



COTTON

Review of the World Situation

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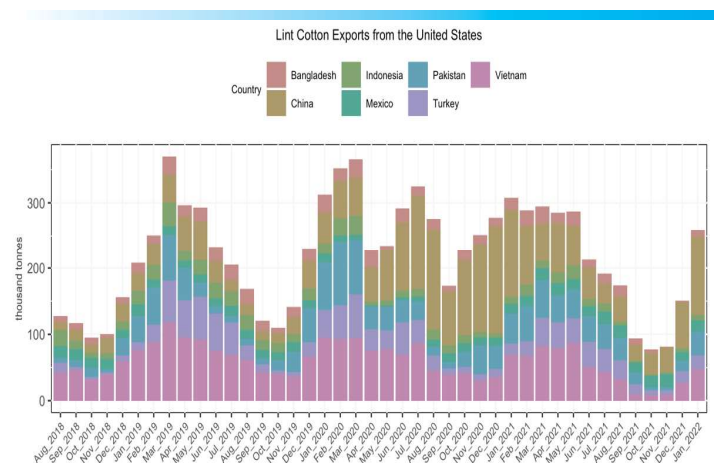
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SUMMARY OF THE OUTLOOK FOR COTTON

New Data Shows Transportation Issues Might Be Improving

For the past several months the International Cotton Advisory Committee (ICAC) has been monitoring and reporting on the shipping and transportation logistics problems that have been causing trouble for all sectors of the global economy, including cotton. We have been using data from the United States International Trade Commission (USITC) on US exports of cotton (HS 5201) to several large cotton consuming countries. The reason for using USITC is threefold: The data is readily available, timely, and robust. Further, if shipping and logistics problems are being seen in the US trade data then it is highly probable that other countries are experiencing situations on par with or worse than is being reflected in the US data.

The most recent USITC data on US exports is giving some indication that frictions surrounding shipping logistics may be starting to ease. A plot of the past 42 months shows the export trend from the US to Bangladesh, China, Indonesia, Mexico, Pakistan, Turkey and Vietnam. While there is a clear trend of seasonality in the data, it is also clear that the 2021/2022 season has been depressed more than usual, especially for the traditional low export period of August to December. When comparing the data from January 2022 to past January numbers we see some encouraging signs. While the January 2022 numbers have not fully reached the last two years of January export numbers, the average of the recent past is close to where the US export numbers are today.



If we assume that the US numbers are the proverbial canary in the coal mine, then this could be good evidence that some of the logistical complications are starting to ease.

However, a few points to be clear on before we rejoice fully. The US has the resources and some political will to address bottlenecks in shipping ports. Policy decisions were made at the highest level of government to help facilitate and smooth out some of the congestion surrounding shipping and transport logistics. In addition, the wide availability of the Covid-19 vaccine has helped the US remain open for business and while this has not been a panacea, it is undeniable that this has afforded the USA an advantage over some least developed countries.

For example, in Africa ports tend to be much smaller and slower than their counterparts in the Americas and Asia. Cargo typically waits for more than two weeks on average before entering or leaving the port. This two week average delay was from numbers recorded pre-pandemic and we can speculate that these delays have increased in recent times. The African Continental Free Trade Area (AfCFTA) is currently working to address these bottlenecks but the ability to pivot quickly is not as easy for some nations as for others.

On the bright side, we remain optimistic that some of the shipping and transport complications are starting to resolve and we are hopeful that the pandemic continues to subside with minimal or no flair-up.

Consumption remains strong as we approach the end of the 2021/22 season. Global consumption is currently being reported at 26.16 million tonnes. Production is down slightly from the previous report but is holding at 26.43 million tonnes, still sufficient to accommodate consumption. If we look at the total global supply and demand numbers we do see a minor deficit in supply. Global supply is currently sitting at 57.129 million tonnes while global demand is 57.133 million tonnes, a paltry difference at best.

The A-Index has continued to rise over the second half of the 2021/22 season and is currently 156.55 US cents/pound. It is difficult to identify a concrete reason for this price increase as fundamental supply and demand principles seem to be well balanced. However, this continued elevation in price could incentivise farmers to plant higher numbers of hectares than in years past.



Cotton Marketing Alternatives in Argentina

Dr. Marcelo Paytas

Director

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Marcelo Paytas is the Director of INTA (National Institute of Agricultural Research) Reconquista Santa Fe, Argentina. Researcher and project leader of the cotton team with focus on crop physiology and agronomy, biotechnology and genetic improvement at INTA. Marcelo graduated as Agricultural Engineer at the National Northeast University, Corrientes, Argentina. Obtained a PhD at the University of Queensland, Australia in Cot-

ton physiology and Agronomy. He is member of APPA (Association for the promotion of cotton production) which associates all representatives of the cotton chain of Santa Fe, Argentina. Coordinator of academic and technical agreements between INTA and other national and international organizations, mainly in South America. Member of SEEP (Social, Environmental and Economic Performance panel) of the International Cotton Advisory Committee (ICAC) and Executive Committee member of the International Cotton Researchers Association (ICRA). Dr Marcelo's main interest is to link and promote research and development together with the cotton industry through public and private interaction for sustainable production.

In Argentina, the national production of cotton can be marketed as seed cotton or fibre. Both seed cotton and the cotton seed are sold in the domestic market, while cotton fibre can be destined for either domestic or international markets.

Seed cotton is marketed through private companies or cooperatives by Collectors and ginners. Collectors can act on their own behalf or on behalf of ginners. Ginners generally pay in cash against delivery, according to the type of cotton (apparent quality) and market conditions. Payment time is usually about 15 to 30 days from the delivery of cotton.

Some cooperatives pay an advance and later complete the payment based on the yield and commercial quality of the fibre. There are no official standards for marketing of seed cotton.

Cotton fibre can be marketed through private ginners and cooperatives, or through brokers and consignees.



There are 'Official Cotton Fibre Quality Patterns'. The cotton sector in Argentina has implemented a more robust system in the use of High Volume Instruments (HVI). Argentina currently has an official Association for the Promotion of Cotton Production laboratory (APPA) that is establishing marketing needs through quality parameters. It is a laboratory at the service of the cotton farmers. Previously, only the buyer had access to HVI. It will be necessary to create a national network of HVI laboratories so the largest possible number of cotton producers can access this service and make subsequent marketing more transparent.



Cotton seed is marketed only through cotton gins and cooperatives and is used for its oil and other products. Cotton seed by-products, such as cake or meal, are used as poultry and livestock feed.

The average ginning cost is approximately US\$85 per tonne of seed cotton. The cost of transportation of seed cotton from the farm to the gin is assumed by the producer, although in exceptional cases the buyer is responsible for it.

Cotton domestic prices are under the umbrella of the Argentine Cotton Chamber. By Decree N°18/81, the Argentinian State has delegated to the Argentine Cotton Chamber the function of establishing indicative prices for cotton fibre and seed (in other words, they are not official prices). To this end, a commission of buyers and sellers meets weekly and takes into consideration the operations reported by the partners, either being carried out and/or in progress, and make decisions by vote. Cotton producers generally do not receive additional income from cotton by-products.

Alternative cotton marketing tools are necessary in Argentina, as is a better implementation and use of HVI parameters by farmers, for improved domestic and international marketing. Public policies would be necessary to overtake these limiting conditions. Also, new marketing niches need to be incorporated into the Argentine cotton system, such as cotton which designates origin, traceable cotton, organic cotton and ecological cotton, among others.



Additional Information:

HVI APPA Laboratory is the 12th laboratory in the world to have ICA Bremen's International Laboratory Certification. The certification of the Official Fibre Quality Laboratory has made it possible to increase its level, while still ensuring accuracy and transparency throughout the process, thus providing an impartial means of dispute resolution. Other goals are to:

Promote the increase in the quality of cotton and its export,

Develop improved traceability, water footprint and zero carbon programs, and

Be united behind the principle of respect for the sanctity of contracts.





Cotton Marketing Alternatives in the United States

Jaral Neeper

President
Trucott, Inc.
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Jaral has spent most of his professional career in the cotton industry, beginning with the completion of his Masters' degree in Agricultural Economics from Texas Tech University in December of 1985. After graduate school he spent 18 months in the oil industry as a corporate analyst with a major oil company. He was then

recruited and hired by the National Cotton Council as a staff economist. In 1990 he was recruited and hired by Ed Jernigan at the Jernigan Group as an analyst and options and futures trader. In 1994 he was recruited and hired by Calcot, Ltd, in Bakersfield CA to do research and provide options trading advice. In 2009 he was named President of Calcot. In September of 2018, Jaral left Calcot to work on his own. He works as a consultant with growers in the coastal bend of Texas, Arizona and California.

Jaral and his wife, Tamara, live in Bakersfield and they both became grandparents for the first time at the end of May 2021 to a beautiful little girl named Emma!

American cotton producers probably have more marketing alternatives than farmers in any other country in the world. The exception would be Australia where producer marketing is similar to the US.

In broad terms, there are two alternatives: cash sales and marketing pools.

1.Cash Sales

Selling cash cotton can be broken down into two main categories: Forward Contracts and Selling (physical cotton) at harvest.

Forward Contracting occurs when a grower and a merchant or cooperative agree on either a fixed number of acres or bales to price at a given basis (the difference between the reference futures month and the cash price), generally determined against the December contract. Basis covers various risks from quality, quantity, delivery timing, counterparty, weather and more. How the basis is applied can be a hard concept for some but think of it this way:

If today, the nearby futures contract settled at 85 cents

and the grower is offered a cash price of 80 cents, the basis is 5.00 cents 'off' the contract price. In the trade vernacular, 5.00 cents is the same as 500 points (or cent-points). A futures contract is for 100 bales or 50,000 pounds which means each 1-cent move is worth \$5.00 per bale (50,000 pounds X 0.01 = \$500.00); \$500 divided by 100 bales = \$5.00 per bale.

On the other hand, a grower could be offered 90 cents for his cotton or 5 cents (or 500 points) 'on' the futures contract.



A basis is agreed upon using a base grade of cotton and associated premiums and discounts surrounding the base grade. For many contracts, those premiums and discounts are tied directly into the government loan program premium and discount schedules.

For example, the base grade for the government loan is a 41 color, 4 leaf, 34 staple with premium micronaire, minimum strength of 26 gpt and uniformity of no less than 80. The US government loan rate for this is 52 cents/pound. Depending on the final class, better qualities could see a loan rate of 55 cents, while lower qualities might see a loan of 48 cents.

For example, if a grower had an original basis of 3.00 cents off the December contract and he set his futures fixation price at 80.00 cents — and that price was executed — the base grade would receive 77.00 cents. If his grades were such that his cotton would have generated three cents in premiums, the grower would see 80.00 cents (80.00 minus the 3.00-cent basis plus 3.00 cents in premiums).

Basis: (3.00) or 3 cents off the December futures fixation

Futures Fixation: 80.00

Price for Base Grade: 77.00 cents



However, base grade and associated premiums and discounts can be whatever the grower and the merchant/cooperative agree to when negotiating.

Generally, but not always, forward contracts that specify bales receive a better basis than contracts specifying acres, as it eliminates risk. The merchant or cooperative buying cotton on a bale contract is more assured of delivery than on an acreage contract. For example, in

the Texas High Plains where drought is always a threat, most producers (and merchants/cooperatives) opt for an acreage contract because they do not know how the year will progress. Will the specified acres yield one bale per acre or three bales per acre? Inherent in the acreage contract is an 'act of God' clause that says if the acres do not produce, the producer is not held responsible for delivering bales against the contract.



If a producer signs a bale contract, he becomes responsible for delivering as many bales as he has contracted and priced prior to harvest. Thus, for a producer who has signed a bale contract for 1,000 bales and has priced 1,000 bales, he must deliver all of them, meaning he may have to go to the open market to buy whatever his shortfall becomes and deliver to the merchant and/or cooperative to fulfill his 1,000 bale-contract.

It should be noted that once a grower accepts a basis, whether it is for contracted acres or bales, he has lost effective ownership of the bale, and thus he is obligated to deliver those bales to the buyer. In most years losing ownership of the bale is not a problem, but in other years it can be a problem when prices are very low (below the government loan) and certain aspects of the government loan program go into effect. This paper will not dwell on that as it is time-consuming and difficult to explain and understand.

Advantages and Disadvantages of Forward Contracts

One major advantage of forward contracts is being able to reduce price (or basis) risk by locking in a favourable price (or basis) when the opportunity exists in the market. Growers should recognise that this reduction in price risk is not free. The price/basis terms offered by the buyer are likely what is required to either bear the price risk or else hedge his position in the futures market. Another advantage of early contracting is that it may enable growers to more easily secure operating loans.

The disadvantages of forward contracting to the grower include:

1. No attractive contracts being offered when the market opportunity is there,
2. No transparent way to evaluate the terms of different contracts on a consistent basis (other than just hearsay or experience), and
3. Having quality specifications be subject to the USDA's Commodity Credit Corporation (CCC) loan schedule of premiums and discounts.

Cash Sale at Harvest

Alternatively, a grower could decide to wait until harvest to sell the production on the open market. Once a grower has ginned the cotton and received the associated classing information, the gin can create a 'recap' of bales indicating the number of bales, the classing information of those bales and usually a price indicating what the grower would receive if the cotton had been put into the government loan.

In some locations, the gin will send out recaps on the grower's behalf to prospective buyers and wait on bids for those bales. Once the bids are received, they will be presented to the grower who can either accept or decline the best bid, perhaps choosing to sell at a later date or when prices improve.

One of the more popular options for a grower is to put the bales out to bid on the most frequently used auction site in the United States called The Seam. The grower can indicate the physical price being sought and weigh that against the bids from buyers. The grower can choose to either accept or reject any bid.

A grower who does not like the current price for cotton at time of harvest but does need some cash to cover expenses can always put the cotton into the government non-recourse loan program. It is called a non-recourse loan because the grower does not have to pay the loan back; the cotton can simply be forfeited to the government if cash prices are no better than the loan price.

Generally, though, very few bales are ever forfeited to the government. The loan is simply a resting spot for cotton until the grower sees a price he likes on the free market.

However, once the grower sees a price he likes, he can redeem the cotton from the loan by repaying the loan and the associated warehouse charges. Sometimes the grower sells an 'equity' meaning that the merchant/shipper will pay the grower the difference between the cash price and the loan rate and then will redeem the cotton instead of the grower.



2. Marketing Pools

Some growers do not want to market their own cotton, preferring instead to have others do it for them. These growers are typically members of a grower-owned marketing cooperative.

The history of grower-owned marketing cooperatives is an old one. The oldest ones in the United States go back to the 1920s. Generally, they own their own warehouses and have traffic departments to arrange shipping, both to bring cotton into the warehouse from the cotton gin, to move it to port for overseas shipments or to arrange trucks to haul it to domestic textile mills.

There is a sales staff to sell the physical cotton and the sales staff generally work with agents in overseas markets to arrange sales.

Once cotton is delivered to the cooperative, it will generally advance the government loan to the grower. As cotton is sold and monies are collected from buyers, the cooperative will make 'progress payments' to the growers. These payments will eventually lead to a final payment which makes up the entire price to the grower.

It should be noted that every bale with the same quality parameters will receive the same price regardless of who produces the cotton.



Advantages/Disadvantages of Cash Sale at Harvest

The biggest advantage to selling at harvest is there is no production risk. The grower knows exactly what he has to sell and he knows the qualities.

The biggest disadvantage to selling at harvest is the grower faces price risk during the growing season and historically, cash prices are lowest during the harvest.

In addition to grower-owned cooperatives, there are some merchant-owned marketing pools that act in a very similar fashion to the grower-owned cooperative. They provide an initial advance to growers and then make progress payments leading to a final payment which constitutes the entire price to growers.



Advantages

The advantages of marketing pools are that, in theory, they should give growers a stronger bargaining position in selling large volumes of cotton to buyers relative to an individual farmer's position. Another significant advantage of marketing pools for growers is that pools are usually available, easy to use, guarantee market access and basically provide an average price received for the season (although the latter could also be seen as a disadvantage). In short, pools provide a 'home' for cotton and help to free growers from the task of locating and negotiating with buyers. The marketing pools that are organised as grower cooperatives (as most of them are) have another legal advantage of being able to place their cotton into the CCC loan program (discussed below) which creates storage advantages when markets prices are below the loan rate.

Finally, there are enough marketing pools around to provide competition with each other as well as with local merchants. Growers should be the beneficiaries of this competition in terms of either higher offers from local merchants or the best terms offered by pools.

Disadvantages

The main disadvantages of pools are similar to those of forward contracts. It is very difficult to get comparative marketing performance information from pools to choose among them. Also, as with forward contracting, there is no free lunch! The marketing services will come at a cost including agent fees, limits on pricing flexibility, limits on quality premiums, hedge risk, or simply in getting an average price instead of being in the upper third.

Growers are responsible for paying the ginning costs. A lot of gins do provide transportation to pick up modules in the field (either conventional or round modules) but that service is not free and is eventually paid by the

grower, one way or another.

Ginning charges vary by regions, ranging from a low of \$18.43/per bale to as high as \$41.26/bale. However, the average across the entire US was \$24.81/bale. These numbers were generated by a 2019 survey of gins across the country and represent the variable cost of ginning.

Repairs and maintenance plus labour costs contributed the most to variable costs, accounting for an average of 73% of the total variable cost of ginning.

The survey did not ask what the return-to-management or profit-per-bale numbers but they almost certainly would add extra costs to the grower's final bill. Also, there was no survey result on any debt servicing that might be taking place to pay for new equipment.

No doubt these costs have to be absorbed by the grower. Usually, the cotton gin sells the cottonseed and if revenue from the seed sales exceeds the cost of ginning, the grower will not pay any ginning fees. However, in years where cottonseed prices are low, the cotton gin will send the grower a bill for services rendered. For grower-owned gins (cooperative gins), there can even be a payment made to the grower at the end of the year if seed sales exceed total expenses by a substantial margin. In the far west, where dairies are plentiful and cotton acreage is not so large, seed prices can be high enough that growers might see as much as \$100/bale paid out to the grower at the end of the season.

Once cotton is ginned, it has to be transported to a warehouse where typically a receiving charge is levied, along with the inbound freight charge and one month's worth of storage, not to mention a compression charge. Many years ago, cotton bales were compressed to a universal density bale size at the cotton warehouse.

However, once a bale compress was developed and incorporated into the ginning process, in order to motivate gins to install and pay for the compress, gins were re-imbursed for the compression service. Currently, all US bales are compressed to a high density of between 490 lbs and 495 lbs. Despite the fact the gin compress has been paid for many times over, the practice of reimbursing the gin still remains today.





Cotton Marketing Alternatives in India

Manish Daga

Managing Director
Cotton Guru
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Popularly known as “Cotton guru”, Shri Manish Daga is 4th generation from COTTONGURU® Group which has been in the cotton business since the last 119 years. He is the one and only registered “Chartered Cotton Valuer” in India. Mr Daga has been a Speaker in more than 35 International and National Textile Conferences across 5 countries. He is an expert advisor and trainer

for farmers, ginner and mills for marketing of Indian cotton. Mr Daga is the promoter of “Swachha Cotton Abhiyan (Clean Cotton Mission)” and has created many “Pradarshan Khet (evidence-demonstration farm)” projects with the aim of doubling farmers’ yield and income and ensuring uninterrupted supply of contamination free cotton for the textile industry. He is also a prolific writer. He is currently a Director of Cotton Association Of India (CAI).

COTTONGURU® is currently engaged in many Organic Cotton projects as a professional Implementing Agency.

Cotton is not only a cash crop but a social and political crop for India. Cotton finds utility in food, fuel and clothing. In fact, cotton is not just a commodity in India but an asset as well. India’s farm exports are growing consistently.

Cotton is an integral part of India’s farm exports. The textile industry, which consumes the cotton, as its principal raw material, contributes around 5% to country’s gross domestic product (GDP), 14% to industrial production and 11% to total export earnings. Hence, growth and development of cotton and cotton-based textile industry has a vital bearing on the overall development of the Indian economy.

Indian farmers grow all the required varieties of cotton from 18 mm to 36 mm in length. Cotton is mostly available throughout the year unlike in other countries. The abundance of cotton and competitive cotton prices are the major factors for the phenomenal growth of the textile industry in India.

The cotton industry is, however, passing through one of the most difficult times. The cost of growing cotton has increased by more than 100% over the last 10 years. However, most of the increase has happened in the last season when the cost of labour, fertilisers and pesticides

Year	Export (Billion USD)
2020	35
2021	41
2022	50

Major products: Rice, Meat & Marine, Sugar, Cotton

increased by nearly 50%. Moreover, the textile industry faces additional burden due to the Goods and Services Tax (GST) and a 40% increase in fuel cost.

Immediate steps must be taken reduce the cost of cotton cultivation and increase cotton productivity to guarantee better returns and higher profitability for farmers and ensure better quality and availability for the textile industry. Simultaneously, cotton organisations need to develop effective marketing strategies and policies for cotton to ensure the sustainability of farmer income.

One must understand and accept the true value of cotton and address the challenges in cotton agriculture and marketing.

Unorganized marketing leading to survival issues for farmers as well as threat for the textile industry

Farmers

Currently, Indian farmers sell their cotton through direct and indirect marketing.

Direct Marketing: Currently, wholesale cotton marketing is undertaken by the network of 6,946 regulated wholesale markets, known as Agricultural Produce Market Committees (APMC). Farmers bring their raw cotton to these APMCs where it is auctioned and purchased by ginners and traders. When prices are below Minimum Support Price levels, the cotton is purchased from these APMCs by a government-owned body, the Cotton Corporation of India (CCI).

Indirect Marketing: Many small and marginal farmers are not able to reach APMCs and CCI Centres. They fall prey to brokers, traders, money lenders and other middlemen, and are compelled to sell their cotton at a discounted price.

The direct engagement of farmers with ginners is very low (less than 15%). This deprives them of the opportunity to get a fair price for their cotton. In addition to price risk, there are other threats including diseases and climate change.

Textile Industry

Unfortunately, cotton the textile industry — which has the longest supply chain — is more like a group of small islands fighting for their own gains. Although cotton has a 60% market share in the Indian textile industry, cotton purchasing is not very organised or systemised. This introduces a strong element of risk to buyers, especially due to cotton price volatility and supply uncertainties. Also, there are issues of inconsistent quality and high contamination.

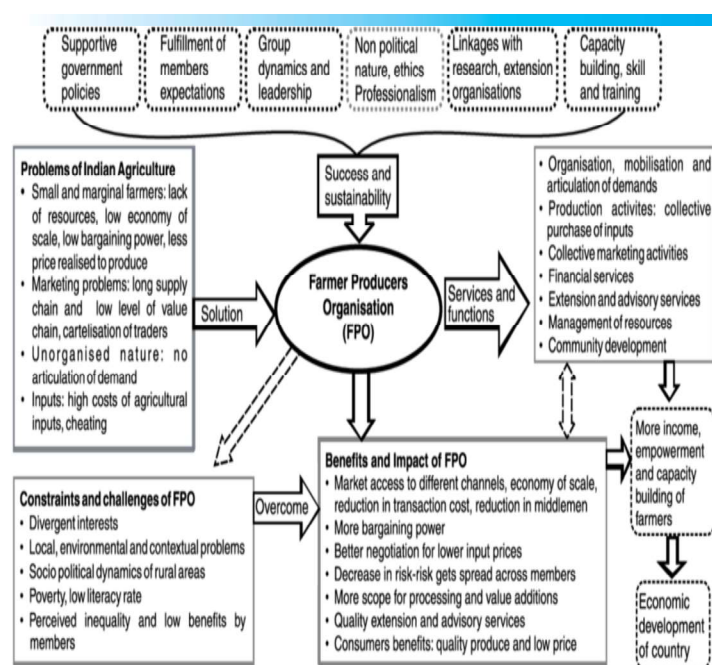
Currently, India is a cotton-surplus country but might not be for much longer. Very few people know that during the 2020/21 season, cotton mill use in India reached 5.87 million tonnes — which is nearly equivalent to cotton

production (6 million tonnes). In 2021/22, the situation may even worsen with consumption (5.78 million tonnes) overtaking production (estimated at 5.4 million to 5.6 million tonnes).

How effective marketing can be the 'Game Changer' for the growth of farmers and the textile industry

Farmers' issues can be resolved by adopting a five-point policy:

1. Collective marketing. Cost risk can be largely mitigated by engaging farmers directly through Farmer Producer Organisations (FPOs), which are registered companies formed by groups of farmers. FPOs are better at aggregation as well as marketing and have greater negotiation power compared than individual farmers.



2. Hedging on electronic futures exchange. Cotton trading encompasses a long chain of activities that must be integrated in seamless value addition from production to marketing. This is extremely difficult but if the FPOs are trained and supported for offline and online marketing and hedging, we will be able to mitigate price risk to a large extent.

3. Revision in Minimum Support Price (MSP). There must be a separate MSP for 35mm ELS DCH-32 cotton and organic cotton. This will encourage more farmers to get into high-value and sustainable cotton cultivation.

4. Revolutionary seed policy. Seeds define the yield and quality of cotton. Results-based research into cotton

seeds must be periodically rated and adequately incentivised to get higher yields and the desired quality in cotton.

5. Better penetration of agriculture credit. The agriculture credit ecosystem must be more accessible for effective cotton marketing. There is a need to move away from asset-based funding to transaction-based funding.

For the textile industry, the keys to effective marketing are:

1. Policy advocacy to provide aggressive incentives to the private sector for creating robust value chains.
2. Support FPOs for cotton aggregation and processing closer to farm gate.
3. Large corporations and brands must directly engage in sustainable cotton projects to create economies of scale and ensure that 'Made in India' cotton products are globally competitive.

A collective approach to marketing Indian cotton can be a win-win situation for the farmers as well as the entire textile industry. There is lot of potential for innovation in cotton and cotton-synthetic blends in both conventional and technical textiles. This gives India an opportunity to become the Global Textile Mall.

The United Nations' COP 26 Summit has shown that the need for sustainable products will be growing. This is a positive sign for a more sustainable world and an increase in demand of natural products. In fact, as the producer of 50% of the world's organic cotton, India has the potential to become the Organic Textile Capital of the World.

SWOT analysis of marketing cotton



S (Strength): an abundance of all types of conventional and sustainable (organic and BCI) cotton

W (Weakness): Unorganised marketing system

O (Opportunity): The potential to become the global textile mall and organic textile capital of the world

T (Threat): Retention of farmers in cotton due to falling yields, increasing costs, and alternative crops like soybean, groundnuts, maize, turmeric, etc.

Is all of this practically possible?

This is the obvious question. Everyone has something to say, but has anyone actually done it? The answer is yes.

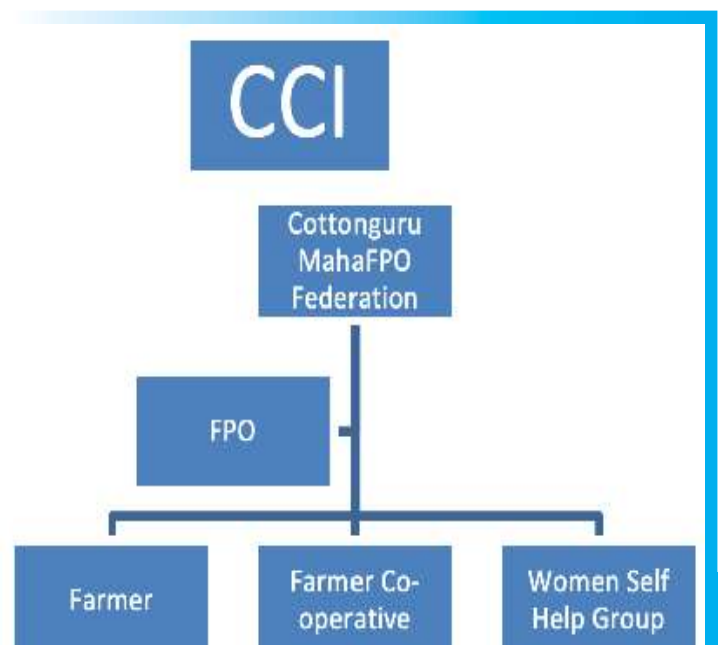
Sharing some case studies, experiences and experiments that Cottonguru has done over the last few years:

1. Aggregation and collective marketing with Cotton Corporation of India (CCI)

This project was done during CCI's MSP operation in 2020/21 (pandemic lockdown period). Cottonguru signed an MoU with the CCI for cotton grading, aggregation and supply in Bhokardan, a small cotton centre in Marathwada, Maharashtra (India). It was the first time that CCI had signed an MoU with a farmer body.

The pre-inspection grading of cotton at farms and aggregation of seed cotton was the first step; then it was delivered to a dedicated ginning factory where the cotton was unloaded based on online tokens generated on the Cottonguru mobile app.

The tangible benefit was that the cotton of registered farmers was immediately unloaded, unlike the week-long queues at other factories, and immediate payment was made by CCI. The farmers got the best possible price due to pre-inspection grading and moisture measurement on the farms.



2. Online training: Webinars with Bombay Stock Exchange

Cottonguru did webinars with 195 FPOs across Maharashtra and North India, in a span of 18 months from June 2020 to Feb 2022. Topics covered in these webinars ranged from sowing to marketing and storage to financing, depending on the needs of the FPO.

3. Contract farming and organic cotton project with top textile corporations & brands

In many organic cotton projects, Cottonguru professionally supports textile corporations and brands in implementing and managing these projects through the certification audit and assists textile manufacturers achieve Sustainable Development Goals (SDGs) and ESG (Environmental, social and governance) criteria goals.

Organic Cotton Project Organogram

Promoter Organisation – Corporation/Brand



Implementing Agency (Cottonguru)



Project Coordinator and other staff



Farmer/Producer Companies



Registered Farmers

Conclusion:

1. Cotton and cotton textile industries can be even greater engines of economic growth in India.

2. Marketing is really the blending of economics and psychology (with a little sociology thrown in). Marketing decisions affect how resources are allocated and distributed throughout the system. A robust marketing strategy leads to increased efficiency, production and income.





Cotton Marketing Alternatives in Mexico

Oscar Hernandez



General Manager
Campos Agrícolas Unidos por la Colonia Buena Vista
Chihuahua, Mexico

Bachelor's Degree in Business Administration and Marketing, with vast experience in management and executive positions in national companies. Extensive experience in businesses administration; management of sales offices; development of seed production programs for planting; development of marketing projects; supervision of imports; personnel training; development of investment studies; reduction of overdue accounts receivable and expenses; and increase in sales and market share. Strong leadership and team management skills as a change agent. Proficient in English. Knowledge of the Bajío, Tamaulipas, Nuevo Leon, Chihuahua (the whole state), and Chiapas areas.

Mexico has been a net importer of cotton since the 1980s. For some years, production has been centred in the state of Chihuahua, which accounts for about 75% of Mexico's cotton production. Here, cotton production depends mainly on three factors:

1. Water availability,
2. Availability of seeds for sowing, and
3. International prices.

Cotton fibre production in Mexico is insufficient to meet the requirements of domestic textile mills. As a result, the spinning mills rely on cotton fibre imports, especially from the United States.

The federal government supported the Mexican cotton farmer for several years by providing a 100% subsidy for put and call options. The support decreased progressively to 75%, 50%, and 25% before it became inactive in 2019. Currently, the farmer is responsible for paying the total cost of coverage. Since 2021, the Mexican cotton producer has available new marketing tools without any additional costs.



However, lack of education and knowledge transfer, mainly amongst small farmers, make these tools not widely used, thus exposing this type of farmer to higher risk. Among the primary marketing alternatives of the Mexican cotton producer are:

- **Cotton forward:** Forward contracts are cash market transactions that establish the terms for transferring actual ownership of physical cotton on a specific delivery date. The contract terms are unique to the parties involved.
- **Accumulators:** These set a base and cap price according to the market price. One of the main advantages of using this type of tool is that producers can cover, with an accumulator scheme, a minimum price for their harvest. If the market is above attractive price levels — above 95 cents per pound — it is time to protect a minimum production amount for covering its production cost per bale.
- **Agents:** They set a price that is almost always between 300 and 400 points below market price.

Recently, a new company called FISECHISA (Fibra y Semillas de Chihuahua SAPI de CV) was founded, made up of 23 ginning companies from Chihuahua that collectively produce 90% of the state's cotton. Its objective is to commercialise the cottonseed for industrial applications and livestock, and fibres directly into the domestic and export markets.



For more than 30 years now, the Mexican cotton producer has commercialised cotton fibre rather than seed cotton, a practice discontinued once farmers had access to information on international prices and market analysis. In addition, cotton cultivation was more concentrated among medium and large producers. The use of technology has helped the Mexican producer better understand the basis of cotton supply and demand and how it impacts the behaviour of international prices. Almost 80% of the cotton crop is sold during its development. This methodology allows farmers to have a handling range of 20% in case the harvest does not provide the expected yields and production decreases significantly. In this way, there is no breach of previously established contracts.

There are very few buyers of cotton fibre in Mexico. Therefore, the price offering base is made through sales

contracts ranging between 300 and 400 points below the Intercontinental Exchange cotton #2 futures prices. The sales price covers the crop production costs estimated prior to sowing. Commercialisation of cotton fibre is handled through sales contracts between the ginning plant and the broker:

- **Ginning partner:** Currently, groups of farmers in each region own the ginning plants in the state of Chihuahua. The producer owns a share of the ginning plant and pays ginning costs with cottonseed production. The ginning plant provides farmers with an input credit at low interest rates, while the farmer agrees to deliver the entire harvest.

- **Not-a-partner:** The producer is free to gin his cotton where it is most convenient based on price and distance.

In Mexico, cotton is commercialised using the same quality parameters as domestic or international markets demand. The sales contracts include grade, micronaire, length and resistance parameters.

As fibre harvesting moves forward and the ginning process continues, each farmer is settled partially and paid no later than seven days after ginning. The first liquidations for the sale of cotton cover the farmer's input credit.

The ginning service payment has been covered with cottonseed production in recent years. If the commercialisation price of the seed was higher than that established in the contract, the ginner then pays an additional reward to the farmer, whether he is a partner or customer. The by-products such as cotton linters and hulls are commercialised directly by the ginner to cover the freight of seed cotton from the farm to the ginning plant.

For the last two seasons, cotton in Mexico faces a problem that risks its productive capacity and its long-term sustainability. No authorisations from environmental authorities to import new genetically modified cotton varieties have been issued. Chihuahua has been the state with the largest share of cotton production in Mexico for more than 20 years. During that time, it has been shown that genetically improved varieties have had no adverse effect on the environment. This technology has decreased the use of pesticides for pest control.

Mexican cotton producers are still waiting for a clear response from government agencies, which will allow them to guarantee crop stability through sowing genetically modified varieties.





Cotton Marketing Alternatives in Pakistan

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Cotton, a major cash crop for Pakistan, is considered the backbone of the national economy. It contributes about 0.6 % to GDP and 3.1% of total value addition in agriculture¹. Cotton is grown by more than 1.3 million farmers on around 3.0 million hectares which is 15% of the cultivable area of Pakistan². Cotton is consumed largely by more than 500 textile mills in the country. Although a significant quantity, of up to 1 million bales, is also exported. However, to meet the demand for extra-long staple cotton, about 3-4 million bales are imported annually. Pakistan is the fifth largest producer, third largest consumer and second largest exporter of cotton yarn in the world³. Export of cotton and textile products account for 57% of the overall exports of the country⁴. There are 1200 cotton ginning factories which are operational in Pakistan with the production capacity of ginning industry ranging from 12 million to 35 million bales of 170 kg. Factories and textile mills in the country employing millions of skilled and unskilled labourers along the entire cotton value added chain, from weaving to textiles and garment exports. Cotton farming is also major source of income for rural labour especially the women as pickers.

More than 70% of the cotton crop comes from the Punjab province and 29% from Sindh, with Khyber Pakhtunkhwa and Baluchistan contributing less than 1%.



1 Economic Survey of Pakistan, 2020-21, Economic Advisor's Wing, Finance Division, Islamabad.

2 Agriculture Statistics of Pakistan, 2020-21, Economic Wing, Ministry of National Food Security & Research.

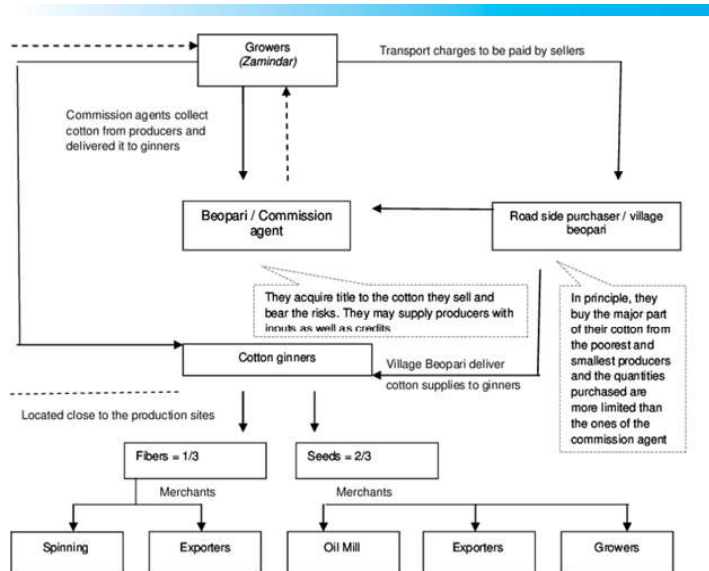
3 Cotton This Month, January – 2022 & World Cotton Statistics & World Textile Demand, ICAC.

4 Pakistan Bureau of Statistics

2. Marketing of Cotton

There are three main actors: farmers, commission agents and ginner, involved in the marketing chain of cotton in the Punjab and Sindh provinces. The majority of the cotton crop is sold by farmers to commission agents who then sell it to cotton ginner. A smaller amount of cotton is sold by farmers to the ginning factories directly, usually by larger farms. The local agent (village level) is a less important actor in terms of volume of trade and collects lesser quantities of cotton and sells either to commission agents or direct to ginning factories. In the supply chain, commission agents also offer some forms of credit to the farming community via pre-harvest agreements. In this funding process, the farmers and the commission agent enter into a contract in which the agent provides credit in advance before the crop is harvested and purchases the product after harvesting at an agreed-upon price according to contract. The credit can be in the form of inputs or money. Provided credit is used to fund cultivation by buying inputs and sometimes also assists as income for the farmer.

3. The Marketing Chain of Cotton



4. Role of the Commission Agent/Middleman in Cotton Marketing

Agents have always dominated the marketing chain, acting as the main link between the growers and the ginning factories.

4.1 Commission Agent/Middleman:

Commission agent' refers to a shop where seed and farm produce are sold. The commission agent manages the transportation of cotton from the farm to the ginning factory. Growers usually approach the agent when they want to sell their crop rather than the other way around. In some cases, the agent acts as an official agent or dealer for domestic fertiliser companies and imported

pesticides. Middlemen are also located in all towns as well as in most of the larger villages, especially those that lie along the paved roads that links the towns.



4.2 Local Agents

A local agent is a small-scale agent who, unlike commission agents, is not involved in supplying inputs or credit. He collects small amounts of cotton, which he sells either to commission agents, or more commonly, direct to ginneries. Local agents generally buy from growers, hired labourers and poor people, especially children who manage to scavenge small quantities from the roadside or elsewhere.

The ginner also provides credit to commission agents and landowners, usually on an interest-free basis. The main purpose of lending is to secure supplies. Loans are provided under a contract via a formal document in which the conditions of agreement are clearly laid down. The borrower is required to supply a quantity of seed cotton to the ginning factory. Repayment of the loan is deducted from the amount paid to the borrower for the seed cotton supplied. The price paid for the delivery is the prevailing market price at the time of supply. Transportation services are charged on a mileage basis, with the additional charges being levied for labour engaged by the trucking company for loading and unloading. There is a certain amount of flexibility in pricing, with valued, regular customers often receiving better terms than others. The risks of transport are shared between the transporter and the commission agent. The transporter is totally responsible for any cotton (or other commodities) stolen during the transit; it is not unheard of for a whole truckload to disappear. However, if the cotton is damaged or destroyed by accident, such as fire, the agent bears the cost.



5. Cotton Market Tools

Pakistan cotton farmers use mobile phones, television, radio, newspapers, internet, extension services, market commission agents, and fellow farmers to market their cotton. Now the internet is also being used as marketing tool to save time and other expenses.

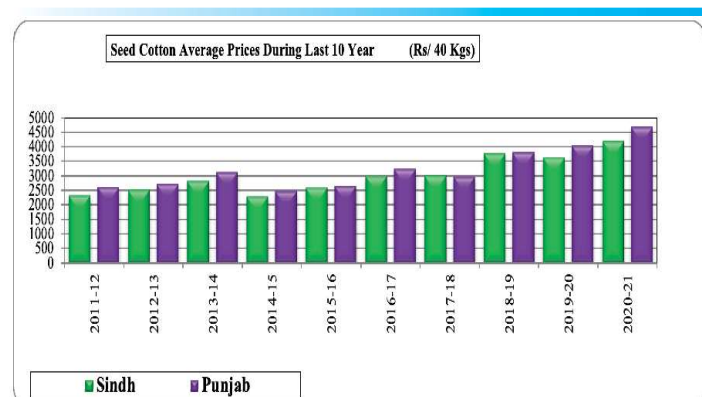
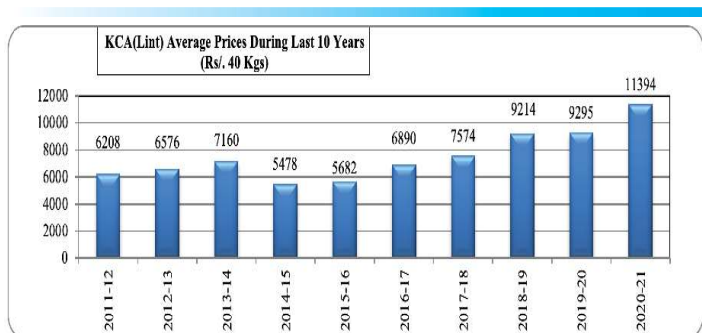
5.1 Method of Fixing Rate of Lint Cotton

The fixing of the lint cotton price is handled by the Karachi Cotton Association (KCA) Rates Committee, which consists of 12 people chosen from the members of KCA or their duly authorised or nominated representatives — six each from amongst the Buyers/Exporters and Sellers/Other categories, as well as one government-nominated director. The Rates Committee has a quorum of five people who meet daily for the purpose of fixing the official KCA Spot Rate for local dealings in Pakistani rupees for Base Grade 3, staple length 1-1/16, micronaire value between 3.8 to 4.9 NCL. The Rate Committee members consider quality of cotton, market trends, fluctuation in market prices and personal feedback.



5.3 Ginning Cost

The average ginning cost both in Punjab and Sindh is \$1.96 to 2.23 per 40 kg and \$48.89 to \$55.87 per tonne.



If the quality of seed cotton is low due to the trash content and humidity content the farmer gets lower prices per 40 kg — a deduction of 2-5 kg per maund (approximately 37.3 kg).

5.2 Payment System

The cotton farmer also pays 0.60% for bank charges (withholding taxes) and will get full payment within 15-20 days after selling at the gin. If he sells to a commission agent, the full payment occurs on the spot.



6. Marketing Alternatives

6.1. Electronic Warehousing

One of the emerging marketing alternatives is the Electronic Warehouse Receipt (EWR), the first of its kind in Pakistan. It is a digital instrument that gives financial institutions real-time information and access to farmers who have placed their production in an accredited warehouse, significantly reducing transaction costs and operational risks for the banks. It is defined as an instrument that permits farmers to store commodities at the time of harvest. EWR financing is a form of institutional credit extended by banks to farmers and traders against physical commodities stored in licensed warehouses. By enabling farmers to desist from distress sales immediately after harvest, the system enables them to attain higher prices for their production, resulting in improved returns. The EWR financing mechanism, supported by a developed ecosystem and strong linkages between farmers, financial institutions, warehouses and subsidiary service providers, may therefore prove vital for improving the efficiency and transparency of the distribution of agricultural commodities, and serve as a benefit to all stakeholders.

6.1.1 Production and Storage of Commodities

The EWR mechanism requires that commodities stored in warehouses serve as collateral for financing, storability, scalability, and an increase in post-harvest price. Currently, the major crops in Pakistan — cotton, sugarcane, rice, maize and wheat — have an annual yield of more than a million tonnes and are thus above the benchmark considered vital to be traded under the EWR financing mechanism. However, Pakistan lacks sufficient infrastructure for post-harvest treatments, preservation of quality, storage and other important components. Similarly, price adjustments after harvest can result in considerable profit or loss scenarios for farmers. However, trends from the previous five years show that price increases are generally prevalent in Pakistan for all major crops identified.

6.2 Linking Electronic Warehouses with Mercantile Exchange

The Pakistan Mercantile Exchange Limited (PMEX) is the country's first and only demutualised commodity futures exchange, licensed and regulated by the Securities and Exchange Commission of Pakistan (SECP). Based on sophisticated multi-dimensional infrastructure and state-of-the-art technology, PMEX offers a complete suite of services including trading, clearing and settlement, custody as well as back office functions, all under one roof. Linking electronic warehouses with commodity exchanging institutions can enhance farmers' bargaining position by offering his production electronically to a wide audience of buyers at the national as well as international level.

References:-

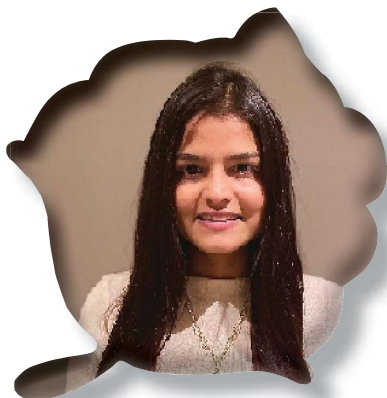
- i. Economy Survey of Pakistan 2020-21, Economic Advisors Wing, Finance Division, Ministry of Finance, Government of Pakistan, Islamabad.
- ii. Pakistan Bureau of Statistics.
- iii. Textile Commissioners Organization, Ministry of Textile Industry, Islamabad.
- iv. Karachi Cotton Association.
- v. Pakistan Cotton Ginners Association.
- vi. Provincial Crop Reporting Departments.
- vii Ahmed Adeel Marketing chain of cotton in the Punjab, University of Agriculture, Faisalabad, Pakistan.
- xiii. Improving cotton Marketing System (Daily Dawn News Paper Editorial).
- ix. Cotton world Statistics world textile Demand (ICAC, Washington DC, USA).



Cotton Marketing Alternatives in Africa

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This article attempts to dig deeper into the marketing systems for cotton lint in African countries. For this study, the article covers 6 countries – Burkina Faso, Tanzania, Mali, Cote d'Ivoire, Togo and Zambia.

Although they cover different geographical areas, they follow almost similar marketing systems. Production is mostly undertaken by small scale farmers, who sell seed cotton to the ginners. In some countries farmers also sell through cooperatives. Mostly, ginners are responsible for collecting and transporting the seed cotton from the farms/ markets to the gins and then exporting the cotton lint once ginned. Ginners may also transport the cotton seed to the local oil mills.

Price mechanisms for different countries may differ. However, there are certain common variables that should be taken under consideration while arriving at the seed cotton prices for example: - the prices of cotton lint in the international market and the cost of production amongst others. Governments, ginners and national cotton associations are involved in this price setting process. Governments may also provide subsidies to cushion farmers in case of fall in prices or to provide accessibility to inputs for production.

BURKINA FASO

Cotton production in Burkina Faso is based on a zoning system. The planted area is divided into three different cotton zones that are exclusively granted to three ginners. Farmers sell seed cotton to the ginner in their zone

and ginners ensure the supply of agricultural inputs to producers.

Seed cotton sales are organised by the agriculture cooperatives (SCOOPS-PC) in collaboration with the ginners. Further, the collection and primary marketing of seed cotton (cotton weighing and payment, etc.) is also ensured by agricultural cooperatives and their unions through self-managed markets. The government is not directly involved in the marketing of cotton.

The seed cotton is sold based on its quality and two sets of minimum prices are set based on quality: a price for first choice¹ of seed cotton and a price for second choice of seed cotton.



The seed cotton purchase price is set by the Interprofessional Cotton Association of Burkina (AICB) based on a price-fixing mechanism, backed by a fund (known as the Price Smoothing Fund). It should be noted that the AICB brings together two professional groups: the professional association of Burkina Faso Cotton Companies (APROCOB) and the association of cotton producers of Burkina Faso (UNPCB). The AICB is also chaired by the President of the UNPCB.

This floor price for seed cotton is announced by AICB before the start of the sowing season. This floor price is unique to each crop year, is applied at the collection points (markets) and is the same regardless of the collection point used.

Once a sale is made, ginners handle the transportation of seed cotton from the purchase points (markets) to the ginning factories. It should be noted that each ginner is required to purchase from producers — on an exclusive basis — all the production of seed cotton in its cotton area. Ginners also handle the shipment of cotton lint bales to ports and cotton seeds to the local oil mills. Once the seed cotton has been sold and delivered, payments to cotton farmers must take place within a contractual period of no more than 21 days.



The Pricing Mechanism and Other Financial Tools Used by Producers

• The Pricing Formula

The formula for calculating the floor price per kilogram of seed cotton is based on:

- a three-year moving average of the reference prices for the two past seasons (N-2 and N-1)
- the forecast of the price for season 'n' (estimated based on the average of the last ten prices for the month of February of season 'n' for projected deliveries in December of season 'n' of the futures contracts on the New York market)

Floor price for seed cotton = 95% x trend price (three-year average world price) x 42% (ginning rate of seed cotton) x share accruing to the co-producer (which varies between 58% and 62%)

- The above formula indicates that the purchase price considers world cotton fibre prices. In addition, it is possible that the producer benefits from an additional payment (rebate). For example, if world cotton prices improve such that the reference price for the marketing of the fibre determined at the end of the season is higher than the floor price calculated at the start of the season, then an additional purchase price of seed cotton is calculated and paid to the producer.

• The seed cotton price-smoothing mechanism

The purchase price of seed cotton is based on a price fixing mechanism which is backed by a price-smoothing fund. A technical regulation is adopted and formalises all the calculations of the mechanism. Data sources are defined and calculation formulas are documented.

TANZANIA

Cotton farmers in Tanzania sell seed cotton to the ginners through cooperative societies. Cotton farmers are in charge to cover the cost of transportation from the field to the cooperative warehouses, while Ginners are in charge of covering the transportation costs from the cooperative warehouses to the cotton ginning mills. Cotton inputs used by farmers are provided by the cotton development trust fund (CDTF). The Fund – which is financed by farmers, ginners and the government - facilitates input procurement and distribution to the cotton producers. Cotton farmers are paid on the spot for their sales.

Cotton is marketed based on its quality. Cotton grading parameters are available in two locations at the Cotton buying Post and at ginning factories. The purchase price for seed cotton in Tanzania is fixed by cotton stakeholders comprising of ginners and farmer's representatives. The Tanzania Cotton Board acts as a regulator and government representatives as observers. The cotton Industry Act No.2, 2001, Section 5(f), 24, gave the Tanzania Cotton Board the responsibility to coordinate with stakeholders to set the price as well as to officially announce it.



The official price is set up based on market conditions and efficiency and is only indicative in nature. Basically, the indicative price is determined by the international market price and stakeholders mainly use New York futures to determine the Farmers indicative price.

The seed cotton purchase price is highly correlated with world cotton prices. World prices are amongst the key variables that determine the seed cotton price. There is a formalized mechanism of price calculation and the key variables used for this calculation include: Exchange rate, ginning out-turn, lint price in the world market, ginning costs, any levy due like District Cess² and cotton development fund deductions.

Generally, the set market price covers the cost of production of cotton. However, at times when the International Market is too low then farmers may not be able to cover their production costs. The government may then intervene and provide small subsidies to the farmers in case the market price falls lower than expected.



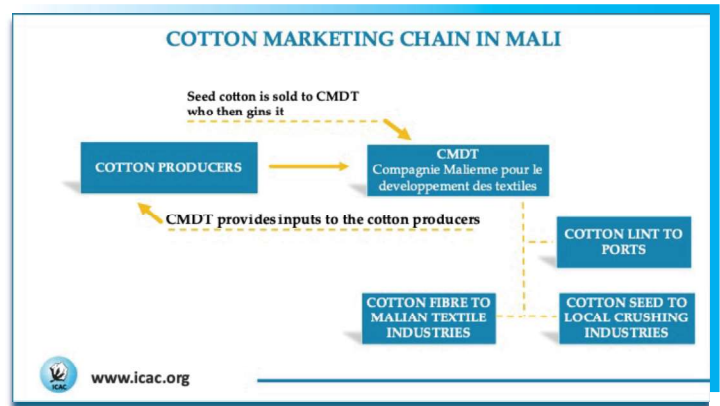
MALI

Cotton is Mali's second largest source of export earnings after gold. The contribution of the cotton sector to GDP is estimated at 15%. It provides producers with income to meet their monetary needs and food security. It supports the activities of the textile and grain crushing industries, banks, transporters, suppliers of spare parts, inputs and fuel.

Cotton producers in Mali sell seed cotton to the Compagnie Malienne pour le développement des textiles (C.M.D.T.). The CMDT is a public limited company of mixed economy and is in charge of:

- Providing agricultural advice to cotton producers;
- primary marketing of seed cotton;
- transportation and ginning of seed cotton; and
- marketing of cotton fibre to Malian textile industries and for exports, and marketing of cotton seed to local crushing industries.

There is an official price by the government that is announced every season for the sale of seed cotton. The price is set based on a pricing commission. The pricing commission takes into consideration the prices in the international market and farmers costs of production for setting the seed cotton price.

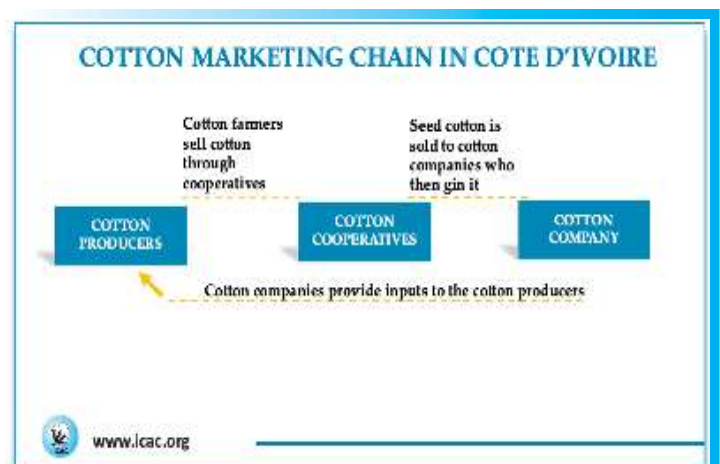


However, this purchase price may differ for different qualities. There are three different qualities which are determined based on the level of contamination in seed cotton. Once seed cotton is sold it takes on an average between two weeks to two months for farmers to receive a full payment.

COTE D'IVOIRE

The cotton producers in Cote d'Ivoire sell seed cotton to cotton companies through their cooperatives. These cotton companies are responsible for collecting the seed cotton from producers and ginning it. Inputs for cotton production are provided to cotton producers by cotton companies on a credit basis. Once seed cotton is sold and delivered, the producer is paid within 10 days.

A unique target price is set for every season. This official price for seed cotton is fixed based on a price fixing mechanism. The price is fixed by the Government based on a proposal from an Interprofessional collaboration. The price is negotiated between different interest groups within the cotton sector and is then announced by the government in the Council of Ministers. The price fixing mechanism for the seed cotton purchase price is based on the average value of changes in international cotton prices and the price of the US dollar. This principle was incorporated into Cote d'Ivoire law No. °2013-656 of 13th September 2013.



The cotton is sold based on quality parameters and different prices are set for seed cotton based on its quality. The government may provide direct and indirect aid to cotton farmers, for example: by granting an additional income to the purchase price of seed cotton or a subsidy on the purchase price of inputs amongst others.

TOGO

Cotton producers in Togo, like many other cotton producing countries in Africa, sell seed cotton to the ginners. Cotton inputs used by farmers are provided by ginners. At the time of sale, ginners collect the seed cotton from farmers and the farmers are paid within one month of the sale.

There is no official price set for the sale of cotton. The government is not involved in the price determination of the seed cotton and the price is arrived at by direct negotiations between ginners and the farmers' cooperatives. International cotton lint prices are taken into consideration while arriving at the price for seed cotton. Seed cotton is marketed based on two qualities – seed cotton without trash and seed cotton with trash and different prices are paid for them.



There is no official price or unique price per season or a national price. The prices are determined and set by ginners which can also change during the season depending on the level of competition. The purchase price is set before the beginning of the marketing season and is adjusted in case of hyperinflation or changes in world prices. It varies as the season changes and usually gets better at the end of the season. The purchase price is set in the national currency—the Zambian kwacha. There are no official additional payments made in case of price fluctuations, but each ginner has a system of paying their farmers to retain them and some ginners can also offer a premium based on the quality of seed cotton.

With respect to additional payments, some associations such as the Cotton Association of Zambia (CAZ) adds value to the seed cotton through handloom production but most farmers have no funding security. The world price guides the ginners to set a benchmark for the seed cotton price. In some cases, a higher world price also leads to a higher domestic price.



ZAMBIA

Zambian cotton farmers sell seed cotton to the ginners. Ginners provide inputs to farmers as well as a payment for the transport of the cotton from the farms to the ginning factories. Once the sale is made the producers are paid on the spot by the ginners.

In Zambia, the purchase price for seed cotton is set solely by the cotton companies (ginners). The cotton industry in Zambia is almost entirely run by the private sector with little government interference. The Competition and Consumer Protection Commission (CCPC) in 2012 ruled that the setting of price will be between the individual ginner and the farmer. However, it is not feasible for ginners to negotiate with individual farmers, therefore, in the end farmers are just price takers.





Supply and Distribution of Cotton

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
	million metric tonnes					
Beginning stocks						
World Total	20.53	18.88	19.43	19.34	22.12	20.63
China	12.65	10.35	9.03	8.88	9.02	9.30
USA	0.83	0.60	0.82	0.83	1.23	0.26
Production						
World Total	23.38	27.00	25.98	26.27	24.39	26.43
India	5.86	6.35	5.66	6.20	6.02	5.79
China	4.90	5.89	6.04	5.80	5.91	5.73
USA	3.74	4.56	4.00	4.34	3.18	3.84
Brazil	1.53	2.01	2.78	3.00	2.36	2.82
Pakistan	1.66	1.80	1.67	1.46	0.96	1.27
Uzbekistan	0.96	0.96	0.64	0.53	1.03	0.94
Others	4.72	5.44	5.20	4.94	4.93	6.04
Consumption						
World Total	24.90	26.35	26.01	23.05	25.66	26.16
China	8.28	8.50	8.25	7.23	8.40	8.31
India	5.15	5.42	5.40	4.45	5.70	5.60
Pakistan	2.22	2.35	2.36	2.34	2.15	2.45
Europe and Turkey	1.66	1.73	1.82	1.60	1.70	1.74
Bangladesh	1.41	1.66	1.58	1.50	1.64	1.73
Vietnam	1.17	1.51	1.51	1.45	1.52	1.68
Brazil	0.69	0.68	0.73	0.57	0.69	0.70
USA	0.71	0.70	0.63	0.47	0.52	0.56
Others	3.62	3.80	3.73	3.44	3.35	3.40
Exports						
World Total	8.29	9.14	9.28	9.21	10.60	10.07
USA	3.33	3.64	3.37	3.47	3.63	2.96
Brazil	0.61	0.91	1.31	1.95	2.40	2.21
CFA Zone	1.00	1.06	1.16	1.07	1.18	1.20
India	0.99	1.13	0.76	0.70	1.33	1.10
Australia	0.81	0.85	0.79	0.30	0.34	0.81
Uzbekistan	0.38	0.22	0.16	0.10	0.01	0.01
Imports						
World Total	8.09	9.04	9.22	8.77	10.39	10.07
China	1.10	1.32	2.10	1.60	2.80	2.31
Vietnam	1.20	1.52	1.51	1.41	1.55	1.70
Bangladesh	1.41	1.67	1.54	1.50	1.69	1.69
Turkey	0.84	0.96	0.79	1.02	1.16	1.17
Indonesia	0.74	0.77	0.66	0.55	0.50	0.54
Trade Imbalance †	-0.20	-0.10	-0.06	-0.44	-0.21	0.00
Stocks Adjustment ‡	0.07	0.00	0.00	-0.01	0.00	0.00
Ending Stocks						
World Total	18.88	19.43	19.34	22.12	20.63	20.90
China	10.35	9.03	8.88	9.02	9.30	9.00
USA	0.60	0.82	0.83	1.23	0.26	0.59
Ending Stocks/Mill Use (%)						
World less China *	51.31	58.29	58.86	82.72	65.59	66.68
China **	125.03	106.27	107.69	124.82	110.77	108.29
Cotlook A-Index***	82.77	87.98	84.35	71.33	84.96	

Note:

Seasons begin on August 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.

‡ Difference between calculated stocks and actual; amounts for forward seasons are anticipated.

* World-less-China's ending stocks divided by world-less-China's mill use, multiplied by 100.

** China's ending stocks divided by China's mill use, multiplied by 100.

*** US cents per pound. Average price for a given season, August 1 to July 31 or average-to-date.



2019/20 Supply and Use of Cotton by Country

	Area	Yield	Production	Begin Stocks	Imports	Consumption	Exports	End Stocks	S/U*	S/MU**
	000 Ha	Kgs/Ha	000 Metric Tonnes						Ratio	Ratio
CANADA	0.00	0.0	0.00	0.08	0.22	0.21	0.01	0.08	0.34	0.36
CUBA	4.05	269.0	1.09	0.64	2.21	3.30	0.00	0.64	0.19	0.19
DOM. REP.	0.00	0.0	0.00	0.46	0.97	0.97	0.00	0.46	0.47	0.47
MEXICO	222.81	1,650.0	367.64	225.64	128.56	440.00	143.68	138.15	0.24	0.31
USA	4,654.00	931.5	4,335.00	825.96	1.00	468.10	3,466.19	1,227.67	0.31	2.62
North America	4,885.86	963.0	4,704.85	1,053.13	133.06	913.68	3,610.00	1,367.35	0.30	1.50
EL SALVADOR	0.00	0.0	0.00	6.75	27.34	27.34	0.00	6.75	0.25	0.25
GUATEMALA	0.00	0.0	0.00	6.91	26.69	27.23	0.00	6.37	0.23	0.23
HONDURAS	0.10	318.3	0.03	0.23	0.00	0.00	0.00	0.27	0.00	0.00
NICARAGUA	1.82	543.4	0.99	0.13	0.00	0.49	0.51	0.12	0.12	0.24
Central America	0.95	522.2	0.50	13.99	61.28	62.16	0.13	13.48	0.22	0.22
ARGENTINA	450.00	806.7	363.00	539.16	0.00	133.99	84.52	683.65	3.13	5.10
BOLIVIA	4.31	640.6	2.76	1.83	0.91	3.45	0.22	1.83	0.50	0.53
BRAZIL	1,665.70	1,802.0	3,001.60	2,340.26	1.02	570.00	1,945.77	2,827.11	1.12	4.96
CHILE	0.00	0.0	0.00	0.02	0.05	0.05	0.00	0.02	0.41	0.41
COLOMBIA	20.50	846.5	17.35	5.48	13.77	27.00	0.00	9.61	0.36	0.36
ECUADOR	1.23	439.5	0.54	2.76	8.59	9.13	0.00	2.76	0.30	0.30
PARAGUAY	10.10	419.8	4.24	1.33	0.42	1.59	3.07	1.33	0.29	0.84
PERU	23.88	818.6	19.55	24.60	41.58	60.86	0.27	24.60	0.40	0.40
URUGUAY	0.00	0.0	0.00	0.00	0.01	0.01	0.00	0.00	0.06	0.06
VENEZUELA	14.47	391.7	5.67	3.12	4.62	10.29	0.00	3.12	0.30	0.30
South America	2,190.20	1,559.1	3,414.71	2,918.56	70.97	816.37	2,033.85	3,554.03	1.25	4.35
ALGERIA	0.00	0.0	0.00	0.06	0.85	0.85	0.00	0.06	0.07	0.07
EGYPT	100.30	725.8	72.80	53.73	81.00	107.00	66.74	33.79	0.19	0.32
MOROCCO	0.00	0.0	0.00	1.31	5.76	5.76	0.00	2.31	0.40	0.40
SUDAN	180.00	722.2	130.00	16.01	0.00	18.03	79.00	48.98	0.50	2.72
TUNISIA	0.00	0.0	0.00	2.76	2.35	12.35	0.00	2.76	0.22	0.22
Northern Africa	283.30	754.7	213.80	73.87	89.96	143.99	145.74	87.89	0.30	0.61
BENIN	665.70	464.9	309.47	149.69	0.00	0.48	305.69	152.99	0.50	320.86
BURKINA FASO	579.00	342.0	198.00	137.73	0.00	5.75	192.00	137.98	0.70	23.98
CAMEROON	222.37	620.6	138.00	61.71	0.00	1.90	137.01	60.80	0.44	32.00
CENT. AFR. REP.	34.06	252.0	8.59	4.04	0.00	0.00	8.76	3.86	0.44	0.00
CHAD	248.26	196.7	48.82	13.84	0.00	0.20	30.74	31.72	1.03	158.58
COTE D'IVOIRE	408.44	516.3	210.86	60.74	0.00	2.04	139.67	129.89	0.92	63.67
GUINEA	12.44	286.9	3.57	1.68	0.00	0.00	3.64	1.61	0.44	0.00
MADAGASCAR	20.00	0.0	30.00	3.23	0.00	0.00	30.00	3.23	0.00	0.00
MALI	738.19	385.1	284.29	26.46	0.00	2.00	208.16	100.59	0.48	50.29
NIGER	4.70	470.3	2.21	0.24	0.00	0.96	1.25	0.24	0.11	0.25
SENEGAL	15.82	408.1	6.46	1.10	0.00	0.00	5.65	1.91	0.34	0.00
TOGO	180.59	264.7	47.80	28.14	0.00	0.00	38.10	37.84	0.99	0.00
Francophone Africa	3,129.58	411.6	1,288.06	488.58	0.00	13.33	1,100.68	662.64	0.59	49.71
ANGOLA	2.90	307.5	0.89	0.29	0.00	0.61	0.28	0.29	0.33	0.48
ETHIOPIA	81.52	741.1	60.42	21.95	3.47	54.45	7.00	24.40	0.40	0.45
GHANA	14.98	375.4	5.62	12.05	0.00	1.30	4.32	12.05	2.14	9.24
KENYA	40.00	100.0	4.00	2.50	3.00	4.00	0.06	5.43	1.34	1.36
MALAWI	84.67	248.9	21.07	11.96	0.00	3.00	13.71	16.32	0.98	5.44
MOZAMBIQUE	135.00	165.5	22.34	14.70	0.00	1.30	18.04	17.70	0.92	0.00
NIGERIA	130.00	341.5	44.40	17.41	0.87	24.79	23.30	14.60	0.30	0.59
SOUTH AFRICA	27.68	1,681.2	46.53	40.74	8.98	12.36	34.97	48.92	1.03	3.96
TANZANIA	441.00	247.2	109.00	17.52	0.00	45.12	40.98	40.42	0.47	0.90
UGANDA	89.00	415.7	37.00	22.00	0.00	3.70	23.31	31.99	1.18	8.65
CONGO, DR	0.00	0.0	0.00	2.18	7.17	7.17	0.00	2.18	0.30	0.30
ZAMBIA	137.17	189.7	26.02	30.40	0.00	1.79	19.93	34.70	1.60	0.00
ZIMBABWE	174.21	229.6	40.00	25.32	0.00	2.81	28.48	34.02	1.09	12.10
Southern Africa	1,379.05	305.4	421.16	223.79	45.05	186.01	216.18	287.80	0.72	1.55
KAZAKHSTAN	131.20	634.3	83.22	11.90	1.00	13.22	65.00	17.90	0.23	1.35
KYRGYZSTAN	13.96	855.3	11.94	4.59	3.00	0.96	13.39	5.19	0.36	5.41
TAJIKISTAN	196.46	537.7	105.63	35.94	0.00	14.82	81.73	45.02	0.47	3.04
TURKMENISTAN	545.00	519.3	283.00	105.00	0.00	141.40	149.00	97.60	0.34	0.69
UZBEKISTAN	1,034.00	513.4	530.90	600.90	0.00	723.75	100.00	308.05	0.37	0.43
Central Asia	1,920.62	528.3	1,014.69	758.34	4.00	894.15	409.12	473.76	1.77	0.53
ARMENIA	0.00	0.0	0.00	0.08	0.22	0.22	0.00	0.08	0.00	0.00
AUSTRIA	0.00	0.0	0.00	1.55	1.87	2.73	0.06	0.63	0.23	0.23



2019/20 Supply and Use of Cotton by Country (continued)

	Area	Yield	Production	Begin Stocks	Imports	Consumption	Exports	End Stocks	S/U*	S/MU**
	000 Ha	Kgs/Ha			000 Metric Tonnes				Ratio	Ratio
azerbaijan	145.80	677.1	98.72	43.64	0.00	29.19	62.58	50.60	0.55	1.73
belarus	0.00	0.0	0.00	3.51	7.34	7.34	0.00	3.51	0.48	0.48
belgium	0.00	0.0	0.00	0.93	6.05	4.47	1.76	0.75	0.12	0.17
Bulgaria	0.79	323.7	0.26	1.96	2.40	2.21	0.19	2.21	0.92	1.00
Czech Rep.	0.00	0.0	0.00	0.34	1.02	1.02	0.00	0.34	0.34	0.34
denmark	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
estonia	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
finland	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
france	0.00	0.0	0.00	1.80	8.48	7.89	0.59	1.80	0.21	0.23
germany	0.00	0.0	0.00	6.91	17.74	15.44	2.30	4.73	0.27	0.31
Greece	291.47	1,218.9	355.27	146.39	6.55	16.08	319.46	172.66	0.51	10.74
Hungary	0.00	0.0	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00
ireland	0.00	0.0	0.00	0.02	0.15	0.15	0.00	0.02	0.12	0.12
italy	0.00	0.0	0.00	6.16	28.05	26.94	1.11	6.16	0.22	0.23
latvia	0.00	0.0	0.00	0.01	0.26	0.20	0.06	0.01	0.03	0.04
Lithuania	0.00	0.0	0.00	0.10	0.00	0.00	0.00	0.10	0.00	0.00
Moldova	0.00	0.0	0.00	0.74	2.18	2.18	0.00	0.74	0.34	0.34
NETHERLANDS	0.00	0.0	0.00	0.45	2.65	2.59	0.30	0.45	0.17	0.00
NORWAY	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
POLAND	0.00	0.0	0.00	0.49	3.44	3.28	0.28	0.49	0.14	0.15
PORTUGAL	0.00	0.0	0.00	6.46	31.50	30.50	0.72	6.46	0.20	0.21
ROMANIA	0.00	0.0	0.00	0.04	0.33	0.33	0.00	0.04	0.11	0.11
RUSSIA	0.02	1,758.8	0.04	10.39	17.91	16.90	0.04	10.43	0.58	0.62
SLOVAK REP.	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPAIN	66.00	1,060.8	70.01	29.70	2.41	2.78	52.08	30.21	0.42	10.87
SWEDEN	0.00	0.0	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.00
SWITZERLAND	0.00	0.0	0.00	0.16	0.81	0.46	0.35	0.16	0.19	0.34
ukraine	0.00	0.0	0.00	0.44	1.64	1.64	0.00	0.44	0.27	0.27
UNITED KINGDOM	0.00	0.0	0.00	0.04	0.18	0.06	0.03	0.04	0.25	0.74
FORMER YUGOSLAVIA	0.00	0.0	0.00	1.31	6.81	6.81	0.00	1.31	0.19	0.19
Europe	504.08	1,040.1	524.29	263.84	152.65	184.05	441.93	294.60	0.47	1.60
Including EU-27	358.26	1,187.8	425.54	203.81	116.97	120.67	297.13	227.58	0.54	1.89
CHINA	3,300.00	1,757.6	5,800.00	8,884.71	1,600.00	7,230.00	29.61	9,024.71	1.24	1.25
HONG KONG	0.00	0.0	0.00	29.98	0.55	0.39	0.38	29.68	34.96	0.00
AUSTRALIA	69.40	1,657.1	115.00	182.58	0.00	1.59	295.92	0.07	0.00	0.05
INDONESIA	5.05	621.0	3.14	95.45	547.03	549.28	0.89	95.45	0.17	0.17
JAPAN	0.00	0.0	0.00	6.62	48.81	48.81	0.00	6.62	0.14	0.14
KOREA, D.R.	0.00	0.0	0.00	1.18	5.00	5.00	0.00	1.18	0.24	0.24
KOREA, REP.	0.00	0.0	0.00	53.94	124.22	119.69	4.53	53.94	0.43	0.45
Malaysia	0.00	0.0	0.00	13.27	153.32	105.38	47.94	13.27	0.09	0.13
PHILIPPINES	0.01	573.1	0.01	3.14	5.60	5.60	0.00	3.15	0.56	0.56
SINGAPORE	0.00	0.0	0.00	0.33	6.08	0.00	6.08	0.33	0.05	0.00
TAIWAN	0.00	0.0	0.00	40.38	86.60	84.25	0.98	40.38	0.47	0.48
THAILAND	1.00	2,000.0	2.00	49.19	152.50	152.50	0.13	51.06	0.33	0.33
VIETNAM	1.00	3,000.0	3.00	199.58	1,408.77	1,445.92	0.00	165.44	0.11	0.11
Eastern Asia	76.46	1,610.5	123.14	645.66	2,537.93	2,518.01	356.46	430.88	0.15	0.17
AFGHANISTAN	36.40	386.6	14.07	3.82	0.00	4.22	10.80	2.86	0.19	0.68
BANGLADESH	45.90	772.0	35.43	422.28	1,500.05	1,500.05	0.00	457.71	0.31	0.31
INDIA	13,373.00	464.0	6,205.00	1,877.56	496.40	4,453.00	696.03	3,429.93	0.67	0.77
MYANMAR	239.09	633.7	151.52	99.06	7.58	162.89	7.10	88.17	0.52	0.54
PAKISTAN	2,527.00	576.5	1,456.72	592.66	981.68	2,344.01	21.44	665.61	0.28	0.28
SRI LANKA	0.00	0.0	0.00	0.20	1.80	1.80	0.00	0.20	0.11	0.11
Southern Asia	16,224.30	484.8	7,864.89	2,996.18	2,987.77	8,468.36	1,184.00	4,645.10	0.50	0.55
IRAN	70.88	710.5	50.36	57.74	47.82	98.17	0.00	49.03	0.50	0.50
IRAQ	8.64	361.9	3.12	1.91	4.92	8.05	0.00	1.91	0.24	0.24
ISRAEL	4.43	1,851.0	8.20	2.27	0.00	0.00	8.20	2.27	0.28	0.00
SYRIA	17.56	967.9	16.99	8.63	0.00	13.59	3.40	8.63	0.51	0.63
TURKEY	477.80	1,703.6	814.00	911.42	1,017.13	1,474.00	97.87	1,170.68	0.74	0.79
Sub total	582.54	1,534.6	893.95	985.36	1,085.09	1,610.31	110.00	1,235.39	0.72	0.77
WORLD TOTAL	34,494.76	761.6	26,270.66	19,339.38	8,770.71	23,049.83	9,209.33	22,110.71	0.96	0.96

Note:

Subtotals and total include countries not shown..

* Ending stocks divided by consumption plus exports.

** Ending stocks divided by consumption.



2020/21 Supply and Use of Cotton by Country

	Area	Yield	Production	Begin Stocks	Imports	Consumption	Exports	End Stocks	S/U*	S/MU**
	000 Ha	Kgs/Ha			000 Metric Tonnes				Ratio	Ratio
CANADA	0.00	0.0	0.00	0.08	0.37	0.19	0.01	0.25	1.27	1.31
CUBA	4.05	271.1	1.10	0.64	2.20	3.30	0.00	0.64	0.19	0.19
DOM. REP.	0.00	0.0	0.00	0.46	0.97	0.97	0.00	0.46	0.47	0.47
MEXICO	144.70	1,584.0	229.20	138.15	202.00	297.00	106.30	166.05	0.41	0.56
USA	3,347.00	950.4	3,180.95	1,227.67	0.24	522.54	3,625.62	260.70	0.06	0.50
North America	3,502.21	974.4	3,412.55	1,367.35	206.25	825.10	3,732.05	429.00	0.09	0.52
EL SALVADOR	0.00	0.0	0.00	6.75	36.06	27.34	0.24	15.24	0.55	0.56
GUATEMALA	0.00	0.0	0.00	6.37	26.82	27.37	0.00	5.82	0.21	0.21
HONDURAS	0.10	318.3	0.03	0.27	0.00	0.00	0.00	0.30	0.00	0.00
NICARAGUA	0.48	550.3	0.27	0.07	0.00	0.27	0.01	0.06	0.20	0.21
Central America	0.74	515.1	0.38	13.48	68.17	60.25	0.36	21.43	0.35	0.36
ARGENTINA	410.00	845.1	346.50	683.65	0.00	110.00	122.58	797.57	3.43	7.25
BOLIVIA	4.31	640.7	2.76	1.83	0.09	3.45	0.00	1.23	0.36	0.36
BRAZIL	1,370.60	1,718.7	2,355.70	2,827.11	2.69	690.00	2,398.00	2,097.50	0.68	3.04
CHILE	0.00	0.0	0.00	0.02	0.31	0.05	0.00	0.28	5.96	5.96
COLOMBIA	18.45	846.7	15.62	9.61	15.21	27.00	0.00	13.44	0.50	0.50
ECUADOR	1.23	439.6	0.54	2.76	8.15	9.13	0.00	2.32	0.25	0.25
PARAGUAY	9.90	419.9	4.16	1.33	1.66	1.91	4.97	0.26	0.04	0.14
PERU	23.40	818.7	19.16	24.60	43.15	60.86	0.47	25.57	0.42	0.42
URUGUAY	0.00	0.0	0.00	0.00	0.00	0.01	0.00	0.00	0.17	0.17
VENEZUELA	14.18	391.8	5.56	3.12	4.63	10.19	0.00	3.12	0.31	0.31
South America	1,852.08	1,484.8	2,750.00	3,554.03	75.89	912.60	2,526.03	2,941.30	0.86	3.22
ALGERIA	0.00	0.0	0.00	0.06	0.85	0.85	0.00	0.06	0.07	0.07
EGYPT	76.80	770.2	59.15	33.79	101.79	104.86	71.32	18.55	0.11	0.18
MOROCCO	1.00	1,000.2	1.00	2.31	8.75	5.59	0.00	6.47	1.16	1.16
SUDAN	180.00	722.3	130.02	48.98	0.00	18.03	104.23	56.74	0.46	3.15
TUNISIA	2.00	5,000.8	10.00	2.76	2.35	12.35	0.00	2.76	0.22	0.22
Northern Africa	259.80	770.5	200.17	87.89	113.74	141.68	175.56	84.57	0.27	0.60
BENIN	614.30	515.3	316.55	152.99	0.00	1.56	316.98	151.00	0.47	96.80
BURKINA FASO	556.47	386.4	215.00	137.98	0.00	5.00	210.00	137.98	0.64	27.60
CAMEROON	224.82	653.9	147.00	60.80	0.00	1.90	141.05	64.85	0.45	34.13
CENT. AFR. REP.	34.06	252.1	8.59	3.86	0.00	0.00	8.59	3.86	0.45	0.00
CHAD	233.61	216.3	50.53	31.72	0.00	1.02	31.00	50.23	1.57	49.29
COTE D'IVOIRE	448.87	529.6	237.71	129.89	0.02	2.04	256.65	108.93	0.42	53.39
GUINEA	12.63	286.9	3.62	1.61	0.00	0.00	3.60	1.63	0.45	0.00
MADAGASCAR	20.20	0.0	0.00	3.23	0.00	0.00	2.30	0.93	0.00	0.00
MALI	164.83	379.8	62.61	100.59	0.00	2.00	148.68	12.52	0.08	6.26
NIGER	4.77	470.4	2.24	0.24	0.00	0.96	1.28	0.24	0.11	0.25
SENEGAL	17.55	447.9	7.86	1.91	0.00	0.00	9.70	0.07	0.01	0.00
TOGO	100.05	272.6	27.27	37.84	0.00	0.00	52.83	12.27	0.23	0.00
Francophone Africa	2,432.17	443.6	1,078.99	662.64	0.02	14.48	1,182.66	544.51	0.45	37.61
ANGOLA	2.84	307.6	0.87	0.29	0.00	0.61	0.26	0.29	0.34	0.48
ETHIOPIA	82.33	741.2	61.03	24.40	0.06	54.99	0.00	30.49	0.55	0.55
GHANA	14.83	375.4	5.57	12.05	1.30	1.30	5.57	12.05	1.75	9.24
KENYA	40.00	100.0	4.00	5.43	0.96	8.00	0.20	2.19	0.27	0.27
MALAWI	83.83	248.9	20.87	16.32	0.00	3.00	22.57	11.61	0.45	3.87
MOZAMBIQUE	133.65	165.5	22.12	17.70	0.00	1.30	27.07	11.45	0.40	8.81
NIGERIA	264.00	341.6	90.18	14.60	0.87	29.74	35.75	40.16	0.61	1.35
SOUTH AFRICA	27.67	809.1	22.39	48.92	12.70	17.18	23.11	43.72	1.09	2.54
TANZANIA	622.00	213.8	133.00	40.42	0.00	45.00	65.00	63.42	0.58	1.41
UGANDA	101.00	425.7	43.00	31.99	0.00	4.30	38.70	31.99	0.74	7.44
CONGO, DR	0.00	0.0	0.00	2.18	7.17	7.17	0.00	2.18	0.30	0.30
ZAMBIA	135.80	189.7	25.77	34.70	0.05	1.79	13.21	45.50	3.03	25.42
ZIMBABWE	239.62	229.6	55.03	34.02	0.00	2.81	52.21	34.02	0.62	12.10
Southern Africa	1,768.33	276.0	488.05	287.80	42.18	198.33	285.44	334.26	0.69	1.69
KAZAKHSTAN	125.80	634.4	79.81	17.90	0.48	13.22	52.42	32.54	0.50	2.46
KYRGYZSTAN	14.10	855.4	12.06	5.19	3.00	0.96	14.10	5.19	0.34	5.41
TAJIKISTAN	196.46	537.8	110.93	45.02	0.00	14.82	96.12	45.02	0.41	3.04
TURKMENISTAN	555.90	519.4	288.71	97.60	0.00	142.81	120.89	122.60	0.46	0.86
UZBEKISTAN	1,034.00	994.2	1,028.00	308.05	0.00	796.13	11.87	528.05	0.65	0.66
Central Asia	1,926.26	788.8	1,519.51	473.76	3.48	967.93	295.40	733.41	2.36	0.76
ARMENIA	0.00	0.0	0.00	0.08	0.22	0.22	0.00	0.08	0.00	0.00
AUSTRIA	0.00	0.0	0.00	0.63	3.74	2.87	0.02	1.48	0.51	0.52



2020/21 Supply and Use of Cotton by Country (continued)

	Area	Yield	Production	Begin Stocks	Imports	Consumption	Exports	End Stocks	S/U*	S/MU**
	000 Ha	Kgs/Ha			000 Metric Tonnes				Ratio	Ratio
AZERBAIJAN	100.00	677.2	67.72	50.60	0.00	29.48	38.24	50.60	0.75	1.72
BELARUS	0.00	0.0	0.00	3.51	7.14	7.34	0.20	3.11	0.41	0.42
BELGIUM	0.00	0.0	0.00	0.75	6.26	4.33	1.07	1.60	0.30	0.37
BULGARIA	0.79	323.7	0.26	2.21	2.57	2.21	0.01	2.83	1.28	1.28
CZECH REP.	0.00	0.0	0.00	0.34	1.16	1.02	0.00	0.48	0.47	0.47
DENMARK	0.00	0.0	0.00	0.00	0.05	0.04	0.02	0.00	0.00	0.05
ESTONIA	0.00	0.0	0.00	0.00	2.64	2.64	0.11	0.00	0.00	0.00
FINLAND	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FRANCE	0.00	0.0	0.00	1.80	8.88	7.89	0.81	1.98	0.23	0.25
GERMANY	0.00	0.0	0.00	4.73	15.29	14.67	2.29	3.06	0.18	0.21
GREECE	286.24	1,121.2	320.93	172.66	5.01	16.08	354.96	127.56	0.34	7.93
HUNGARY	0.00	0.0	0.00	0.02	0.33	0.00	0.38	0.00	0.00	0.00
IRELAND	0.00	0.0	0.00	0.02	0.07	0.15	0.00	0.00	0.03	0.03
ITALY	0.00	0.0	0.00	6.16	29.34	25.59	1.83	8.08	0.29	0.32
LATVIA	0.00	0.0	0.00	0.01	2.22	0.20	0.26	1.76	3.80	8.82
LITHUANIA	0.00	0.0	0.00	0.10	0.00	0.00	0.00	0.10	0.00	0.00
MOLDOVA	0.00	0.0	0.00	0.74	2.18	2.18	0.00	0.74	0.34	0.34
NETHERLANDS	0.00	0.0	0.00	0.45	1.79	2.59	0.07	0.00	0.00	0.00
NORWAY	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
POLAND	0.00	0.0	0.00	0.49	3.63	3.77	0.12	0.23	0.06	0.06
PORTUGAL	0.00	0.0	0.00	6.46	33.76	30.50	0.91	8.81	0.28	0.29
ROMANIA	0.00	0.0	0.00	0.04	0.18	0.18	0.03	0.00	0.00	0.00
RUSSIA	0.02	1,759.0	0.04	10.43	26.59	19.43	0.56	17.05	0.85	0.88
SLOVAK REP.	0.00	0.0	0.00	0.27	0.11	0.00	0.00	0.38	0.00	0.00
SPAIN	61.64	1,040.9	64.16	30.21	4.15	2.78	80.13	31.61	0.47	11.37
SWEDEN	0.00	0.0	0.00	0.01	0.01	0.01	0.00	0.00	0.18	0.23
SWITZERLAND	0.00	0.0	0.00	0.16	0.37	0.46	0.09	0.00	0.00	0.01
UKRAINE	0.00	0.0	0.00	0.44	0.70	1.64	0.00	0.00	0.00	0.00
UNITED KINGDOM	0.00	0.0	0.00	0.04	0.20	0.06	0.06	0.12	1.02	2.05
FORMER YUGOSLAVIA	0.00	0.0	0.00	6.01	7.00	6.81	1.00	5.20	0.66	0.76
Europe	448.69	1,009.8	453.10	299.30	165.36	184.94	483.18	266.80	0.40	1.44
Including EU-27	348.67	1,105.2	385.35	227.39	128.09	123.53	431.49	189.90	0.34	1.54
CHINA	3,170.00	1,864.3	5,910.00	9,024.71	2,800.08	8,400.00	30.00	9,304.79	1.10	1.11
HONG KONG	0.00	0.0	0.00	29.68	0.69	0.39	0.47	29.51	34.08	75.09
AUSTRALIA	297.00	2,047.1	608.00	0.07	0.00	1.59	340.41	266.07	0.78	167.48
INDONESIA	4.54	621.1	2.82	95.45	502.27	503.78	1.31	95.45	0.19	0.19
JAPAN	0.00	0.0	0.00	6.62	32.78	39.00	0.21	0.19	0.00	0.00
KOREA, D.R.	0.00	0.0	0.00	1.18	4.59	5.00	0.00	0.77	0.15	0.15
KOREA, REP.	0.00	0.0	0.00	53.94	121.01	137.64	0.54	36.77	0.27	0.27
MALAYSIA	0.00	0.0	0.00	13.27	136.98	81.50	55.48	13.27	0.10	0.16
PHILIPPINES	0.01	573.2	0.01	3.15	8.48	6.72	0.02	4.89	0.73	0.73
SINGAPORE	0.00	0.0	0.00	0.33	0.06	0.00	0.04	0.34	7.92	0.00
TAIWAN	0.00	0.0	0.00	40.38	56.71	85.10	5.13	7.10	0.08	0.08
THAILAND	1.00	1,500.0	1.50	51.06	130.16	152.50	0.16	30.06	0.20	0.20
VIETNAM	1.00	720.0	1.50	165.44	1,552.31	1,518.21	0.00	201.03	0.13	0.13
Eastern Asia	303.55	2,022.1	613.83	430.88	2,545.35	2,531.04	403.31	655.96	0.22	0.26
AFGHANISTAN	36.40	386.7	14.08	2.86	0.00	4.22	9.85	2.86	0.20	0.68
BANGLADESH	45.90	772.1	35.44	457.71	1,694.54	1,635.06	0.00	552.63	0.34	0.34
INDIA	13,007.00	462.7	6,018.87	3,429.93	183.70	5,698.25	1,326.76	2,607.49	0.37	0.46
MYANMAR	239.09	633.8	151.54	88.17	17.34	162.89	16.00	78.17	0.44	0.48
PAKISTAN	2,000.00	480.2	960.36	665.61	1,212.36	2,153.85	9.76	674.72	0.31	0.31
SRI LANKA	0.00	0.0	0.00	0.20	0.17	0.80	0.00	0.00	0.01	0.01
Southern Asia	15,331.30	468.5	7,182.43	4,645.10	3,108.37	9,657.46	801.46	3,916.50	0.36	0.41
IRAN	98.00	816.3	80.00	49.03	85.76	150.00	0.02	64.76	0.43	0.43
IRAQ	8.64	361.9	3.13	1.91	4.92	8.05	0.00	1.91	0.24	0.24
ISRAEL	4.43	1,693.0	7.50	2.27	0.00	0.00	8.20	1.57	0.19	0.00
SYRIA	24.58	972.9	23.91	8.63	0.00	14.95	8.40	9.19	0.39	0.61
TURKEY	359.20	1,827.0	656.25	1,170.68	1,160.00	1,577.18	127.28	1,282.47	0.75	0.81
Sub total	498.09	1,550.0	772.06	1,235.39	1,260.54	1,762.27	143.90	1,361.83	0.71	0.77
WORLD TOTAL	31,511.04	773.9	24,387.69	22,115.41	10,391.13	25,663.74	10,604.47	20,627.62	0.80	0.80

Note:

Subtotals and total include countries not shown..

* Ending stocks divided by consumption plus exports.

** Ending stocks divided by consumption.



2021/22 Supply and Use of Cotton by Country

	Area	Yield	Production	Begin Stocks	Imports	Consumption	Exports	End Stocks	S/U*	S/MU**
	000 Ha	Kgs/Ha			000 Metric Tonnes				Ratio	Ratio
CANADA	0.00	0.0	0.00	0.25	0.17	0.17	0.01	0.24	1.36	1.41
CUBA	4.05	272.4	1.10	0.64	2.20	3.30	0.00	0.64	0.19	0.19
DOM. REP.	0.00	0.0	0.00	0.46	0.97	0.97	0.00	0.46	0.47	0.47
MEXICO	145.42	1,591.9	231.49	166.05	177.75	302.94	106.30	166.05	0.41	0.55
USA	4,034.72	950.8	3,836.30	260.70	0.24	555.20	2,956.43	585.62	0.17	1.05
North America	4,190.66	971.3	4,070.21	429.00	181.43	863.68	3,062.86	754.10	0.19	0.87
EL SALVADOR	0.00	0.0	0.00	15.24	27.48	27.48	0.24	15.00	0.54	0.55
GUATEMALA	0.00	0.0	0.00	5.82	27.51	27.51	0.00	5.82	0.21	0.21
HONDURAS	0.10	319.9	0.03	0.30	0.00	0.00	0.00	0.33	0.00	0.00
NICARAGUA	0.48	550.3	0.27	0.07	0.00	0.27	0.01	0.06	0.20	0.21
Central America	0.58	508.8	0.29	21.43	55.00	55.25	0.26	21.22	0.38	0.38
ARGENTINA	508.38	850.2	410.67	797.57	0.00	110.55	121.58	976.11	4.21	8.83
BOLIVIA	4.31	647.1	2.79	1.23	0.09	3.45	0.00	0.65	0.19	0.19
BRAZIL	1,600.40	1,764.8	2,824.30	2,097.50	2.69	700.00	2,210.29	2,014.20	0.69	2.88
CHILE	0.00	0.0	0.00	0.28	0.31	0.05	0.00	0.55	11.51	11.51
COLOMBIA	18.45	855.1	15.78	13.44	11.22	27.00	0.00	13.44	0.50	0.50
ECUADOR	1.23	443.9	0.55	2.32	8.15	9.13	0.00	1.88	0.21	0.21
PARAGUAY	9.90	424.1	4.20	0.26	1.66	0.91	4.97	0.23	0.04	0.26
PERU	23.40	826.9	19.35	25.57	43.15	60.25	0.47	27.35	0.45	0.45
URUGUAY	0.00	0.0	0.00	0.00	0.00	0.01	0.00	0.01	1.38	1.38
VENEZUELA	14.18	395.7	5.61	3.12	4.63	10.09	0.00	3.28	0.33	0.33
South America	2,180.26	1,505.9	3,283.25	2,941.30	71.90	921.44	2,337.32	3,037.71	0.93	3.30
ALGERIA	0.00	0.0	0.00	0.06	0.85	0.85	0.00	0.06	0.07	0.07
EGYPT	84.00	833.3	70.00	18.55	88.76	102.76	56.00	18.55	0.12	0.18
MOROCCO	1.00	1,010.2	1.01	6.47	5.31	5.42	0.00	7.37	1.36	1.36
SUDAN	180.00	729.6	131.32	56.74	0.00	18.03	127.47	42.55	0.29	2.36
TUNISIA	2.00	5,050.8	10.10	2.76	2.35	12.35	0.00	2.86	0.23	0.23
Northern Africa	267.00	795.6	212.43	84.57	97.27	139.41	183.47	71.39	0.22	0.51
BENIN	700.00	437.7	306.40	151.00	0.00	2.00	290.00	165.40	0.57	82.70
BURKINA FASO	670.07	309.9	207.66	137.98	0.00	5.44	200.00	140.20	0.68	25.77
CAMEROON	227.45	706.5	160.70	64.85	0.00	1.90	131.50	92.15	0.69	48.50
CENT. AFR. REP.	32.70	254.6	8.33	3.86	0.00	0.00	8.44	3.75	0.44	0.00
CHAD	350.00	197.1	68.98	50.23	0.00	1.02	30.00	88.19	2.84	86.54
COTE D'IVOIRE	460.65	550.3	253.50	108.93	0.02	3.06	250.44	108.94	0.43	35.60
GUINEA	12.63	288.4	3.64	1.63	0.00	0.00	3.63	1.64	0.45	0.00
MADAGASCAR	19.59	0.0	0.00	0.93	0.00	0.00	0.00	0.93	0.00	0.00
MALI	810.00	394.0	319.15	12.52	0.00	2.00	265.84	63.83	0.24	31.91
NIGER	4.77	472.8	2.25	0.24	0.00	0.96	1.30	0.24	0.11	0.25
SENEGAL	25.00	341.6	8.54	0.07	0.00	0.00	4.77	3.85	0.81	0.00
TOGO	193.00	109.8	21.19	12.27	0.00	0.00	20.00	13.46	0.67	0.00
Francophone Africa	3,505.86	388.0	1,360.34	544.51	0.02	16.38	1,205.92	682.58	0.56	41.68
ANGOLA	2.84	310.6	0.88	0.29	0.00	0.61	0.27	0.29	0.33	0.48
ETHIOPIA	83.16	745.0	61.95	30.49	0.06	55.54	0.00	36.96	0.67	0.67
GHANA	15.28	377.3	5.76	12.05	1.30	1.30	5.76	12.05	1.71	9.24
KENYA	42.00	100.5	4.22	2.19	2.82	8.04	0.00	1.19	0.15	0.15
MALAWI	86.34	250.2	21.60	11.61	0.00	3.00	18.60	11.61	0.54	3.87
MOZAMBIQUE	137.66	166.3	22.90	11.45	0.00	1.30	21.60	11.45	0.50	8.81
NIGERIA	271.92	343.3	93.35	40.16	0.87	29.74	64.48	40.16	0.43	1.35
SOUTH AFRICA	28.50	813.1	23.17	43.72	12.70	17.18	18.69	43.72	1.22	2.54
TANZANIA	641.00	220.2	141.00	63.42	0.00	45.00	96.00	63.42	0.45	1.41
UGANDA	104.03	427.9	44.51	31.99	0.00	4.30	40.21	31.99	0.72	7.44
CONGO, DR	0.00	0.0	0.00	2.18	7.17	7.17	0.00	2.18	0.30	0.30
ZAMBIA	139.87	191.6	26.80	45.50	0.05	1.79	26.03	44.54	1.60	24.88
ZIMBABWE	246.81	231.9	57.24	34.02	0.00	2.81	53.80	34.65	0.61	12.32
Southern Africa	1,820.79	278.9	507.77	334.26	44.04	198.92	347.76	339.39	0.62	1.71
KAZAKHSTAN	125.80	637.6	80.20	32.54	0.48	13.22	52.42	47.59	0.73	3.60
KYRGYZSTAN	14.10	859.7	12.12	5.19	3.00	0.96	14.10	5.25	0.35	5.47
TAJIKISTAN	202.36	540.4	109.36	45.02	0.00	14.82	96.12	43.46	0.39	2.93
TURKMENISTAN	572.58	522.0	298.85	122.60	0.00	144.24	154.61	122.60	0.41	0.85
UZBEKISTAN	945.00	994.2	939.52	528.05	0.00	835.93	13.59	618.05	0.73	0.74
Central Asia	1,859.83	774.3	1,440.06	733.41	3.48	1,009.17	330.83	836.94	2.60	0.83
ARMENIA	0.00	0.0	0.00	0.08	0.22	0.22	0.00	0.08	0.00	0.00
AUSTRIA	0.00	0.0	0.00	1.48	2.62	2.76	0.02	1.32	0.48	0.48



2021/22 Supply and Use of Cotton by Country (continued)

	Area	Yield	Production	Begin Stocks	Imports	Consumption	Exports	End Stocks	S/U*	S/MU**
	000 Ha	Kgs/Ha			000 Metric Tonnes				Ratio	Ratio
AZERBAIJAN	100.00	680.6	68.06	50.60	0.00	29.78	38.28	50.60	0.74	1.70
BELARUS	0.00	0.0	0.00	3.11	7.14	7.34	0.20	2.70	0.36	0.37
BELGIUM	0.00	0.0	0.00	1.60	5.40	4.33	1.06	1.60	0.30	0.37
BULGARIA	0.79	325.3	0.26	2.83	2.57	2.21	0.01	3.44	1.55	1.56
CZECH REP.	0.00	0.0	0.00	0.48	1.16	1.02	0.00	0.61	0.60	0.60
DENMARK	0.00	0.0	0.00	0.00	0.05	0.04	0.02	0.02	0.00	0.60
ESTONIA	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FINLAND	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FRANCE	0.00	0.0	0.00	1.98	8.70	7.89	0.81	1.98	0.23	0.25
GERMANY	0.00	0.0	0.00	3.06	16.96	14.67	2.29	3.06	0.18	0.21
GREECE	271.93	1,121.2	304.88	127.56	5.01	16.08	298.81	122.56	0.39	7.62
HUNGARY	0.00	0.0	0.00	0.00	0.33	0.00	0.38	0.03	0.00	0.00
IRELAND	0.00	0.0	0.00	0.00	0.07	0.15	0.00	0.06	0.43	0.43
ITALY	0.00	0.0	0.00	8.08	27.42	25.59	1.83	8.08	0.29	0.32
LATVIA	0.00	0.0	0.00	1.76	2.22	0.20	0.26	3.52	7.57	17.60
LITHUANIA	0.00	0.0	0.00	0.10	0.00	0.00	0.00	0.10	0.00	0.00
MOLDOVA	0.00	0.0	0.00	0.74	2.18	2.18	0.00	0.74	0.34	0.34
NETHERLANDS	0.00	0.0	0.00	0.00	1.79	1.59	0.07	0.13	0.08	0.08
NORWAY	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
POLAND	0.00	0.0	0.00	0.23	3.63	3.77	0.12	0.00	0.00	0.00
PORTUGAL	0.00	0.0	0.00	8.81	33.76	30.50	0.91	11.16	0.36	0.37
ROMANIA	0.00	0.0	0.00	0.00	0.18	0.18	0.03	0.30	1.42	1.69
RUSSIA	0.02	1,767.8	0.04	17.05	26.59	19.43	0.56	23.67	1.18	1.22
SLOVAK REP.	0.00	0.0	0.00	0.38	0.11	0.00	0.00	0.50	0.00	0.00
SPAIN	63.49	1,046.1	66.42	31.61	4.15	2.78	80.13	29.27	0.40	10.53
SWEDEN	0.00	0.0	0.00	0.00	0.01	0.01	0.00	0.00	0.13	0.16
SWITZERLAND	0.00	0.0	0.00	0.00	0.37	0.46	0.09	0.03	0.05	0.06
UKRAINE	0.00	0.0	0.00	0.00	0.70	0.64	0.00	0.06	0.09	0.09
UNITED KINGDOM	0.00	0.0	0.00	0.12	0.12	0.06	0.06	0.12	1.01	2.03
FORMER YUGOSLAVIA	0.00	0.0	0.00	5.20	7.00	6.81	1.00	4.38	0.56	0.64
Europe	436.23	1,007.9	439.65	266.80	160.23	180.48	426.96	270.06	0.44	1.50
Including EU-27	336.21	1,105.1	371.56	189.90	145.28	118.32	431.49	187.27	0.38	1.58
CHINA	3,028.00	1,892.3	5,730.00	9,304.79	2,314.30	8,315.00	30.00	9,004.09	1.08	1.08
HONG KONG	0.00	0.0	0.00	29.51	0.69	0.39	0.47	29.34	33.88	74.65
AUSTRALIA	657.00	1,762.6	1,158.00	266.07	0.00	1.59	815.00	607.48	0.74	382.39
INDONESIA	4.09	621.1	2.54	95.45	539.31	513.85	1.31	122.13	0.24	0.24
JAPAN	0.00	0.0	0.00	0.19	43.22	38.61	0.21	4.59	0.12	0.12
KOREA, D.R.	0.00	0.0	0.00	0.77	4.59	5.00	0.00	0.37	0.07	0.07
KOREA, REP.	0.00	0.0	0.00	36.77	138.33	138.33	0.54	36.23	0.26	0.26
MALAYSIA	0.00	0.0	0.00	13.27	139.72	84.24	55.48	13.27	0.09	0.16
PHILIPPINES	0.01	576.1	0.01	4.89	6.88	6.89	0.02	4.87	0.71	0.71
SINGAPORE	0.00	0.0	0.00	0.34	0.06	0.00	0.04	0.36	8.27	0.00
TAIWAN	0.00	0.0	0.00	7.10	80.84	80.84	5.13	1.97	0.02	0.02
THAILAND	1.00	1,507.5	1.51	30.06	131.47	155.55	0.16	7.33	0.05	0.05
VIETNAM	1.00	723.6	1.51	201.03	1,700.59	1,680.59	0.00	222.54	0.13	0.13
Eastern Asia	663.10	1,754.7	1,163.56	655.96	2,785.02	2,705.50	877.90	1,021.14	0.28	0.38
AFGHANISTAN	36.40	388.6	14.15	2.86	0.00	4.22	9.85	2.93	0.21	0.69
BANGLADESH	45.90	776.0	35.62	552.63	1,688.00	1,730.00	0.00	546.25	0.32	0.32
INDIA	12,350.00	469.1	5,794.00	2,607.49	170.10	5,596.00	1,100.98	1,874.60	0.28	0.33
MYANMAR	241.48	634.5	153.21	78.17	27.30	164.52	16.00	78.17	0.43	0.48
PAKISTAN	2,110.00	599.8	1,265.62	674.72	1,200.44	2,447.59	9.46	683.73	0.28	0.28
SRI LANKA	0.00	0.0	0.00	0.00	1.17	0.80	0.00	0.38	0.48	0.48
Southern Asia	14,786.70	491.3	7,264.75	3,916.50	3,087.26	9,945.52	801.46	3,186.69	0.29	0.32
IRAN	98.00	820.4	80.40	64.76	85.76	150.00	0.02	80.90	0.54	0.54
IRAQ	8.64	363.7	3.14	1.91	4.92	8.05	0.00	1.93	0.24	0.24
ISRAEL	4.43	1,701.5	7.54	1.57	0.00	0.00	7.54	1.57	0.21	0.00
SYRIA	25.81	977.8	25.23	9.19	0.00	15.03	8.40	10.99	0.47	0.73
TURKEY	480.00	1,827.0	832.78	1,282.47	1,169.84	1,616.61	126.01	1,542.47	0.89	0.95
Sub total	620.12	1,532.6	950.37	1,361.83	1,270.38	1,799.77	141.96	1,641.85	0.85	0.91
WORLD TOTAL	33,376.94	791.8	26,429.35	20,627.62	10,072.01	26,158.17	10,072.01	20,902.64	0.80	0.80

Note:

Subtotals and total include countries not shown..

* Ending stocks divided by consumption plus exports.

** Ending stocks divided by consumption.