



FAIRTRADE AND COTTON

Millions of small-scale farmers in developing countries depend on cotton for their livelihoods. This briefing provides an industry overview, and explores why Fairtrade is needed and what it can achieve...

May 2020



FAIRTRADE
FOUNDATION

COTTON AT A GLANCE

FAIRTRADE FACTS



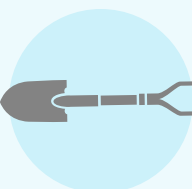
Fairtrade works with 19 producer organisations growing Fairtrade cotton in seven countries.¹



Fairtrade cotton farmers produced 48,838 metric tonnes (MT) of certified seed cotton in 2018.² 10,188MT of cotton lint was sold as Fairtrade in 2018.³



There are 45,576 Fairtrade smallholder seed cotton farmers cultivating a total of 55,516 hectares.⁴



Farmers generated €1,434,146 of Fairtrade Premium in 2018.⁵



Farmers spent 18 percent of their Fairtrade Premium on community services, including education, and 47 percent on agricultural tools and inputs.⁶

GLOBAL FACTS



Around 25 million MT of cotton have been produced each year over the past five years.⁷



In 2017, global exports of cotton were worth \$56.7 billion.⁸



The global average water footprint of seed cotton is 3,644 cubic metres per tonne, which is equivalent to nearly 1.5 Olympic swimming pools.⁹



Six percent of the world's pesticides and 16 percent of insecticides are used on cotton production.¹⁰



Cotton is grown in around 65 countries on approximately 29.67m hectares – or 2.1 percent of global arable land.¹¹

¹ Fairtrade International, *Key Data: Fairtrade Cotton*, <https://www.fairtrade.net/impact/key-data-fairtrade-cotton> [accessed 29 September 2020].

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ Keith Tyrell, Anne-Katrien Denissen, Isabelle Roger, Lisa Schonenberg, Richard Holland, Ely Peters, Justin Woolford, Edith Verhoestraete, *Sustainable Cotton Ranking 2017: Assessing Company Performance* (PAN UK, WWF & Solidaridad, 2017), p.1.

⁸ International Trade Centre, *Trade Map*, <https://www.trademap.org/Index.aspx>, [accessed 5 September 2019]. *Includes cotton, yarn, thread and fabrics.

⁹ Cotton Up Guide to Sourcing Sustainable Cotton, *Challenges for Cotton*, <http://cottonupguide.org/why-source-sustainable-cotton/challenges-for-cotton/#1518784631421-5825380e-f0f8>, [accessed 18 March 2020].

¹⁰ PAN UK, *Pesticide Concerns in Cotton*, <https://www.pan-uk.org/cotton/>, [accessed 18 March 2020].

¹¹ Textile Exchange, *2025 Sustainable Cotton Challenge: First Annual Report* (2018), p.13.

GLOBAL FACTS CONTINUED...



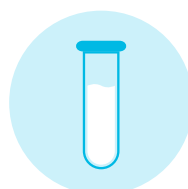
The apparel market today is worth around \$1.3 trillion (excluding footwear and jewellery) in retail sales globally.¹²



Over 150 countries are involved in exporting or importing cotton.¹⁴



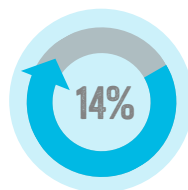
Government subsidies for domestic cotton production were up 33 percent in 2017/18 and totalled \$5.9bn. 47 percent of world cotton production received direct government assistance in 2017/18. China led the way with \$4.3bn paid.¹³



75 percent of cotton grown globally is genetically modified.¹⁵



100m rural households are directly engaged in cotton production – 90 percent of them in developing countries.



Polyester accounts for more than 50 percent of global textile product, with an average of 53m MT produced every year. However, in recent years there has been an increase in the production of recycled polyester, which was up to 14 percent in 2017.¹⁶



An estimated 350 million people work in the cotton sector.



Cotton prices are volatile, and have experienced long-term decline since the 1980s. Taking inflation into account, prices have fallen from around \$3.00/kg in the 1980s to \$1.98 today.¹⁷

¹² Common Objective, *The Size of the Global Fashion Retail Market*, <https://www.commonobjective.co/article/the-size-of-the-global-fashion-retail-market>, [accessed 18 March 2020].

¹³ ICAC, *Production and Trade Subsidies Affecting the Cotton Industry* (Secretariat of the International Cotton Advisory Committee: Washington DC, November 2018), pp.1–2.

¹⁴ International Trade Centre, *Cotton Exporters Guide: The importance of cotton in world trade*, <http://www.cottonguide.org/cotton-guide/the-world-cotton-market/the-importance-of-cotton-in-world-trade/>, [accessed 15 April 2020].

¹⁵ BCI, *Genetically Modified (GM) Cotton*, <https://bettercotton.org/resources/key-facts/fact-6-genetically-modified-gm-cotton/>, [accessed 23 March 2020].

¹⁶ Textile Exchange, *Preferred Fiber & Materials: Market Report 2018* (Textile Exchange: 2018), pp.5–6.

¹⁷ World Bank, *World Bank Commodities Price Forecast: April 2019*, <http://pubdocs.worldbank.org/en/598821555973008624/CMO-April-2019-Forecasts.pdf>, [accessed 24 March 2020].

Cotton is the world's oldest commercial crop and one of the most important fibre crops in the global textile industry. It is grown in around 65 countries on approximately 29.67m hectares – or 2.1 percent of global arable land. This makes cotton one of the most significant crops in terms of land use after food grains and soybeans.

Cotton is also a heavily traded agricultural commodity with over 150 countries involved in exporting or importing it. It makes up nearly 30 percent of global production and has a history dating back over 8,000 years.¹⁸ Cotton also plays a major role in the economic and social development of developing and newly industrialised countries. It is an especially important source of employment and income in West and Central Africa, India, Pakistan and Central Asia.

As many as 100m rural households – 90 percent of them in developing countries – are directly engaged in cotton production, relying on it for their income. An estimated 350 million people work in the cotton sector when family labour, farm labour and workers in connected services such as transportation, ginning, baling and storage are taken into account.¹⁹

The major cotton producing countries are India, China, the United States, Brazil and Pakistan.²⁰ China is both the largest exporter and importer of cotton by value. Since 2015, Bangladesh has been the second largest importer of cotton, with Vietnam and Turkey also importing significant volumes – possibly due to the development of textile and garment manufacturing industries in these countries.

World cotton production for the 2018/19 season showed a three percent decrease to 25.7m MT.²¹ This signals the first decrease in production since 2015/2016.²² While some countries' production remained steady, or even increased, several of the major players – the US, Australia and Pakistan – suffered production losses as a result of poor weather conditions and a lack of available water.²³ Additionally, the global consumption of cotton suffered a one percent decrease to 26.2m MT during the 2018/19 season.²⁴

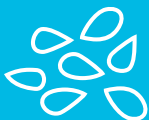
FROM COTTON PLANT TO CLOTHING



1 Cotton is primarily grown in dry tropical and subtropical climates at temperatures between 11°C and 25°C.



2 The flower of the cotton plant (genus *Gossypium*) produces seeds and surrounding white downy fibre known as bolls.



3 After harvesting – by hand or mechanically – the bolls are transported to a ginnery where the fibres, known as lint, are separated from the cottonseed.



4 The lint is compacted in bales and stored before being spun into yarn or thread and processed into a range of textile products...



5 ...whether that's through weaving, knitting, dyeing and printing or being sewn into garments, accessories and homeware products.



6 The cottonseed is used in animal feed or pressed to make cooking oil.

¹⁸ Cotton Up Guide to Sourcing Sustainable Cotton, *Cotton at a Glance*, <http://cottonupguide.org/why-source-sustainable-cotton/cotton-at-a-glance/#1518784631421-5825380e-f0f8>, [accessed 24 March 2020].

¹⁹ Fashion Revolution, *Meet Kady Waylie: Fairtrade Cotton Farmer*, <https://www.fashionrevolution.org/meet-kady-waylie-fairtrade-cotton-farmer/>, [accessed 24 March 2020].

²⁰ Statista, *Distribution of Cotton Production Worldwide in 2017/2018, By Country*, <https://www.statista.com/statistics/595561/distribution-of-global-cotton-production-by-country/>, [accessed 24 March 2020].

²¹ ICAC, *News – 21 November 2019 – Cotton Review of the World Situation*, www.icac.org/News/NewsDetails?NewsId=2314&YearId=2019, [accessed 25 March 2020].

²² ICAC, *News – 17 December 2018 – Global Stocks Expected to Decrease*, <https://www.icac.org/News/NewsDetails?NewsId=1258&YearId=2018>, [accessed 25 March 2020].

²³ ICAC, *News – 1 July 2019 – Rising Stocks and Uncertain Demand Cloud the Outlook for 2019/20*, <https://www.icac.org/News/NewsDetails?NewsId=1287&YearId=2019>, [accessed 25 March 2020].

²⁴ ICAC, *News – 21 November 2019 – Cotton Review of the World Situation*.



The cotton industry faces a number of challenges to its long-term sustainability – from the intensive use of hazardous chemicals to climate change and low cotton prices. Many of these contribute to the fact that cotton is failing to provide a sustainable and profitable livelihood for the millions of small-scale farmers predominantly in Asia and Africa who are responsible for growing the seed cotton the global cotton textile industry depends on.

Industry challenges

Competition from synthetic fibres

In 2017, over 100m MT of fibres were produced, from cotton to polyester. Of this, around 65 percent were synthetic fibres derived from petrochemicals, with polyester being the most commonly produced. Meanwhile, cotton currently has an increasing market share with around 25 percent of global fibre production being cotton-based.²⁵

Synthetic fibres have a different, but still significant, impact on the environment. While cotton production is water and land-intensive, the production of synthetic fibres produces substantial greenhouse gas emissions. The production of a polyester shirt has more than double the carbon footprint of a cotton shirt (5.5kg CO₂e vs. 2.1kg CO₂e).²⁶ However, growing concern about the climate crisis, microplastics and microfibres has led to an industry-level focus on more sustainable alternatives such as recycled fibres (eg from plastic waste or reused textiles), man-made cellulose (including from recycled cotton), and natural and bio-based fibres.

The gap between cotton and polyester prices has been narrowing since mid-2017. Recycled polyester also has a growing market share (up to 14 percent of production in 2017), however a recent ban on imports of polyester solid and textile waste to China may cause recycled polyester production to decrease. At present, less than one percent of all clothing is recycled back into clothing. However, increasing commitment from the fashion industry to circularity makes growth in this area likely, potentially reducing cotton's market share.²⁷

Government subsidies

Intended to shield domestic producers from volatile and low cotton prices, government subsidies include direct support to production, border protection, crop insurance subsidies and minimum support price mechanisms. It has been seen that in years when prices are high, subsidies tend to decline. In years when prices are low, subsidies tend to rise.²⁸



Cotton at Noble Ecotech, India

²⁵ Textile Exchange, *Preferred Fiber & Materials: Market Report 2018*, p.6.

²⁶ UK Parliament, *Fixing Fashion: Clothing Consumption and Sustainability, Fashion's Environmental Price Tag*, <https://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/1952/report-files/195206.htm> [accessed 15 April 2020].

²⁷ Textile Exchange, *Preferred Fiber & Materials: Market Report 2018*.

²⁸ ICAC, *Production and Trade Subsidies Affecting the Cotton Industry*, p.1.



Workers weeding a cotton field in Rapar district, India

Government subsidies for cotton farmers in rich countries create a market with artificially low prices in which small-scale farmers in developing countries are unable to compete.²⁹

High price volatility can negatively affect the competitiveness of cotton. This can have disastrous consequences that threaten the future of the cotton economy, including pushing retailers to shift to higher blend textiles. For example, they might move to making what was formerly a 100 percent cotton shirt to 50 percent cotton and 50 percent polyester.³⁰

Child labour and forced labour

Child labour in cotton has been reported in several countries and is most prominent on small-scale farms, particularly at planting and harvesting times. The US Department of Labor's 2018 list of goods produced by child labour or forced labour states cotton as having the joint fourth highest number of listings (17 countries).³¹

Forced and child labour presents a major challenge to the cotton industry and is well documented in nine cotton-producing countries. In Turkmenistan and Uzbekistan, state-controlled forced labour is used to complete the cotton harvest each year.

Following global scrutiny and pressure from across the industry, including from consumers and brands, Uzbekistan has begun to take measures to address the issue. Following the introduction of new policies in 2017, children aged between seven and 14 are no longer sent to the cotton fields. However, forced labour remains an issue – in 2017, the International Labor Organization estimated that around 336,000 forced labourers were sent to the cotton fields for the harvest.

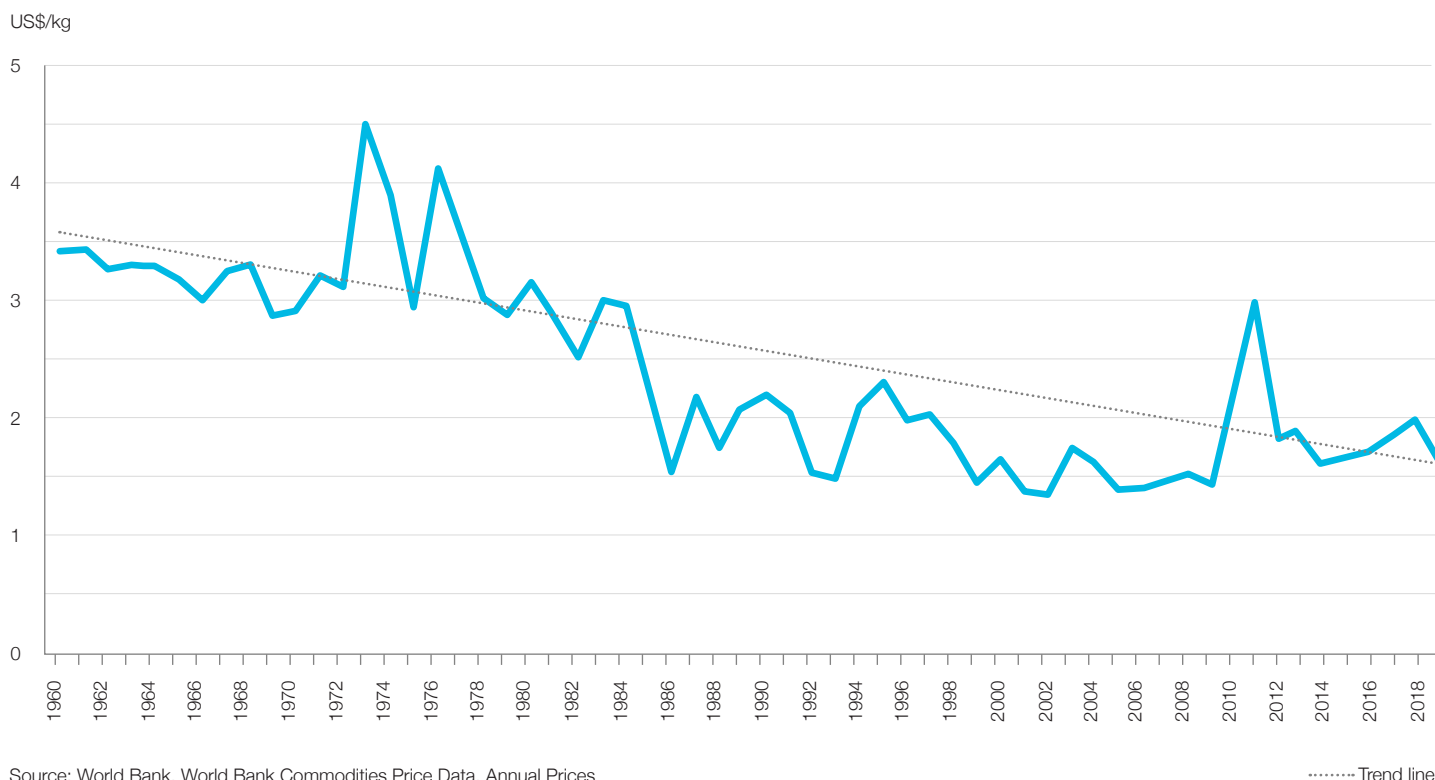
Similarly, in Turkmenistan, despite national laws prohibiting forced labour, citizens are forced to pick cotton under various threats. As the Turkmen government owns all land in the country, farmers have no choice but to grow cotton to the government's demands. The Responsible Sourcing Network is advocating for industry stakeholders to pledge not to knowingly source cotton from Uzbekistan and Turkmenistan, and many companies have already joined this campaign.³²

²⁹ Fairtrade Foundation, *Cotton is Failing to Provide a Profitable Livelihood for Small Scale Farmers*, <https://www.fairtrade.org.uk/Media-Centre/News/April-2015/Cotton-is-failing-to-provide-a-profitable-livelihood-for-small-scale-farmers>, [accessed 26 March 2020].

³⁰ Report from the Task Force on the Challenges from Competing Fibers to the 72nd Plenary Meeting of the International Cotton Advisory Committee, September 29-October 4, 2013.

³¹ US Department of Labour, *2018 List of Goods Produced by Child Labour or Forced Labour* (Office of Child Labour, Forced Labour, and Human Trafficking: 2018), pp.11 – 14.

³² Responsible Sourcing Network, *Cotton*, <https://www.sourcingnetwork.org/cotton>, [accessed 26 March 2020].



Source: World Bank, World Bank Commodities Price Data, Annual Prices

..... Trend line

Challenges for farmers

Low incomes, low investment, high dependency

Cotton farmers are at the end of a long and complex supply chain in which they are virtually invisible and wield little power or influence. With high levels of illiteracy and limited land holdings, many cotton farmers live below the poverty line and are dependent on the middlemen or ginners who buy their cotton, often at prices below the cost of production.

Rising costs of production, fluctuating market prices, decreasing yields and climate change are daily challenges, along with food price inflation and food insecurity. These factors also affect farmers' ability to provide decent wages and conditions to the casual workers they employ. In West Africa, a cotton farmer's typical smallholding of two to five hectares provides the essential income for basic needs such as food, healthcare, school fees and tools. A small fall in cotton prices can have serious implications for a farmer's ability to meet these needs. In India, many farmers are seriously indebted because of the high interest loans needed to purchase fertilisers and other farm inputs. Unstable, inadequate incomes perpetuate the situation in which farmers lack the finances to invest in the infrastructure, training and tools needed to improve their livelihoods.

Price volatility

Like many commodities, cotton is traded on international markets in US dollars, while the Cotlook A Index is the recognised barometer of world prices. Cotton prices are volatile, and have experienced long-term decline since the 1980s. In real terms (accounting for inflation), prices per kg have decreased from \$3.00 in the 1980s to \$1.98 today, particularly striking as the 2018 price is the highest price achieved since 2011.³³ Technology-driven productivity gains, competition with other fibres and changes in consumption and production (supply and demand) patterns all have downstream impacts on the value chain, ultimately affecting the prices received by farmers.

Research shows that a small increase in the seed cotton price would significantly improve the livelihood of cotton farmers but have little impact on retail prices. Depending on the amount of cotton used and the processing needed, the cost of raw cotton makes up a small share of the retail price, not exceeding ten percent. This is because a textile product's price includes added value in the various processing and manufacturing activities along the supply chain. So a ten percent increase in the seed cotton price would only result in a one percent or less increase in the retail price – a negligible amount given that retailers often receive more than half of the final retail price of cotton finished products.³⁴

³³World Bank, *World Bank Commodities Price Data, Annual Prices (The Pink Sheet)*, <https://www.worldbank.org/en/research/commodity-markets#1>, [accessed 16 April 2020].

³⁴Valerie Nelson and Sally Smith, *Fairtrade Cotton: Assessing Impact in Mali, Senegal, Cameroon and India. Summary of Synthesis Report* (London: University of Greenwich, May 2011), p.2.

Agrochemical use and the environment

Concern is growing about the sustainability of cotton production as the environmental impacts of conventional cotton production become more apparent. Cotton farmers rely heavily on agrochemicals such as herbicides to eradicate weeds and pesticides to control the numerous pests that destroy around 15 percent of world production.³⁵ According to an ICAC report released in 2012, around five percent of the world's pesticides sold are destined to be used for cotton and 14 percent of insecticides.³⁶

The consequences of intense chemical use include deterioration in soil quality and productivity, and contamination of groundwater – the main source of drinking water for most rural populations in developing countries. Other consequences include increasing resistance of pests, negative effects on biodiversity and the potential health risks of cooking oil and animal feed made from cottonseed. Meanwhile, poor storage, inadequate or unused personal protective equipment and lack of training in safely handling hazardous chemicals results in widespread pesticide poisoning among cotton workers, ranging from headaches, nausea and vomiting to loss of consciousness and seizures.³⁷

In recent years there has been significant reporting suggesting a decrease in the use of agrochemicals, however many figures are out of date and inaccurate. Findings show that pesticide use has not dropped as substantially as some believe – cotton is still the fourth largest consumer of agricultural chemicals. And while pesticide use has undoubtedly dropped since the 1980s, progress is not uniform and the extent of the problem is under-reported.³⁸

Water use

Under poor management practices, cotton can contribute to over-consumption of water, depending on where and how it is grown. The global average water footprint of seed cotton is 3,644 cubic metres per tonne, the equivalent of nearly 1.5 Olympic swimming pools.³⁹

In Central Asia, water consumption for irrigation for cotton production has had pronounced environmental impacts. The Aral Sea has shrunk to only 25 percent of its original size and soil salinity is affecting cotton yield and productivity.⁴⁰

Other major cotton producing regions, such as Pakistan, China, Uzbekistan and the US, use artificial irrigation, particularly in large plantations. Artificially irrigated areas represent about half the global area under cotton cultivation but, because of higher yields, account for 73 percent of the global cotton production.⁴¹ Inefficient irrigation systems can deplete local water sources, making water a scarce commodity for many cotton-growing communities. Traditional techniques such as flood irrigation can be wasteful and also lead to the runoff of fertilisers and pesticides causing the pollution of rivers, lakes and water tables. Similarly, cotton-processing industries in many countries pollute natural water sources by pumping untreated waste flows into them.



Cotton harvests are weighed and shipped in Segou, Senegal

³⁵ Carmelo Rapisarda & Giuseppe E Massimino Cocuzza (eds.), *Integrated Pest Management in Tropical Regions* (CAB; Wallingford, Oxon; Boston, MA: 2017), p.137. <https://books.google.co.uk/books?id=PY1FDwAAQBAJ&pg=PA137&lpg=PA137&dq=cotton+pests+15%25&source=bl&ots=Bl6vOTWW6I&sig=ACfU3U1sL40nve-G9FhBkwWOLm4Oaap-Q&hl=en&sa=X&ved=2ahUKEwjNkn5s8zoAhVGQUEAHWuGADgQ6AEwBXoECAwQMg#v=onepage&q=cotton%20pests%2015%25&f=false>

³⁶ PANUK, *Is Cotton Conquering its Chemical Addiction? A Review of Pesticide use in Global Cotton Production* (Brighton: PANUK, October 2017), p.17.

³⁷ Peter A. C. Ooi, Suwanna Praneetvatakul, Hermann Waibel, Gerd Walter-Echols "The Impact of the FAO-EU IPM Programme for Cotton in Asia", *Pesticide Policy Project Publication Series Special Issue No. 9*, July 2005 University of Hannover, Germany.

³⁸ PANUK, *Is Cotton Conquering its Chemical Addiction?*, pp.2–7.

³⁹ Cotton Up Guide to Sourcing Sustainable Cotton, Challenges for Cotton, <http://cottonupguide.org/why-source-sustainablecotton/challenges-for-cotton/#1518784631421-5825380e-f0f8>, [accessed 18 March 2020].

⁴⁰ Nasa, *Landsat Top Ten – A Shrinking Sea, Aral Sea*, https://www.nasa.gov/mission_pages/landsat/news/40th-top10-aralsea.html, [accessed 9 April 2020].

⁴¹ Jason Potts, Matthew Lynch, Ann Wilkings, Gabriel Huppé, Maxine Cunningham, Vivek Voora, *The State of Sustainability Initiatives Review 2014* (International Institute for Sustainable Development & International Institute for Environment and Development, 2014), p.187.

Climate change

Textile production is a major contributor to climate change. It is estimated that across the full life cycle of clothing, the industry has an annual carbon footprint of 3.3bn tonnes of CO₂e, rising to nearly 4bn tonnes if footwear is included.⁴² Globally, 73 percent of cotton cultivation relies on irrigation, and water use can be significant.

Rising temperatures can also lead to cotton plants suffering heat stress. This is likely to reduce yields and increase the prevalence of pests and diseases, particularly in hotter growing environments (eg India, Pakistan and Sudan).

Agricultural areas in China, Pakistan, India and Central Asia that depend on fresh water from the Himalayan glaciers are very vulnerable to the effects of climate change. The rapid retreat of glaciers caused by higher temperatures is significantly reducing the amount of fresh water released into rivers and streams and, consequently, available for agricultural use. In India, farmers are experiencing erratic and extreme weather patterns, including delayed monsoons, and dry spells and floods during the same season, which have a huge impact on livelihoods. Similarly, in Pakistan, above average summer monsoon rains have resulted in damaging floods alternating with extended droughts that reduce fresh water supplies even further.

Similar changes in weather patterns are also likely to have a negative impact on agriculture in many parts of Sub-Saharan Africa. In particular, dependence on rain-fed agriculture and natural resources for livelihoods, combined with limited knowledge on climate change and limited resources for adaptation, make this region especially vulnerable to higher climatic variability and climate change.⁴³ Under business-as-usual conditions, the fashion industry's climate impact is projected to increase by 49 percent against 2016 levels by 2030.⁴⁴



Cotton bolls, Pratima, India



Pratima Organic Grower Group worker Katha Mahananda

GM cotton

GM (genetically modified) cotton was widely adopted in cotton-growing regions in the late 1990s to early 2000s (1997 in South Africa and 2002 in India). It was hoped that the genetic modifications would improve resistance to pests and to certain herbicides, making it easier to eliminate weeds. For example, the most common form of GM cotton – Bt Cotton – is resistant to bollworm. However, the experience of many cotton farmers using GM seeds has not been positive, mainly as the initial purchase cost of the seeds is higher. A range of negative impacts has been documented. For example, target pests begin to develop resistance over time, requiring intensive management and monitoring regimes, and, even where the target pest is effectively removed, secondary pests may become more problematic. A study across five Chinese provinces found that Bt Cotton farmers earned less than conventional cotton-growers, primarily due to the need to treat the emergence of previously insignificant (secondary) pests.⁴⁵ Similarly, in 2015, whitefly destroyed two thirds of the cotton crop in the Punjab, causing an estimated loss of \$629m and leading to several farmer suicides.⁴⁶

In India, 90 percent of India's cotton area is planted with GM seeds. And the companies selling GM seeds have a monopoly over the cotton seed market, leaving farmers with little choice.⁴⁷

⁴² Quantis, *Measuring Fashion: Insights from the Environmental Impact of the Global Apparel and Footwear Industries Study* (2018), p.3.

⁴³ Patrick Gwimbi and Tanyaradzwa Mundoga, "Impact of climate change on cotton production under rainfed conditions: case of Gokwe", *Journal of Sustainable Development in Africa* 12 (8), 2010: pp.59–69.

⁴⁴ Quantis, *Measuring Fashion*, p.2.

⁴⁵ Brian Dowd-Urbe & Jim Bingen, "Debating the merits of biotech crop adoption in sub-Saharan Africa: distributional impacts, climatic variability and pest dynamics", *Progress in Development Studies*, 11(1), 2011: p.66.

⁴⁶ Soil Association, *Failed Promises: The Rise and Fall of GM Cotton in India* (October 2017), p.2.

⁴⁷ Canadian Biotechnology Action Network (CBAN), *Genetically Modified Cotton: CBAN Factsheet*, (CBAN: Ottawa CA, February 2013), p.3.



Fairtrade Standards cover all three pillars of sustainability – economic, social and environmental.

What differentiates Fairtrade from other certification schemes?

The negative aspects of conventional cotton production are causing concern to both consumers and industry. Social and environmental accountability and sustainability issues are becoming increasingly important for major brands and retailers. This has seen a growth in the number of certification schemes that aim to improve the economic, social and environmental conditions within cotton production. The 2016 ‘Textiles Standards and Legislation’ lists more than 70 sustainable textile labels and standards.⁴⁸

The share of more sustainable cotton increased to 21 percent of global production in the 2017/18 season (12 percent in 2015/16, which was reported in the Sustainable Cotton Ranking’s 2017 report, with approximately 5.3m MT of cotton lint.⁴⁹

The volume of more sustainable cotton actively sourced by brands and retailers increased slightly to approximately 25 percent of the available supply in 2018 (21 percent in 2016), still leaving 75 percent of more sustainable cotton traded as conventional cotton.⁵⁰

There are many certifications, codes and programmes trying to address the challenges in the cotton sector. While others aim to protect the environment or enable companies to trace their products, Fairtrade is unique in being the only certification scheme whose primary aim is to tackle poverty through better terms of trade as well as giving farmers greater power within their trading relationships.

Small-scale cotton farmers have limited options for improving their economic and social situation within the conventional supply chain. Fairtrade supports farmers with fairer, more stable prices and additional income to invest in infrastructure, training, farm equipment and business improvements as well as programmes such as healthcare, clean water and education that contribute to flourishing communities. Fairtrade supports farmers in managing the environmental and health risks from cotton production and in building stronger organisations with increased bargaining power and a more active role in global supply chains. Fairtrade works with 19 producer organisations growing Fairtrade cotton in seven countries.⁵¹ In 2018, cotton farmers generated €1,434,146 of Fairtrade Premium.⁵² 18 percent of this Premium was spent on community services, including education, and 47 percent on agricultural tools and inputs.⁵³

FAIRTRADE IN BRIEF

- Fairtrade Minimum Price protects against volatile market prices
- Fairtrade Premium for strategic investment (fertilisers, pesticides, fuel, yield and quality)
- Fairtrade Premium for community investment in essential infrastructure (healthcare, education, clean water)
- Facilitates access to export markets
- Supports strong, entrepreneurial and representative farmer organisations
- Access to training and capacity building
- Environmentally friendly and long-term sustainable practices

“ FOR ME, FAIRTRADE IS THE BALANCE BETWEEN ETHICS AND THE ENVIRONMENT. THE DISADVANTAGED CO-OPERATIVES BENEFIT SOCIALLY, ECONOMICALLY AND ECOLOGICALLY FROM FAIRTRADE. THE SYSTEM ENCOURAGES THEM TO PARTICIPATE DEMOCRATICALLY IN ALL DECISIONS OF THE CO-OPERATIVE. ”

Siddharth Tripathy, Press Secretary of Chetna Organic Farmers Association

⁴⁸ Textile Standards & Legislation, *A Guide to Environmental & Social Compliance Textile Standards & Legislation*, <https://www.textilestandards.com/> [accessed 15 April 2020].

⁴⁹ Sustainable Cotton Ranking, *Market Update*, <https://sustainablecottonranking.org/market-update>, [accessed 9 April 2020].

⁵⁰ Sustainable Cotton Ranking, *Market Update*, <https://sustainablecottonranking.org/market-update>, [accessed 9 April 2020].

⁵¹ Fairtrade International, *Key Data: Fairtrade Cotton*, <https://www.fairtrade.net/impact/key-data-fairtrade-cotton> [accessed 29 September 2020].

⁵² Ibid.

⁵³ Ibid.

Fairtrade Standards for cotton

Fairtrade cotton was launched in 2005 to offer cotton producers an alternative to the volatile and unreliable conventional market. Producer organisations are audited against Fairtrade Standards, which provide a framework for a sustainable approach to production that can have long-term economic, social and environmental benefits for farmers and their communities. The Standards include a guaranteed Fairtrade Minimum Price for seed cotton and the additional Fairtrade Premium for farmers to invest in strengthening their organisations, developing their businesses and improving the infrastructure of their communities.

The main provisions and objectives of Fairtrade Standards are:

Minimum Price and Premium payment

- Producer organisations are paid a Fairtrade Minimum Price for seed cotton. Set by region and variety, it ranges from €0.66/kg in Kyrgyzstan to €0.39/kg in South Asia
- The Fairtrade Minimum Price aims to cover average costs of sustainable production and provides a safety net when market prices fall below a sustainable level
- When the market price is higher than the Fairtrade Minimum Price, the buyer must pay the higher price. Producers and traders can also negotiate higher prices on the basis of quality and other attributes
- Producer organisations are paid an additional Fairtrade Premium of €0.05/kg to invest in business development and community and environmental projects chosen by their members
- The Trader Standard aims to encourage fairer negotiations and include signing contracts that allow for long-term planning and sustainable production practices

Organisational development and strengthening

- Fairtrade certified seed cotton is open to small producer organisations that are owned and governed by their members
- A democratic decision-making process must be in place, with all members having an equal right to vote on key issues
- Farmers in India who are not organised to this level can be certified under the Contract Production Standards. Farmers must be contracted to an intermediary organisation (usually an exporter or NGO), known as a Promoting Body, which will support them in the process of forming a functioning independent organisation
- Producer organisations can request pre-finance of up to 60 percent of the negotiated contract value. This is vital in providing small-scale farmers' organisations with the capital to purchase their members' crop and provide agreed services

Environmental and social production standards

Environmental standards promote best agricultural practices that are sustainable, minimise risks and protect biodiversity:

- Minimised use and safe handling and storage of pesticides, herbicides and hazardous chemicals
- No use of chemicals included in the Fairtrade Prohibited Materials List
- Integrated pest management including non-chemical pesticides and biological pest controls
- Appropriate and safe use, storage and disposal of hazardous waste
- No use of genetically modified organisms (GMOs)
- Improve soil fertility, reduce and prevent soil erosion
- Efficient and sustainable use of water resources
- Maintain buffer zones around bodies of water and conservation areas where pesticides and hazardous chemicals must not be used
- Re-use of organic waste for composting, mulching and manure
- Protect and enhance biodiversity by identifying and protecting natural ecosystems, protected areas and conservation areas
- Work towards efficient energy use and reduction in greenhouse gas emissions
- Forced labour and child labour are prohibited
- Operators within the supply chain must comply with core International Labor Organization Conventions
- No discrimination of members or workers on the basis of race, colour, religion, gender, sexual orientation, age, marital status, disability, HIV/AIDS status, nationality or social origin, political opinion, trade union membership

Fairtrade Standards include core requirements which must be met by all producer organisations (eg training in handling pesticides) and development requirements, which are a process for making continuous improvements within realistic timeframes (eg reducing the use of herbicides). Fairtrade International provides training and guidance in meeting standards, supported by training manuals and in-country liaison officers.

Fairtrade certification includes regular audit FLOCERT (flocert.net), a global certification and verification body with the main role of independently certifying Fairtrade products. Producer organisations and traders pay a certification fee, which contributes to the cost of the service and which is compulsory for ISO 17065 accreditation.⁵⁴ Producer organisations that lack sufficient financial resources to pay the full Fairtrade certification or renewal fee can apply for a grant of up to 75 percent of the fee. Certification provides the scrutiny that motivates producer organisations and traders to actively and effectively ensure compliance with Fairtrade Standards. It also helps producers to progressively strengthen their organisations by developing and adapting internal systems and processes.

⁵⁴ISO 17065 is the standard set by the International Organization for Standardization for bodies certifying products, processes and services, and is intended to ensure they operate certification schemes in a competent, consistent and impartial manner. <https://www.iso.org/standard/46568.html>



THE DIFFERENCE FAIRTRADE MAKES TO FARMERS AND THEIR COMMUNITIES



IN 2018 FAIRTRADE COTTON
FARMERS PRODUCED

48,838MT

OF CERTIFIABLE SEED
COTTON GENERATING

€1,434,146

IN FAIRTRADE PREMIUM TO
INVEST IN THEIR BUSINESSES
AND COMMUNITIES.⁵⁶

Farmer working in Kyrgyzstan

There are now 19 Fairtrade certified cotton producer organisations representing 45,576 smallholder farmers across seven countries – including Burkina Faso, India, Kyrgyzstan and Senegal.⁵⁵

“BEFORE, WE FARMERS HAD TO BUY SEEDS FROM LOCAL MERCHANTS EVERY YEAR AND REMAIN IN DEBT TO THEM. THE FAIRTRADE CERTIFIED CO-OPERATIVE THAT WE ARE NOW MEMBERS OF BUYS SEEDS IN LARGE QUANTITIES AND SELLS TO US FARMERS FOR A REASONABLE PRICE. THE CO-OPERATIVE BUYS ALL THE COTTON WE GROW AND SELLS IT FOR US, SO THAT EACH FARMER DOES NOT HAVE TO HANDLE THE SALE HIMSELF.”

Chatr Singh, Noble Ecotech co-operative, India

⁵⁵ Fairtrade International, *Key Data: Fairtrade Cotton*, <https://www.fairtrade.net/impact/key-data-fairtrade-cotton> [accessed 29 September 2020].

⁵⁶ Ibid.

RESEARCHING THE IMPACTS OF FAIRTRADE COTTON

Fairtrade commissioned Trucost and Gist to compare and benchmark the external social and environmental costs and benefits of Fairtrade cotton against conventional cotton.

Researchers took a high-level approach, averaging the data from two Fairtrade co-operatives and comparing it with data on conventional cotton farming in India. We acknowledge that this sample may not be representative of the entire Fairtrade cotton farming community in India.

The aim of the study was to identify opportunities to reduce the external costs and to use this information to target improvements and support programmes offered by Fairtrade.

These external costs, or 'externalities', are defined as costs imposed on society by the production, consumption or investment decisions of individuals, governments and businesses for which they do not pay.⁵⁷

A classic example of a negative environmental externality is the emission of air pollution due to the burning of fossil fuels to produce electricity. The emission of air pollution is damaging to the communities living nearby – increasing healthcare costs and reducing life expectancy due to poor health – but the electricity producer may not fully pay these costs to the communities. In this way, the health damages caused by the emission of air pollution represent an external cost of electricity generation.

An example of a negative social externality is the exposure of workers to health and safety risks. If workers do not wear sufficient protective clothing and equipment, they are exposed to a greater risk of occupational incidents and associated injuries. The cost of such incidents increases healthcare costs, which the producer may not fully pay, shifting the cost to the worker or to society more broadly. Another example is the provision of wages to workers that are insufficient to support a decent living, imposing negative effects on the wellbeing of the worker and their household.



A cotton farmer picks a handful of cotton in Rapar district, Gujarat, India

⁵⁷ Thomas Helbling, "What Are Externalities?", *Finance and Development: International Monetary Fund (IMF)*, Vol. 47, No. 4: December 2010: p.48.

The results

The research revealed that the combined social and environmental costs of Fairtrade cotton farming are five times lower than that of conventional cotton farming.

The findings showed:

- Fairtrade cotton farming has lower environmental costs due to a number of factors. For instance, agrochemical use is lower. Synthetic fertilisers are replaced with organic fertilisers such as compost, which normally contain less nitrogen and phosphorous, and synthetic pesticides are replaced with organic pesticides such as leaf extract. These agricultural practices lead to reduced water and soil pollution impacts. Greenhouse gas emissions are also lower for Fairtrade cotton farming, mainly because in conventional cotton farming there is the burning of crop residues whereas for Fairtrade this technique is no longer practiced. Finally, for Fairtrade cotton farming, water use per kg of seed cotton produced is also reduced (on average approximately 30 percent lower).
- Fairtrade cotton cultivation has approximately 97 percent lower social costs than conventional cotton cultivation. This can be attributed to the absence of forced overtime for farm labourers

and the lower impacts associated with child labour on Fairtrade farms when compared to conventional farms.

- For all the KPIs except for land use, Fairtrade cotton performed better than conventional cotton. This can be explained by the lower level of inputs per kg of cotton and appropriate crop residue management practices. On average, land use for Fairtrade cotton is higher. This is because Fairtrade cotton farming has slightly lower yield than conventional and therefore more land is required to produce one kg of seed cotton.
- Fairtrade cotton farming generated approximately 13 percent higher social benefits than conventional farming. These benefits are attributable to the payment of Fairtrade Minimum Prices to farmers, which deliver higher returns than market prices. In addition, Fairtrade Premium received by the co-operative benefit local communities by enabling them to implement projects to enhance wellbeing. Finally, the fair wages paid to the agricultural labourers play an important role in improving their incomes.

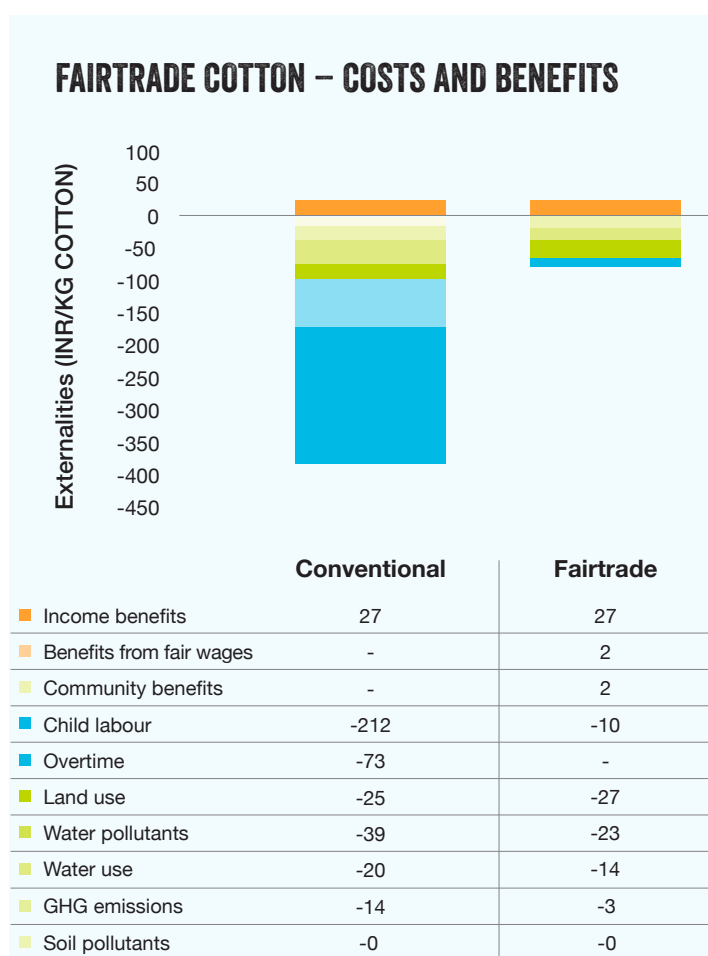


Figure 2: Fairtrade cotton costs and benefits – data

Fairtrade cotton farming had **external costs five times lower than conventional** cotton farming:

- 31% lower for the environmental components
- 97% lower for the social components

In this study, Fairtrade cotton farming had **external benefits that were non-existent in conventional cotton farming**, such as benefits from fairer wages and community benefits.

About the data in this report

With reference to some social indicators, the overall industry and Fairtrade figures might be underestimated due to some methodological choices, data access restrictions, and the hidden nature of these practices. The small sample size is a limitation applicable to both social and environmental KPIs.

Please email cotton@fairtrade.org.uk for more information on this report.

FAIRTRADE AND COTTON IN INDIA

A. PRATIMA ORGANIC GROWER GROUP

Pratima Organic Grower Group was founded in 2003 and became Fairtrade certified in 2010. It has more than 3,500 members who cultivate around 4,500 hectares of land. It is dedicated to 100 percent organic and Fairtrade production. It was the second Fairtrade cotton producer organisation to transition from contract production to a fully-fledged, farmer-owned small producer organisation.

About Pratima

- Annual production capacity: 1,000MT
- Number of farmers: Approximately 3,683 – 10 percent are women
- Land under cultivation: 3,072 hectares

Pratima is located in the state of Odisha, one of the poorest regions in India. Over 42 million people live in the state, with the majority of them working in the agricultural sector. Drought and irrigation problems have had major impacts on the sector and many people have moved away in search of other employment opportunities.

Pratima has a democratic structure, with an executive committee of farmers elected every three years. Annual general meetings are held and all decisions are taken democratically. As Pratima has its own Global Organic Textile Standard (GOTS) certified ginning mill onsite, farmers are able to weigh their cotton themselves at the mill before being verified in front of a farmer representative.

In order to help farmers generate sufficient incomes, Pratima began running information events for its members. These help farmers to identify alternative income-generating opportunities.



Pratima worker Lal Majhi

Fairtrade Premium

One of the most significant projects Pratima has used the Fairtrade Premium for is the community centre. This provides extra space for families, and electricity for children to do their homework.

Pratima is using some of the Fairtrade Premium to establish a fund from which women's self-help groups can seek loans to set up income-generating activities like brickmaking, tailoring and aquaculture initiatives.

Farmers have also used the Fairtrade Premium for drinking water pumps, water-harvesting structures and farm ponds, and to provide seeds and other agricultural inputs to farmers. Women-only changing rooms have also been built by the ponds where villagers bathe.

Pratima also provides 600–700 scholarships for school children every year using the Fairtrade Premium.

FAIRTRADE AND COTTON IN INDIA

B. PRATIBHA SYNTEX LIMITED PRATIBHA-VASUDHA JAIVIK KRISHI KALYAN SAMITI

Pratibha Vasudha is promoted by Pratibha Syntex Ltd., one of the largest textile manufacturers in the world. Vasudha translates as 'Mother Earth' and this represents Pratibha's commitment to helping people and the environment.

About Pratibha

- Annual production capacity: 1,850MT from 32,000 farmers in Rajasthan and Madhya Pradesh
- Number of farmers: 1,524 members – around 10 percent are women
- Land under cultivation: 3,581 hectares

Pratibha has started the process of converting the project from contract production to a small producer organisation. This has been accomplished through capacity building and education initiatives to train the farmer members to become more democratically organised. It also employs specialists to train and educate farmers on waste management, recycling, pest management, healthcare and better farming practices.

Pratibha Syntex quality checks the cotton and weighs this in front of the farmer at the local ginning site. Payment is made in cash on the same day. Farmers may also receive a bonus from Pratibha based on total annual sales to promote Fairtrade and organic farming. The cotton is processed at a spinning mill into yarn, fabric and garments.



Use of the Fairtrade Premium in Pratibha, India, 2018

Fairtrade Premium

Vasudha has a strong focus on women's empowerment and holds various training activities to encourage women to become stakeholders in the decision-making process. They wish to increase female representation in the executive committee by 15 percent. Vasudha has also established a skill development centre where women learn additional craft skills such as tailoring and stitching to supplement their income, and is making efforts to enrol all girls in the community in the local schools.

In 2009, the Vasudha Vidya Vihar school was built for the children of the farmers. Today, over 450 students attend the school, which offers education until the 12th grade. Farmers pay a nominal tuition fee and Fairtrade farmers get a 10 percent subsidy on the fee and an additional discount on sibling enrolment.

Good quality seed material is provided annually to farmer members in order to maintain genetic purity and prevent GMO contamination at the farm level. The co-operative also benefits from a TRAIID-funded seed multiplication programme. Other field-based initiatives include the installation of drip irrigation for 125 farmers (covering 50 hectares acres), conserving 35 to 40 percent water; the distribution of saplings to promote agroforestry and reduce soil erosion; and reduced use of fertilisers and pesticides through the use and sale of organic manure at cost price.

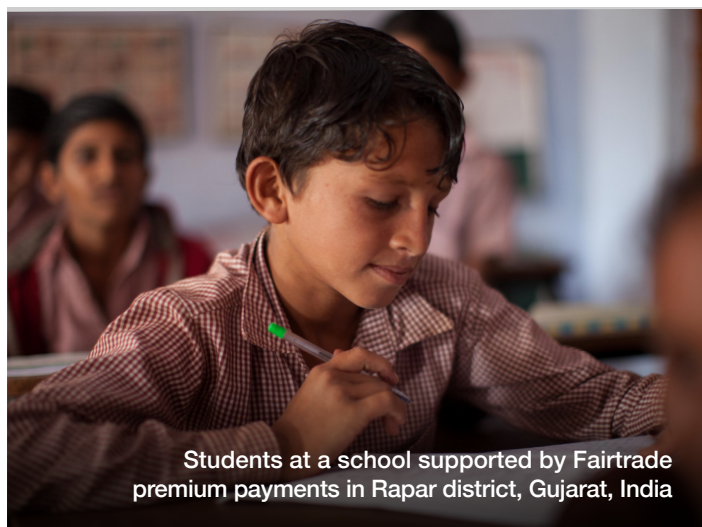
Pratibha has used some of the Premium towards the construction of infrastructure and demonstration farms to teach other farmers about organic farming and best agricultural practices.

Farmers have put the Fairtrade Premium towards supporting education projects, subsidies for farm inputs, medical camps and health check-ups, and to invest in income diversification initiatives.

FAIRTRADE AND COTTON IN INDIA

C. RAPAR AND DHRANGADHRA FARMERS PRODUCER COMPANY (RDFC)

RDFC is a cotton co-operative founded in 2015 with almost 500 members, located in the western Indian state of Gujarat. In 2016, more than 1,200MT of cotton on the world market came from this co-operative.



Students at a school supported by Fairtrade premium payments in Rapar district, Gujarat, India

“BEING A COTTON FARMER ASSOCIATED WITH FAIRTRADE IS PRESTIGIOUS IN THE VILLAGE AS IT DIFFERENTIATES US FROM THE OTHER FARMERS IN THE VILLAGE. WE HAVE OUR OWN ORGANISATION, WHICH IS NECESSARY TO ASSOCIATE WITH FAIRTRADE, OTHERS DON'T. WE MEET REGULARLY TO DISCUSS ABOUT PROBLEMS AND OPPORTUNITIES; COLLECTIVELY BARGAIN TO GET BETTER-THAN-MARKET-PRICE FOR OUR COTTON SINCE WE FOLLOW FAIRTRADE AND ORGANIC STANDARDS; DISCUSS BEST AGRICULTURAL PRACTICES AND TECHNOLOGIES AT THE MEETINGS; AND, MOST IMPORTANTLY WE HAVE THE POWER OF THE FAIRTRADE PREMIUM WHICH WE CAN INVEST TO SOLVE THE PROBLEMS IN OUR DAILY LIVES AND FOR THE VILLAGE.”

Jayavant Sinh Zala, Farmer and President, RDFC

About RDFC

- Annual production capacity: 5,000MT
- Number of farmers: 497, all men
- Average farm size: 0.5–2 hectares
- Other Fairtrade commodities: peanuts, cumin, sesame and tea

RDFC became a Fairtrade small producer organisation in April 2016. Prior to this, the organisation was certified as a Fairtrade contract production project under the name Agrocel Pure and Fair Cotton Growers Association.

As a small producer organisation, RDFC consists of around 260 farming families who collectively manage about 1,700 hectares of cultivated land. The co-operative has a democratically elected board of directors and committees responsible for different areas, for example, environmental affairs.

Fairtrade Premium

The co-operative uses the Fairtrade Premium to invest in business development, environmental protection and education. Particular projects have included:

- Purchasing agricultural equipment
- Purchasing non-GMO seed and farm implements to reduce the cost of cultivation
- Renovating a school, building new classrooms and providing sports equipment

They plan to invest future Fairtrade Premium revenues in engaging women and helping them to develop income-earning opportunities, for example through the production and sale of handicrafts.

FAIRTRADE AND COTTON IN KYRGYZSTAN

AGRICULTURAL COMMODITY AND SERVICE CO-OPERATIVE (ACSC)

ACSC is based in the south of Kyrgyzstan. The co-operative has been certified since 2008 and sell 60–70 percent of their crop on Fairtrade terms.

About ACSC

- Production capacity: 1,200MT
- Number of farmers: 1,000
- Average farm size: 2–10 hectares; 98 percent are small farmers with an average of two hectares
- Other Fairtrade commodities: cotton derivatives eg cottonseed oil

Fairtrade Premium

The co-operative has used the Fairtrade Premium to provide training and technical assistance to improve the quality of their crop and improve yield. As a result of the training, farmers are reporting better soil fertility and higher water retention within their farms.

The Premium has also supported other social and community projects.

THERE HAVE BEEN MANY THINGS HAPPENING SINCE WE BECAME FAIRTRADE CERTIFIED IN 2008. WE ONLY HAD SMALL AMOUNTS OF FAIRTRADE SALES BY 2014, BUT WE DID NOT GIVE UP HOPE AND BELIEVED WE COULD DO IT AND BE SUCCESSFUL. WE DID THAT – SINCE 2014, WE SELL 60 – 70 PERCENT OF OUR COTTON UNDER FAIRTRADE CONDITIONS.

Nurbek KJannazarov, Chairman of the co-operative



Group of women workers, Kyrgyzstan

FAIRTRADE TEXTILE STANDARD

Fairtrade introduced the Textile Standard in 2016 as a first step towards implementing a comprehensive Fairtrade textile programme to change textile supply chains and related business practices throughout the textile industry.



The Standard is based on Fairtrade's existing Hired Labour Standard and focuses on working conditions, living wages and workers' rights. It requires living wages to be paid within a set time period – six years – and makes brand owners contractually responsible for their fair and long-term purchasing practices.

Key benefits for workers within the Standard are:

- Living wages must be implemented within six years
- Support for workers to unionise, leading to greater worker empowerment
- Engagement with the Standard through inclusion in Compliance Committees
- Improved health and safety

- Better working conditions, including requirements related to working hours, overtime, contracts and temporary employment
- Training and capacity building, including raising awareness of workers' rights
- Support for youth employment and apprentice programmes

The Standard also seeks to minimise negative impacts on workers and the environment through control of chemical use and practices, including through the prohibition of materials specific to the textile industry.

Products meeting set criteria for all stages of production for the entire supply chain may carry the Fairtrade Textile Production Mark.





WHY WORK WITH FAIRTRADE?

A SUSTAINABILITY OPTION FOR COTTON-SOURCING COMPANIES

The success of Fairtrade is due to the rise in public demand for sustainable and ethical sourcing, including procurement tenders. This has encouraged businesses to be responsible for the integrity of their supply chains and to consider carefully how they purchase products.



Fairtrade cotton farmers, US GPC de Kedougou, Senegal

Enlightened business leadership understands that investing in long-term sustainable practices and more resilient producer communities is a sound business strategy, especially in commodity markets such as cotton where prices and yields can fluctuate greatly.

Fairtrade can offer solutions which meet these consumer demands and give businesses the opportunity to demonstrate their commitment to sustainability through a widely recognised and understood scheme, both in-store and through other channels.

Sourcing Fairtrade cotton under either of our sourcing models also provides businesses with traceability of their cotton and transparency within their supply chains.

FAIRTRADE OFFERS THE FLEXIBILITY OF TWO MODELS:



The FAIRTRADE Certified Cotton Mark provides physical traceability of the cotton from a labelled end garment back to the farmers who grew it, with the assurance to consumers that all cotton in a finished product is Fairtrade certified.



The Fairtrade Sourced Cotton model makes it easier for businesses to source some of their cotton on Fairtrade terms. This way, farmers can sell more of their cotton, which means more benefits for them and their communities.

The Fairtrade Sourced Cotton model provides businesses with greater flexibility – businesses commit to sourcing a total volume of cotton but have flexibility in how this is incorporated into different product lines and ranges.

Designed for scale, this model is cost-effective and also provides full traceability and supply chain transparency for partners, with farm-level, credible data available to show a company's impact. Transactions are tracked and verified in real time throughout the supply chain using our online reporting system, Fairtrace. This system uses a 'digital handshake' so that both parties confirm transactions, and allows FLOCERT to check and verify the actual volumes sourced by commercial partners.

This model also offers flexibility in terms of communications – businesses can choose whether to use on-pack (consumer) or off-pack (corporate) communications.

Producer organisations

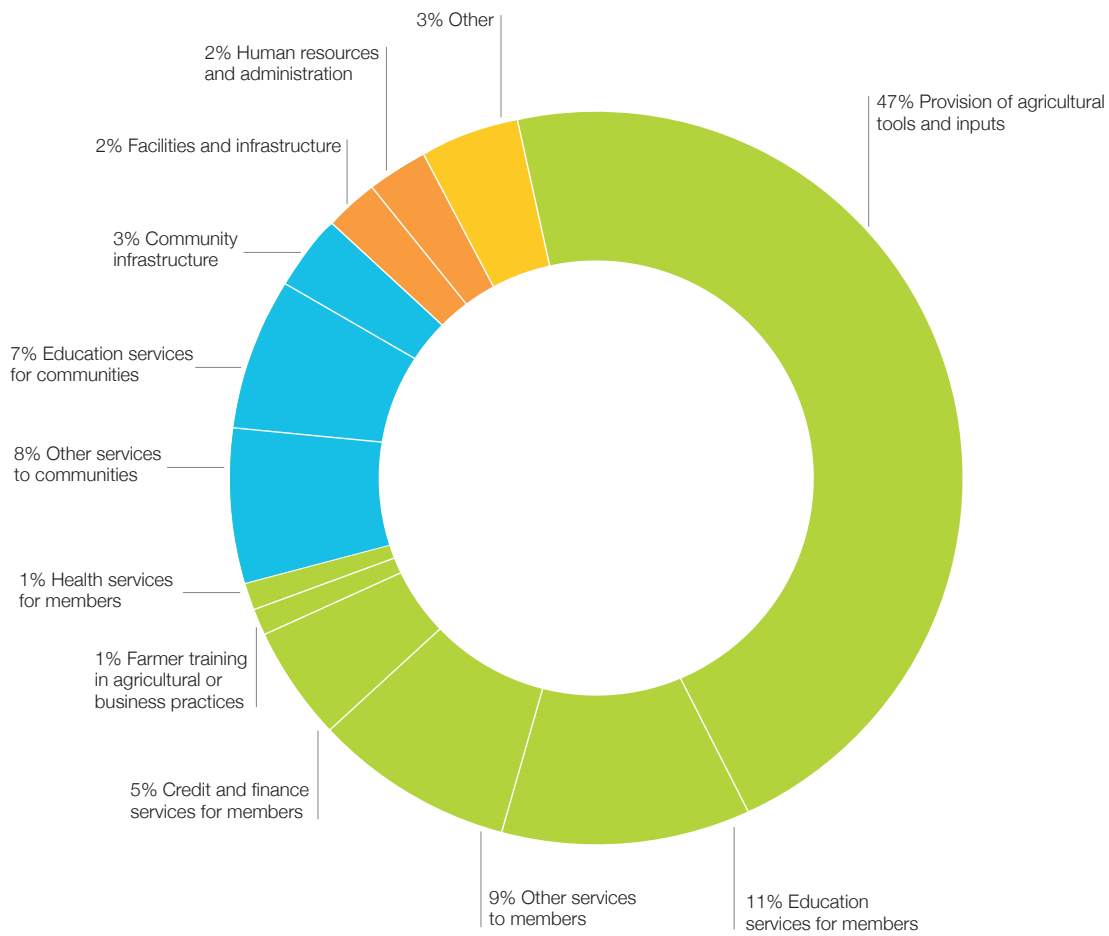
In 2018, there were 19 Fairtrade certified producer organisations located in seven countries. These producer organisations represent 45,576 smallholder farmers.⁵⁸

They grow seed cotton on 55,516 hectares (equivalent to over 77,000 football pitches) and produce 48,838MT of Fairtrade certified seed cotton. Global sales of 10,188MT in 2018 generated €1,434,146 in Fairtrade Premium.⁵⁹

Fairtrade Premium

Producer organisations reported that 76 percent of the Fairtrade Premium was invested in services for farmer members in 2018.⁶⁰

- Cotton producers spent 18 percent of the Fairtrade Premium they earned on services for their communities, including education services⁶¹
- 47 percent was spent on the provision of agricultural tools and inputs, to improve producer organisations and services for farmers⁶²



| | |
|--------------------------------------|-----|
| Services to farmer members | 76% |
| Services for communities | 18% |
| Investment in producer organisations | 4% |
| Other | 3% |

Figure 3: Fairtrade cotton Premium use in small producer organisations 2018⁶³

⁵⁸ Fairtrade International, *Key Data: Fairtrade Cotton*, <https://www.fairtrade.net/impact/key-data-fairtrade-cotton> [accessed 29 September 2020].

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Ibid.

⁶³ Ibid.

Despite supplying the raw commodity that the multi-billion dollar global clothing and textile industries depend on, growing cotton is failing to provide millions of rural households in developing countries with a sustainable and profitable livelihood.

Cotton farmers' incomes are being hit by low and volatile cotton prices and by the rising costs of food, fuel, transport and farm inputs, preventing investment in modern farming practices and technology. Their families' health and the environment are at risk from the widespread use of hazardous agrochemicals, child labour and forced labour continue to blight the industry, while climate change is bringing more unpredictable challenges.

Fairtrade Standards provide a framework for cotton farmers to form democratic organisations or strengthen existing organisations. This enables farmers to increase their negotiating power in the

marketplace, improve business systems, access new markets, develop long-term trading partnerships and implement sustainable farming practices. Fairtrade Minimum Prices contribute to financial stability, while Fairtrade Premium can be invested in improving cotton quality and productivity, climate change adaptation and improving community welfare.

By offering Fairtrade cotton products, businesses are contributing to a more sustainable future for cotton farmers, their communities and the environment. And by purchasing them, consumers are choosing products that change lives.



Pratima worker Radha Majhi

APPENDIX

COTTON VS. SUBSTITUTE FABRICS

Cotton production is widely associated with driving large environmental and resource usage. It is important to compare and contrast the environmental costs of production for different fabrics in order to identify any appropriate substitute.

To complete this assessment, the following factors were considered: energy use, CO₂ emissions, freshwater use, biogeochemical flows, land use change and genetic diversity. The assessment was completed for the following fabrics: conventional cotton, organic cotton, polyester, hemp and wool.

Energy requirements

- Polyester: the largest embedded energy use – raw materials are petroleum products and the manufacturing process is quite energy and heat intensive
- Hemp: varies depending on production method
- Conventional cotton: has a high energy requirement in the crop cultivation stage due to the use of synthetic fertilisers, herbicides and energy intensive irrigation schemes

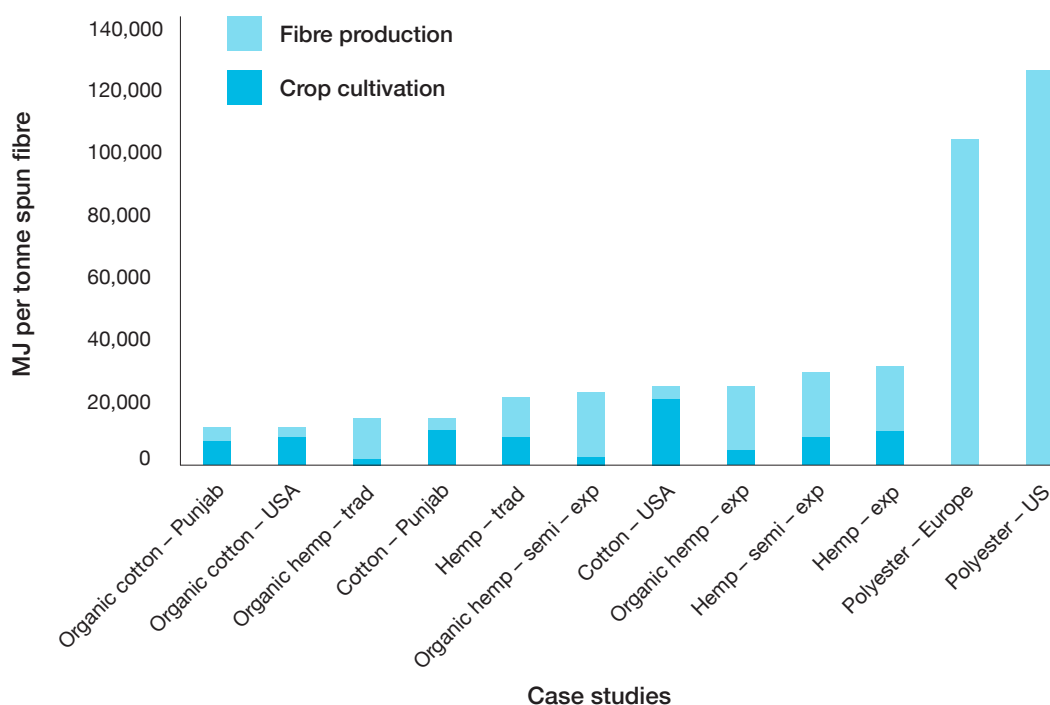


Figure 4: Total energy (in megajoules) required to produce one tonne of spun fibre

N Cherrett, J Barrett, A Clemett, M Chadwick, and M J Chadwick, *Ecological Footprint and Water Analysis of Cotton, Hemp and Polyester: Report prepared for and reviewed by BioRegional Development Group and World Wide Fund for Nature – Cymru* (Stockholm Environment Institute, 2005).

APPENDIX

COTTON VS. SUBSTITUTE FABRICS CONTINUED...

Carbon dioxide emissions

- Polyester: production results in the greatest CO₂ emission, ranging from 7.2–9.52kg of CO₂ per metric tonne of fibre
- Cotton: significantly lower and ranged from 2.35–5.89kg of CO₂ per metric tonne of fibre
- Organic cotton: different fuel mixes used by India and the US results in the different emissions
- Conventional cotton: once again, that grown in the US has the highest emissions associated to crop cultivation due to inefficient production methods
- Hemp: ranges moderately between 3.5–4.1kg of CO₂ per metric tonne of fibre

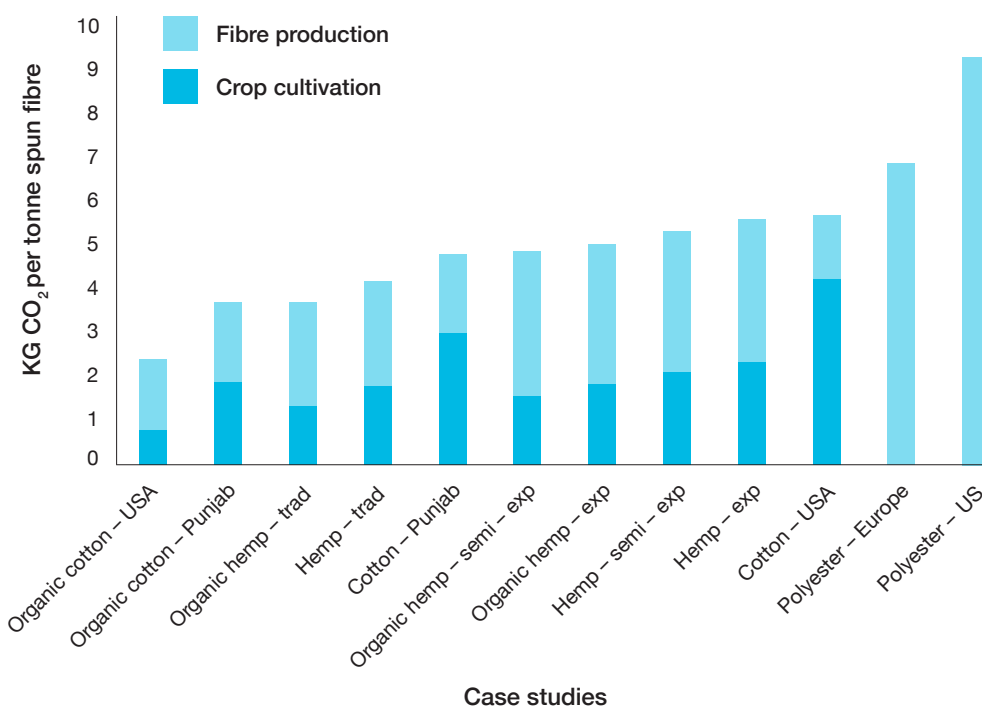


Figure 5: CO₂ emissions (in kilograms) associated with the production of one tonne of spun fibre

N Cherrett, J Barrett, A Clemett, M Chadwick, and M J Chadwick, *Ecological Footprint and Water Analysis of Cotton, Hemp and Polyester: Report prepared for and reviewed by BioRegional Development Group and World Wide Fund for Nature – Cymru* (Stockholm Environment Institute, 2005).

APPENDIX

COTTON VS. SUBSTITUTE FABRICS CONTINUED...

Freshwater use

- Cotton: has by far the highest water footprint in comparison to its substitutes. An estimated 9,788–9,958 litres of water is required to produce 1kg of cotton. Top cotton producing countries – China, the US and India – are all facing water scarcity
- Hemp: the most water-efficient, requiring just 2,123 litres of water to produce 1kg of useful fibre
- Polyester: uses almost no freshwater in the production process. The little water that is used for cooling is often returned to the system
- Wool: data is inconclusive

N Cherrett, J Barrett, A Clemett, M Chadwick, and M J Chadwick, *Ecological Footprint and Water Analysis of Cotton, Hemp and Polyester: Report prepared for and reviewed by BioRegional Development Group and World Wide Fund for Nature – Cymru* (Stockholm Environment Institute, 2005).

Land use

- Polyester: land used for oil drilling for raw material extraction, and production facilities
- Cotton: large land areas needed for cultivation
- Hemp: higher yields per hectare than cotton
- Wool: high land requirement for grazing

S Muthu, *Assessing the Environmental Impact of Textiles and the Clothing Supply Chain*, Woodhead Publishing Series in Textiles, (Cambridge: Woodhead Publishing Ltd, 2014).

Biogeochemical flows

- Cotton: conventional uses a lot of mineral fertilisers and pesticides but organic cotton is less intense with these products
- Polyester and wool: use a lot of toxic chemicals, contaminated groundwater/water sources a common occurrence
- Hemp: better than conventional cotton as less fertilisers and pesticides are needed

S Muthu, *Assessing the Environmental Impact of Textiles and the Clothing Supply Chain*, Woodhead Publishing Series in Textiles, (Cambridge: Woodhead Publishing Ltd, 2014).

Genetic diversity

- Conventional cotton: large areas of land cleared to grow GMO or single species cotton. Furthermore, pesticides and fertilisers depress ecosystems
- Organic cotton: allows for more diversity, and no pesticides or fertilisers are used
- Polyester: no direct impact, other than impacts from land/water pollution
- Hemp: other plants cleared away for cultivation, but lower use of fertilisers and pesticides in comparison to cotton

S Muthu, *Assessing the Environmental Impact of Textiles and the Clothing Supply Chain*, Woodhead Publishing Series in Textiles, (Cambridge: Woodhead Publishing Ltd, 2014).

Note: Data is not explicit, as there can be variations subject to where it is produced, how affluent the producing country is, technological capabilities etc.

APPENDIX

COTTON SUBSIDIES

United States

The importance of the US in the global cotton market has diminished in recent years with the rise of China. Nonetheless, the US is still just as critical to the issue of cotton subsidies. Their dominance as the largest cotton exporters can be highlighted by the fact that between 1990 and 2014 they had consistently supplied a third of all cotton exports.⁶⁴

The 2014 Farm Bill altered the cotton programme so that farmers were more reliant on insurance schemes that enabled them to evade World Trade Organization rulings.⁶⁵ STAX, the Stacked Income Protection Plan, was introduced and provided crop insurance to cotton farmers. Support through subsidised crop insurance protects producers against crop yield and revenue losses caused by natural disasters, weather, pests and fire.⁶⁶ Alternatively, there is also the Cotton Ginning Cost-Share (CGCS) programme, which provides cost-share payments for the cotton ginning costs faced by producers.⁶⁷ The sum of all types of support provided to US cotton producers, including crop insurance, STAX and the CGCS programme, is estimated at \$469m in 2016/17. During 2017/18, total support to US cotton producers increased to an estimated \$890m.⁶⁸

The new 2018 tax bill now includes cotton seeds as a food product, and this has placed further uncertainties on America's cotton trade policies.⁶⁹

China

With over half of the world's textile production taking place in China, the Chinese market is the most important for all cotton producers. China's cotton policies therefore have profound global consequences.

Through the implementation of rigorous border protection methods, China effectively controls cotton import volumes and values. There is an effective tariff of 40 percent on cotton imported without a quota. Between 2017/18, the Chinese government provided an estimated \$4.3bn in cotton subsidies. This was an increase of \$1bn from the previous year. In addition, China has a large strategic reserve of cotton that enables them to appropriately respond to price fluctuations through a national buffer stock.⁷⁰

C-4

The C-4 countries are dependent on the Chinese cotton market, and are also recipients of substantial sums of aid, investment and credit from China.⁷¹

India

India implements a Minimum Support Price (MSP) system which aims to support farmers so that they avoid incurring losses from their sales. These were active in 2014/15 due to low market prices, and so farmers were supported by cotton sales to the government. In addition, Indian cotton farmers are supported by the government through debt forgiveness, subsidised crop insurance and fertiliser subsidies.⁷²

⁶⁴ Sophia Murphy and Karen Hansen-Kuhn, *The Stubborn Persistence of US Cotton Dumping* (Institute for Agriculture and Trade Policy: Minneapolis; Washington D.C.; Berlin; 2017), p.2.

⁶⁵ *Ibid*, p.3.

⁶⁶ ICAC, *Production and Trade Subsidies Affecting the Cotton Industry*, pp.2–3.

⁶⁷ National Cotton Council of America (NCCA), *Cotton Ginning Cost-Share (CGCS) Program Fact Sheet*, 2016, <https://www.cotton.org/issues/2016/upload/16cgcifact.pdf> [accessed 14 April 2020].

⁶⁸ ICAC, *Production and Trade Subsidies Affecting the Cotton Industry*, p.3.

⁶⁹ Farm Bureau (FB), *(Seed) Cotton is Back in the Farm Bill*, <https://www.fb.org/market-intel/seed-cotton-is-back-in-the-farm-bill> [accessed 16 April 2020].

⁷⁰ *Ibid*, pp.1–2.

⁷¹ Kristen Hopewell, "US-China conflict in global trade governance: the new politics of agricultural subsidies at the WTO", *Review Of International Political Economy*, 26(2), 2019: pp. 207–231.

⁷² ICAC, *Production and Trade Subsidies Affecting the Cotton Industry*, p.4.

APPENDIX

COTTON: GROWERS AND BUYERS

Main producing countries

World cotton production for the 2018/19 season showed a three percent decrease to 25.7m MT.⁷³ The largest exporters by value in 2018 were China (\$15.4bn) the US (\$8.4bn), India (\$8.1bn), Pakistan (\$3.5bn) and Vietnam (\$2.8bn).⁷⁴

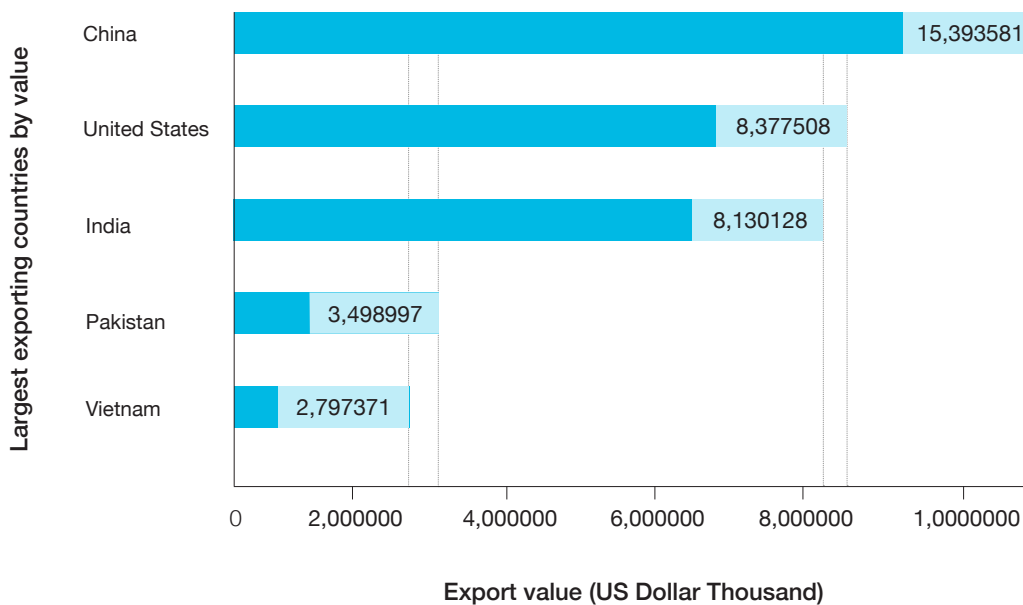


Figure 6: Exporters and exported value in 2018

Source: ITC calculations based on UN COMTRADE and ITC statistics.
Ref: International Trade Centre (ITC), International trade in goods – Exports 2001 – 2019, <http://www.intracen.org/itc/market-info-tools/statistics-export-product-country/>, [accessed 14 April 2020].

⁷³ ICAC, *News – 21 November 2019 – Cotton Review of the World Situation*, <https://www.icac.org/News/NewsDetails?NewsId=2314&YearId=2019> [accessed 14 April 2020].

⁷⁴ International Trade Centre (ITC), *International trade in goods - Exports 2001-2019*, <http://www.intracen.org/itc/market-info-tools/statistics-export-product-country/>, [accessed 14 April 2020].

APPENDIX

COTTON: GROWERS AND BUYERS

Main consuming and importing countries

While Chinese cotton production was projected to decrease to 5.6m MT in 2018/19, consumption was forecast to increase to 8.4m MT during the same period.⁷⁵ This is due to both the continued prominence of China's huge textile industry and increasing domestic demand for apparel and footwear. The Chinese government controls import volumes and values for cotton, but its strategic reserve means that it can release cotton to the market for use in times of shortage.⁷⁶

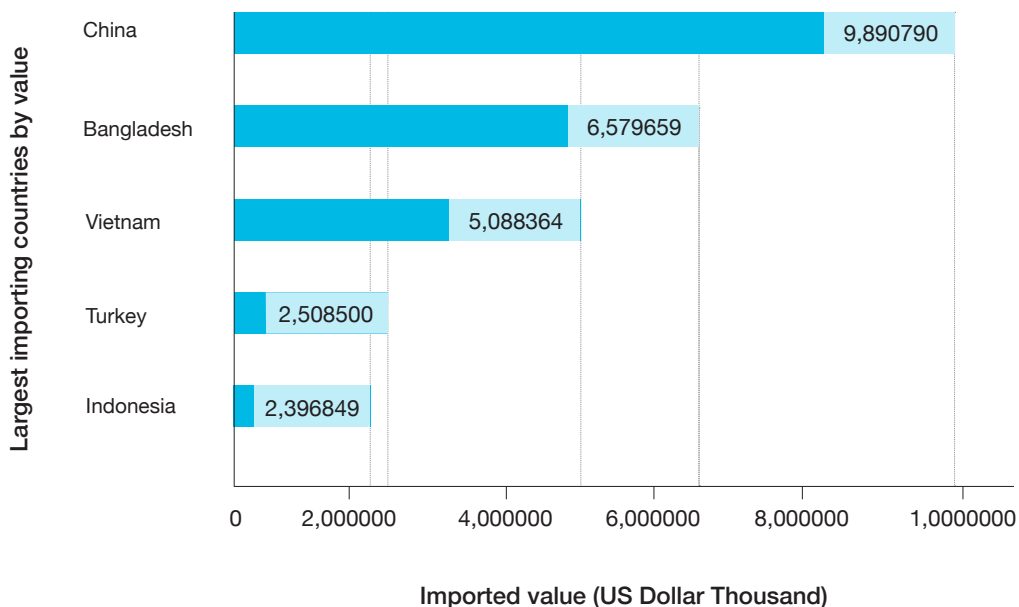


Figure 7: Importers and imported value in 2018

Source: ITC calculations based on UN COMTRADE and ITC statistics. Ref: International Trade Centre (ITC), International trade in goods – Imports 2001 – 2019, <http://www.intracen.org/itc/market-info-tools/statistics-import-product-country/>, [accessed 5 September 2019].

⁷⁵ ICAC, *News – 1 June 2018 – Stocks Declining in China, Increasing Elsewhere*, <https://icac.org/News/NewsDetails?NewsId=1245&YearId=2018>

⁷⁶ ICAC, *Production and Trade Subsidies Affecting the Cotton Industry*, p.1.

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