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Cotton:
Review of the World Situation

ICAC International Cotton Advisory Committee

Table of Contents

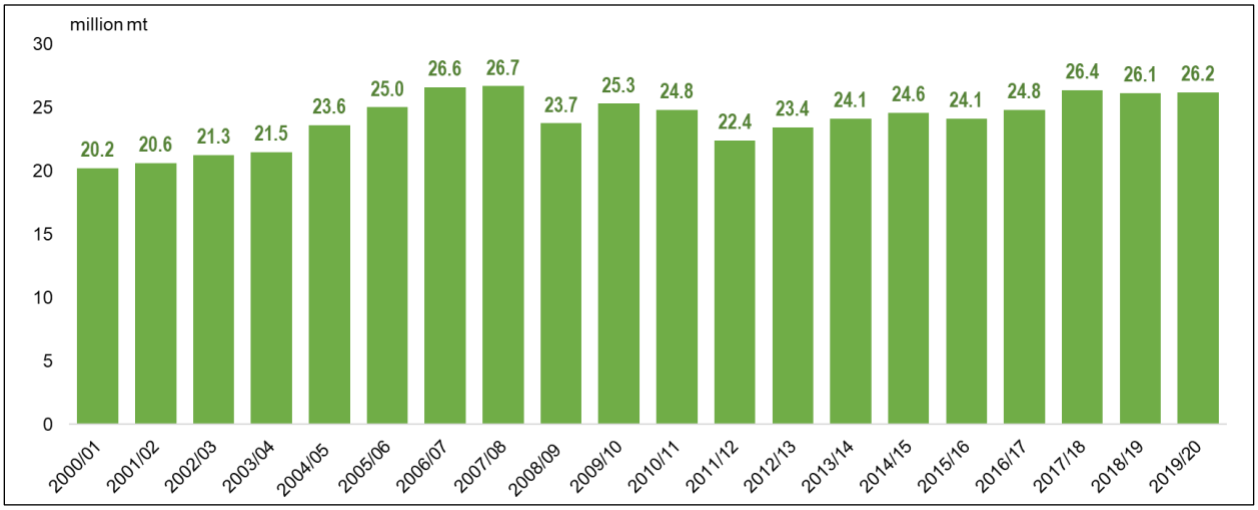
Tables

Summary of the Outlook for Cotton

Little Consumption Growth as Global Economic Growth Slows

While global cotton consumption continues the recovery begun in 2012/13, the Secretariat's current projection for consumption in 2019/20 is 26.2 million tonnes at 0.3% growth over the previous season. Global economic growth has slowed to the lowest levels in decades as global trade disputes remain unresolved leading to uncertainty for manufacturing and investment activity. For the cotton sector, where consumption has been led by Asian and Southeast Asian economies, the recently revised IMF forecasts of a global synchronised slowdown are expected to stall growth for the region's manufacturing activities and demand for consumer goods.

While Cotton Consumption Continues Recovery, Growth is Slowing



Resolving trade conflicts, revising global trade rules and increasing transparency in trade policies will help to support growth, rebuild investment and boost consumer confidence for the cotton sector and wider economy. The current outlook for world cotton trade includes a 3% decline in volume with projections at 9 million tonnes. China is expected to continue to lead global consumption with 8.05 million tonnes, a 2.4% decrease from the previous season. With domestic production expected to decrease to 5.8 million tonnes, imports will be needed to support mill-use and replenish reserves. Chinese national reserves are currently estimated at under 3 million tonnes. Chinese imports have been announced by the Ministry of Agriculture at 1.6 million tonnes and over the course of the season this figure may increase. China is expected to lead global importers at this volume and account for approximately 20% of total imports. In 2017/18, imports from the United States represented 45% of China's total imports of 1.2 million tonnes. In 2018/19, China increased total imports to 2.1 million tonnes. However, under the China-US trade dispute, US cotton was subject to a 25% tariff and the United States share of imports fell to 18%. Other major exporters increased market share with exports from Australia increasing 97% to 555,000 tonnes, exports from Brazil increasing 480% to 480,000 tonnes and exports from India increasing 127% to 275,000.

Total US exports are expected to recover in 2019/20 after falling 7% to 3.2 million tonnes in 2018/19. Even if the trade dispute continues, the US is expected to lead global exporters with more than a third of global exports. Brazil is currently expected to remain the second largest exporter with a 17% share of global exports at 1.5 million tonnes. With Australia's cotton sector limited by water availability, increased import needs by China are likely to be met with Brazil with possible increases by West Africa and India. Month on month, Brazil exports for October have increased from August through October, with 100,000 tonnes exported to China in October 2019.

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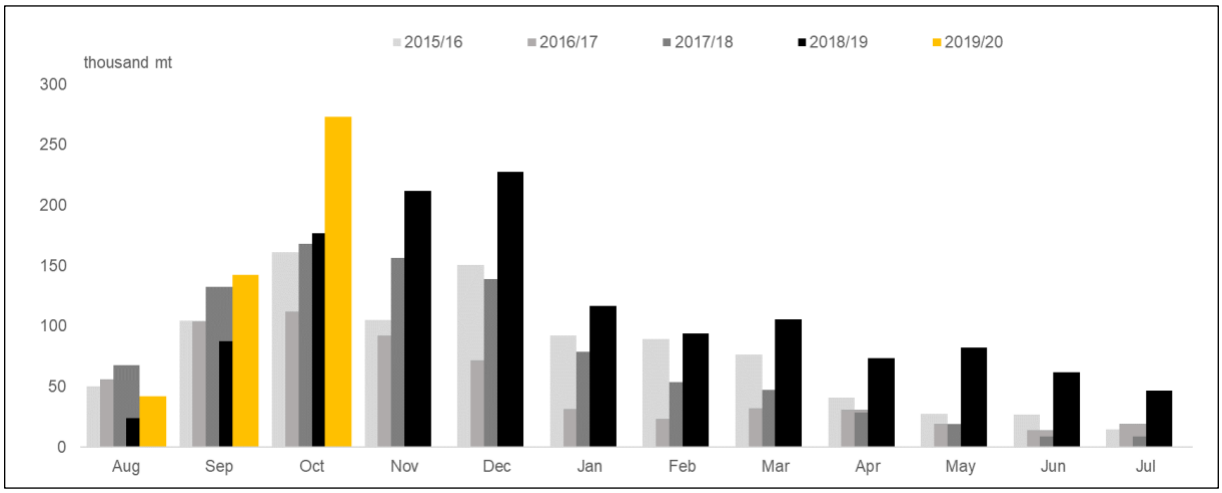
Brazil exports month on month 2015/16 – 2019/20



Prices

Global ending stock levels are currently projected to increase by 1% by the end of the 2019/20 under current estimates for production and consumption. With current projections of increase in global cotton production and weak consumption, cotton prices are expected to remain low in the new year. The Secretariat's current price projection for the year end average of the Cotlook A Index has been revised to 75.4 cents per pound this month.

Overview and Outlook for South Africa's Cotton Sector

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Introduction

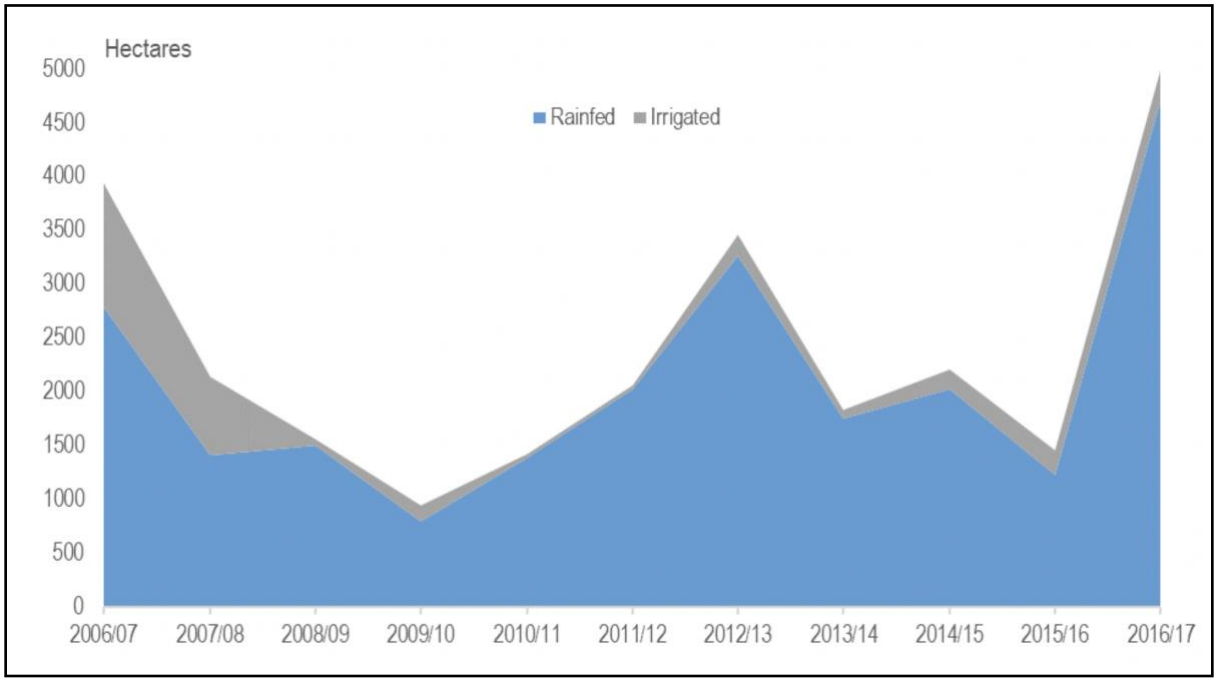
Agriculture in South Africa accounts for about 10% of formal employment and about 2.6% of GDP. In 1960, agriculture constituted 9.1% of the total economy, decreasing to just 2.2% by 2013. In 2016, the Food and Agricultural Organization of the United Nations (FAO) estimated the agricultural area to be 96,341,000 hectares in South Africa. Cotton is believed to have been planted in South Africa as early as 1690 and was planted on a large scale from 1860 to 1870 due to high demand for the fibre. By 1969, about 80% of the total crop was being produced under irrigation.

Cotton is planted in five provinces of South Africa: KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, and North West. Currently, cotton accounts for 70% of natural fibre, and more than 40% of all fibre, processed in South Africa. However, cotton production in South Africa has been declining due to competition from other countries where government support programmes sustain the local farming community, as well as the relative returns that can be made from competing crops such as maize and sunflower. The introduction of genetically modified (GM) cotton varieties by both commercial and smallholder farmers has contributed significantly to the maintenance of yields and profitability of cotton but has failed to increase the planted area. All cotton currently produced in South Africa is GM cotton and is grown under irrigation as well as in dryland conditions with 75% of local production harvested by hand. Cotton production in South Africa is an important agricultural sector with approximately 150 commercial farmers and 1,300 smallholder farmers, who farm roughly 5,000 hectares on 2-5 hectare plots.

Latest Cotton Situation

By July 2019, Cotton SA reported that the industry produced 29,672 tonnes of seed cotton and 6,494 tonnes of cotton lint for the 2018/19 season. The cotton ginners ginned 4,937 tonnes, of which 3,875 tonnes were sold. Spinners consumed 1,593 tonnes, 438 tonnes of which were from the local ginners, a decline of 7% compared to the 2017/18 season. According to Cotton SA's eighth crop estimate for the 2018/19 production year, South African farmers planted 20,825 hectares (ha) to dryland cotton and 23,502 ha to irrigated cotton. The country will produce an estimated yield of 244,543 bales of cotton lint (200kg each), an increase of 30% from the previous season. The area planted for dryland and irrigated cotton has increased by 45% and 22%, respectively. The increase is mainly due to better prices for cotton, demand for the locally produced product and a renewed interest in cotton. Figure 1 represents the smallholder cotton farmer production area for both irrigated and dryland over the past 10 years. Cotton area remains very low for smallholder farmers compared to commercial farmers.

Figure 1: Production area estimates for irrigated and dryland area of smallholder cotton farmers between 2006/07 and 2016/17.



Cotton Research

The Industrial Crop division of the Agricultural Research Council (ARC) conducts cotton research through three research programmes: Crop Development, Crop Protection, and Crop Science. Currently, the following cotton research projects are conducted, and the results are shared with the public through Farmers Days, reports, conference presentations and publications in journals:

- **National cotton cultivar trials**. Each year the Agricultural Research Council coordinates cultivar trials across South Africa to evaluate the performance of different cotton varieties. These tests provide unbiased data on the performance of the cotton cultivars in the different cotton-producing areas.
- **BASF cultivar registration trials**. The purpose of this study has been to further test the herbicide efficacy of BASTA (Glufosinate-ammonium) in terms of crop tolerance of Glytol x Liberty Link cotton.
- **Biological control of nematodes on cotton**. The project seeks to evaluate the effect of nematicides and biological agents for the management of nematodes in a cotton farming system under field and greenhouse conditions.
- **Biological control of bollworms and jassids**. The research objective of the study is to evaluate the potential of biological control agents on cotton bollworm and jassids management in the field.
- **Evaluation of water-harvesting methods**. The objective of the trial is to evaluate different water-harvesting methods on cotton yield and fibre properties.
- **Effect of different Pix treatments**. The study evaluated the different pix dosages and seed treatments on different cotton cultivars.
- **High-temperature tolerance in cotton**. The objective of this study was to evaluate different screening methods for the identification of heat tolerance in cotton genotypes.
- **Evaluation of planting date on the production of cotton cultivars**. The objective of the trial is to determine which cultivar is most suitable for a particular planting date. The effect on plant growth, yield, fibre qualities and the degree of whiteness (colour values) of the different cotton cultivars is determined at various planting

dates.

- **Minimum input farming with on-farm demonstrations**. The objective of these on-farm trials is to demonstrate the effect of double skip and rip on the row production methods on dryland cotton with three different soil types.
- **Minimum input farming with nitrogen fertilisation**. The objective of this trial is to determine whether nitrogen applied as a topdressing on dryland cotton have an economic benefit to the farmer. The trial is conducted under double skip and rip on the row production methods

The ARC is also responsible for the South African cotton germplasm and runs the following analytical services:

- Soil testing: test for soil pH and fertility (nutrients)
- Water testing: testing of irrigation water samples for nutrient content
- Plant analysis: crop nutrition (deficiency, sufficiency, toxicity of nutrients)
- Nematode analysis: root-knot nematode classification and counting
- Disease diagnostics: identification of fungi and bacteria

Cotton SA has a long-standing history of cotton grading and HVI fibre testing. Its laboratory was the first laboratory to be certified under the ICA Bremen International Laboratory Certification Scheme.

Support to Enhance Cotton Production for Smallholder Farms

The ARC and the Department of Rural Development and Land Reform (DRDLR) entered into an agreement to support cotton development projects between 2012 and 2018. The initiative focused on the enhancement of cotton production by smallholder farmers in South Africa. The project enlisted the support of cotton farmers in three provinces to enable them to become sustainable producers of quality cotton. This also assisted the ongoing job-creation potential related to continuous cotton production to supply the entire value chain. Production inputs and mechanisation were procured, almost 9,000 hectares were planted, 80 farmers were trained on cotton production and more than 90 million South African rand (US$6.3 million) was invested.

Support to Increase Capacity and Competitiveness in the Value Chain

In 2014, the Department of Trade and Industry officially launched a five-year plan to establish a national textile cluster, supported by an R200-million (US$14 million) grant fund. Its aim was to improve capacity and competitiveness and to create jobs in the cotton, textile and clothing industry value chains. The cotton industry formed the Sustainable Cotton Cluster in May 2014 to serve the cotton-specific interventions. The cluster brings together the entire cotton supply chain under one umbrella: farmers, ginneries, yarn manufacturers, dyers, finishing plants, weavers, retailers, and consumers. The stakeholders are working together to improve the economic, social and environmental sustainability of the cotton industry. In 2015, an Integrated Supply Chain Programme, driven by retail demand, was initiated. Retailers like Mr Price, Edcon, Clicks, and Woolworths have been actively involved. The programme gives participants in the supply chain access to shared production inputs and resources, as well as improved channels to market, due to price stability and supply certainty. This has resulted in increased production — from 25,000 bales in 2013 to 180,000 bales in 2018.

Constraints to Growth in the Sector

The following are some of the challenges in the South African cotton industry that restrict industry growth:

- **Competition from other countries where governments subsidise agriculture**. Although the government has been developing programmes to promote small-scale farming and to boost job creation, there is a limit to subsidies that can be given to cotton producers. In some countries, cotton prices are affected by government support to cotton producers and the support is given to cotton producers based on the difference between the market prices and prices paid to producers. These practices encourage farmers to focus on cotton production. Due to the limited support, the majority of young people struggle to access funds, especially when they want to farm.

- **Market competition from other crops**. Locally, the world market and exchange rate movement may continue to affect domestic market prices. Lower grains profit margins have supported cotton planting in South Africa, but maize is most widely grown — followed by wheat, oats, sugar cane and sunflowers. When the international cotton prices are favourable, domestic cotton prices are firm and expected to remain high. The switch to other crops has been mainly attributed to the international cotton prices, which have previously been very low. Due to a number of factors, including low cotton prices, a strong South African rand, more attractive returns from competing crops and the dry conditions, cotton may once again experience challenges.

- **Relative high input costs**. Although Bt cotton is planted throughout the country, it has not proven to be sustainable in terms of reducing pesticide use, nor in terms of improving income for farmers. There is also a high fee that farmers must pay for the Bt technology. Some of the smallholder farmers still lack the needed knowledge and expertise as cotton requires more management input and specialised skills than most other crops. Other costs of inputs like fertiliser, pesticide and labour remain major constraints in cotton production.

- **The high cost of cotton picking**. Hand-picking is more expensive than machine picking in South Africa; however, a majority of smallholder farmers harvest cotton by handpicking. The general national minimum wage for farm workers is set at R18 per hour, which limits the profit for smallholder farmers.

- **Low-cost imports**. The South African textile sector has been negatively affected by some challenges, which include illegal imports, incorrectly declared items, and cheaper products from Asia. With higher labour costs, local products face competition against imported products. In 2016, South Africa developed the National Cotton Sector Strategy, which has the potential for retail sector import replacement, for filling manufacturing capacity gaps and creating employment. Specific sub-sector strategies like cotton spinning will be developed as well as strategies for weft knitting, dyeing and finishing, and retail.

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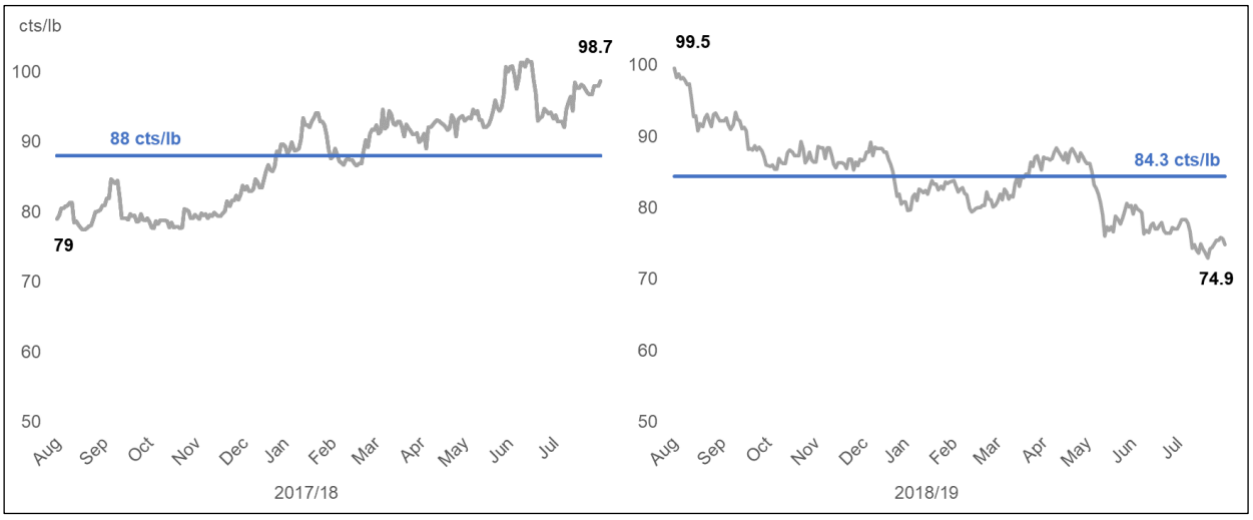
Outlook for the 2019/20 Season

Lihan Wei, Statistician, ICAC

Overview of the 2018/19 Market Year

During the 2017/18 season, the international reference price of cotton (as measured by the Cotlook A index) rose steadily, passing the 100 cents per pound mark in June. Global stocks at the end of the 2017/18 season were 11% lower than the previous season at 18.7 million tonnes. Given the rise of the commodity price and stable forecasted economic and demand growth at the end of the 2017/18 season, the outlook at the start of the 2018/19 season appeared to be positioned for continued growth. On August 1, 2018, the price of cotton was at what would be the season high of 99.5 cents per pound. Over the course of the season, prices fell to the season low of 72.95 cents per pound on 19 July 2019 and ending at 74.9 cents per pound on 31 July 2019. Prices were under pressure over the course of the season due to trade tensions amongst leading economies, leading to uncertainty for the market. Trade issues in 2018/19 led to slowing regional economic growth, which in turn impacted cotton demand and manufacturing.

Prices Fell Through 2018/19 Season



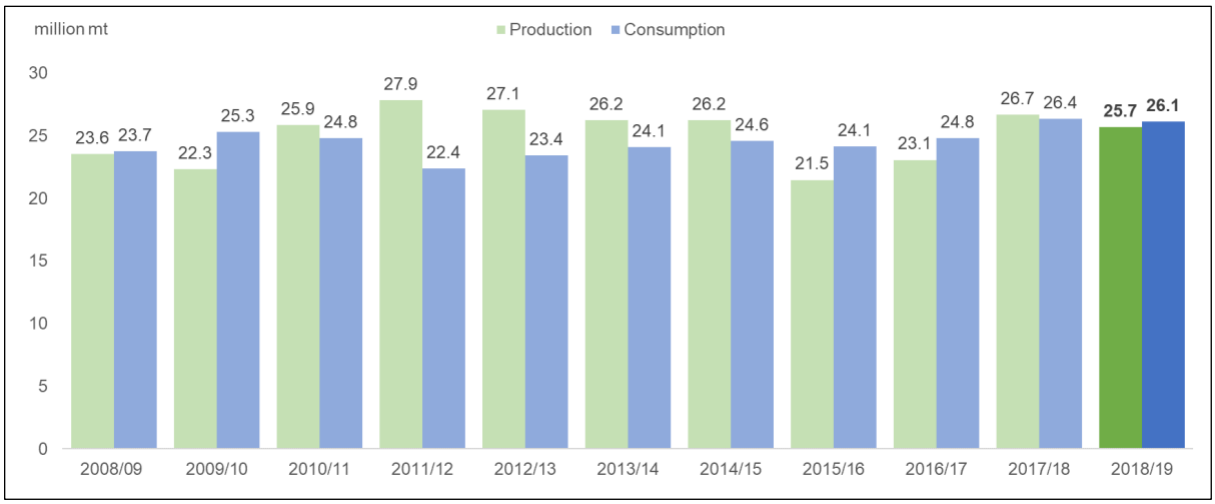
In 2017/18, the United States had a 38% share of cotton exports, making it the world's top exporter. In 2017/18, China imported 1.3 million tonnes of cotton, about half of which came from the United States. Projections at the start of the season were for China to import 2 million tonnes in 2018/19. However, tariffs on cotton entering China from the United States, and textiles entering the USA from China, were included in the escalating trade dispute between the two countries. Trade negotiations were ongoing through most of the market year with news of possible progress providing support for upward prices — followed by news of stalled talks and a prolonged trade dispute, which further depressed prices. During the February-April period of the market year, prices were on the rise, perhaps influencing Northern Hemisphere planting decisions for the 2019/20 season. However, in the following months, prices fell sharply. The season average was 84 cents per pound with the season ending at a price just below 75 cents per pound.

In addition to fundamentals, policies affect commodity price. Within the dispute, cotton prices amongst those of other agricultural commodities were impacted as US agricultural exports to China were subject to additional tariffs. Manufactured Chinese goods including textile and apparel exports to the US were also subject to tariffs. The trade dispute between the United States and China has impacted cotton demand and supply chains over the course of the past 18 months. Agricultural products including cotton were included in the July 2018 list of US goods. Escalating rounds on a broadening range of goods have affected cotton, agricultural commodities and the wider economy. Through the 2018/19 season, news of possible de-escalation and resolution through trade talks had the effect of increasing prices

for a time. However, when tariffs remained in place, economic growth began slowing throughout the world as uncertainty impacted not only trade, but manufacturing and investment.

On the fundamentals, global production decreased by 4% in 2018/19 to 25.7 million tonnes. The global leader in production, China, saw a 3% increase in production to more than 6 million tonnes. The second-largest producer of cotton, India, saw a 16% decrease in production from the previous season to 5.4 million tonnes, with no change in area, due mainly to water availability and poor weather. The United States remained the third-largest producer despite production decreasing by 12% to 4 million tonnes. Brazil increased production through area expansion and yield improvements to 2.7 million tonnes, representing a 34% increase over 2017/18. Pakistan saw a production decrease of 7% to 1.7 million tonnes. Turkey saw a 25% increase to nearly 1 million tonnes from area increases, irrigation expansion and investments in South Eastern Anatolia. Australia, with lower area and yields, produced 485,000 tonnes, representing a decrease of 54%. Production from the West Africa region rose 1% to 1.2 million tonnes.

Production and Consumption Decreases in 2018/19

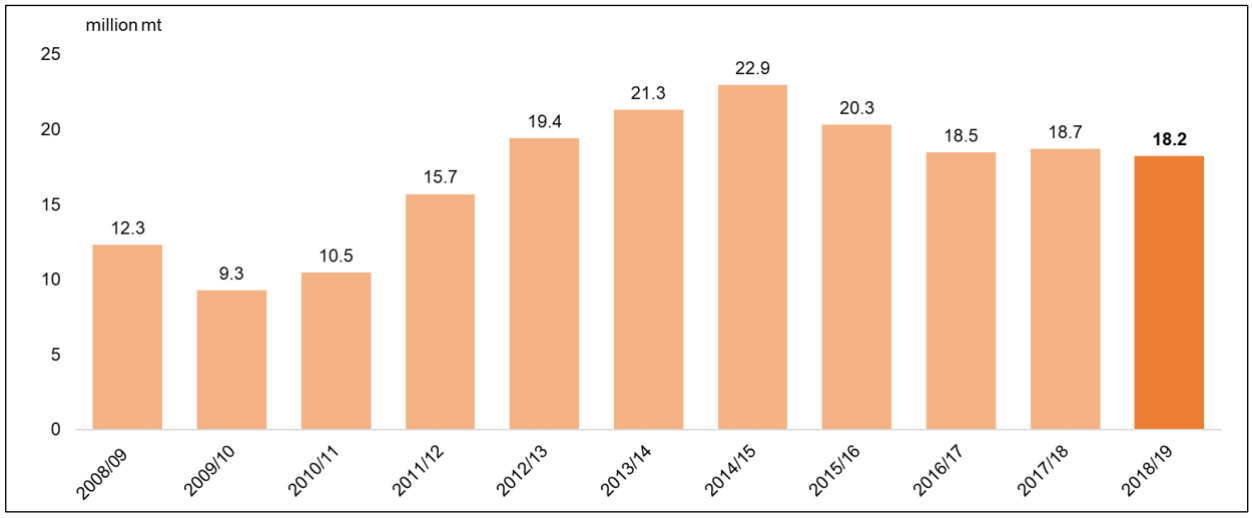


On the consumption side, following a recovery in 2016/17, global cotton consumption grew by an additional 6% in 2017/18 reaching a historical high for mill use of 26.4 million tonnes. However, in 2018/19, consumption contracted by 1% to 26.1 million tonnes. Across major consuming countries in Asia and Southeast Asia, mill use decreased with growth rates ranging from -10% in Indonesia to 0% growth in Vietnam. Amongst the major consuming countries, only Pakistan, Turkey, Mexico and Brazil reported increases in mill use over the previous season. Consumption in China, the global leader in volume, decreased by 3% in 2018/19 to 8.25 million tonnes from 8.5 million tonnes. Countries that had reported strong growth in consumption in 2017/18 were particularly affected by slowing demand. Bangladesh, which saw 18% growth in consumption in 2017/18, saw a 5% contraction to 1.6 million tonnes in 2018/19. Vietnam — where growth had been at 16% in 2016/17 and 31% in 2017/18 — saw no growth in 2018/19 with consumption flat at 1.5 million tonnes. Because Asian and Southeast Asian countries had been leading global cotton consumption, the negative growth in these major consuming regions has impacted global cotton consumption. Despite the slowdown, consumption growth was seen in several major consuming countries:

- Turkey increased mill use by 5% to 1.6 million tonnes in 2018/19,
- Mexico increased mill use by 6% to 460,000 tonnes,
- Brazil increased mill use by 7% to 730,000 tonnes, and
- Uzbekistan led all countries in cotton mill use growth with a 36% increase to 630,000 tonnes, as the country has increased investment to the value-added industries of spinning and textiles.

Global ending stock levels in 2018/19 decreased by 3% to 18.2 million tonnes as consumption, even on the decline, had outpaced production. Stock levels have appeared to reach some stability with less fluctuation globally over the past three seasons. The stocks-to-use ratio remained at 0.70, the lowest level since 2011/12.

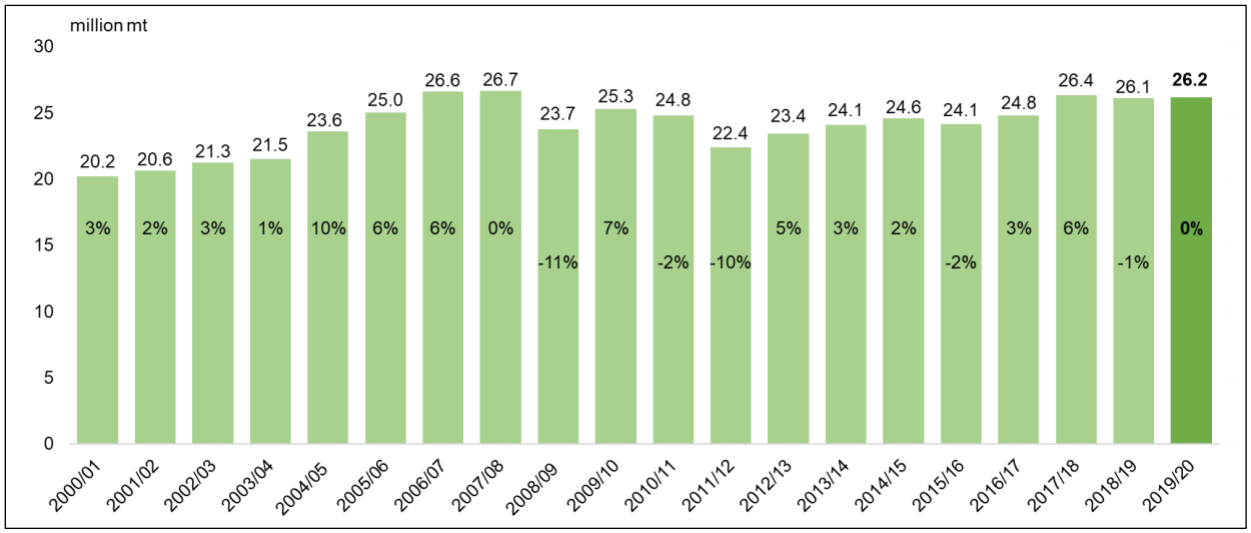
Global Stocks Decreased in 2018/19



The 2019/20 Outlook

While global cotton consumption continues the recovery that began in 2012/13, the Secretariat's current projection for consumption in 2019/20 is 26.2 million tonnes at 0.3% growth over the previous season. Global economic growth has slowed to the lowest levels in decades as global trade disputes have remained unresolved leading to uncertainty for manufacturing and investment activity. For the cotton sector, where consumption has been led by Asian and Southeast Asian economies, the revised IMF forecasts of a global synchronised slowdown are expected to stall growth for the region's spinning and textile activities and demand for consumer goods.

Little Consumption Growth Expected in 2019/20



Global production is expected to increase this season to 26.4 million tonnes. Against demand or consumption, production estimates at this point in the season show that supply appears to be enough for the estimated demand levels. Global production appears to be outpacing or on par with consumption at a time when forecasts for global consumption

growth are slowing and global stocks are growing. Favourable forecasts for production and increasing global stock levels in 2019/20 would place a downward pressure on prices.

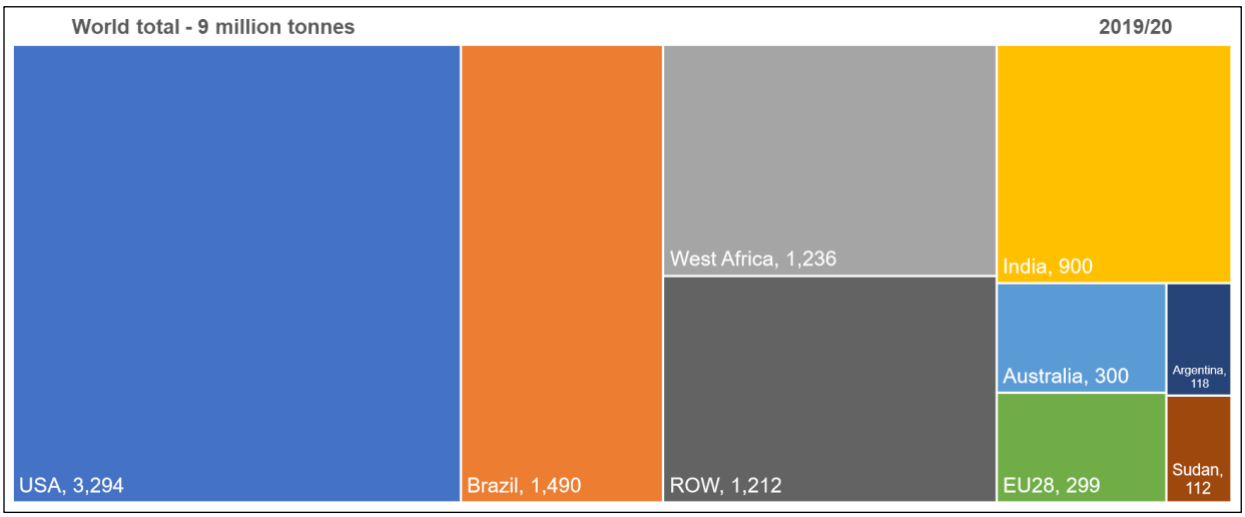
Production increases range across countries along with production decreases in other countries based on weather issues and water availability. While India is currently estimated to lead global production at 6 million tonnes, the expected productivity of 440 kg/ha of lint remains amongst the lowest in the world and below the global average of 780 kg/ha. Increased production in India for this season comes as cotton area in the country expands. Area has decreased slightly in China for the 2019/20 season and yields are currently expected to decline due to high temperatures and little rain in the Xinjiang region. Production in China is currently forecasted 4% lower than the previous season at 5.8 million tonnes. Cotton area in the United States has increased by 23% with production expected to increase to 4.5 million tonnes. Brazil's record high harvest in 2018/19 is expected to remain at a similar level in 2019/20 at 2.7 million tonnes.

Planted area in Pakistan increased for 2019/20 on high target levels set by the government signalling the priority placed on cotton production. However, inclement weather is likely to reduce output to 1.5 million tonnes or less. Monsoon rains have impacted both quantity and quality, with high temperatures lowering potential yield. The 2019/20 crop from West Africa is expected to be an all-time high with over 1.3 million tonnes reflecting a fifth season of steady increases in area and production. Benin, Burkina Faso, Côte d'Ivoire, Mali and Togo reported expansion of planted area for the 2019/20 season. However, except for Côte d'Ivoire, the region has reported insufficient rain that delayed planting and may impact yields. Turkey's crop is expected to be slightly smaller due to late planting and disease and pest issues. Production in Uzbekistan continues to decrease slightly as land under cotton has been switched to other agricultural products. In Côte d'Ivoire, planted area is expected to increase to 425,000 hectares and production is expected to rise to 220,000 tonnes. Despite the slow start to the season, Benin is expected to lead West African production with 315,000 tonnes, followed by Mali at 310,000 tonnes. Production in Burkina Faso is expected to recover to 208,000 tonnes following the production losses of 2018/19 due to weather issues, quality of inputs and producer boycotts. Production in Greece is expected to increase to 317,000 tonnes. Production in Australia is expected to decline again on limited water availability. Production in Argentina is expected to be around 263,000 tonnes. Production in Egypt is expected to increase to 122,000 tonnes.

Consumption is currently projected at 26.2 million tonnes in 2019/20, a 0.3% increase over the 2018/19 season. East Asian and South Asian economies are expected to continue to lead the world in cotton consumption based on volume, but growth, if any, is expected to be modest in 2019/20. Current estimates on raw cotton consumption include 8 million tonnes by China. Consumption in India is expected to increase 2% to 5.5 million tonnes. Amongst major consuming countries reliant on imports and where double-digit consumption growth had been seen for several years, growth has slowed sharply. Consumption in Bangladesh is currently projected to increase by 1% to 1.6 million tonnes in 2019/20 following a 5% decrease in 2018/19 as falling yarn prices reduced demand. In Vietnam, where consumption had been sharply increasing from 2011/12 to 2017/18, consumption growth is expected to slow in 2019/20 to 1.5 million tonnes. With supply chains for yarn and fabric being reported as well supplied, limited opportunities for movement are not expected to increase the flow of raw cotton upstream.

The Secretariat's current estimate for global trade is at 9 million tonnes, a 3% decrease from the previous season. China is expected to lead global importers at this volume and account for approximately 20% of total imports. Imports by China are currently projected at 1.6 million tonnes, representing a decrease of 22% (400,000 tonnes) from the previous season's 2.1 million tonnes. The impact of US tariffs on Chinese textile and apparel exports have softened consumption demand for not only China but globally. Imports remain concentrated in the manufacturing regions with imports by Bangladesh and Vietnam following the same trend as their consumption estimates for these countries with little domestic production.

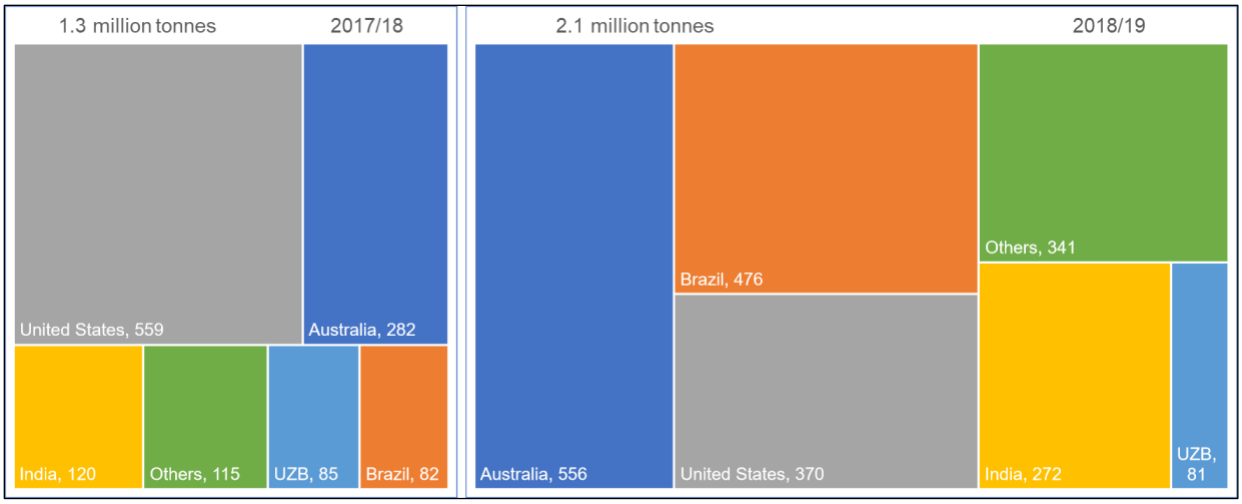
Exports 2019/20



Even if trade barriers remain, the US is expected to lead global exporters with more than a third of global exports. The US is expected to export 3.3 million tonnes in 2019/20. Brazil is currently expected to remain the second-largest exporter with a 17% share of global exports at 1.5 million tonnes. West Africa as a region is expected to be third-largest exporter with 1.2 million tonnes.

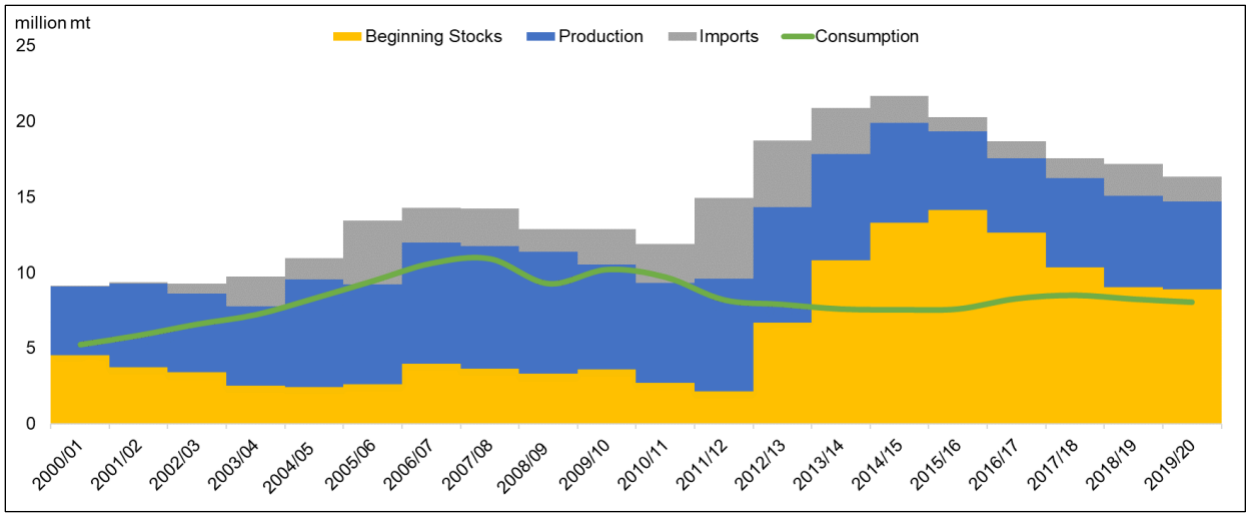
Due to China's global position in consuming and importing, the volume of China's imports has had an impact on our 2019/20 outlook. In 2017/18, China was the third-largest importer with 15% of the global total (9 million tonnes). Of the 1.3 million tonnes China imported, the United States provided 43% of the total, followed by Australia with 282,000 tonnes and India with 120,000 tonnes. Brazil exported just 82,000 tonnes to China — less than 10% of their 900,000-tonne total export. In 2018/19, China's imports grew to 2.1 million tonnes, a 60% increase over the 2017/18 season. During this time, US cotton was subjected to a 25% tariff entering China, thus decreasing market share and volume. In 2017/18, US cotton represented 43% of China's imports. In 2018/19, this share fell to 18%. Australia market share nearly doubled as exports to China increased from 282,000 to 556,000 tonnes. India market share more than doubled as exports to China increased from 120,000 to 272,000 tonnes. While the West African crop is smaller and thus volume is smaller, exports to China grew by over 300% to 158,000 tonnes. However, the largest growth came from Brazil as their market share increased by nearly 500% to 476,000 tonnes.

Imports to China Increased and Supply Chains Shifted During Trade Dispute



With China's domestic production expected to decrease to 5.8 million tonnes, imports will be needed to support mill-use and replenish reserves. Chinese national reserves are currently estimated at less than 3 million tonnes. Chinese imports have been announced by the Ministry of Agriculture at 1.6 million tonnes although this figure may increase over the course of the season. While our current export estimates for 2019/20 are based on consumption, our production estimates for Brazil and the United States show that there may room for this to increase should China wish to replenish its reserves.

China Cotton Supply



Month on month, Brazil exports have increased from August through October of this season. Of the 275,000 tonnes exported by Brazil in October 2019 — a 60% increase from the previous October — 100,000 tonnes were destined for China. As supply chains have shifted over the course of the past 18 months, market share lost by the US has been gained by Brazil. In the absence of a de-escalation or resolution between the US and China on their trade issues, this shift in market share could expected to remain in place. However, in the wider scope of global economic growth providing certainty for manufacturing and investment and consumer confidence for textile demand, the enduring trade issues that include not just the US and China — more than 20 other countries are currently involved in trade disputes — have the impact of slowing overall economic growth.

Impact and Implications

The fundamentals of supply and demand, with current estimates for production outpacing consumption, put downward pressure on prices as stocks levels may increase.

Little growth in consumption: Consumption drives demand and little growth in consumption is expected as global economic growth is slowing. Trade barriers and trade disputes have weakened import and export growth and have positioned the global economy for a synchronised economic slowdown that has hindered the pace of manufacturing and investment. Trade disputes are not limited to that between the United States and China but include a range of major economies across the globe. Trade disputes create uncertainty for businesses and reduce investment activity. Trade deals and resolutions are needed for increased confidence in the market.

Slowing trade: Trade for 2019/20 is estimated at 9 million tonnes. Global economic growth has slowed to the lowest levels in decades. For the cotton sector, where consumption has been led by Asian and Southeast Asian economies, the recently revised IMF forecasts of a global synchronised slowdown are expected to stall growth for the region's manufacturing activities and demand for consumer goods.

Impact of policies: Resolving trade conflicts, revising global trade rules and increasing transparency in trade policies will help to support growth, rebuild investment and boost consumer confidence for the cotton sector. New uncertainties have emerged in addition to the usual risks facing agriculture. Following several years of relatively calm market conditions, world agricultural markets today face mounting risks, including policy uncertainty from trade tensions. Our recommendations include more open, transparent and predictable trade as these are important for the cotton market and its role as an important commodity in the global economy.

Based on presentation delivered at the December 2019 ICAC Plenary in Brisbane, Australia

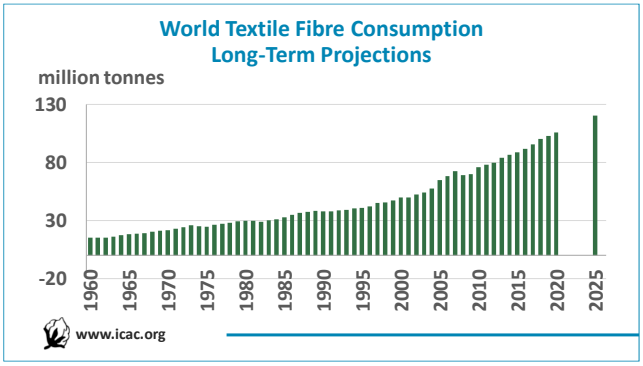
World Textile Fibre Demand

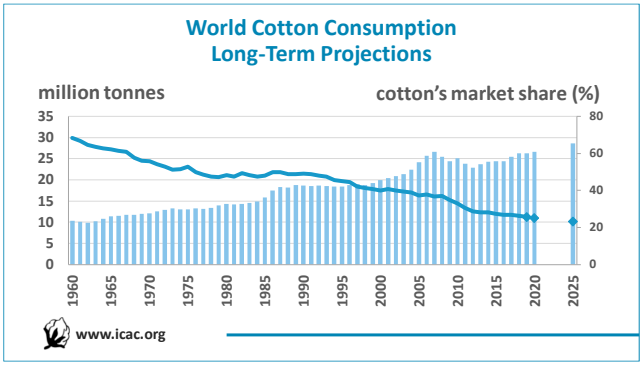
Lorena Ruiz, Economist, ICAC
Adapted from the December 2019 World Textile Demand Report

World textile fibre consumption has increased steadily over the last few decades. This increase has been supported by both global economic and population growth. Since the global financial crisis of 2008, world economic activity has grown moderately, positively influencing world textile fibre consumption, which reached a new record high of 100.1 million tonnes in 2018.

This growth has been driven by an increase in the consumption of man-made fibres, which rose from 42.4 million tonnes in 2008 to 72.7 million tonnes in 2018. Demand for cotton products increased by 3.3% and reached 26.3 million tonnes in 2018. Although world textile demand has continued to expand for 10 consecutive years, the growth rate slowed from 8.5% in 2010 to 2.4% in 2011 before increasing again in 2017 and 2018 to 4.2% and 5%, respectively.

Current projections suggest that world textile fibre consumption could increase to 120.5 million tonnes in 2025. World cotton consumption is projected to expand at a much slower pace and reach 27.9 million tonnes in 2025, due to the significant challenges faced by the cotton industry.





In the last five decades, the demand for textile fibres has experienced enormous changes across all regions. The market share of developing countries in total textile fibre demand has increased from 28.8% in 1969 to 66% in 2018. The trend is reversed in developed countries, where the market share in total textile fibre demand has dropped from 51.5% in 1969 to 30% in 2018. The same downward trend is observed in Central and Eastern Europe and the former USSR (CEEU) where the market share decreased from 19.7% to 3.6% over the same period.

The World Textile Demand report provides data on cotton available for home use (consumption at retail level or what it is called 'end-use consumption') by region and for the world going back to 1960 (although not by country). End-use refers to the final use of fibres at the retail level, such as apparel. However, all numbers are expressed as fibre equivalent (in fibre equivalent weight).

Regions in the WTD are divided into:

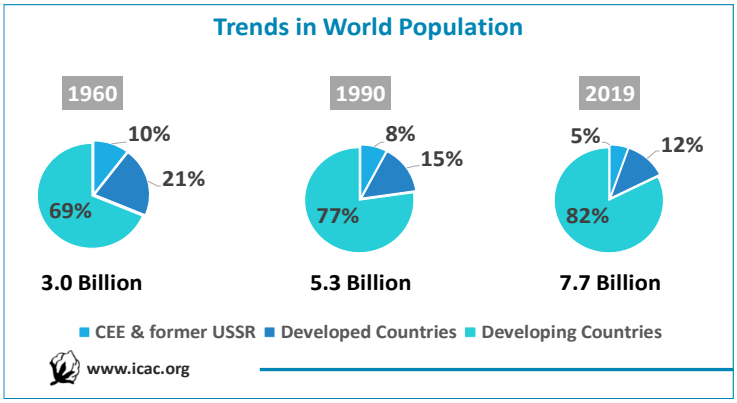
- Central and Eastern Europe and former USSR countries
- Industrial Countries
    - North America
    - Western Europe
    - Asia/Oceania
- Developing Countries
    - Asia
    - Africa

- Middle East and Europe
- Latin America and the Caribbean

Developing countries in Asia have played a vital role in the increase of textile fibre consumption. Textile fibre consumption (natural + chemical fibres) have increased rapidly due to the increase in population in the region.

The average textile fibre demand in developing Asia increased from 3.2 million tonnes during the 1960s, to 5.35 million tonnes during the 1970s, to 8.6 million tonnes during the 1980s, to 13.45 million tonnes during the 1990s, and to 25.55 million tonnes during the 2000s. Between 2010 and 2018, textile fibre consumption in developing Asia increased even more rapidly, rising from 37.1 million to 54.3 million tonnes. Latin America and the Caribbean (LAC) accounted for 7.5% of textile fibre demand in developing countries, followed by the Middle East and Europe (MEE) with 5.7% and Africa with the remaining 4.8%.

World textile fibre consumption is driven by three major economic variables: income, population growth and fibre prices. The relevance of developing countries in world textile fibre demand has been impacted by their population growth. Population in developing countries amounted to 3.3 times the population in developed countries in 1960 — but is 6.7 times more in 2018. In the last four decades, developing Asia and Africa have witnessed the most rapid demographic change in the world, with increases of 1.72 billion people and 813 million people, respectively.



Synthetic Fibres Continue to Account for the Majority of Global Fibre Demand

World chemical fibre consumption increased for the 10th consecutive year and reached a new record in 2018 (72.7 million tonnes). Synthetic fibres, mainly polyester, accounted for most of the increase, as it currently represents 75% of total chemical fibre consumption.

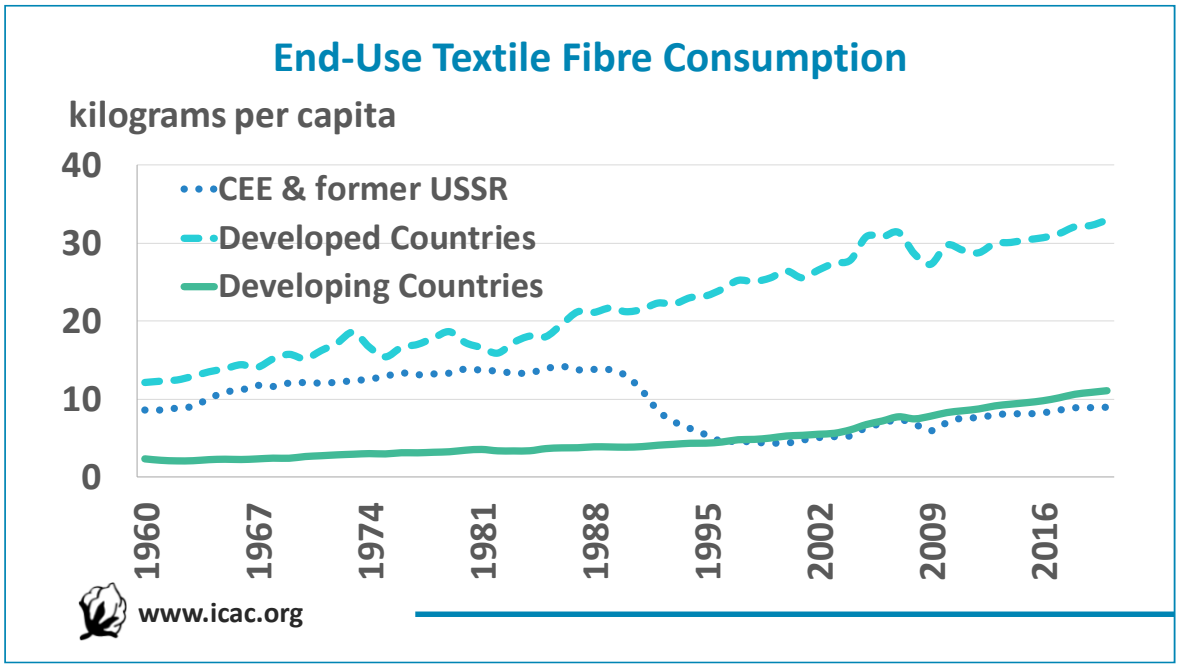
Between 2008 and 2012, global cotton consumption experienced a dramatic reduction, decreasing from 25.5 million to 22.8 million tonnes — the lowest level observed since 2004. The decline is easily explained by the financial crisis and the surge in cotton prices to record levels that weakened the competitiveness of cotton in relation to other textile fibres. Nevertheless, global cotton consumption has been recovering over the past six years, increasing at a compound annual growth rate (CAGR) of 2.1%, from 23.7 million tonnes in 2013 to 26.3 million tonnes in 2018.

Textile Fibre Consumption per Capita

Annual world textile fibre consumption per capita continued to increase and reached 13.1 kilograms in 2018. Developed countries continued to be the major consumers of textiles fibres with per capita consumption at 32 kilograms in 2018. This was followed by developing countries at 10.6 kilograms and by CEEU countries at 8.8 kilograms.

Since 2008, world per capita cotton fibre consumption declined from 3.6 kilograms in 2010 to 3.4 kilograms in 2011 and to 3.2 kilograms in 2012, the lowest since 1999. However, the declining trend has reversed in the last couple of years, and world per capita cotton fibre consumption reached 3.45 kilograms in 2018. The increasing demand for fibres in developing countries has been largely met by man-made fibres.

World non-cotton fibre consumption per capita increased from 1.6 kg in 1960 to about 9.7 kilograms in 2018. As a result, the share of non-cotton fibres in total fibre consumption in developing countries climbed from 43% in 1981, to 60% in 2000, and to 79% in 2018. World non-cotton fibre consumption per capita is currently 2.8 times greater than the corresponding level of cotton consumption.

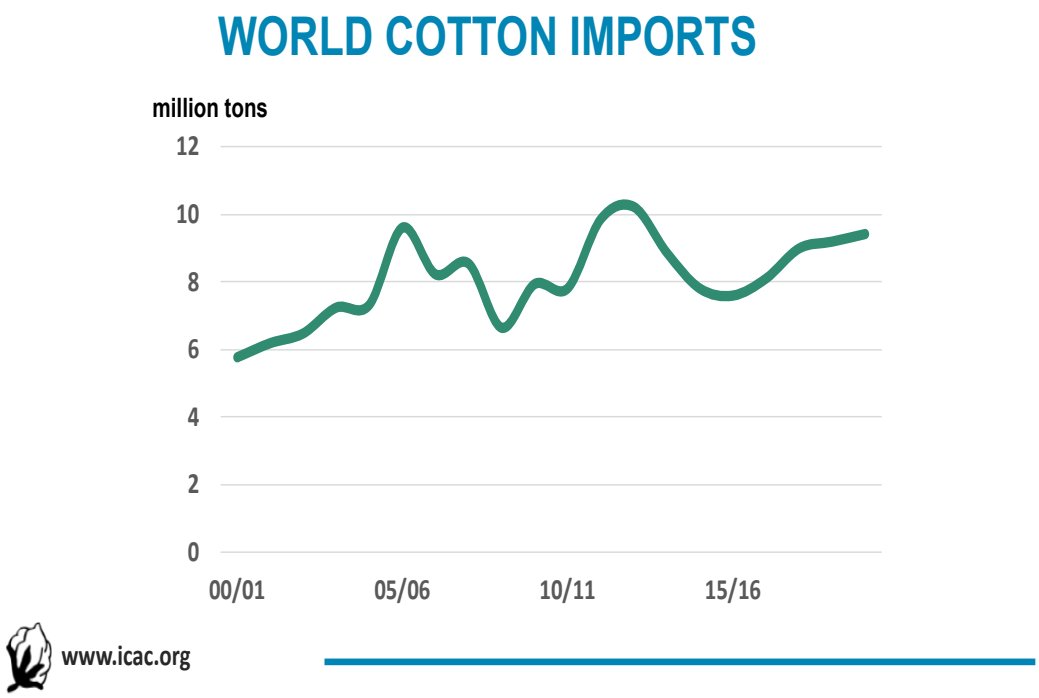


World Cotton Trade Flows Have Changed

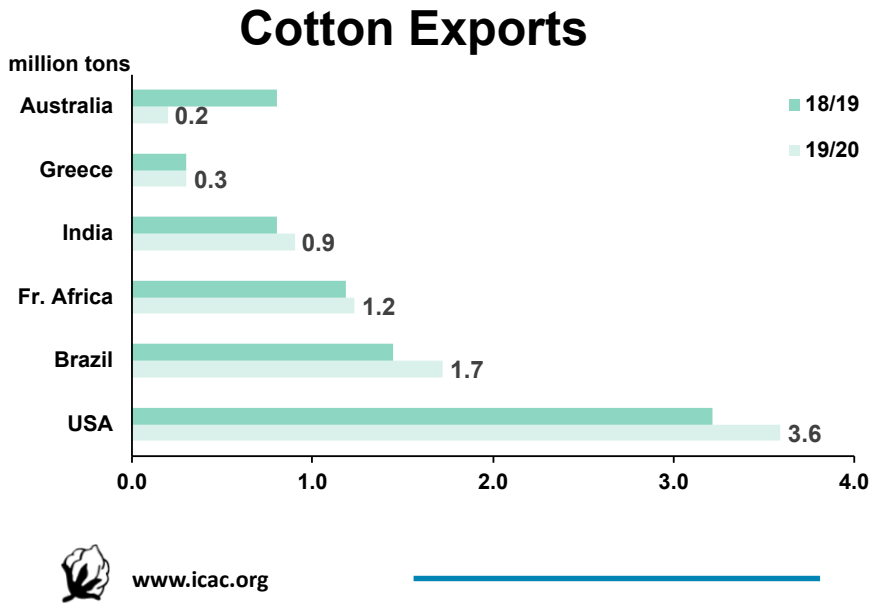
Andrei Guitchounts, Director of Trade Analysis, ICAC

The world cotton trade is experiencing serious challenges in 2019/20, including slowing growth in the world economy; depressed demand from the major textile economies in East Asia, especially China; and the trade dispute between USA and China that has created uncertainties for all market participants.

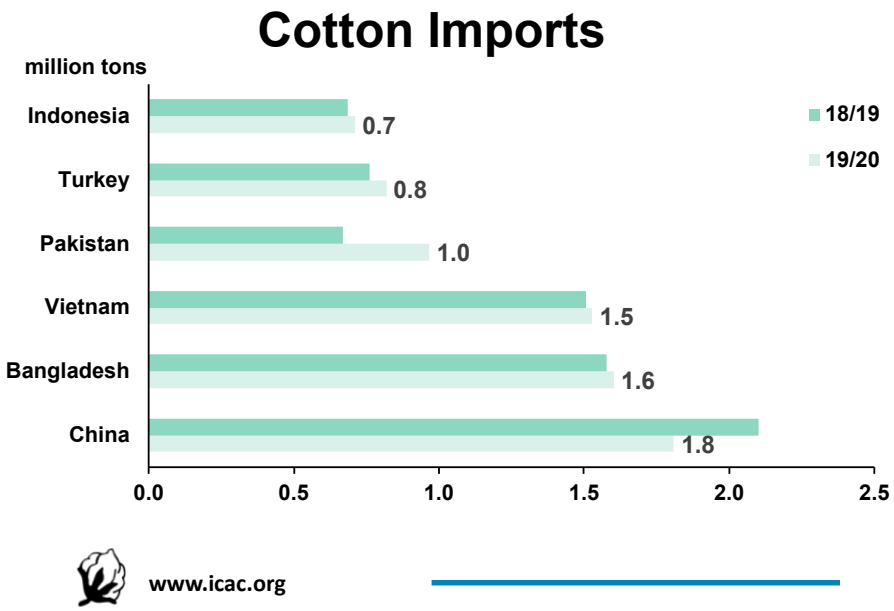
Despite the tariff dispute escalation by the two major cotton-trading countries, the world cotton trade is currently projected to grow in 2019/20 by 2% to 9.4 million tonnes. However, major market composition shifts have taken place recently. Between 2011/12 and 2013/14, world trade reached record levels above 10 million tonnes, boosted by the Chinese policy of stockpiling domestically produced cotton and relying on substantial imports of lower-priced foreign growths. The end of cotton stockpiling in China and release of government reserves to domestic mills led to a decline in Chinese imports from record-high levels. By the end of 2018/19, government reserves declined to minimum levels and China started a new program in 2019/20 of buying cotton from producers to replenish reserves. This renewed government procurement program by China could support world trade in the near future.



East Asian textile-based economies are projected to be major importers in 2019/20. China, Bangladesh, Vietnam, Indonesia, Turkey, Pakistan and Thailand will remain the world's largest importers in 2019/20, accounting for 82% of world imports.



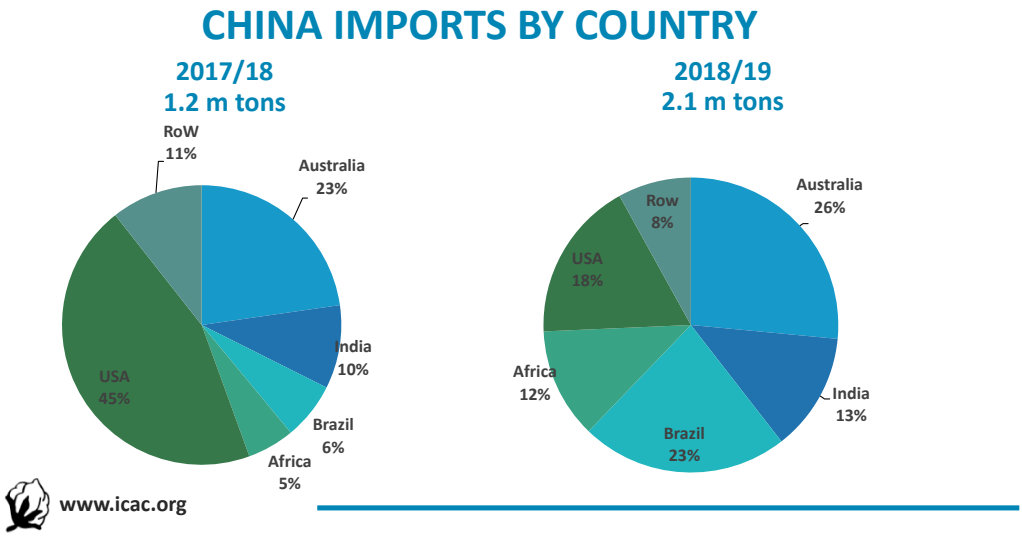
USA, Brazil, Francophone Africa, India, Australia and Greece will remain the largest exporters in 2019/20, accounting for 84% of world exports. Exports from Australia are projected to decline but will be partially offset by increased exports from USA, Brazil, Francophone Africa and India.



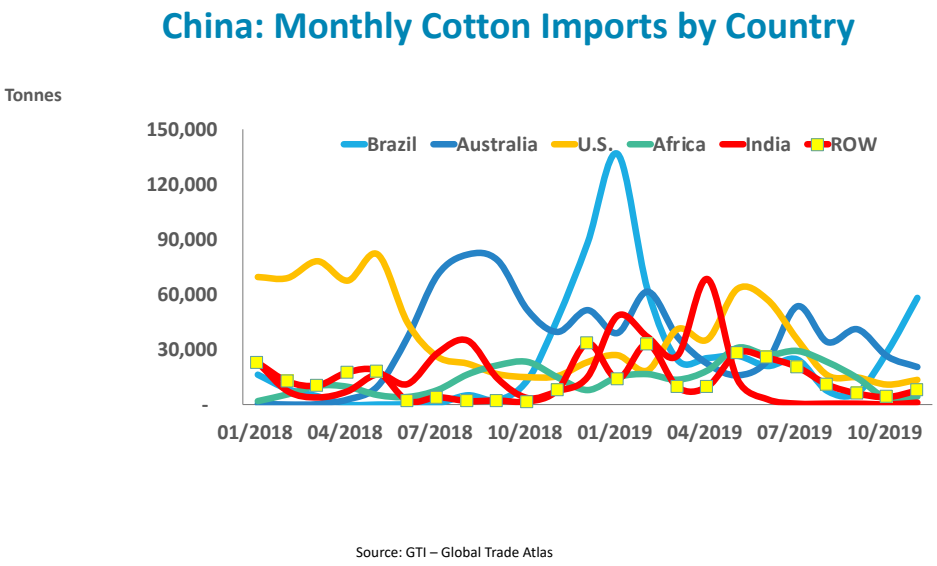
Substantial changes in cotton trade flows have occurred over the past 20 years. The decline in mill use in developed economies and the rapid expansion of the spinning industry in Asia led to a major shift in the destinations for world exports. Asia has become the primary destination for cotton shipments over the past 20 years. In 1998/99, Asia accounted for 58% of world mill use, 47% of world imports and 4% of world exports. In 2019/20, Asia is projected to account for 79% of world mill use, 83% of world imports and 11% of world exports.

Changing Origins for China's Imports

During the past several seasons, China restricted imports by limiting the release of import quotas and releasing cotton from the government reserve to mills. Under the terms of its accession agreement to the WTO, China is obliged to establish a tariff-rate-quota (TRQ). The in-quota tariff is 1% for the first 894,000 tonnes of imports each calendar year. Additional quotas can carry a tariff of 1% or be subject to a sliding scale of between 5% and 40%. The purpose of the sliding scale is to ensure that the effective cost of imported cotton exceeds international market prices and thus boosts prices paid to farmers in China. An additional import sliding scale quota for 800,000 tonnes was issued by China In 2018/19; as a result, imports by China increased by a similar amount to 2.1 million tonnes — the largest import figures in five seasons — because of rising demand and shrinking stocks in the government reserves. The release of the reserves to domestic mills started in 2014/15 and by the start of 2019/20 the government reserves declined to an estimated 2 million tonnes. At its peak, the size of the reserve reached 13 million tonnes. China started purchasing cotton from producers to replenish reserves in December 2019, but during the first month of operations, fewer than 50,000 tonnes were purchased. The scale of procurements could increase during the second half of the season and could include imported cotton. Although it is projected that imports by China will decline to 1.8 million tonnes, China will remain the largest importer in 2019/20, accounting for 19% of world imports.



In July 2018, China imposed a 25% tariff on about $50 billion of US imports (including various US agricultural products, including cotton) as retaliation against tariffs imposed earlier by the USA on Chinese products. The USA was the world's largest exporter of cotton in 2017/18, accounting for 3.5 million tonnes (38% of world exports) and for 45% of Chinese imports. Because of the 25% tariff imposed by China on imports of US cotton, the US share of Chinese imports declined substantially in 2018/19 to an estimated 18%, while other major exporters increased their share of the Chinese market, especially Brazil. In 2018/19, Brazil's share of the Chinese market almost quadrupled to 23%; Australia, India and Africa also increased their share at a more moderate rate. Tariff increases on US cotton exports to China might also have been a driver of the recently declining cotton prices.



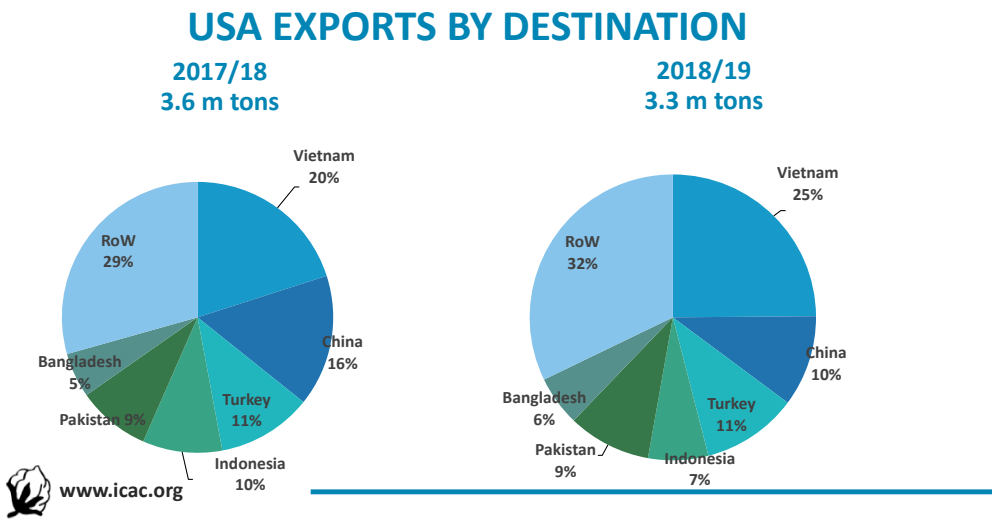
Source: GTI – Global Trade Atlas

During the first four months of 2019/20 Australia accounted for 34% of imports by China; Brazil for 29%; USA for 16%; Africa for 13%; and India for 1%.

Exports from the USA Are Projected to Grow

The USA remains the world's largest exporter and is projected to increase exports by 12% in 2019/20 to reach 3.6 million tonnes, largely due to a sharp increase (up 9%) in production. The USA will account for 38% of world exports (up from 35% in 2018/19). In 2018/19 and in 2019/20, US cotton was subject to a 25% tariff in China. The share of US cotton exports shipped to China declined from 16% in 2017/18 to an estimated 10% in 2018/19. Vietnam remained the largest destination for US cotton in 2018/19, accounting for 25% of exports (up from 20% in 2017/18). In the past decade, US cotton exports to Vietnam have undergone extremely rapid growth, rising from 166,000 tonnes in 2008/09 to 830,000 tonnes in 2018/19. Turkey's share remained unchanged in 2018/19 at about 11%, while

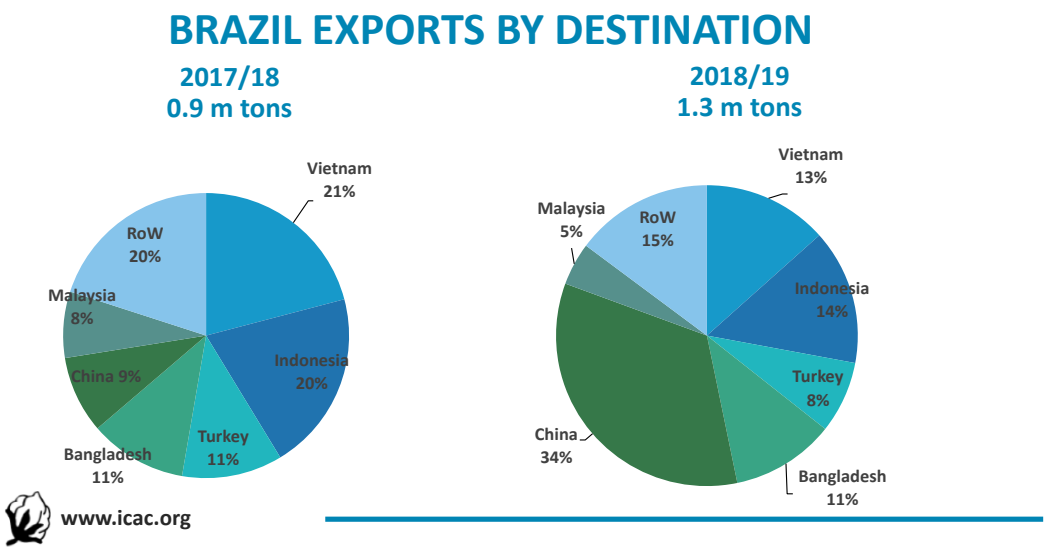
Pakistan was the fourth-largest importer of US cotton and accounted for 9% of US shipments in 2018/19. Large shipments were also made to Indonesia, India, Bangladesh, Mexico, Thailand, Korea and Taiwan.



During the first four months of 2019/20 the shares in US cotton export destinations remained almost unchanged: Vietnam accounted for 24%; China for 11%; Pakistan for 9%; and Bangladesh for 8%.

Exports from Brazil Are Expanding

Brazil was the biggest beneficiary of the tariff escalation between USA and China in 2018/19 and was able to increase exports to China sharply, replacing US cotton. The increase was also aided by a significant increase in production in Brazil in 2018/19, which rose by third to a record 2.7 million tonnes and is projected to remain at this level in 2019/20, largely as a result of higher domestic prices and a relatively weak Brazilian real. As a result, exportable surplus in Brazil rose substantially and exports by Brazil rose by 60% in 2018/19, reaching a record of 1.4 million tonnes, and are projected to grow further in 2019/20 to 1.7 million tonnes. Brazil will remain the second-largest exporter in 2019/20, accounting for 18% of world exports. In 2018/19, China became the largest destination for Brazilian cotton, accounting for 34% of exports (up from 9% in 2017/18). Indonesia was the second major destination for Brazilian exports, accounting for 14% (down from 20%) and Vietnam was the third-largest destination, accounting for 13% (down from 21% in 2017/18). Bangladesh, Turkey, Malaysia, Korea, Pakistan and Thailand accounted for most of the remaining volume.



During the first four months of 2019/20, China accounted for 31% of Brazilian exports; Vietnam for 16%; Bangladesh for 11%; Indonesia for 20%; and **Pakistan** for 9%.

Biotech Cotton Dominates Trade

Biotech cotton production remains substantial. Based on officially reported data, biotech cotton accounted for 20% of world area, 28% of world production and 33% of world exports in 2002/03. In 2018/19, it is estimated that biotech cotton accounted for 66% of world area, 67% of world production, and 58% of exports. World exports of biotech cotton are estimated based on production shares in exporting countries. The largest exporters of biotech cotton are the USA, India, Australia and Brazil.

The share of biotech cotton in textiles traded in all markets is clearly rising and now exceeds two-thirds of production. There are no price differentials between biotech and non-biotech cotton fibre, or textiles containing biotech and non-biotech cotton. No evidence exists of rejection or price discrimination against biotech cotton or of price premiums for non-biotech cotton, in any segment of the market or region. In practice, markets do not generally identify biotech cotton content, but rather evaluate cotton properties based on quality characteristics.

2017/18 Supply and Use of Cotton by Country 2 December 2019

	Area	Yield	Prod	Beg Stocks	Imports	Cons	Exports	End Stocks	S/U *	S/MU **
	000 Ha	Kgs/Ha	000 Metric Tonnes						Ratio	Ratio
Canada				0	0	0		0	0.12	0.12
Cuba	4	269	1	1	2	3		1	0.19	0.19
Dom. Rep.					1	1		0	0.47	0.47
Mexico	212	1,580	335	141	212	435	71	182	0.36	0.42
USA	4,492	1,014	4,555	599	1	768	3,450	936	0.22	1.22
N. America	**4,713**	**1,038**	**4,893**	**742**	**217**	**1,209**	**3,522**	**1,120**	**0.24**	**0.93**
El Salvador				9	35	35		9	0.27	0.27
Guatemala				7	27	27		7	0.26	0.26
Honduras	0	318	0	0		0		0		
C. America	**2**	**512**	**1**	**16**	**62**	**63**	**0**	**16**	**0.26**	**0.26**
Argentina	328	688	226	301	2	146	37	347	1.90	2.38
Bolivia	4	639	3	2	1	3	0	2	0.50	0.53
Brazil	1,175	1,707	2,006	1,163	18	680	909	1,598	1.01	2.35
Chile				0	0	0		0	0.41	0.41
Colombia	10	937	10	6	28	40		4	0.10	0.10
Ecuador	1	439	1	3	10	10		3	0.31	0.31
Paraguay	10	419	4	1	2	3	3	2	0.34	0.65
Peru	26	814	22	25	53	60	1	39	0.64	0.64
Uruguay				0	0	0		0	0.06	0.06
Venezuela	14	390	6	3	5	11		3	0.30	0.30
S. America	**1,570**	**1,450**	**2,276**	**1,504**	**119**	**953**	**949**	**1,997**	**1.05**	**2.10**
Algeria				0	2	2		0	0.04	0.04
Egypt	91	747	68	90	117	139	50	86	0.45	0.61
Morocco				3	8	8		3	0.35	0.35
Sudan	180	444	80	14		18	60	16	0.21	0.90
Tunisia				3	12	12		3	0.22	0.22
N. Africa	**271**	**546**	**148**	**109**	**139**	**179**	**110**	**107**	**0.37**	**0.60**
Benin	530	485	257	87		2	196	146	0.74	74.45
Burkina Faso	879	292	257	120		4	236	137	0.57	34.19
Cameroon	183	586	107	58		2	103	60	0.58	31.75
Cent. Afr. Rep.	33	21	1	3			3	0	0.10	
Chad	50	130	7	51		0	47	10	0.22	32.63
Cote d'Ivoire	326	538	176	21		2	138	56	0.40	27.63
Guinea	12	245	3	1			3	1	0.38	
Madagascar				3				3		
Mali	704	424	299	61		5	289	66	0.22	13.17
Niger	5	429	2	0		1	1	0	0.12	0.25
Senegal	20	277	6	2	1	1	7	1	0.13	1.28
Togo	169	285	48	14			42	19	0.45	
F. Africa	**2,910**	**399**	**1,161**	**421**	**1**	**17**	**1,065**	**501**	**0.46**	**29.54**
Angola	3	301	1	0		1	0	0	0.33	0.48
Ethiopia	60	700	42	19	6	41	7	19	0.39	0.46
Ghana	15	132	2	12		1	1	12	6.03	9.33
Kenya	25	184	5	1	0	5	0	1	0.13	0.13
Malawi	90	78	7	12		3	13	3	0.16	0.87
Mozambique	124	201	25	20			30	15	0.49	
Nigeria	261	196	51	18	1	28	20	22	0.45	0.79
South Africa	34	1,120	38	12	16	20	7	39	1.45	1.93
Tanzania	350	154	54	51		43	39	23	0.28	0.54
Uganda	77	486	37	22		1	34	25	0.73	28.44
Congo, Dr				2	7	7		2	0.30	0.30
Zambia	126	326	41	34		2	40	34	0.80	
Zimbabwe	202	203	41	22		3	35	25	0.65	8.80
S. Africa	**1,387**	**250**	**346**	**238**	**55**	**181**	**228**	**231**	**0.57**	**1.28**
Kazakhstan	116	634	73	36	0	13	46	51	0.87	3.90
Kyrgyzstan	14	810	11	4	3	1	13	4	0.28	4.19
Tajikistan	187	532	100	27		15	78	34	0.36	2.29
Turkmenistan	545	559	304	86		140	159	91	0.30	0.65
Uzbekistan	1,208	662	800	259	1	464	337	259	0.32	0.56
C. Asia	**2,069**	**622**	**1,288**	**413**	**4**	**632**	**634**	**439**	**2.14**	**0.69**

2017/18 Supply and Use of Cotton by Country (cont'd) 2 December 2019

	Area	Yield	Prod	Beg Stocks	Imports	Cons	Exports	End Stocks	S/U *	S/MU **
	000 Ha	Kgs/Ha	000 Metric Tonnes						Ratio	Ratio
Austria				1	3	3		1	0.18	0.18
Azerbaijan	139	537	75	15		17	39	34	0.61	2.00
Belarus				4	11	11		4	0.34	0.34
Belgium				1	7	3	4	1	0.19	0.42
Bulgaria	1	324	0	1	5	5	0	1	0.18	0.19
Czech Rep.				0	2	2		0	0.09	0.09
Denmark					0	0			0.12	
Estonia										
Finland										
France				2	10	8	2	2	0.15	0.19
Germany				9	26	22	4	9	0.34	0.41
Greece	243	906	220	24	7	16	234	0	0.00	0.01
Hungary				0				0		
Ireland				0	0	0		0	0.10	0.10
Italy				6	37	34	2	8	0.21	0.22
Latvia				0	0	0	0	0	0.03	0.04
Lithuania				0				0		
Moldova				1	2	2		1	0.34	0.34
Netherlands				0	4	4		0	0.11	
Norway										
Poland				1	4	3	0	1	0.51	0.56
Portugal				6	40	39	1	7	0.18	0.19
Romania				0	0	0		0	0.10	0.10
Russia				7	41	41	0	6	0.15	0.15
Slovak Rep.										
Spain	70	943	66	25	3	3	52	38	0.69	11.04
Sweden				0	0	0		0		
Switzerland				0	1	0	0	0	0.19	0.32
Ukraine				0	2	2		0	0.26	0.26
United Kingdom				0	0	0		0	0.13	0.13
Former Yugoslavia				1	7	7		1	0.19	0.19
Europe	**454**	**796**	**361**	**106**	**216**	**228**	**338**	**117**	**0.21**	**0.51**
Including EU-28	**314**	**912**	**286**	**77**	**151**	**146**	**299**	**70**	**0.16**	**0.48**
China	3,350	1,758	5,890	10,352	1,320	8,500	30	9,033	1.06	1.06
Taiwan				29	138	146		21	0.14	0.14
Hong Kong				30	1	0	0	30	61.83	
Sub Total	**3,350**	**1,758**	**5,890**	**10,411**	**1,458**	**8,646**	**30**	**9,084**	**1.05**	**1.05**
Australia	526	2,011	1,058	252		6	900	404	0.45	63.62
Indonesia	6	615	4	85	762	778	2	70	0.09	0.09
Japan				8	57	58		8	0.13	0.13
Korea, D.R.				1	5	5		1	0.24	0.24
Korea, Rep.				47	197	201	2	40	0.20	0.20
Malaysia				13	161	128	33	13	0.08	0.10
Philippines	0	567	0	4	14	13		5	0.35	0.35
Singapore				0	6		6	0	0.05	
Thailand	2	517	1	52	250	248		56	0.22	0.22
Vietnam	0	1,000	0	181	1,521	1,506		196	0.13	0.13
E. Asia	**552**	**1,939**	**1,070**	**647**	**2,972**	**2,950**	**943**	**796**	**0.20**	**0.27**
Afghanistan	38	387	15	7		4	12	5	0.31	1.20
Bangladesh	45	764	34	379	1,671	1,662		422	0.25	0.25
India	12,235	519	6,350	1,829	365	5,423	1,132	1,989	0.30	0.37
Myanmar	249	634	158	62	57	207		69	0.34	0.34
Pakistan	2,665	674	1,795	734	671	2,346	46	808	0.34	0.34
Sri Lanka				0	2	2		0	0.12	0.12
S. Asia	**15,235**	**548**	**8,354**	**3,011**	**2,766**	**9,647**	**1,190**	**3,295**	**0.30**	**0.34**
Iran	79	709	56	42	71	116	0	52	0.45	0.45
Iraq	10	361	3	2	5	8		2	0.24	0.24
Israel	7	1,853	13	2			13	2	0.14	
Syria	25	954	23	11		22	4	9	0.34	0.39
Turkey	462	1,714	792	802	876	1,481	71	918	0.59	0.62
Sub Total	**585**	**1,519**	**889**	**862**	**974**	**1,650**	**87**	**987**	**0.57**	**0.60**
World Total	**33,099**	**806**	**26,677**	**18,481**	**8,983**	**26,354**	**9,095**	**18,691**	**0.71**	**0.71**

*/ Ending stocks divided by consumption plus exports.
**/ Ending stocks divided by consumption.
Subtotals and total include countries not shown.

2018/19 Supply and Use of Cotton by Country 2 December 2019

	Area	Yield	Prod	Beg Stocks	Imports	Cons	Exports	End Stocks	S/U *	S/MU **
	000 Ha	Kgs/Ha	000 Metric Tonnes						Ratio	Ratio
Canada				0	0	0		0	0.12	0.12
Cuba	4	269	1	1	2	3		1	0.19	0.19
Dom. Rep.					1	1		0	0.47	0.47
Mexico	245	1,692	414	182	95	440	69	182	0.36	0.41
USA	4,130	968	3,999	936	1	712	3,214	1,010	0.26	1.42
N. America	**4,384**	**1,007**	**4,415**	**1,120**	**100**	**1,158**	**3,283**	**1,194**	**0.27**	**1.03**
El Salvador				9	35	35		9	0.26	0.26
Guatemala				7	27	27		7	0.26	0.26
Honduras	0	318	0	0		0		0		
C. America	**1**	**522**	**1**	**16**	**62**	**63**		**16**	**0.26**	**0.26**
Argentina	356	738	263	347	1	167	118	325	1.14	1.94
Bolivia	4	640	3	2	1	3	0	2	0.50	0.53
Brazil	1,618	1,685	2,726	1,598	4	730	1,446	2,152	0.99	2.95
Chile				0	0	0		0	0.41	0.41
Colombia	15	870	13	4	27	40		4	0.10	0.10
Ecuador	1	439	1	3	10	11		3	0.31	0.31
Paraguay	10	420	4	2	2	3	2	3	0.72	1.35
Peru	27	819	22	39	38	59	1	39	0.64	0.65
Uruguay				0	0	0		0	0.06	0.06
Venezuela	15	392	6	3	5	10		3	0.30	0.30
S. America	**2,046**	**1,484**	**3,037**	**1,997**	**87**	**1,024**	**1,567**	**2,531**	**0.98**	**2.47**
Algeria				0	1	1		0	0.05	0.05
Egypt	141	787	111	86	131	167	75	86	0.35	0.51
Morocco				3	7	7		3	0.38	0.38
Sudan	180	578	104	16		18	86	16	0.15	0.89
Tunisia				3	12	12		3	0.22	0.22
N. Africa	**321**	**670**	**215**	**107**	**152**	**206**	**161**	**107**	**0.29**	**0.52**
Benin	656	449	295	146		1	292	147	0.50	107.48
Burkina Faso	646	283	183	137		3	200	116	0.57	38.82
Cameroon	250	530	132	60		2	125	66	0.52	34.85
Cent. Afr. Rep.	32	251	8	0			4	4	0.93	
Chad	60	117	7	10		0	14	3	0.20	11.30
Cote D'Ivoire	392	514	202	56		2	195	61	0.31	29.77
Guinea	12	286	3	1			3	2	0.58	
Madagascar				3				3		
Mali	698	395	276	66		2	300	40	0.13	19.79
Niger	4	469	2	0		1	1	0	0.11	0.25
Senegal	22	285	6	1		1	5	1	0.18	1.41
Togo	180	313	56	19			47	28	0.59	
F. Africa	**2,953**	**396**	**1,171**	**501**		**12**	**1,187**	**472**	**0.39**	**38.34**
Angola	3	304	1	0		1	0	0	0.34	0.48
Ethiopia	78	737	57	19	6	52	7	22	0.37	0.42
Ghana	15	373	5	12		1	4	12	2.22	9.28
Kenya	25	184	5	1	0	5	0	1	0.13	0.13
Malawi	86	248	21	3		3	9	12	0.99	3.99
Mozambique	124	222	28	15			27	15	0.56	
Nigeria	250	205	51	22	1	28	29	17	0.31	0.63
South Africa	44	1,103	49	39	15	19	31	53	1.05	2.77
Tanzania	420	193	81	23		44	43	18	0.20	0.40
Uganda	74	369	27	25		1	42	9	0.21	10.42
Congo, Dr				2	7	7		2	0.30	0.30
Zambia	121	392	47	34		2	47	32	0.67	
Zimbabwe	212	292	62	25		3	44	39	0.83	13.98
S. Africa	**1,472**	**298**	**438**	**231**	**53**	**192**	**285**	**246**	**0.51**	**1.28**
Kazakhstan	113	665	75	51	0	13	58	55	0.76	4.14
Kyrgyzstan	14	851	12	4	3	1	13	5	0.33	4.79
Tajikistan	191	535	102	34		15	85	36	0.36	2.43
Turkmenistan	534	561	300	91		141	143	106	0.37	0.75
Uzbekistan	900	712	641	259		630	127	144	0.19	0.23
C. Asia	**1,752**	**645**	**1,130**	**439**	**3**	**800**	**427**	**345**	**2.01**	**0.43**

2018/19 Supply and Use of Cotton by Country (cont'd) 2 December 2019

	Area	Yield	Prod	Beg Stocks	Imports	Cons	Exports	End Stocks	S/U *	S/MU **
	000 Ha	Kgs/Ha	000 Metric Tonnes						Ratio	Ratio
Austria				1	3	3		1	0.18	0.18
Azerbaijan	143	672	96	34		20	66	44	0.50	2.13
Belarus				4	11	11		4	0.34	0.34
Belgium				1	7	3	4	1	0.19	0.43
Bulgaria	1	324	0	1	6	6	0	1	0.17	0.17
Czech Rep.				0	2	2		0	0.04	0.04
Denmark					0	0			0.12	
Estonia										
Finland										
France				2	9	8	1	1	0.14	0.17
Germany				9	24	21	4	8	0.31	0.36
Greece	243	1,268	308	0	7	16	298	0	0.00	0.01
Hungary				0				0		
Ireland				0	0	0		0	0.11	0.11
Italy				8	34	32	2	8	0.22	0.23
Latvia				0	0	0	0	0	0.03	0.04
Lithuania				0				0		
Moldova				1	2	2		1	0.34	0.34
Netherlands				0	4	4		0	0.11	
Norway										
Poland				1	2	2	0	1	0.60	0.63
Portugal				7	42	41	1	9	0.21	0.21
Romania				0	0	0		0	0.10	0.10
Russia	0	1,750	0	6	40	41	0	6	0.14	0.14
Slovak Rep.										
Spain	70	929	65	38	3	3	52	37	0.54	11.08
Sweden				0	0	0		0		
Switzerland				0	1	0	0	0	0.19	0.33
Ukraine				0	2	2		0	0.26	0.26
United Kingdom				0	0	0		0	0.12	0.12
Former Yugoslavia				1	7	7		1	0.19	0.19
Europe	**771**	**673**	**519**	**117**	**217**	**60**	**545**	**211**	**0.35**	**3.51**
Including EU-28	**314**	**1,190**	**373**	**70**	**145**	**145**	**299**	**68**	**0.15**	**0.47**
China	3,367	1,794	6,040	9,033	2,100	8,250	30	8,885	1.07	1.08
Taiwan				21	138	138		21	0.15	0.15
Hong Kong				30	0	0	0	30	51.93	
Sub Total	**3,367**	**1,794**	**6,040**	**9,084**	**2,239**	**8,389**	**30**	**8,936**	**1.06**	**1.07**
Australia	343	1,414	485	404		6	800	83	0.10	13.79
Indonesia	6	618	3	70	685	700		59	0.08	0.08
Japan				8	50	51		7	0.14	0.14
Korea, D.R.				1	5	5		1	0.24	0.24
Korea, Rep.				40	170	171	1	38	0.22	0.22
Malaysia				13	165	95	70	13	0.08	0.14
Philippines	0	570	0	5	13	13		5	0.35	0.35
Singapore				0	6		6	0	0.05	
Thailand	2	520	1	56	234	236		56	0.24	0.24
Vietnam	0	667	0	196	1,510	1,506		200	0.13	0.13
E. Asia	**368**	**1,349**	**496**	**796**	**2,839**	**2,790**	**878**	**464**	**0.13**	**0.17**
Afghanistan	36	387	14	5		4	11	4	0.25	0.90
Bangladesh	45	768	35	422	1,544	1,579		422	0.27	0.27
India	12,250	437	5,350	1,989	340	5,400	800	1,479	0.24	0.27
Myanmar	239	637	152	69	55	207	0	69	0.33	0.34
Pakistan	2,325	718	1,670	808	668	2,358	46	743	0.31	0.32
Sri Lanka				0	2	2		0	0.12	0.12
S. Asia	**14,898**	**485**	**7,223**	**3,295**	**2,610**	**9,552**	**1,190**	**2,719**	**0.26**	**0.28**
Iran	71	710	50	52	71	116		58	0.50	0.50
Iraq	9	362	3	2	5	8		2	0.24	0.24
Israel	4	2,009	9	2			8	2	0.27	
Syria	18	958	18	9		14	4	9	0.49	0.61
Turkey	520	1,878	977	918	762	1,555	105	997	0.60	0.64
Sub Total	**626**	**1,691**	**1,058**	**987**	**855**	**1,713**	**117**	**1,071**	**0.59**	**0.63**
World Total	**32,647**	**787**	**25,694**	**18,691**	**9,208**	**26,126**	**9,243**	**18,224**	**0.70**	**0.70**

*/ Ending stocks divided by consumption plus exports.
**/ Ending stocks divided by consumption.
Subtotals and total include countries not shown.

2019/20 Supply and Use of Cotton by Country 2 December 2019

	Area	Yield	Prod	Beg Stocks	Imports	Cons	Exports	End Stocks	S/U *	S/MU **
	000 Ha	Kgs/Ha	000 Metric Tonnes						Ratio	Ratio
Canada				0	0	0		0	0.13	0.13
Cuba	4	269	1	1	2	3		1	0.19	0.19
Dom. Rep.					1	1		0	0.47	0.47
Mexico	224	1,644	369	182	141	440	69	182	0.36	0.41
USA	5,062	895	4,532	1,010	1	734	3,294	1,516	0.38	2.06
N. America	**5,295**	**926**	**4,903**	**1,194**	**145**	**1,180**	**3,363**	**1,700**	**0.37**	**1.44**
El Salvador				9	35	35		9	0.24	0.24
Guatemala				7	27	27		6	0.23	0.23
Honduras	0	318	0	0		0		0		
C. America	**1**	**522**	**0**	**16**	**61**	**63**		**15**	**0.24**	**0.24**
Argentina	356	738	263	325	1	169	118	301	1.05	1.78
Bolivia	4	641	3	2	1	3	0	2	0.50	0.53
Brazil	1,637	1,659	2,716	2,152	3	734	1,490	2,648	1.19	3.61
Chile				0	0	0		0	0.41	0.41
Colombia	21	847	17	4	23	40		4	0.10	0.10
Ecuador	1	439	1	3	10	11		3	0.31	0.31
Paraguay	10	420	4	3	1	2	4	2	0.34	0.98
Peru	26	819	22	39	38	59	1	39	0.65	0.66
Uruguay				0	0	0		0	0.06	0.06
Venezuela	14	392	6	3	5	10		3	0.30	0.30
S. America	**2,070**	**1,464**	**3,031**	**2,531**	**82**	**1,028**	**1,613**	**3,002**	**1.14**	**2.92**
Algeria				0	1	1		0	0.07	0.07
Egypt	155	788	122	86	139	164	98	86	0.33	0.52
Morocco				3	7	7		3	0.40	0.40
Sudan	180	722	130	16		18	112	16	0.12	0.89
Tunisia				3	12	12		3	0.22	0.22
N. Africa	**335**	**753**	**252**	**107**	**160**	**202**	**210**	**107**	**0.26**	**0.53**
Benin	700	450	315	147		1	294	168	0.57	174.80
Burkina Faso	735	283	208	116		3	203	119	0.58	39.53
Cameroon	250	559	140	66		2	141	63	0.44	33.10
Cent. Afr. Rep.	34	252	9	4			9	4	0.44	
Chad	131	152	20	3		0	14	9	0.62	42.95
Cote d'Ivoire	426	514	219	61		2	209	68	0.32	33.53
Guinea	12	287	4	2			4	2	0.44	
Madagascar				3				3		
Mali	782	395	309	40		2	297	49	0.16	24.49
Niger	5	470	2	0		1	1	0	0.11	0.25
Senegal	20	255	5	1		1	5	0	0.05	0.38
Togo	180	311	56	28			59	25	0.43	
F. Africa	**3,275**	**393**	**1,286**	**472**		**12**	**1,236**	**510**	**0.41**	**43.06**
Angola	3	308	1	0		1	0	0	0.33	0.48
Ethiopia	82	741	60	22	3	54	7	24	0.40	0.45
Ghana	15	375	6	12		1	4	12	2.14	9.24
Kenya	25	185	5	1	0	5	0	1	0.17	0.17
Malawi	85	249	21	12		3	18	12	0.55	3.92
Mozambique	124	223	28	15			27	16	0.58	
Nigeria	250	205	51	17	1	28	25	17	0.33	0.63
South Africa	43	891	39	53	14	19	24	63	1.46	3.31
Tanzania	441	247	109	18		45	46	36	0.40	0.79
Uganda	76	369	28	9		1	26	11	0.41	12.29
Congo, Dr				2	7	7		2	0.30	0.30
Zambia	118	393	46	32		2	47	30	0.61	
Zimbabwe	212	292	62	39		3	59	39	0.64	13.99
S. Africa	**1,495**	**307**	**460**	**246**	**51**	**195**	**285**	**277**	**0.58**	**1.42**
Kazakhstan	117	669	78	55	0	13	65	55	0.70	4.08
Kyrgyzstan	14	855	12	5	3	1	13	5	0.36	5.41
Tajikistan	196	538	106	36		15	91	36	0.34	2.43
Turkmenistan	545	564	307	106		141	166	106	0.34	0.75
Uzbekistan	900	712	641	144		641		144	0.22	0.22
C. Asia	**1,772**	**646**	**1,144**	**345**	**3**	**812**	**335**	**345**	**1.97**	**0.43**

2019/20 Supply and Use of Cotton by Country (cont'd) 2 December 2019

	Area	Yield	Prod	Beg Stocks	Imports	Cons	Exports	End Stocks	S/U *	S/MU **
	000 Ha	Kgs/Ha	000 Metric Tonnes						Ratio	Ratio
Austria				1	3	3		1	0.19	0.19
Azerbaijan	146	677	99	44		29	70	44	0.44	1.50
Belarus				4	11	11		4	0.34	0.34
Belgium				1	7	3	4	1	0.19	0.44
Bulgaria	1	324	0	1	6	6	0	1	0.17	0.17
Czech Rep.				0	2	2		0	0.07	0.07
Denmark										
Estonia										
Finland										
France				1	8	8	1	1	0.11	0.12
Germany				8	23	20	4	7	0.27	0.32
Greece	250	1,268	317	0	7	16	303	5	0.02	0.30
Hungary				0				0		
Ireland				0	0	0		0	0.12	0.12
Italy				8	32	31	1	8	0.23	0.24
Latvia				0	0	0	0	0	0.03	0.04
Lithuania				0				0		
Moldova				1	2	2		1	0.34	0.34
Netherlands				0	4	4		0	0.11	
Norway										
Poland				1	2	2	0	1	0.59	0.65
Portugal				9	42	41	1	10	0.24	0.24
Romania				0	0	0		0	0.11	0.11
Russia	0	1,759	0	6	40	41	0	5	0.13	0.13
Slovak Rep.										
Spain	70	929	65	37	3	3	52	37	0.53	11.18
Sweden				0	0	0		0		
Switzerland				0	1	0	0	0	0.19	0.34
Ukraine				0	2	2		0	0.27	0.27
United Kingdom				0	0	0		0	0.11	0.11
Former Yugoslavia				1	7	7		1	0.19	0.19
Europe	**751**	**672**	**505**	**125**	**217**	**48**	**637**	**210**	**0.31**	**4.35**
Including EU-28	**321**	**1,192**	**382**	**68**	**141**	**141**	**299**	**72**	**0.16**	**0.51**
China	3,300	1,758	5,800	8,885	1,657	8,050	30	8,232	1.01	1.02
Taiwan				21	131	131		21	0.16	0.16
Hong Kong				30	0	0	0	30	53.01	
Sub Total	**3,300**	**1,758**	**5,800**	**8,936**	**1,788**	**8,182**	**30**	**8,282**	**1.00**	**1.01**
Australia	145	2,028	294	83		6	300	72	0.23	12.47
Indonesia	5	621	3	59	711	707		65	0.09	0.09
Japan				7	51	51		7	0.14	0.14
Korea, D.R.				1	5	5		1	0.24	0.24
Korea, Rep.				38	162	163		37	0.22	0.22
Malaysia				13	173	101	72	13	0.08	0.13
Philippines	0	573	0	5	14	14		5	0.34	0.34
Singapore				0	6		6	0	0.05	
Thailand	2	522	1	56	241	243		56	0.23	0.23
Vietnam	0	667	0	200	1,544	1,529		215	0.14	0.14
E. Asia	**169**	**1,800**	**305**	**464**	**2,906**	**2,824**	**378**	**473**	**0.15**	**0.17**
Afghanistan	36	387	14	4		4	11	3	0.19	0.68
Bangladesh	46	772	35	422	1,614	1,603		469	0.29	0.29
India	12,700	472	6,000	1,479	350	5,535	900	1,394	0.22	0.25
Myanmar	246	640	158	69	44	212		59	0.28	0.28
Pakistan	2,631	570	1,500	743	820	2,358	30	675	0.28	0.29
Sri Lanka				0	2	2		0	0.11	0.11
S. Asia	**15,662**	**492**	**7,709**	**2,719**	**2,829**	**9,716**	**1,190**	**2,600**	**0.24**	**0.27**
Iran	71	711	50	58	65	116		58	0.50	0.50
Iraq	9	362	3	2	5	8		2	0.24	0.24
Israel	4	2,009	9	2			9	2	0.26	
Syria	18	968	17	9		14	3	9	0.51	0.63
Turkey	520	1,835	954	997	640	1,594	79	918	0.55	0.58
Sub Total	**625**	**1,656**	**1,035**	**1,071**	**729**	**1,751**	**91**	**992**	**0.54**	**0.57**
World Total	**34,469**	**766**	**26,406**	**18,224**	**8,960**	**26,199**	**8,960**	**18,431**	**0.70**	**0.70**

*/ Ending stocks divided by consumption plus exports.
**/ Ending stocks divided by consumption.
Subtotals and total include countries not shown.

Supply and Distribution of Cotton
02 December 2019

Seasons begin on 1 August

	2014/15	2015/16	2016/17	2017/18 Est.	2018/19 Est.	2019/20 Proj.
			Million Metric Tonnes			
Beginning Stocks						
World Total	**21.32**	**22.95**	**20.31**	**18.48**	**18.69**	**18.22**
China	13.28	14.12	12.65	10.35	9.03	8.88
USA	0.51	0.79	0.83	0.60	0.94	1.01
Production						
World Total	**26.23**	**21.48**	**23.07**	**26.68**	**25.69**	**26.41**
India	6.56	5.75	5.87	6.35	5.35	6.00
China	6.60	5.20	4.90	5.89	6.04	5.80
USA	3.55	2.81	3.74	4.56	4.00	4.53
Pakistan	2.31	1.54	1.66	1.80	1.67	1.50
Brazil	1.56	1.29	1.53	2.01	2.73	2.72
Uzbekistan	0.89	0.83	0.79	0.80	0.64	0.64
Others	4.77	4.06	4.59	5.28	5.27	5.22
Consumption						
World Total	**24.59**	**24.14**	**24.79**	**26.35**	**26.13**	**26.20**
China	7.55	7.60	8.28	8.50	8.25	8.05
India	5.38	5.30	5.15	5.42	5.40	5.54
Pakistan	2.47	2.15	2.15	2.35	2.36	2.36
Europe & Turkey	1.69	1.68	1.61	1.64	1.71	1.74
Bangladesh	1.20	1.32	1.41	1.66	1.58	1.60
Vietnam	0.88	1.01	1.17	1.51	1.51	1.53
USA	0.78	0.75	0.71	0.77	0.71	0.73
Brazil	0.80	0.66	0.69	0.68	0.73	0.73
Others	3.85	3.67	3.64	3.83	3.88	3.91
Exports						
World Total	**7.77**	**7.54**	**8.19**	**9.10**	**9.24**	**8.96**
USA	2.45	1.99	3.25	3.45	3.21	3.29
India	0.91	1.26	0.99	1.13	0.80	0.90
CFA Zone	0.97	0.98	0.99	1.06	1.18	1.23
Brazil	0.85	0.94	0.61	0.91	1.45	1.49
Uzbekistan	0.55	0.50	0.40	0.34	0.13	0.00
Australia	0.53	0.62	0.81	0.90	0.80	0.30
Imports						
World Total	**7.80**	**7.59**	**8.09**	**8.98**	**9.21**	**8.96**
Bangladesh	1.18	1.38	1.41	1.67	1.54	1.61
Vietnam	0.93	1.00	1.20	1.52	1.51	1.54
China	1.80	0.96	1.10	1.32	2.10	1.66
Turkey	0.80	0.92	0.80	0.88	0.76	0.64
Indonesia	0.73	0.64	0.74	0.76	0.69	0.71
Trade Imbalance 1/	**0.03**	**0.05**	**-0.10**	**-0.11**	**-0.03**	**0.00**
Stocks Adjustment 2/	**-0.05**	**-0.03**	**-0.01**	**0.00**	**0.00**	**0.00**
Ending Stocks						
World Total	**22.95**	**20.31**	**18.48**	**18.69**	**18.22**	**18.44**
China	14.12	12.65	10.35	9.03	8.88	8.23
USA	0.79	0.83	0.60	0.94	1.01	1.52
Ending Stocks/Mill Use (%)						
World-Less-China 3/	**52**	**46**	**49**	**54**	**52**	**56**
China 4/	**187**	**166**	**125**	**106**	**108**	**102**
Cotlook A Index 5/	**70.78**	**70.39**	**82.77**	**87.98**	**84.35**	

1/ The inclusion of linters and waste, changes in weight during transit, differences in reporting periods and measurement error account for differences between world imports and exports.
2/ Difference between calculated stocks and actual; amounts for forward seasons are anticipated.
3/ World-less-China's ending stocks divided by World-less-China's mill use, multiplied by 100.
4/ China's ending stocks divided by China's mill use, multiplied by 100.
5/ US cents per pound.

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