an OMRI-approved spinosad insecticide showed the same average level of damage reduction. Together, spinosad insecticide and resistant lines gave 80 percent protection from thrips feeding injury compared to standard cultivars with no spinosad. New cultivars available for farmers to test on organic cotton farms could be available by 2020.

What Textile Exchange is doing

Collaborating to expand the USA market

Textile Exchange worked closely with the Organic Trade Association in 2017 to help raise the visibility of organic fiber among both consumers and regulators.

In May, 2017, Textile Exchange, TOCMC organic farmers, and representatives of leading organic cotton and organic wool fashion and home textile brands participated in an Organic Trade Association-hosted "Live Organic from Farm to Home" event in New York City. The focus was on educating consumers and the media that "organic is not just for eating anymore." A steady stream

of social media updates from on-site presentations, enabled the many who could not attend to nonetheless follow the event using #LiveOrganic.

In October, 2017, as part of the Textile Exchange annual conference, its USAbased leading companies visited key senators' offices in Washington, DC, to educate them about organic fiber farming and the organic textile sector and urged Congress to strongly support organic agriculture as they began Farm Bill deliberations.



Photo: Dr Jane Dever, Professor and Cotton Breeder, Texas A&M AgriLife Research



Participants at the Organic Trade Association #LiveOrganic event in New York City.

Photo: Organic Trade Association, USA

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Q&A with Sally Fox



Sally Fox Plant Breeder, Owner,

Vreseis, Ltd. Brooks, California

) What is Vreseis?

Vreseis is the longest running organic cotton seed breeding program that I am aware of, and I continue to make progress every year. I started breeding naturally colorful cotton in 1982 (and formed Vreseis Limited in 1986 to fund this research by selling the cotton itself).

Q

Why bother breeding colored cotton... doesn't everyone want white cotton?

Well, my idea originally was that these cottons that are naturally pest and disease resistant would open the door to farming cotton organically. That the white cotton varieties offered to farmers worldwide were all bred to be dependent upon chemical help from farmers. Everything from fertilizers to pest management they were selected to do best with. By breeding with these cottons that were only being grown in gardens, that had not been selected for response to ag chemicals, that I stood a chance of being able to develop varieties that could be successfully be grown organically.

My first and second generation of varieties did just that. In the early 1990s, we had thousands of acres of these cottons being grown in Arizona and south Texas organically. These are parts of the USA whose normal white cottons received more than 11 applications of pesticides per season, not even counting all the seed treatments and defoliants.

With naturally colorful cottons, there is no issue with staining of the leaves when machine picking, so defoliants are not even required. Even the farmers who were not growing organically i.e. - used normal fertilizers - did not need to use pesticides and so it seemed like the logical way to get organic cotton going. You start with varieties that are able to forage the soil for their nutrients, able to withstand soil born diseases on their own and out grow and out produce pest pressure.

The big challenge was getting the fibers produced to be long, strong, and fine enough for machine spinning. And capable of being machine picked. And whose color did not wash out when being laundered.

The very first organic cotton grown here in the USA was my cotton that I bred and it got the conversation going about cotton. And how we might approach it's farming more sustainably. But naturally colorful cottons did not stop with the farming, it asked the textile industry how could it have a better sustainability report card.

What progress have you made with breeding the different colors?

For each color, different types of improvements are called for.

With the green cottons, fiber length and strength have been solved, but yield and other agronomic issues, along with color manipulation using sustainable materials in the yarn and or fabric finishing, remain targets for further exploration. For the brown color family, fiber length improvements have been achieved, but those resulted in reduction of yield, so I continue to work on intensity of color coupled with fiber length improvements while not compromising yield.

Major improvements on color stability with the reds/ochre color pallet have occurred, along with significant agronomic advances such as nonphotoperiodic cultivars. Now I am working on fiber length improvements of that color family. In 2016, I was able to increase seed stock of a line in this color family that I hope to find the funds to increase further soon.

What's the future for colored cotton?

Reduction in dye use by utilizing their natural colors for khakis, etc. and by using at a base to reduce the amount of dye required to create rich vibrant dyed colors in cotton textiles. Achievable because these cottons have tannin within the fiber which is a dye mordant. It draws dyes- both natural and chemicalinside the fiber and thus less dye of any kind is needed.

But more importantly to me is the fire resistance that the tannin within the

Q&A with Sally Fox

brown color imparts. These cottons are in the realm of wool in terms of flammability. They do combust, but with less vigor. And this is significant. When I ran tests as little as 13 percent brown cotton mixed with white rendered some fabrics passable on some flammability I have hung on. By myself, on tests for certain uses, such as fleeces.

My current goal is to form a non-profit that gets funded by industry to get good foundation seedstock to interested groups around the world so that they can breed washable, spinnable, pickable naturally disease and pest resistant cottons for their own areas.

I have been funding all this research all these years by selling the cotton itself and selling the products of this cotton. Thanks to Itochu and Dr Kondo. I am still in business. Thanks to my mail order customers who buy socks and yarns and fabrics, my biodynamic farm. But, I want to train younger people in my method of organic breeding of cotton of all colors- yes I also breed the white cottons- and see this cotton offered as a possibility to designers all over the world as the integral part of the sustainable textile option that it most definitely is.



Photos: Top - Paige Green for Vreseis; Bottom - Vreseis, USA

Read more inspiring stories from Textile Exchange's Insider Series here, which showcases an eclectic mix of industry leaders speaking from "inside" their organizations.

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Stakeholder directory

Who's doing what in the USA?

This map highlights some of the key organizations working to support organic cotton in this region.

NORTH AMERICA

Organic Trade Association Industry Association

Texas A&M Agrilife Research Research Institute

Texas Organic Cotton Marketing Cooperative (TOCMC) Producer Organization (%) & (2)



 Supply Chain Intervention:

 Standards/Chain of Custody

 Field-level Intervention:

 Seed breeding

 Informing & Convening:

 Seed breeding

 Market research & analytics

 Seed breeding

 Market research & analytics

 Seed breeding

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Standards & Certification

Organic textiles certification

Certified facilities*



*Please note that the figures detailed on this page reflect the number of facilities certified to produce GOTS/OCS products in 2016, which may differ from the number that actually produced GOTS/OCS certified products in that year.

Organic textiles certification

Organic cotton is grown within a rotation system that builds soil fertility, protects biodiversity, and is grown without the use of any synthetic chemicals or GMOs. Organic cotton is subject to the national laws governing organic production including the EEC Organic Regulation 834/2007 in Europe, USDA National Organic Program (NOP) in the United States, and the National Programme for Organic Production (NPOP) in India. 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.

In 2017, there were 3,643 and 5,024 facilities certified to OCS and GOTS, respectively. Following an impressive double digit growth of 21 percent in 2016, the number OCS certified facilities dropped by 0.5 percent in 2017. Facilities certified to GOTS grew by eight percent, with the most significant growth rates coming from Portugal, the USA, Bangladesh and Italy. See the previous page for a more detailed overview.

IFOAM Motion 61 passed: fiber production and processing for organic textiles to be covered by appropriate standards

In November 2017, a Motion was passed by IFOAM - Organics International for: "Textiles advertised/ labelled 'organic' and made with organic fibers produced according to recognized standards (e.g. IFOAM Family of Standards), should also be processed to a standard (endorsed by IFOAM -Organics International) that prohibits hazardous and residual inputs according to a clear procedure."

IFOAM - Organics International acknowledged that such standards

should cover the whole supply chain (as is the case with food) and that stating the organic fiber content ("contains X percent organic cotton"), through for example Textile Exchange's Organic Content Standard, is a relevant step.

IFOAM - Organics International said it would communicate this to stakeholders and engage with them for the widespread adoption of a whole-chainapproach (chain of custody) to labelling organic textile products.

Textile Exchange's Shared Measurement System

Information has always been core to how Textile Exchange delivers value, and the organization was the first to collect and report on organic cotton production data in 2005. Both our data collection and reporting mechanisms have transformed significantly over the past decade. Our data collection process is now verified according to GRI principles and brand and retailer data is also now collected through our recognized online benchmark program, from which we provide valuable insights to participating brands and the wider sector on PFM market size, demand, supply and impacts.

Textile Exchange is introducing a Shared Measurement System (SMS) that will essentially be the connected network of all of Textile Exchange's data systems that links producers, suppliers and brands to provide a holistic and multidimensional view of impacts in preferred fiber and material and paves a path for the standards continual improvement. The new Central Database System described on the next page will provide the traceability backbone to the SMS.

Merging data with potential collaborators on key impact indicators, such as water and carbon, will enable an unprecedented view of how the community is doing in areas that matter most. Leveraging our current work on SDG mapping will further allow the sector to report on impact footprint within the universally recognized SDG framework.

GMO testing method project conceptualised by GOTS

GOTS has initiated and conceptualized a project to determine testing protocols for GM presence in cotton fiber and downstream products. This project is being funded by Organic Cotton Accelerator (OCA). Ideally, it will lead to an ISO standard. It is expected that the exercise may take between 12 and 16 months depending on the scope accepted by the ISO. We feel confident that at the end of this, we will have a clear idea of which tests work, what could be a standardized test protocol and where in the supply chain these tests are reliable. It is expected that these conclusions will be of immense value to the entire organic cotton supply chain by removing uncertainly among test laboratories and test results.

Central Database System

The Central Database System (CDS) is a collaborative technical platform for the chain of custody of GOTS and Textile Exchange standards. Developed in partnership between the two organizations, the CDS integrates scope certificates, transaction certificates, and volume reconciliation across all supply chain actors for Global Organic Textile Standard (GOTS) and Organic Content Standard (OCS) in organic, as well as Content Claim Standard (CCS), Recycled Claim Standard (RCS), Global Recycled Standard (GRS), Responsible Down Standard (RDS) and Responsible Wool Standard (RWS) in other preferred fiber and materials.

The objectives of the CDS are to:

- Increase efficiency, traceability, and transparency of certification and its related activities by providing greater access to certification data;
- Prevent fraud for certificates and duplicate organic orders by creating a single source for verification and volume reconciliation;
- Provide standards' impact data for standard scheme owners;
- Provide public facing data about certified companies; and

 Provide opportunity for traceability and transparency of material source and supply chain member data for stakeholders.

The current review of the organic standards for backward traceability from gin to farm, to be incorporated into the CDS, will further connect and reconcile the national organic farm standardsand OCS.

What does this mean?

- CDS will be the single source system for verification of scope certificates and transaction certificates for GOTS and Textile Exchange standards.
- GOTS and Textile Exchange standard licensees, as well as buyers and sellers of a transaction certificate, can check scope and transaction certificate profile and validity in CDS.

CDS will be the single source system for verification of scope certificates and transaction certificates for GOTS and Textile Exchange standards where standard licensees as well as buyers and sellers of a scope and transaction certificate can check for profile and validity in CDS.

Development timeline - Phase 1

May	Project Initiation
June – August	Requirements Definition
June – August	System Configuration
September	Preliminary CB and Supplier Testing
October	Stakeholder Calls
October 2	CB Webinar
October 21	CB Feedback (Textile Exchange Conference)
October 24	CDS Preview (Textile Exchange Conference)
December	Acceptance Test
December	Further Configuration & Testing
January 1	CDS Release (Pilots)

How to be involved?

- LEARN: Find out more about the development of CDS and how it affects your organization.
- ENGAGE: Be a part of the CDS Working Group to understand and help shape the development of the system.
- SPONSOR: The CDS is an initiative to strengthen the integrity of the organic and other preferred fiber and materials. Your contribution will help our continuous effort for better traceability, transparency and reporting of these materials.

To find out more, email: Lee@TextileExchange.org.

Methodology & Disclaimer

2018 methodology & disclaimer

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. To that end, with the sponsorship of C&A Foundation, 2018 marks a milestone for Textile Exchange in achieving <u>independent</u> <u>third-party verification</u> on its organic cotton data processes to the Global Reporting Initiative (GRI) standard and Accountability Principles for the Organic Cotton Market Report (OCMR).

The following sections sets out the abridged methodology used to collect, analyze and crosscheck the data on the production of organic cotton fiber in 2018.

Key terms & 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 United States, and the National Programme for Organic Production (NPOP) in India.

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. postginning cotton).

Cotton In-Conversion: For cotton to be certified organic, it must be grown organically on land that has undergone a three-year transition period from conventional practices (note the conversion period may be reduced in certain circumstances). While no toxic chemicals are allowed during this time, the transition period is required to eliminate remaining residues left in the soil from past conventional practices. Cotton produced during the three-year transition period is termed Cotton In-Conversion.

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 Organic Certified Land. In-Transition Land: In-Transition Land refers to land that is undergoing the required three-year transition period from conventional to organic as required by all organic standards. While no toxic chemicals are allowed during this time, the transition 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 transition period is referred to as Year 1 (Y1), Year 2 (Y2) and Year 3 (Y3) In-Transition Land, respectively.

Yield: Measured in kilograms per hectare (kg/ha), Yield refers the amount of cotton produced (in kilograms) for each hectare 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, mt, m, b): This report uses the metric system for measurements and units have been abbreviated as follows. Different 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); mt = metric ton (1,000 kg); m = million (1 m = 1,000,000 kg); b = billion (1 b = 100,000,000).

Reporting boundaries, completeness and accuracy

Reporting Period: The data being collected cover a 12month cycle and are based on the International Cotton Advisory Council (ICAC) harvest year of 1 August to 31st July. In 2018, data for the 2016-17 harvest year were collected. In countries, such as Tanzania, where the cotton is picked between July 2016 and August 2017 (i.e. covering 2 ICAC years), the data is allocated to the first year (e.g. 2016). In countries, such as USA, where the cotton is picked in October 2017 to December 2017, data for the previous calendar year (e.g. October 2016 – December 2016) is reported.

Cotton Producing Countries/Production:

In 2018, Textile Exchange's systematic collection, review and reporting of organic cotton production covers more than 95 percent of overall cotton production volume and 50 percent cotton producing countries. In all, 32 of the 64 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 to "IFOAM Family of Standards." A systematic completeness check was carried out on all data collected against published data by 53 Certification Bodies across 46 IFOAM Family of Standards.

Data Source: For OCMR 2018, more than 88 percent of organic cotton production was sourced from Accreditation Bodies (7 percent) and Certification Bodies (81 percent). Sourcing data from Organic Cotton Producers will continue to serve as a source for crossvalidation and to understand farm level scenarios, as Certification Body data is limited to a small set of indicators.

Data sources

Data was collected from a combination of four sources - Authorization Bodies, Certification Bodies, Organic Cotton Producers and Other Business Aggregators and Stakeholders (i.e. ginners, mills, manufacturers, buyers, and NGOs.). The data is collected via telephone interview, site visit, or email by the Textile Exchange Ambassadors between April and July 2018.

Data analysis and checks

Textile Exchange makes every attempt to obtain a single complete data set per country from a 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 cross-check against data reported in the past. In case of inconsistencies, rationales for decision-making are defined in a systematic process and documented. The final aggregates are proofed by industry experts.

Special remarks

Production Volume: A Certification Body estimates the production volume of an Organic Cotton Producer at 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 OCMR 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 land area under organic cotton is reported and total land area certified to organic is not 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 the total certified land was reported, the average rate of intercrops was applied to derive fiber production. (e.g. in India an estimated 33 percent for intercrops is applied as per Certification Body methodology).

Land In-Conversion: In selected cases where in-conversion organic cotton fiber production from land area in-conversion is reported and land area in-conversion is not reported, 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 gap exists, 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 OCMR, 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.

About Textile Exchange

Founded 15 years ago, Textile Exchange is a global non-profit with more than 260 members that represent leading brands, retailers and suppliers – the quality and global reach of which has meaningfully accelerated the use of preferred fibers and increased the adoption of standards and certifications in the global textile industry. As an organization, Textile Exchange creates leaders in the sustainable fiber and materials sector by providing learning opportunities, tools, insight, standards, data, measurement and benchmarking—and by building a community that can collectively accomplish what no individual or company can do alone.

Textile Exchange members are connected to a powerful community of brands, retailers and companies, large and small, from across the textile world—all seeking to create a more sustainable and responsible fiber and materials industry. Members gain access to a suite of valuable tools, relevant data, insight reports, industry networks and connections —and, above all, the opportunity to take action, individually or collectively. Our goal is to help you succeed. Please join us in our collective journey!



Textile Exchange has three tiers of membership to suit your company or organization's needs, including Friend, Supporter, Partner (Brand/Retailer) and Partner (Supply Network). Current Partner level members include:



Acknowledgements

It has been a privilege to work with the C&A Foundation again this year, alongside the committed community of organic cotton farmers, manufacturers, brands, and retailers 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:

APEDA • Bergman Rivera • bioRe Foundation • BioSustain • C&A Foundation • Catholic Relief Services • Chetna Coalition
Chetna Organic • Control Union • Cotton Connect • ECOCERT • Eko-Tar • EMBRAPA Algodão • ESPLAR • Fair Cert
Fairtrade International • FENABE • FiBL • FiLMAR – GOTS - Green Net Cooperative - Gulu Agricultural Development Company
HELVETAS Swiss Intercooperation • Instituto C&A Brazil • Justa Trama • KOWA • National Cotton Classification Center Greece
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Organic Cotton Colours • OrganiMark • Pratibha • Pesticide Action Network UK • Pesticide Action Network Ethiopia
RARE • RDFC • Rural Business Development Center Pakistan • SEKEM • Sense Organic Cotton Market Cooperative
SOCiLA • SODEFITEX • Stay True • Suminter • Texas A&M AgriLife • Texas Organic Cotton Market Cooperative
Vreseis, Ltd. - UNPCB • USDA Foreign Agricultural Service • VEJA Shoes



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Textile Exchange envisions a global textile industry that protects and restores the environment and enhances lives. <u>www.TextileExchange.org</u>

To learn more about organic cotton, visit Textile Exchange's dedicate microsite:

www.aboutorganiccotton.org

For the latest news and trends in the wider preferred fiber and materials landscape, look out for Textile Exchange's 2018 Preferred Fiber & Materials Market Report 2018, being released soon.