Cotton Outlook

Special Feature
August 2016

World Long Staple Market

Shifting price relationships


COTTON USA™
Purity of fiber.
Quality of fabric.
Responsibility for the planet.
Find out more at cottonusa.org.

Introduction

Our annual Long Staple Special Feature is published at a time of contrasting production trends in this specialised sector of the market. The improved water situation in California will allow for a recovery of the US Pima crop. Egypt, in contrast, will produce the smallest crop of modern times. Despite declining local prices and oversupply, China is expected to produce more long staple cotton this season than last.

On the demand side, there are intimations that the shifting relationship between long staple and upland prices may be providing a stimulus to consumption. Supply and demand developments, therefore, will repay careful attention during the months ahead, not least as the past season has seen a substantial fall in carryover.

Having fallen over a protracted period, the cheapening of long staple prices relative to those of upland has been accentuated by an unexpected rally in the latter.

In addition to these market-related observations, a common theme of several contributions to this publication concerns the importance of technological innovation as a weapon in the armoury of those defending the present well-being and future viability of long staple production. That challenge is encountered throughout the long staple value chain: from maximising productivity in the field and minimising environmental impacts, to protecting the integrity and cachet of the long staple brand in the high street.

COTLOOK A INDEX 50 YEARS 1966-2016

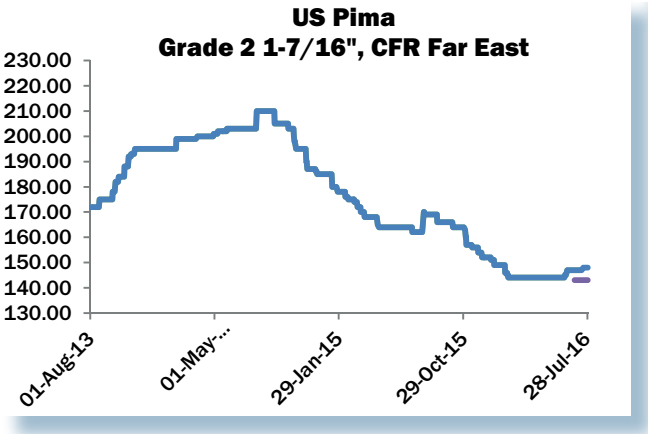
Celebrating 50 years of the Cotlook A Index

Long Staple Market: an End to the Bearish Price Trend?

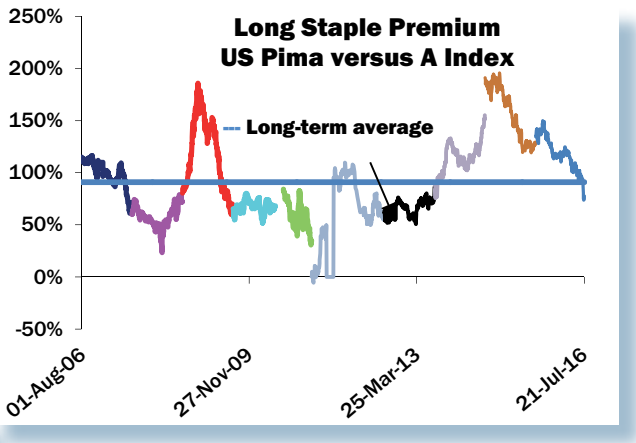
Mike Edwards, Editor,
Cotton Outlook

2015/16 Marketing Year

The lengthy retreat of long staple prices that began in September 2014 persisted during most of the 2015/16 marketing year. Our benchmark quotation for American Pima Grade 2 1-7/16" fell progressively from a high point of 210.00 cents per lb, CFR Far East, in early September 2014, to a low point of 144.00 cents per lb in February 2016. There it remained until early June, when the depleted supply from the 2015/16 crop imparted renewed firmness to offers. By late July our quotation had firmed slightly, to stand at 148.00 cents per lb.



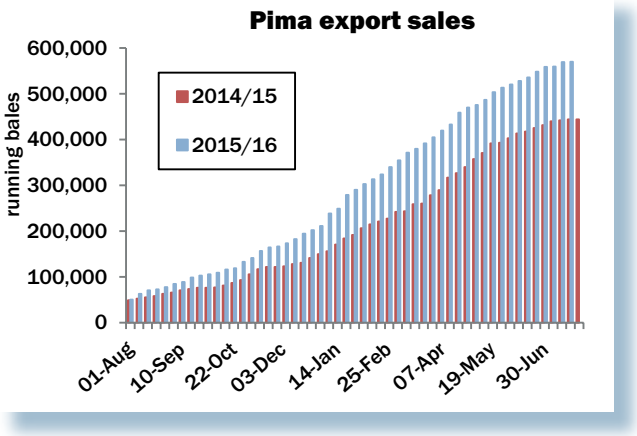
By then, forward offers from the 2016/17 crop had emerged, typically reflecting a modest discount in relation to those for the dwindling current crop supply.



Whether the long staple market's downward direction of travel had come to an end was not clear, but traders drew some encouragement from signs of early demand from various import markets, for supplies from the 2016/17 Pima crop. USDA's July 21 export report indicated forward sales commitments for shipment during the 2016/17 season at a robust 105,500 running bales.

Despite the modest, late-season upturn in Pima values, since nearby upland prices staged a strong rally at the end of the season, long staple values have continued to cheapen in relation to the upland market. The long staple premium – calculated by comparing our US Pima quotation with the Cotlook A Index – crossed the long-term average (about 91 percent) in early July, and toward the end the month had fallen to around 74 percent.

Page design and layout by Pam Jones, Cotton Outlook.
Published by : Cotlook Limited, Outlook House, 458 New Chester Road, Rock Ferry, Birkenhead, Merseyside, CH42 2AE, U.K.
Tel : 44 (151) 644 6400 Fax : 44 (151) 644 8550 E-Mail : editor@cotlook.com World Wide Web : www.cotlook.com



The steadier appearance of US Pima prices over the past few months has coincided with a period of more active export sales, though the pace has dropped somewhat in recent weeks. By late July, the 2015/16 season's cumulative sales amounted to almost 570,000 running bales (say, 129,000 tonnes), of which nearly 72,000 (16,000) had yet to be shipped. The total is roughly 28 percent ahead of the corresponding figure at the same point of the previous campaign.

Sales to China by the date in question were 12 percent below those a year earlier, but all other major destinations showed an increase, including most notably the second largest market, India, commitments to which had more than doubled, and the third, Pakistan which showed growth of more than 70 percent. A sharp increase was also attributed to Turkey.

USDA July Pima S&D
(thousands 480 lb bales)

	2015/16	2016/17
Beginning stocks	259	146
Production	433	585
Imports	4	0
TOTAL SUPPLY	696	731
Domestic mill use	25	25
Exports	525	550
TOTAL DEMAND	550	575
Ending stocks	146	156

USDA's July estimates place the season's exports at 525,000 bales of 480 lbs. A substantial reduction of ending stocks – from 259,000 to 146,000 bales - will thus have taken place during the course of the campaign.

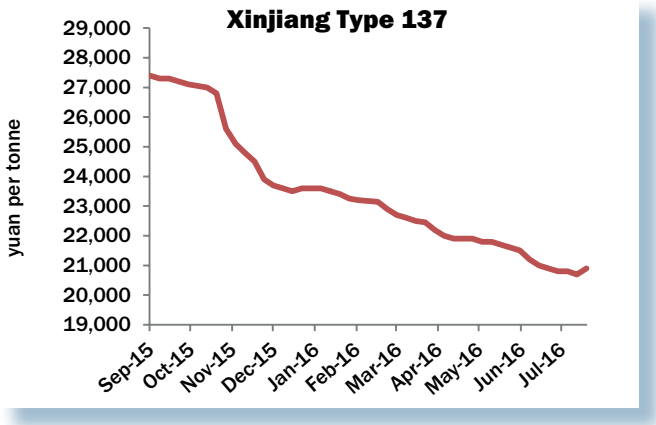
In Egypt, by contrast, the pace of export registrations has throughout most of the season been well behind that recorded in 2014/15. By July 23, just over 30,500 tonnes had been committed for export (of which 76 percent had been shipped), compared with 49,630 tonnes at the same point a year earlier.

Quality issues have been well to the fore (a significant part of the export business is understood to have involved Giza 86 from the 2014/15 crop). As a result, the price indications that have accompanied the export data reported weekly by the exporters' association, ALCOTEXA, have shown wide variations.

For spinners in various import markets, Turkmen long staples have provided a timely source of supply throughout the season. Availability has been influenced by adjustments to marketing policy at the origin, where a sizeable backlog of uncommitted supplies from previous crops, comprising both upland and long staple cotton, had been allowed to accumulate.

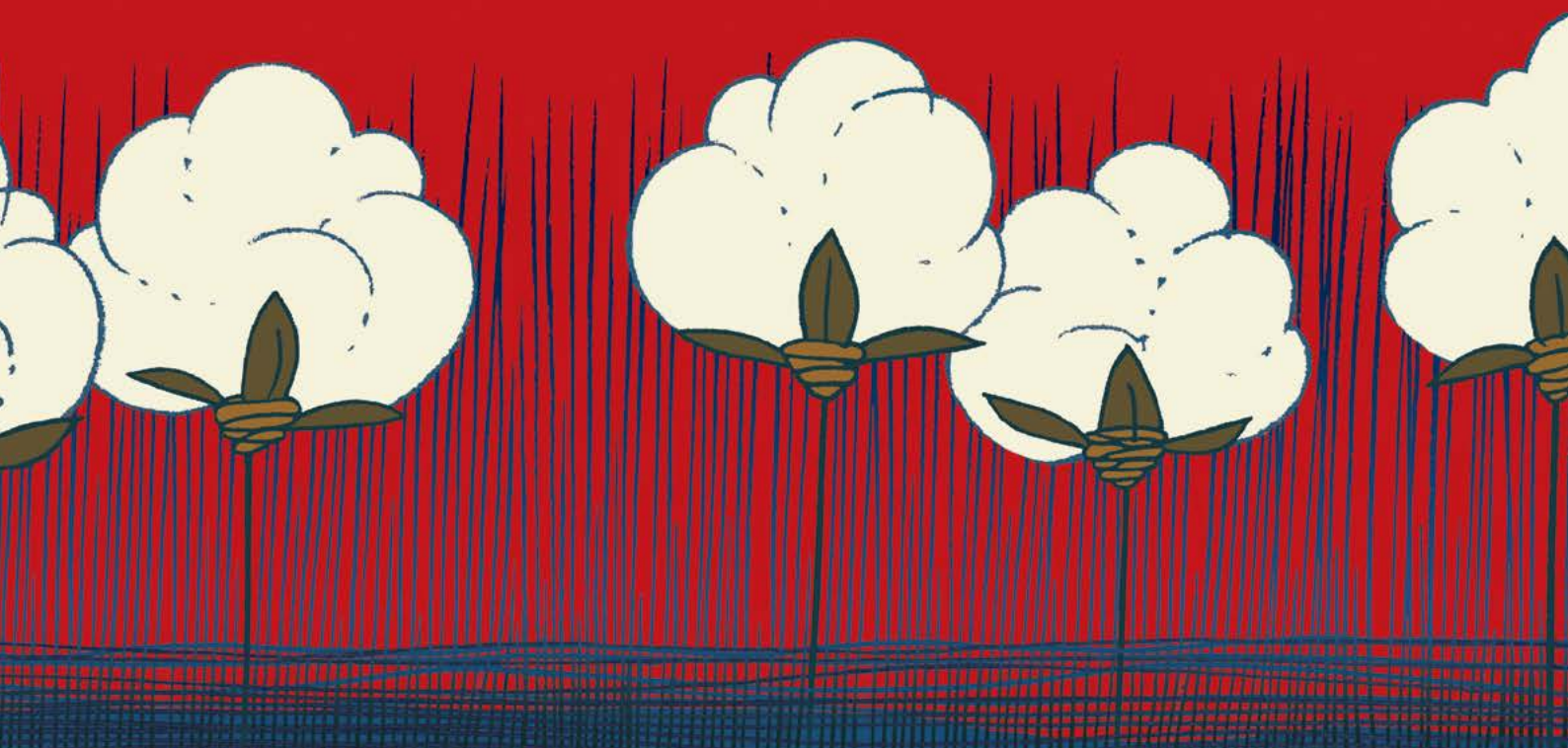
By dint of obliging international buyers purchasing current crop upland cotton also to take some old crop long staples, the marketing authorities have succeeded in forcing the latter into trade hands, for subsequent sale to fine count spinners. Export sales from origin since last August are estimated to be well in excess of 40,000 tonnes, more than half of which came from crops prior to 2015/16. By mid-July, the quantity still uncommitted at origin was placed at about 5,000 tonnes.

Domestic prices in China continued to decline for most of the season before a slight upturn in mid-July, in sympathy with sharply rising upland values. In percentage terms, at nearly 24 percent, the downturn since last August has been more substantial than that of international values (our Pima quotation has lost



COMMITTED TO COTTON

REINHART SINCE 1788



Paul Reinhart AG
Technikumstrasse 82
P.O.Box 2259
CH-8401 Winterthur
P: +41 52 264 81 81
F: +41 52 212 00 55
mail@reinhart.ch
www.reinhart.com

13 percent) during the period. Despite the erosion of local market values and the aforementioned over-supply, the export marketing of surpluses mooted at the start of the season as a possibility by some international traders - potentially a bearish factor for world long staple values - has not materialised. However, as discussed elsewhere in this publication, efforts are under way to secure the incorporation of a Chinese value in the mechanism by which Washington determines the Pima Competitiveness Payment.

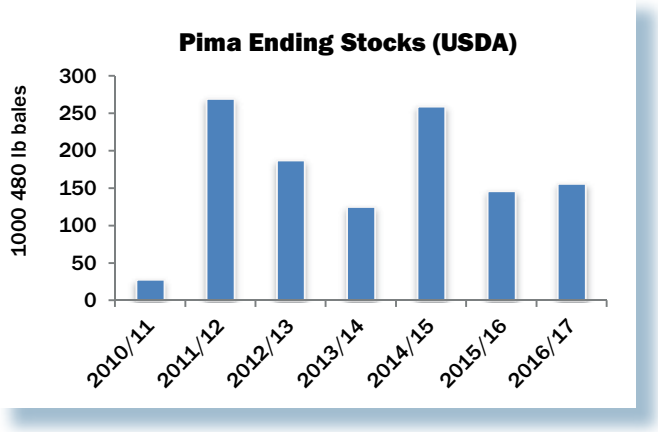
Outlook for 2016/17

With sowing of crops in the Northern Hemisphere complete, contrasting fortunes are in evidence with regard to the prospects for long staple production in the US Far West and Egypt.

In the former producing region, the winter and spring of 2015/16 have been characterised by significant precipitation: both rainfall to replenish the badly-depleted reservoirs, and snow to boost the Sierra Nevada snowpack, from which run-off is also an important contributor to water supplies available for irrigation.

Washington's forecast of new crop production from the 2016/17 crop has been adjusted downward to 585,000 bales, from the 635,000 suggested in the May report, the result of a lower planted area. However, the new crop estimate represents a significant rise in output in comparison to 2015/16. Although exports are forecast to increase modestly, the carryover is expected to have risen by 10,000, to 156,000 bales by the end of next season.

The further decline of Egyptian production is discussed in our report on pages 15/16. The result is that neither ELS varieties nor Giza 86 is likely to register more than a fleeting presence in the international market, during the season ahead.



In China, reports from Xinjiang of continued enthusiasm for long staple cultivation seem at odds with the headlong fall of market prices described above, but can of course be explained by the provisions of the region's target price system, which enshrines a premium for long staple production. Aware of the oversupply that has developed in this sector of the market, the authorities appear to have succeeded in engineering a reduction in the area devoted to the 2016/17 crop, but an anticipated recovery of yields (depressed last year by excessive summer temperatures) should more than offset the decline, and a modest increase in output is indicated.

In India, the impression gained is that, despite the domestic deficit of long staple supply, production continues to stagnate. The better returns obtainable from higher-yielding upland styles continue to suggest that long staple output will, at best, be maintained. Some observers anticipate a small decline.

In Israel too, a modest reduction in output would seem to be in prospect, as producers respond to the progressive decline of international prices described above.

Turkmenistan remains the only significant long staple producer in Central Asia. Output there is expected to be maintained. In Uzbekistan and Tajikistan, production has dwindled to very meagre proportions in recent seasons, though some reports indicate the possibility of recovery in 2016/17, in the latter country.

On the demand side of the market, reports from various markets betray little conviction that a major change in the pattern of mill consumption is foreseeable next season. The relative cheapening of fine count cottons, relative to the upland market, should nonetheless help to sustain or stimulate mill use, in which case our consumption forecasts for next season may prove conservative. The encouraging US export data alluded to earlier would seem consistent with that proposition.

World LS Output (tonnes)

	2013/14	2014/15	2015/16	2016/17	2016/17 v 2015/16
United States	138,037	123,232	94,275	127,369	35%
Egypt	86,904	99,609	47,620	28,018	-41%
of which:					
ELS	4,762	3,588	1,601	2,003	25%
Giza 86	82,142	96,021	46,019	26,016	-43%
Sudan	857	-	450	1,000	122%
Uzbekistan	1,500	1,000	1,000	1,000	0%
Tajikistan	700	500	500	750	50%
Turkmenistan	17,415	22,726	22,500	22,500	0%
India	75,000	88,400	94,350	90,000	-5%
Peru	6,000	4,500	12,500	12,000	-4%
China	35,000	86,000	122,000	127,000	4%
Israel	11,000	14,000	16,000	13,000	-19%
Spain	1,820	5,000	4,850	5,350	10%
Australia	-	-	-	-	
Total	**374,234**	**444,968**	**416,045**	**427,987**	3%

As things stand, our global total shows a net decrease, owing to the prospect of a significant reduction of consumption by Egypt's spinners, on the grounds that the local supply will not be available from a much diminished carryover, and a 2016/17 crop that will set a new low in modern times.

World supply and demand

Our initial forecasts of world production and consumption suggest a market broadly in balance during the season ahead. Production is expected to rise modestly, the further downturn in Egypt having been more than offset by a higher forecast for the United States. The contraction of anticipated mill use in the former country – for want of domestic supply – is the single largest adjustment between seasons on the consumption side of the equation.

However, one should perhaps bear in mind that the season's beginning stocks have been lowered substantially in the United States (where, as one of our contributors notes, much of the carryover comprises cotton from the 2014/15 crop), in Egypt and in Turkmenistan. That fact may prove of significance as the new season progresses, especially if crops should suffer any setbacks, or if the shifting relationship between upland and long staple values should result in a more keen appetite for the latter than our current figures suggest. If that proves to be the case, long staple producers may have reasonable grounds to hope that the protracted fall of prices has about run its course.

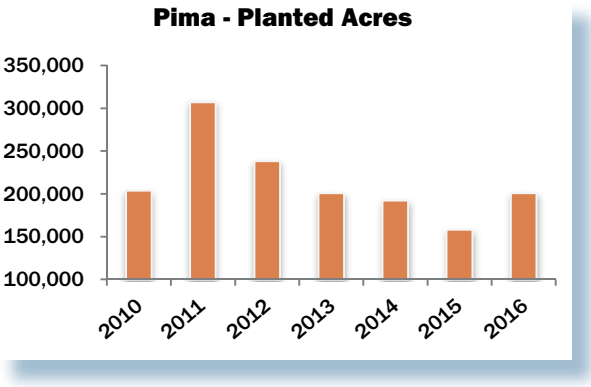
World LS Consumption
(tonnes)

	2013/14	2014/15	2015/16	2016/17	2016/17 v 2015/16
Americas					
United States	5,008	5,443	5,443	5,443	0%
Mexico	600	650	650	650	0%
Peru	12,000	13,000	13,000	13,000	0%
Europe					
Italy	3,000	3,000	3,000	3,000	0%
Switzerland	2,000	2,000	2,000	2,000	0%
Germany	5,000	4,500	5,000	5,000	0%
Turkey	17,000	11,000	12,000	13,000	8%
Portugal	500	800	2,000	2,000	0%
Asia					
China	125,000	120,000	120,000	125,000	4%
India	130,000	130,000	145,000	148,000	2%
Pakistan	25,000	30,000	35,000	38,000	9%
Indonesia	7,200	4,000	5,000	5,300	6%
Japan	3,800	4,500	4,000	4,000	0%
South Korea	2,800	2,600	2,600	2,500	-4%
Bangladesh	11,500	12,000	11,000	11,000	0%
Thailand	5,200	5,000	4,000	4,000	0%
Taiwan	800	1,600	1,000	1,500	50%
Turkmenistan	500	1,000	1,000	1,000	0%
Africa					
Egypt (ELS + G86)	34,672	17,883	50,500	35,000	-31%
Others	4,500	4,500	4,500	4,800	7%
Total	**396,080**	**373,476**	**426,693**	**424,193**	-1%

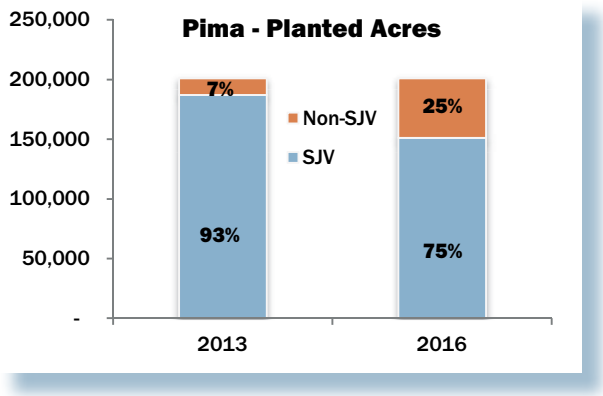
Extra Long Staple Cotton Shows Massive Shifts

Ernie Schroeder Jnr., CEO,
Jess Smith and Sons

Mills and growers often look at conditions in their "backyard" first to project on the world situation. This season shows the danger of not looking at the big picture. Some areas are sharply reducing production while others are expanding. Surpluses appear on paper but not in the market. Let's try to analyze the entire world Extra Long Staple market to understand the conflicting positions.

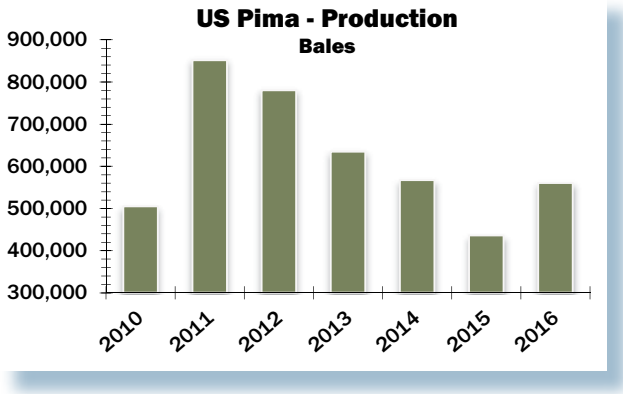


In the United States, two factors combined to increase Pima acreage by over 25%. For the three years prior to the current season, water was extremely limited in the San Joaquin Valley as a double drought occurred. First, there was a natural drought as reservoirs dropped due to lower precipitation and a low snowpack. Growers also suffered from a Congressional drought as restrictions were placed on pumping limited water that could be used for agriculture. As planting approached in 2016, increased rainfall helped restore reservoir levels and made growers more optimistic about receiving more water. The second factor that caused larger acreage was disastrously low prices for competing crops such as hay and tomatoes. While Pima prices at



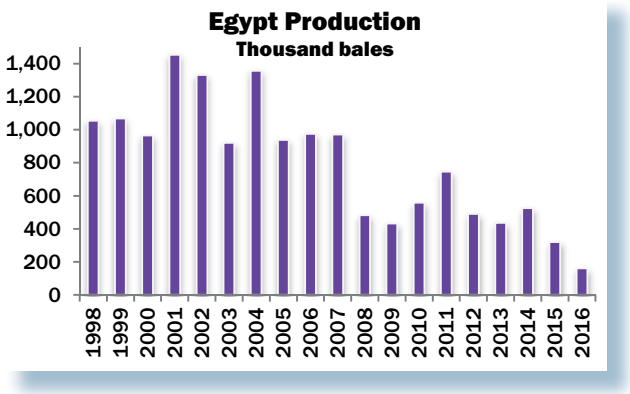
planting time were sharply lower than in recent years, competing crops were even less attractive to plant. Planted Pima acreage in the US is projected to have been up 26% to about 200,000 acres.

In the last few years, with the water limitations in the SJV, there has been a shift in acreage outside the San Joaquin Valley. While total Pima acreage in 2013 and 2016 appear to be equal, 93% of the Pima acres in 2013 were from the SJV. This season, it is expected that about 25% of the Pima acreage will be in Arizona, New Mexico and Texas.



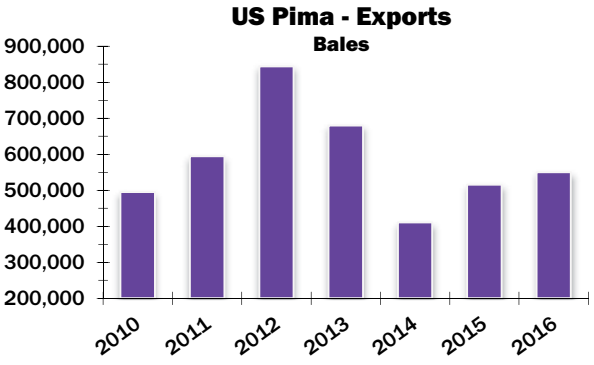
At this early point of the season, projecting yields is very difficult. There were problems during planting, including some isolated hail and flooding that were much less than ideal. Since then crop conditions appear good. Growers are already spraying for Lygus, as the spring rains provided them a home until cotton began to grow. We are anticipating a crop of about 585,000 bales compared to last season's 433,000.

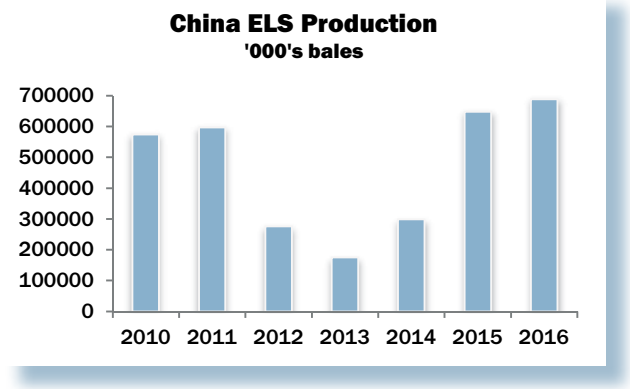
Exports of Pima rose in the 2015/16 season to about 535,000 bales, 125,000 more than the previous season. Concern about spinnability in the 2013 and 2014 seasons had reduced demand for US Pima, but the quality of the 2015 crop restored demand. Helping restore the confidence were efforts such as Jess Smith Laboratory for testing Pima cotton. A major shift occurred in the markets for US Pima. In the 2014/15 season, China bought 54% of all US Pima sold. This year, China is buying less cotton, despite overall exports increasing. In the 2015/16 season, it will represent less than 40% of US Pima exports. However, reductions in Egyptian production have allowed demand for US Pima in the rest of the world to increase, offsetting the decline in China.



For the 2016/17 season, it appears likely that Pima stocks will be tighter than this season. Current projections place Pima stocks on August 1, 2017 at 120,000 bales.

While the US situation by itself may look supportive to prices, the changes in Egypt are even more dramatic. With questions about seed quality and farmer concern over the lack of strong support from the government for cotton, acreage collapsed this season, dropping to just 50% of last season's area. The expected crop is just 160,000 bales, almost 90% less than Egyptian production at the beginning of the century. Instead of being a competitor in export markets, Egypt may become one of the largest importers of Extra Long Staple cotton.





US Pima Supply and Demand
000's 480lb bales

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Begin Stocks	28	28	269	187	125	259	135
Production	851	851	780	634	566	433	585
Consumption	22	22	22	23	25	25	25
Exports	672	594	844	680	410	525	575
End Stocks	188	269	187	125	259	146	120

Pima stocks at the end of the 2015/16 are now forecast at 135,000 bales. As of the end of July, there are still 80,000 bales of 2014 and earlier cotton still with Electronic Warehouse Receipts (EWR) in California. This would place the carryover of 2015 crop at less than 55,000 bales, with sales carried forward about equal to that amount.

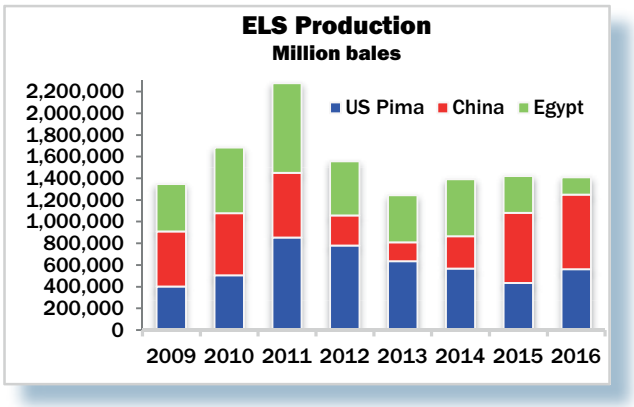
While China was supporting Upland farmers by offering to buy all Upland cotton at a lucrative price, there was no program for Chinese ELS cotton. As a result, during the 2011-13 seasons,

China ELS Supply and Demand
000's 480lb bales

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Begin Stocks	147	170	423	354	322	400	703
Production	574	597	276	175	299	648	689
Imports	781	744	762	799	698	634	551
Consumption	827	643	689	551	565	592	666
Exports	23	23	23	23	23	23	23
End Stocks	188	423	354	322	400	703	1,254

production of Chinese ELS fell dramatically. In the 2014 season, China changed policy, converting to a Target Price program. After growers had planted the 2014 crop, it was announced that producers would receive a support payment equal to 130% of the Upland support price. This was a large incentive to producers, and acreage more than doubled in the 2015/16 season as a result. Harvest problems in the 2015 season prevented the larger crop from collapsing prices, however, it is projected that ELS acreage will be a little larger for the 2016 crop.

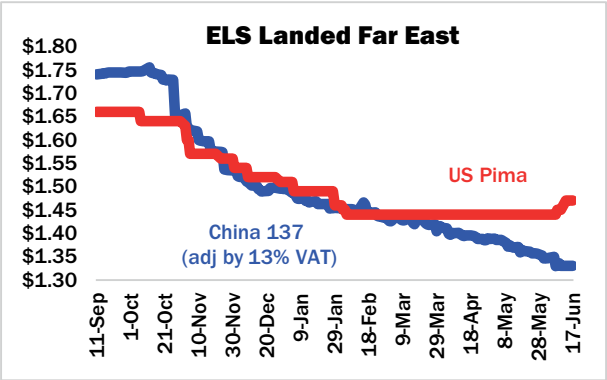
Chinese stocks at the end of the 2015/16 season are estimated to be over 700,000 bales. It is no surprise that we have seen this dramatic jump in stocks, given the more than 60 cents per pound subsidy being paid to Chinese producers. For the 2016/17 season, ELS stocks could exceed 1.25 million bales on August 1, 2017, almost double the annual Chinese consumption, raising questions as to how that surplus will be addressed.



World Extra Long Staple production will be practically unchanged, but there is a large shift in where it will be produced. Egypt will be down sharply, the US and China will have modest increases. This suggests that the major factor in world trade will be a shift in markets. China may import less while US will replace Egyptian in many markets.

Landed Far East prices for US Pima fell through most of the season until they began to turn higher at the end of the season. On a similar quote basis, taking interior Chinese ELS quotes and converting them to an export price, shows that Chinese ELS prices began the season over 10 cents higher than US, but by the end of the marketing year, they were almost 15 cents less than US prices.

This shift in prices in China caused by government support of producers is exactly the reason the United States Congress has included in the Farm Bill for many years a "Competitiveness Price Program". The Farm Bill states that the goal of the Competitiveness Program is to maintain and expand domestic use of Pima, to expand exports of Pima and to keep Pima competitively priced in world markets. In the



past, USDA has used a formula for competitiveness determined only using CIF Prices in the Far East. They have only followed three growths to make the comparison: Egyptian Giza 86, Egyptian Giza 88 and Israeli Pima. Due to quality issues, Giza 86 has not been used for several years and, because of its small volume, Giza 88 has not been quoted either. Clearly, the subsidy in China is preventing US Pima cotton from being competitive in China and it is losing exports as a result. The USDA has been approached to revise their calculation and include Chinese ELS for the comparison and competitive purposes. Since China has yet to begin exporting, there is no CIF Far East quote. However, it is possible to take interior Chinese ELS quotes and adjust them to a CIF quote by adding transportation cost to the port, the 13% Value-Added Tax and the 1% Import License Fee. The USDA has been asked to make this change and, if they follow the intent of Congress, may begin to develop the appropriate formula this year.

Over the years, the US Pima industry has developed and expanded its market share tremendously, and much of this is owed to the Supima licensing program and support of the industry to promote this incredible fiber. The Supima organization has created demand by promoting the superior American Pima qualities to mills, manufacturers and brands/retailers across the world, who are willing to support the program in order to use the SUPIMA® trademark on their products. To continue the success of the program, mills, manufacturers, brands/retailers and consumers must be sure that SUPIMA® products are made with American Pima cotton and generically labeled "Pima" programs containing blends or other ELS cotton are prevented from being sold as Supima®. The Supima organization has been working for almost a decade to improve and expand its authenticity testing and traceability. For example, one of the many tools that are being utilized is fiberTyping™, which allows Supima to take a sample of a product, from fiber to a finished retail product, to test and ensure that the product is not blended. We continue to support Supima's efforts and are confident in fiberTyping™ as being an effective tool in the arsenal in ensuring authenticity.

Sustainability and Cotton Production in California

Brad Reinhart, Cotton Marketing Manager,
J G Boswell

You can walk into the produce section of almost any grocery store in America and be confident that a good portion of the fruits, nuts and vegetables you find came from the fertile soil of the San Joaquin Valley of California. And when you step into the doors of a high-end apparel or home fashion retailer, you can be certain the large majority of their Supima cotton products are made with the California-grown fiber.

In addition to being one of the most agriculturally productive areas in the U.S., California is also politically one of the most progressive. We tend to lead the U.S. in adopting laws that protect the environment, reduce greenhouse emissions, and encourage renewable energy production. This drive towards sustainability comes at a significant cost to the business that operates here, and farming operations are no exception.

In 2006, California was the first state in the country to take a comprehensive, long-term approach to addressing climate change by setting a statewide limit on greenhouse gas emissions through the passage of Assembly Bill (AB) 32. Specifically, the law requires that there be a greenhouse reduction target of 20% from 1990 levels by 2020, and more recently a 40% reduction from 1990 levels by 2030. These are extremely aggressive goals that impact all aspects of farming operations - transportation, electricity, fuel and even the varieties of crops grown.

Row crops, like cotton, tend to be more equipment-intensive than permanent crops, like almonds and pistachios. Each year, the ground needs to be worked, seeds planted, and cultivated throughout the season. There's significant land preparation the first year with a permanent crop, but very little once the trees are planted. The higher energy costs, which are a direct consequence of AB-32, are hastening this conversion.

To ensure regulated emissions are kept at a minimum, our local permitting agency, the San Joaquin Valley Unified Air Pollution Control District, requires every diesel-fueled stationary and transportable engines over 50 horse-power used on a farm to be a tier 3 or tier 4 engine. In addition, any new pumping equipment over 50hp and all new tractors, harvesters, backhoes and graders are required have a tier 4 engine. These requirements add higher costs to farming operations, as new equipment is more expensive due to the more advanced engine technology. Also, the more complicated electrical components add to repair and maintenance expenses. Further, ozone emission standards are set to become even more stringent due to our region's "Extreme" classification for ozone non-attainment, under the Federal Clean Air Act. Our local air district and the Natural Resource Conservation Service administer highly successful incentive programs to assist with offsetting the cost of the voluntary replacement of affected engines and equipment, however the funding is not nearly adequate to cover the need.

In 2011, California signed into law the most ambitious renewable portfolio standard in the country. Governor Brown established the lofty goal of having 33% of total electricity come from renewable sources by 2020 and 50% by 2030. Renewable energy from sources such as wind, solar and geothermal not only tend to be more unreliable compared to sources like natural gas or coal, but also are more expensive. In addition, new transmission lines will need to be built to deliver the power at a significant cost. These additional expenses will be transferred to the users

Our company has been farming this land since 1925. And because we intend to keep farming it for years to come, our team manages the land in ways that will keep it healthy and productive. The J.G. Boswell Company pioneered many of the farming techniques that not only increases yield, but eliminates the waste of precious resources. Our fine quality product comes from attention to detail and from Boswell being the only company in the United States that produces, processes and supplies cotton directly to our spinning mill customers.

simply through higher rates. California cotton ginners already pay over $5.00/bale for electricity, compared to their counterparts in the rest of the U.S. that pay near $3.50/bale.

No other single factor has had a larger impact on agriculture in California than the state laws surrounding water allocations. In 2015, which was the third year of a historic drought, 50% of the total surface water was devoted to environmental purposes and flowed needlessly to the Pacific Ocean. This happened at the same time as there was a deficit some estimate at 2.5 million acre-feet of water in the San Joaquin Valley, where the majority of the cotton is grown in California. Farmers, reacting to the shortage of surface water, pumped groundwater through wells simply to survive. Wells are used only as a last resort, as the cost to pump is higher and the quality is generally poor. In addition to water supply regulatory constraints, every irrigated farming operation is required to obtain a state permit that governs practices that affect salt and nitrated issues within groundwater.

Given the high costs of inputs of water and energy, farmers in the San Joaquin Valley are using technology to eliminate waste of resources and maximize yield at the same time. This is a clear example of how the farmer's bottom line and the environment are both benefitting. Less diesel is unnecessarily burned, and fertilizer and pesticides are used only when needed and in the correct amounts.

Drip irrigation is utilized where it makes sense, as in areas with sandy or variable soil types. On ground where flood irrigation is used, the fields are usually laser-levelled, enabling the water to flow evenly across. There are new technologies being implemented that enable farmers to monitor soil moisture, water pressure, flow rates, and control irrigation pumps - all via their phones.

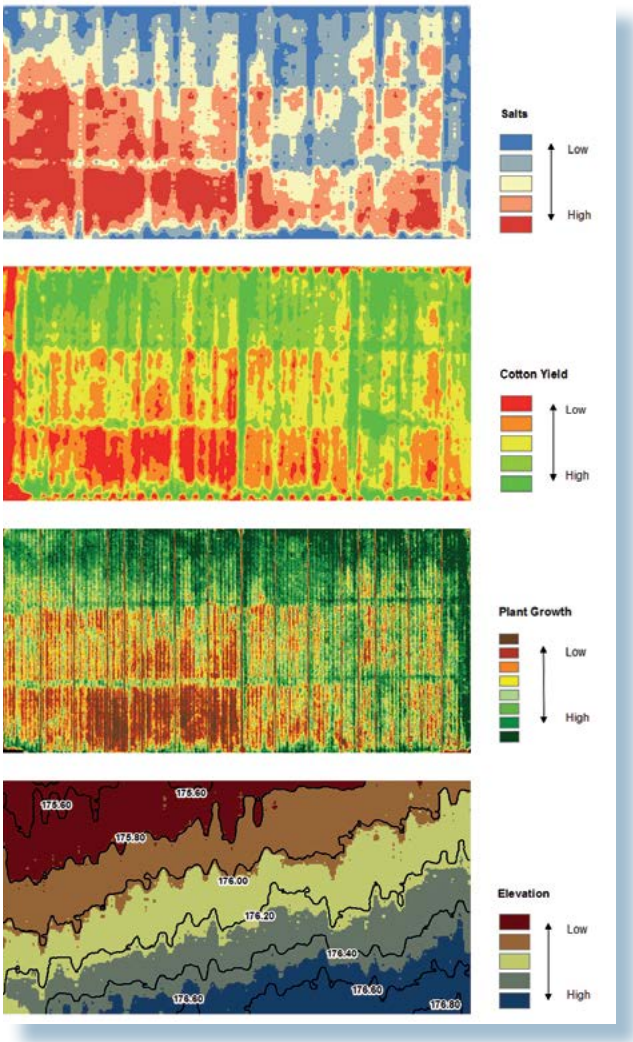
Early on, all of the tractors that were used in the tilling and cultivation of the soil were retrofitted with GPS that allows the tractor to be located within a few inches anywhere on earth. This assures that ground is worked in a uniform manner and not unnecessarily worked twice or rows missed. This reduces wasted time and diesel, and limits the NO2 emitted by the tractors.

Perhaps the most exciting advances have been made in measuring soil fertility. Through erosion over millions of years, sodium from the Sierra Nevada Mountains and Coastal Ranges has settled in the Valley. This salt in large amounts will severely limit the growth potential of the crops planted. However, new soil sampling technology allows us to measure the electrical conductivity and identify the relatively salty areas on a map. There tends to be a strong correlation between the level of saltiness and plant growth, and yield projections can be made based on this information. Fields are photographed by aircraft two months after the crop is planted, and spatial software is used to determine the amount of plant vigor. In addition, all cotton harvesters are equipped with yield monitors that calculate the amount of the seed cotton passing through the picker head at any point. Software is then used to generate a map of the field that indicates the higher yielding areas versus the lower yielding areas.

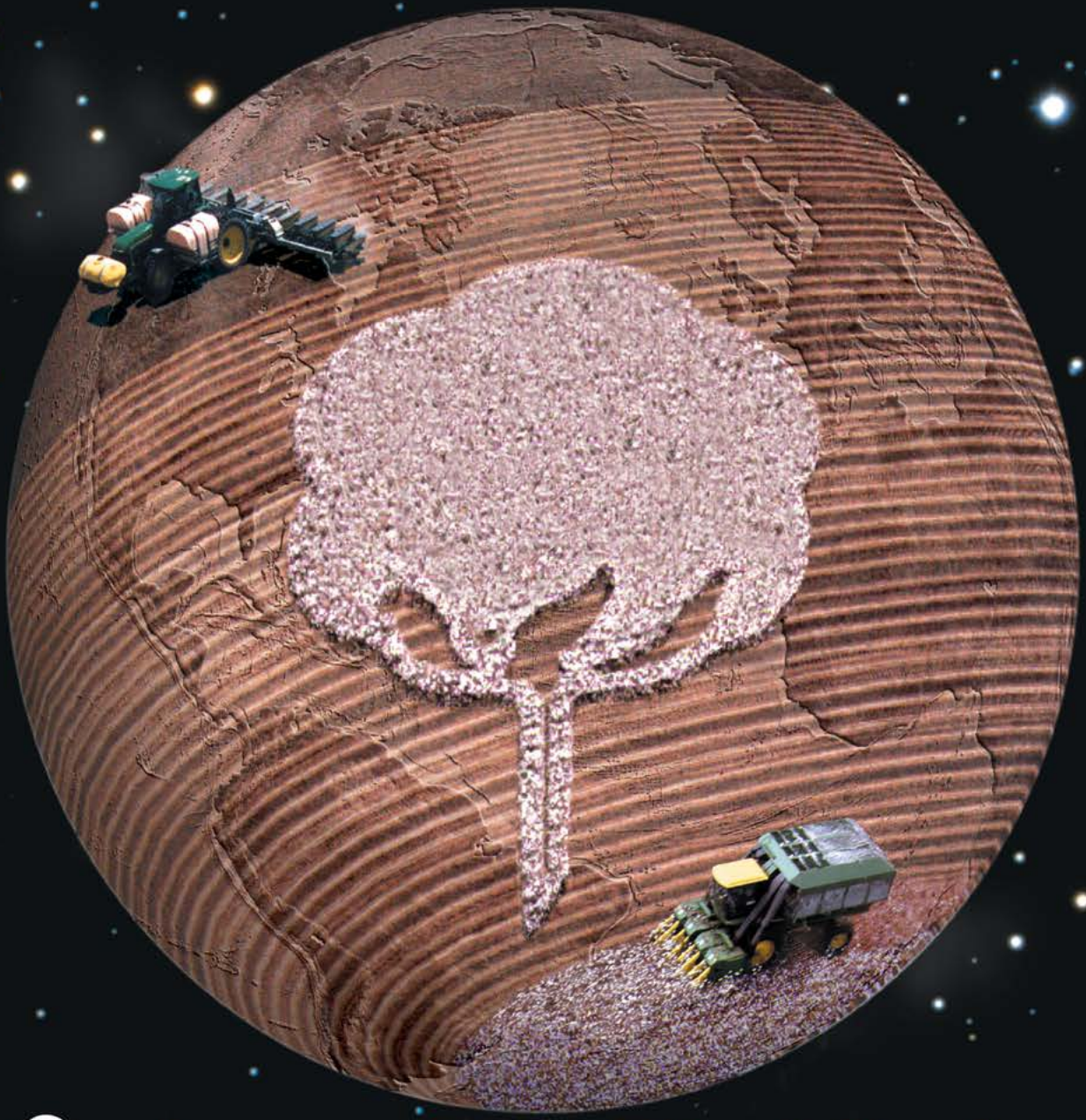
So how is all this data and information useful to an agronomist? It allows the farmer to make informed decisions about seeding and fertilizer application rates. If an area of the field is deemed to be less productive and therefore the plants less vigorous, the agronomist can program into the tractor's computer a smaller amount of fertilizer be applied in that specific area. Conversely, the seeding rate may be increased in a less productive area of the field.

Gypsum is a soil amendment that is used to help leach the salt out of the root zone of crops. An agronomist now has the information allowing him to identify where to apply more gypsum in salty areas, and less where the ground may not need it. Before this technology was available, the same amount of gypsum was spread uniformly across the field.

The laws of California, combined with our farmers' expertise and technology, make our cotton the most sustainably grown cotton in the world. Nowhere else are water, fertilizer, fuel and energy more efficiently used. This focus on reducing waste is something that must be done to remain competitive, given our elevated cost of production.



PIMA
DEPENDABILITY AND SERVICE
ALL OVER THE WORLD.



allenberg cotton co.

A DIVISION OF LD COMMODITIES COTTON LLC.

8225 N. FRESNO ST.
FRESNO, CA 93720
PHONE: 1-559-447-1800
FAX: 1-559-448-4846

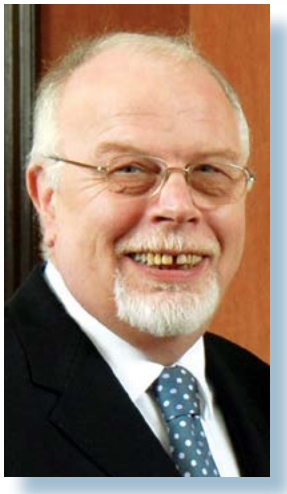
Louis Dreyfus Commodities

LOUIS DREYFUS COMMODITIES SUISSE S.A.

29, ROUTE DE L'AÉROPORT
CH-1215 GENEVA 15, SWITZERLAND
PHONE: 41-22 799 2700
FAX: 41-22 592 74 68

Please call us, so that we can help you with your extra long staple needs.

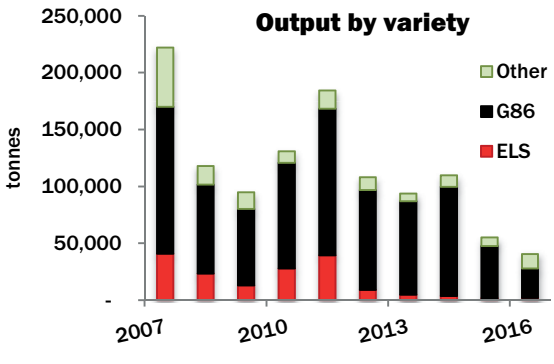
Egypt's Cotton Area Falls to New Low

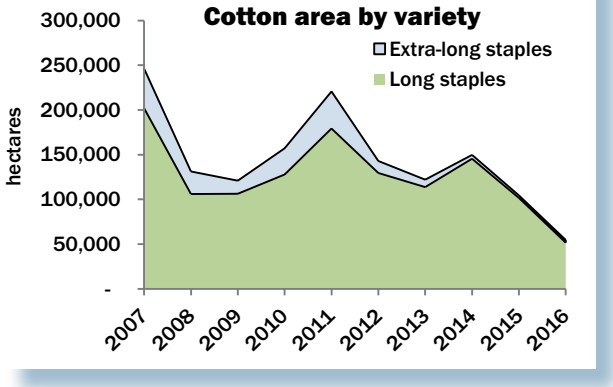


Ray Butler, Managing Director, Cotton Outlook

The 2016/17 planting period was approached with strong hope expressed that attainment of an area close to 250,000 feddan (virtually acres) was in prospect, which would be similar to that finally recorded a year earlier. As we recorded in our spring update, however, progress proved to be slow and by the end of June (when planting data were presumably close to final) merely 131,480 feddan had been sown, or only a little over half the 248,820 feddan finally recorded (according to the Egyptian Cotton Gazette) in 2015.

The June figures show 7,230 feddan under extra-long staples, mostly, as last year, of the Giza 87 variety, which represents only a modest increase





and thus signals that, once again, the supply of such cottons will be limited. The bulk of the area (almost 85,000 feddan) is under the Giza 86 long staple style but this is sharply less than the 210,000 or so sown in 2015. Despite government attempts to limit rice cultivation, so as to conserve scarce water supplies, it appears to have been chosen as the preferred, alternative crop on price grounds, especially in the absence of clear guidance as regards the marketing arrangements for cotton in the season ahead. A late announcement as to the prices farmers would receive was not helpful. As expected, the Giza 94 variety first grown on a commercial scale last year has been sown on an expanded area of over 18,000 feddan, with the Giza 90 and 95 strains grown in Upper Egypt making up the balance.

The clear inference to be drawn from the reported figures is that Giza 86 output, which fell by more than half in 2015/16, will be reduced substantially further in 2016/17, perhaps to less than 400,000 metric cantar (20,000 tonnes). The entire crop, it would seem, may fail greatly to exceed 800,000 cantar (40,000 tonnes), thus setting a new low point in Egypt's cotton production history in modern times.

In 2015/16, the Cotton and Textiles Holding Company assumed the role as the main buyer of the crop, paying prices above the world market, with the aim of channelling government subsidy direct to farmers. The private trade was left with marketing any quantities sold by farmers outside the subsidy system (for which farmers could expect comparatively prompt payment) and the considerable balances that were carried into the 2015/16 season. The latter amounted to 828,217 metric cantar (over 41,000 tonnes), some 90 percent of that volume, according to the Gazette, having consisted of Giza 86. Very little of the cotton that moved into public sector hands appears to have found its way into export markets - three public companies together accounted for merely two percent of export sales registered by late June. Registrations for shipment during the 2015/16 season had then reached just less than 30,000 tonnes, of which Giza 86 was the main component. It would thus appear that, outside any supply in the hands of the Holding Company, the carryover into next season will be slender.

Deliveries to domestic mills had meanwhile reached 513,592 cantar (a little under 26,000 tonnes), according to the Cotton Arbitration and Testing General Organisation, of which around 58 percent had been taken from the hands of public sector companies. This compares with deliveries of 561,647 cantar (28,000 tonnes) during the whole of the 2015/16 season. Imports seem likely to prove somewhat greater in 2015/16 than in 2014/15 as a matter of necessity, despite having been rendered less attractive by the general advance of upland cotton values and by the Egyptian authorities' tight rein on access to US dollars in face of persisting, grave economic challenges.

Join Us in Protecting the Egyptian Cotton Heritage

Mr. Khaled Schuman, Executive Director,
Cotton Egypt Association

Egypt is picking up the pieces to rebuild its economy, one of the foundations of which has been our Egyptian cotton and the textile industry. Through these difficult times, the Egyptian cotton brand, an entity that is our inheritance, has been seriously damaged by the multiplicity of inferior and not genuine cotton products that have pervaded the retail sector, claiming to be Egyptian cotton.

Cotton Egypt Association and the Egyptian Cotton Logo Trade Mark

The Cotton Egypt Association is a not-for-profit organization solely managing the Egyptian cotton logo, owned by the Egyptian Ministry of Trade and Industry and *ALCOTEXA* (Alexandria Cotton Exporters Association). In our continuous efforts, directed to the protection and promotion of Egyptian cotton, we have set up new licensing procedures for the Egyptian Cotton Logo trade mark. These rely on the traceability of Egyptian cotton throughout its supply chain, internal DNA analysis of cotton fibre or yarn as appropriate, through to the finished product on shelves.

We have collected, at retail and through manufacturers, samples of Egyptian cotton products from all over the world. The DNA analysis proved that 90% of the products labelled as Egyptian cotton were not genuine. This level of fraudulent merchandise on offer as Egyptian cotton is at crisis point.

Many manufacturers abuse the global consumer's love of the Egyptian cotton heritage. They maximize their profits by blending or even not using Egyptian cotton, but merchandising their products as if they were made from Egyptian cotton, in order to enhance their offering. Regardless of the form of fraudulent merchandising, it is the production of counterfeit goods, cheating the customers, who are not getting what they paid for.

This fraudulent trading has extremely negative effects on the Egyptian brand, since such manufacturers are using inferior, unbranded cottons and thus damaging the global brand image of the Egyptian cotton product, perceived to be the best quality in the world.

In light of such evidence, we have embarked on a major Egyptian cotton promotional campaign to enlighten retailers and manufacturers as to their responsibility to the ultimate client to provide goods as merchandised. We seek to retake the differentiated retail space that belongs to fine luxury Egyptian cotton, which has served the industry for centuries. Currently, most of the retailers all over the world are cooperating, in order to clear the retail space of the enormous amount of fake cotton products merchandised as being of Egyptian cotton. Increasingly, retailers are seeking manufacturers' accreditation to Egyptian Cotton Logo criteria, before considering any presentation of products as Egyptian.

Thus, the Egyptian Cotton Logo accreditation process is becoming the industry standard in purchasing products. We are highlighting to the textile industry that we have a certification process that facilitates the identification of genuine Egyptian cotton suppliers. Under our new registration format, the application is completed with total transparency in product processing.

A closer interface with retailers on Egyptian Cotton

Logo developments consolidates our working relationship with regard to product lines submitted as being made from Egyptian cotton. There is greater unity of interest in protecting the retailer and, finally, the ultimate retail customer as to the validity of any claim of Egyptian cotton content in manufacturers' samples. Under our continued retail sampling programmes, samples are collected and DNA analyzed from the shelves of stores across the United States, Australasia and Europe.

Internal DNA Analysis

The process of DNA analysis for Egyptian cotton was developed by Prof. Dr. Mohamed Negm and Prof. Dr. Suzan Sanad of the Cotton Research Institute in Egypt, established in 1912. The professors' research was presented in the 33rd International Cotton conference in Bremen, Germany and Prof. Dr. Negm was recently appointed as vice-chairman of the International Cotton Institute.

It is worth mentioning that, in the second half of the last century, Watson and Crick led a scientific discovery that gave us a new area in the biological sciences, the intelligent molecular structure of nucleic acids. The Structure for Deoxyribose Nucleic Acid was the first article published to describe the discovery of the double helix structure of DNA (material of life for all organisms that live on our planet).

Presently, about 60 years on from this discovery, it is accepted that DNA is the intelligent structure for analysis of any form of life on our planet and, with successive developments in this field, DNA analysis has become the most realistic method in the field of origin classification, criminal detection and assessment of evidence. Dr. Zahi Hawass, the famous Egyptology scientist, adopted ancient DNA authentication to study pathologies, inherited diseases, and the causes of King Tutankhamun's death, circa 1324 BC.

The DNA Laboratory

The Colors laboratory is specialized in Genetic testing either for clinical or research purposes. The staff comprises Ph. D. researchers and highly qualified Biotechnologists, holding masters' degrees. The laboratory is equipped with the latest up to date research equipment, such as Real Time PCR (Viia 7 & Quant Studio Family) & Sequencing device like the 3500 Genetic Analyzer & S5 from (NGS) Next Generation Family.

The Colors laboratory is accredited with ISO 17025 from EGAC (Egyptian Accreditation Council), CAB 213005A approved from ILAC (International Laboratory Accreditation Cooperation), Astrazenica for lung cancer testing by R-PCR and also approved from FEPAS, FAPAS, LSG, EMQN.

Colors is embarking on new joint venture between Colors Lab and BGI Institute of China, one of the world leaders in Genetics and DNA analysis.

Colors Laboratory was appointed to make Sampling of Tutankhamun's bone tissue and hair to extract and purify the DNA. In addition, water and other aqueous polymerase chain reaction (PCR) components were monitored using the sensitive internal-Alu-PCR protocol to assess contamination with modern human DNA.

The professors at the Cotton Research Institute, Dr. Mohamed A. M. Negm and Dr. Suzan H. Sanad, relied on the innate genetic differences between different species of cotton, such as Gossypium Barbadense (i.e. Egyptian cotton) and Gossypium Hirsutum (Upland cotton), to determine the species from which the fibres are derived. They developed the CTAB (cetyltrimethylammonium bromide) extraction method to extract DNA from Egyptian cotton fibres throughout the supply chain, up to the finished product. This development was the outcome of years of experiments and cooperation with Colors Laboratory, until it became a validated standard operating procedure for DNA isolation (Academy of Scientific Research & Technology, Egypt registered No. 2081/2015).

After isolating the DNA from cotton by the CTAB technique, the pure extracted DNA was identified by Real-Time-PCR with a specific primer for every origin of cotton. Results are analysed and interpreted to identify the species of the cotton fibre and thus prove the authentication of the tested product.

Genuine Egyptian Cotton Products

Finally, sharing the objective of meeting the expectations and aspirations of the retail customer, we at Cotton Egypt Association are working to monitor manufacturers' Egyptian cotton usage. The aim is to provide the finest genuine Egyptian cotton through total transparency in the process of manufacture, so as to ensure that a merchandised Egyptian cotton product reflects the fine luxury perception of Egyptian cotton for centuries to come.

During the past two years, the Cotton Egypt Association has made presentations and conducted awareness campaigns for manufacturers, retailers, consumers and traders, through emails, presentations, magazines, press conferences and direct visits. We have given presentations in global events such as ICAC's 12th meeting of the Inter-regional Cotton Research Network in Sharm el-Sheikh, the ICAC Plenary Meeting in Bombay - India, Market week in New York, Meditex in Alexandria, Heimtextil in Germany, Pitti Filati in Italy and Cairo Fashion week.

We trust our efforts will provide a clean retail space to both retailers and manufacturers, affording the genuine manufacturers the product acceptance that is consistent with the cotton of preference in a chain which will also bring growth of Egyptian cotton sales to the fine luxury markets of the world.

This will have a very positive impact in motivating the Egyptian farmer to plant more cotton every year, due to the increase in demand for the genuine Egyptian white gold that will be sold at its real high value - contrary to the current situation with the lowest Egyptian cotton crop ever.

We encourage all members of the Egyptian cotton value chain to join us.

2016 China Long Staple Market Survey

By Liang Wenying, Chairwoman,
Xinjiang Yinlong International Agricultural Corporation Co., Ltd

1. The impact of China's cotton policy on long staple plantings over the past three years.

The Chinese government initiated the direct subsidy policy for cotton in Xinjiang in 2014, but the actual area planted to long staples that year was just 922,900 mu (61,527 hectares), as a result of the late release (September 2014) of the policy in question.

The subsidy policy in 2015 met the expectations of long staple growers, who have received more subsidy than those cultivating upland cotton. As a result, growers expanded the area devoted to long staples, though crops were affected by adverse weather. The actual planted area in 2015 reached 1,796,000 mu (119,733 hectares), a new high in recent years.

In 2016, the agricultural department in Aksu encouraged growers to convert to fruit planting instead of cotton, and later lowered the long staple planted area to no more than 1,500,000 mu (100,000 hectares), while the Agricultural First Division of the Production and Construction Corps (army group) maintained long staple plantings at the level of the previous year.

2. Long staple planted area and output over the past three seasons.

1. 1. In 2015/16, the area planted to long staple cotton in Xinjiang was 1,796,000 mu (119,733 hectares). With a yield of 60/70 kilos per mu, the actual output was 122,500 tonnes, which was around 36,000 tonnes less than expected. In 2015, Awati County was the main area producing long staples in the Aksu region, with a cultivated area of 1,200,000 mu (80,000 hectares). However, the crop was affected by high temperatures during its earlier stages of development. As a result, yield, quality and price all decreased, even though total output reached record highs, due to the substantially increased area. The area sown in Jiashi County, Kashgar region, was 5,500 mu (367 hectares). Another main cotton area, Yupuhu County, also made a trial of long staple planting in 2015, but final output was unclear. It is estimated that the aggregate production from both areas was no more than 800 tonnes.
2. In 2016/17, the area planted Awati County was 1,020,000 mu (68,000 hectares). In early June 2016, a hailstorm left a damaged area totalling nearly 40,000 mu, which has been replanted with corn, so the actual area under

	2014/2015 (actual)			2015/2016 (actual)			2016/2017 (estimate)		
	Planted area	Yield	Lint output	Planted area	Yield	Lint output	Planted area	Yield	Lint output
	mu	kg/mu	tonnes	mu	kg/mu	tonnes	mu	kg/mu	tonnes
Aksu	914,900	93	85,086	540,000	70	37,800	400,000	81	32,400
Awati				1,200,000	65	78,000	980,000	80	78,400
Agricultural First Division PCC	8,000	100	800	50,000	110	5,500	50,000	100	5,000
Kashgar				6,000	90	540	130,000	90	11,700
total	922,900		85,886	1,796,000		121,840	1,560,000		127,500

long staples is estimated at 980,000 mu (65,333 hectares). So far, vegetative growth has been good, and yields are expected to be 10/20 kilos per mu higher than the previous year.

Area in Aksu is 400,000 mu (26,666 hectares), while the Agricultural First Division of the PCC has sown 5,000 mu (333 hectares). Plantings in Kashgar have increased remarkably by 120,000 mu (8,000 hectares), to 130,000 mu (8,667 hectares), consisting of 100,000 mu in Jiashi County and 30,000 in Yupuhu County. This is explained by the high quality and good sales from the previous crop, which have stimulated growers' enthusiasm for long staple planting.

3. Long staple varieties in 2016/17.

The main varieties of long staples cultivated this year are unchanged from the previous year.

The varieties planted in Aksu and Awati are Xinhai 21 and 36, both traditional long staple varieties, which are competitively priced, offer good boll setting properties and strong resistance to disease. Output is stable under normal weather conditions, which is welcomed by growers. There are also some other high-yielding varieties which are resistant to high temperatures and disease, such as Xinhai 35, 44 and 45.

The main varieties sown by the Agricultural First Division of the PCC were also unchanged, including Xinhai 21, 27, 28 and 25.

4. Long staple crop developments in 2016/17.

Sowing time (at the beginning of April) began this year three or four days ahead of last year, with benefits to the crop. Although some areas in Awati County were affected by hailstorms, most were undamaged by adverse weather. At the time of writing, the general height of long staples plants is 30/50cm, with five to ten flower buds on each cotton plant. The new crop is generally growing well.

5. Domestic long staple market in 2016/17

China's total consumption of long staples annually is 75,000/80,000 tonnes. This year, China's long staple market has encountered several problems, such as oversupply, large inventories, a sluggish downstream market, the yuan's frequent exchange rate fluctuations, and the continuous fall of prices. The area sown to long staples in the new season has dropped somewhat, but total output is expected to be at last year's level, with the result that there is little optimism with regard to the outlook for the market.

ELS Cotton Consumption

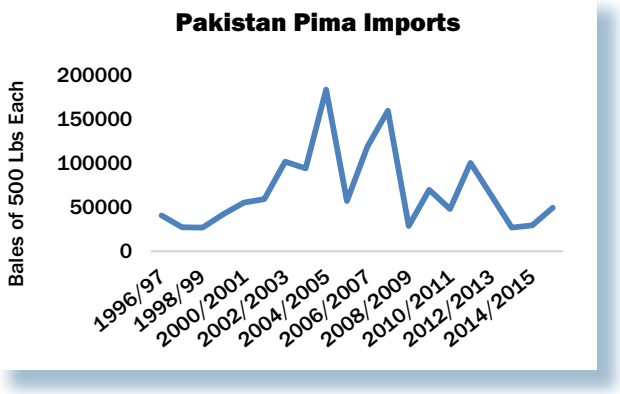
'a Spinner's Perspective'

Abid Hussain,
Saif Textile Mills

Global extra-long/long staple cotton is about 2% of world's total cotton production. This level is almost stagnant over the last two years and is expected to remain at the same level during next year. This segment could not get enough appreciation because of its high price versus upland cotton, as well as uncertainty and/or inconsistency in its quality. Unlike China and India, Pakistan does not produce any ELS cotton, but it has been one of the leading producers of fine count yarns, as well as high-end products made from ELS cotton, for many years. Thus, it has relied on imports from the main ELS cotton-producing countries, to produce fine count yarns over the years.

The lack of any local production of ELS cotton to ensure availability to mills at stable prices has meant that demand for, and consumption of, ELS cotton in Pakistan has been highly elastic over the years. Furthermore, Pakistan mills are willing to cover well beyond their known requirements when they feel ELS prices are lower or near their bottom, and thus import volumes are much higher when ELS prices are lower.

Consumption of ELS cotton in Pakistan is also affected by the health of demand for coarse count yarns. In the current season, when there was a squeeze on demand and margins for coarse count yarns, a lot of mills increased their consumption of ELS cotton. This phenomenon has created immense competition from Pakistani spinners and as well as from mills in Turkey, India and Uzbekistan in the global market for fine count yarns and products. The chart on the right illustrates US Pima imports into Pakistan over the last few years, and clearly demonstrates the elastic nature of demand from Pakistan.



Traditionally, the bulk of yarn and textile products made from ELS cotton in Pakistan was exported to high-end textile importing markets, mainly the United States and Europe. However, over the last few years, some of the leading Pakistan textile mills have tried to establish a formidable presence in the local retail market, and these efforts have led to established domestic brands which attract very good local sales. A burgeoning domestic population with increasing disposable income bodes well for the future of domestic demand for products made from ELS cotton. Thus, a good percentage of yarn and products made from ELS cotton is being targeted for sale in the domestic market. Particularly, lawn fabric made by Pakistan mills is extremely popular in Pakistan as well as in neighbouring markets, and manufacturers have effectively used both e-commerce as well as an international retail presence to cater to this international market.

From a demand perspective, high thread counts bed sheeting have not recently been in demand. The shirting market is shrinking, especially in Europe. Brands are more inclined to produce 'run-of-the-mill' products, as they seek to enhance their margins, rather than to make garments with ELS/LS cotton. Fine count yarn manufacturers are struggling to maintain their market share and to retain their long-term customers.

Lately, ELS cotton has also faced stiff competition from man-made fibers, particularly Tencel and Modal. Due to consistent quality, deliveries and the advantage of high production, many textile manufacturers have tended to increase their consumption of these alternative fibres. Particularly, whenever ELS cotton prices move higher, there is demand destruction, as manufacturers increase their share of alternative fibers, in order to keep their costings and offering prices down. A classic example is the current escalation in ELS prices, which has started to divert some of the ELS cotton demand to man-made fibres, particularly Tencel. Although it is not easy for manufacturers of branded products, for example SUPIMA licensees, to switch completely to alternative fibres, production of some of the lower-end textile products can be easily switched to being produced from such fibres. In view of the viability of selling yarns, the trend to production of high-end, unbranded fine count yarns is also said to be increasing. Another factor that is affecting ELS consumption in Pakistan is the imports of fine count yarns from the LS/ELS producing countries, particularly India, which are giving fair incentives and rebates on exports of their yarns.

In terms of preference for various ELS growths, the worldwide trend is shifting toward contamination-free cottons. Particularly as the quality and quantity of Egyptian crop has declined considerably over the last two seasons, many regular consumers of Egyptian cotton have moved to other growths including US Pima, Spanish ELS and Turkmen ELS. Recently, for example, we have seen a very active demand for Spanish ELS in Pakistan, as US Pima supplies have become scarce, and prices have moved higher. Although Spanish ELS is a relatively new growth for mills in Pakistan, they have been willing buyers due to its availability at a competitive price and its being contamination-free, which can help spinners in replacing US Pima to a certain extent.

Mills in Pakistan also tend to blend it with longer staple upland growths to make a cheaper version of finer counts. However, it is worth mentioning that there is no standard blending practice or standard way of producing a particular count of yarn. The quality and specifications of each count produced by different spinners vary, and thus attract premiums and discounts accordingly. The latest machinery can help spinners to get the best from any particular growth of cotton, and new spinning and laboratory technologies are helping to achieve high production, less wastage, improved yarn quality, as well as production of fancy yarns.

Global demand for fine count yarns has been more or less stable or flat over the last two years. The higher prices for US Pima in comparison to upland cotton over the last two to three years, on the basis of historical comparison, have dissuaded spinners from increasing fine count production. Buyers of fine count yarns have resisted paying premiums, thus flat business sentiment has been prevalent for some time now.

An IPM Approach in Non-GM ELS Cotton in Israel

Menahem Yogev,
Israel Cotton Board Ltd.

Introduction

Modern agriculture, which consists of large fields of single crop, monocultural practice, generally causes an aggressive violation of the ecological balance. A single host gives an "unfair" advantage to specific insects that can accelerate their population levels within a few generations, leaving their predators far behind. As a result, the food chain is damaged and an insect turns out to be a pest to a crop. Non-GM cotton growers face major distress, as on the one hand they have to eliminate harmful insecticides and, on the other hand, chemical companies have no incentive to develop new pesticides for non-GM cotton. The only way to handle it on a large scale is to use an IPM-IRM approach.

During the mid 1980's cotton growers in Israel found themselves in an unbearable situation concerning pest control. 3 major harmful insects: Cotton whitefly (*Bemisia tabaci*), Pink bollworm (*Pectinophora gossypiella*) and Cotton bollworm (*Helicoverpa armigera*), followed by additional minor pests caused severe damage.

This situation forced farmers to implement about 16 applications of insecticides during the season. This was unacceptable and we understood that we were at a critical junction. Decisions had to be made whether to stop cotton farming altogether or adopt a totally different approach to pest control. Given that all cotton growers in Israel are organized under the Israel Cotton Board (ICB), it was somewhat easier to manage an approach that would be as environmentally friendly as possible, yet effectively enable the control of cotton pests.

IPM–IRM Theory

Integrated Pest Management (IPM) and Insect Resistance Management (IRM) are ecosystem-based strategies that focus on long-term prevention of pest development or their damage through a combination of techniques, such as: biological control, habitat manipulation, modification of cultural practices, and use of resistant cotton varieties.

Pesticides are used only after monitoring indicates that the level of damage in the field is above a threshold according to established guidelines. Pesticides are selected and applied with the goal of removing only the target organism, and in a manner that minimizes risks to human health, and preserves beneficial insects, non-target organisms and the environment.

The Israeli IPM-IRM Approach

Implementation of pest control in Israeli cotton is strictly based on IPM-IRM theory.

Control strategy is based on the following principles, which are realized in the field on a routine basis.

A. Visual scouting

Fluctuation assessment of insect populations is based on routine field scouting by professional entomologists and pest control scouts. Methodology includes:

1. Division of fields into reference plots for comparison purposes and improved management.
2. Assessment of the populations of pests and beneficials/predators within each plot, according to a specific methodology adapted for each insect species, including different stage larvae counts, oviposition levels and adult population assessments.

Figure 1. Pink bollworm Larvae (Pectinophora gossypiella)

B. Threshold Levels

Intervention and insect control management are strictly based on economic threshold levels specific to each cotton pest. Levels are pre-determined according to long-term Research and Development findings and are made available to growers in a "Cotton Production Procedures Manual" at the disposal of all producers. Intervention is modified according to beneficial insect populations found in the field.

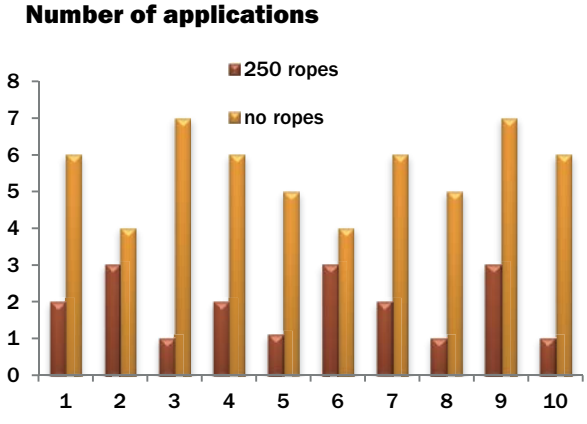


Figure 2: Effect of Pheromone Rope Usage on Number of Chemical Applications

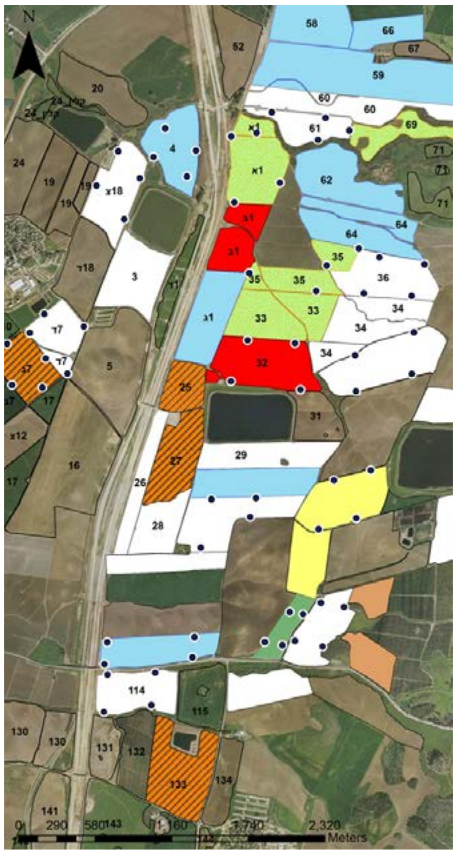


Figure 3. Map of Pheromone Traps

C. Cultural Methods

Diverse cultural methods complement conventional chemical treatments on Israeli cotton farms.

Methods vary and include crop rotations, resistant varieties (e.g. all present cotton varieties are tolerant to Alternaria leaf spot), pheromone usage, avoidance of chemical treatments at times of high beneficial insect levels and tillage regimes to preserve field sanitation.

D. Pink Bollworm Control

Pink bollworm is a major pest in non-GM cotton, as the larval stage penetrates the boll within a very short time after emergence from the egg. Once it is inside the boll it is almost impossible to control it by pesticide application.

Therefore, the strategy is to prevent the adult moth from mating.

Cultural methods include a legally compulsory annual plow down following cotton production, and maintenance of strict raw cotton residues at the farm and gin, particularly at storage locations.

All growers apply pheromone ropes in fields at a level of 500 ropes per hectare to cause mating disruption.

Israel Cotton

where Top Quality is 100% BCI Production

The Israel Cotton Production & Marketing Board Ltd.

3 Netivot St. P.O.Box: 384, Herzlia B', 46103 ISRAEL
Tel: 972-9-9604003, Fax: 972-9-9604010
www.cotton.co.il

otto stadtlander
gmbh

marcusallee 3 · 28359 bremen · germany
telephone +49 421 20 42-0 · telefax +49 421 20 42-200
www.osta.de · e-mail: info@osta.de

The technique works by hanging slow-release pheromone ropes on plants in the field to cause disruption to males seeking females for mating. We started with 250 ropes per hectare (Figure 2), in 10 fields from different regions and increased to 500 ropes, which is the present rate. In addition, farmers place pheromone traps at fixed points in the field (Figure 3) to acquire knowledge about the point in time at which the insect population accelerates to a level at which pesticide application is needed. The results were convincing and we understood that we could reduce the pink bollworm level using this method. Populations are also monitored at a regional level using data from these pheromone traps. Traps are used to monitor levels of other pests as well, whereby for each pest there is a threshold number of individuals found in the trap, which indicates a population figure increasing up to a damaging level.Only when populations build up at season's end are chemical applications administered.

E. Insect Resistance Management

The main principle driving resistance management is that each generation of a pest is exposed to one group of insecticides only (Figure 4).

The objective is to prevent the possibility of developing resistance by the insect to a particular pesticide.

The Israeli cotton sector monitors development of resistance of pests to insecticides on a regular basis. Insecticides usage is discontinued in some cases, and in others is modified according to resistance development and regression.

F. Central Monitoring Scheme A central monitoring system for pest populations, coupled to plant development status and resistance levels, has been established. The objective of the scheme is to collect data from all regions concerning pest behavior, in order to understand each insect dynamic with the aim of predicting when it will achieve an economic threshold.

Regional considerations with regard to pest levels are considered when planning control strategies.

G. Development and Dissemination of Knowledge

The cotton sector in Israel under the leadership of ICB is engaged in ongoing Research and Development as well as disseminating knowledge and advice to growers via a designated team of pest control extension agents.

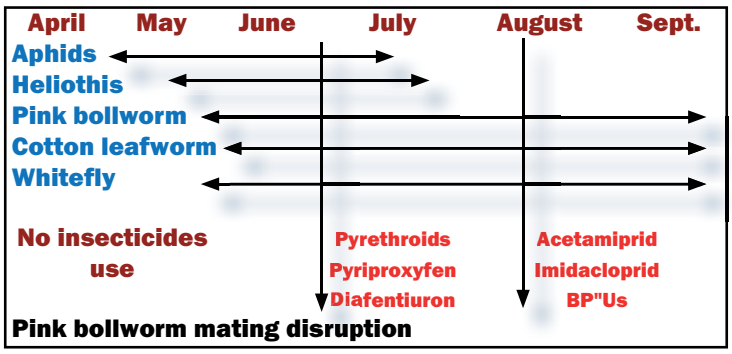


Figure 4. IPM Pesticide Usage Timing in Israel

Research and dissemination programs include:

1. Study of the influence of new insecticides on beneficial–predator insects.
2. Threshold development.
3. Pest infestation surveys.
4. Explanatory and educational campaigns.

Achievements

Within six years, from the onset of the IPM-IRM policy implementation, the number of seasonal pesticide applications dropped dramatically, from 16 to 7. Thereafter, highly toxic, blanket coverage chemicals have been substituted with target pest materials and insect growth regulators with low mammalian and beneficial organism toxicity.

Awareness of the environmental impact of pesticides and that to the community is increasing, and the cotton sector is successfully adapting and managing a sustainable pest control policy. As for the last three years, all cotton growers apply 500 ropes/Ha at the beginning of the season – at the 6 leaves stage - and another 500 ropes/Ha 35 days later. This pest is now under control and is not a critical threat as it used to be. In most fields, there is no need to use pesticides to control the Pink Bollworm.

Quality Parameters 2015-2016:

Variety	Length (HVI)	MICRONAIRE	STRENGTH (HVI)
Israel Pima ELS	37-38 mm	3.8-4.4	40-43 GPT
Israel Acalpi LS	34-36 mm	3.4- 4.2	34-37 GPT

BCI Membership

As of the 2015 season, The Israel Cotton Board is a member of the Better Cotton Initiative (BCI). ICB is aligned with the BCI values in that the organization's "Principles and Criteria" for production, including pest control measures, water and soil conservation, ensuring cotton quality, awareness and care for the habitat and safeguarding decent work principles amongst employees and other workers in the sector, are already implemented by Israeli cotton growers.

The cotton sector led by ICB hopes to improve its performance based on these principles, to the benefit of growers and all other stakeholders related to the industry.

Conclusions

Non-GM cotton farmers can reduce the number of insecticide applications by using an IPM & IRM strategy.

Achievement can be reached by combining several techniques: correct pest scouting in fields, a knowledge-based threshold system, pesticide usage policy, pheromones, cultural techniques and more.

The approach is based on large-scale collaboration; single farmers can succeed by cooperating amongst themselves, with the research and extension agencies, and with the umbrella organizations leading the sector at the regional and national levels.

The environmentally friendly plant protection approach is one amongst other components which comprise a way of life for cotton farming and farmers in Israel.

ICB's commitment is to improve cotton quality, resulting in consistent progress in quality parameters.

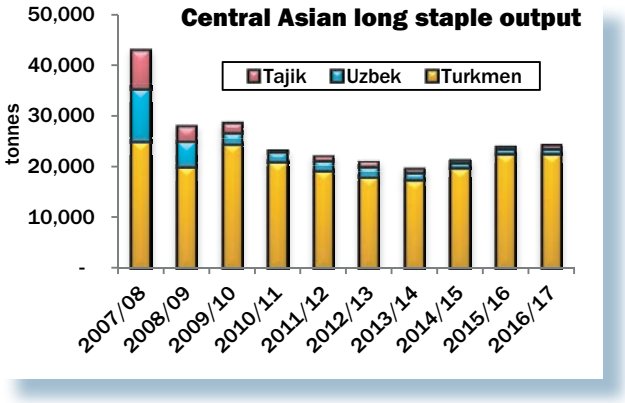
The avoidance of stickiness in cotton fibres is one of the issues that is highly emphasized by the production system. Farmers are using the IPM-IRM policy to keep fields free of pests toward the end of the season. Fibre Contamination Tester (FCT) equipment is used in the classing institute to test all bales for stickiness. The result of all these efforts is that Israel is well known for non-sticky cotton.

Israel's cotton is now exclusively and successfully marketed by Otto Stadtlander GmbH, Germany, and consumed by the best and leading spinning mills all over the world; in Europe as well as in the East, Far East and South America.

ELS in Turkmenistan

Galina Fisher, CIS Editor,
Cotton Outlook

Turkmenistan today is the only long staple producer of consequence remaining in the Central Asian region. Uzbekistan and Tajikistan, once sizeable producers, nowadays devote only insignificant areas and efforts to such varieties, on the grounds of cost, profitability and the desire to produce more of the upland cotton that is in demand from both domestic and foreign buyers.



For the past several seasons, Turkmenistan has managed to maintain a stable production of around 20,000 tonnes of long staples per season, with some fluctuations, mainly due to weather conditions and, therefore, yields.

Long staples account for roughly 5 per cent of the area devoted to all cotton sown in the country. The main growing provinces are southern Mary and Akhal. They produce a wide range of different qualities, from top grades, stapling 1-7/16", with strength of 35gpt and above, down to low grades, which scarcely command any premium over upland styles. The key markets for Turkmen long staples are Turkey, which benefits from its proximity and traditional economic and trade links and, increasingly, Pakistan, India and Bangladesh. High grades are used by spinners for the production of finer count yarns, whereas lower grades are customarily blended with upland cotton.

Almost all long staple cotton produced in the country is channelled for export, as the domestic spinning industry uses principally upland styles. Each season, some quantities (the more desirable qualities that command premium prices) are also kept aside in the so-called 'state reserve', and are released for export only if and when the country needs additional foreign currency income.

All of the country's exportable raw cotton surplus is sold through the daily trading auctions that take

LOGISTIC MIND

Cotton - one of the strategic segments of Turkmenistan economy. Turkmenistan is one of ten top producers of cotton in the world, approximately each year Turkmenistan produces about 1.1 million tons of cotton. The Great Silk Road exported more than 70.000 tons in 2014 and 57 000 tons in 2015 of cotton for the companies such as: Olam International, Ecom Trading, ICT Cotton Limited, Chalik Cotton, Cargill, Louis Dreyfus Group.

Transportation of cotton products:
- cotton fiber
- cotton yarn
- cotton waste (linter, uluk)

rail freight
auto freight
ocean | sea | river freight
air freight direct | indirect
multimodal freight forwarding
custom clearance
door to door delivery
warehousing & distribution
oversize | heavy |
exhibition and projects

Turkmenistan, Ashgabat,
137, 10 Year Abadanchylyk str.
Tel.: +(993 12) 48 34 66 | 67
Fax: +(993 12) 48 34 68

www.greatsilkroad.tm
info@greatsilkroad.tm

グレートシルクロード

偉大的絲綢之路

Die Große Seidenstraße

La Gran Ruta de la Seda

La Grande Route de la Soie

La Grande Via della Seta

De Grote Zijderoute

Lớn Con đường tơ lụa

დიდი აბრეშუმის გზა

Մեծ Մետաքսե Ճանապարհ

Büyük İpek Yolu

جاده بزرگ ابریشم

הגדול המשי דרך

เส้นทางสายไหมที่ดี

ग्रेट सिल्क रोड

그레이트 실크로드

Jalan Sutera Besar

العظيم الحرير طريق

Великий Шовковий Шлях

Великий Шелковый Путь

BEÝIK ÝÜPEK ÝOLY

GREAT SILK ROAD
TURKMENISTAN

LOGISTIC SOLUTION
FOR COTTON BUSINESS

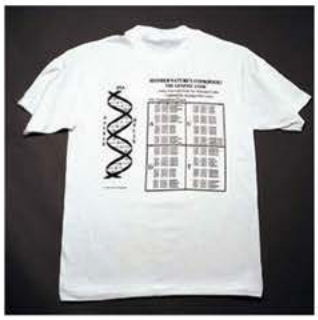
place at the State Commodity Exchange in Ashgabat. Although upland cotton had been selling at a satisfactory pace during the past few seasons, long staples had failed to attract the same level of demand, in part owing to less workable prices, from the international buyers' perspective. As a result, by the beginning of the 2015/16 season, accumulated stocks of old crop long staple cotton were high.

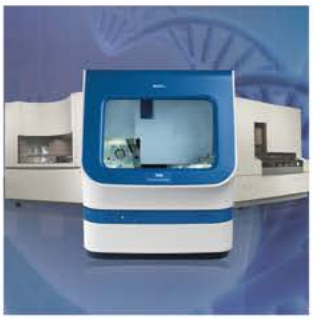
With the arrival of the new crop, the authorities had no choice but to adopt a more aggressive sales policy. As a result, an interesting trend emerged during the 2015/16 season. As merchants' appetite for upland remained good, the authorities made sales of upland contingent upon the buyer also taking a percentage of long staples. That percentage varied from auction to auction, however, at times, it was said to have been as high as 30 to 40 percent. Despite some resistance from the international trade, the policy proved quite successful: not only were all old crop stocks from the past several seasons disposed of, but over 65 percent of the current 2015/16 crop supply had also been committed by the time of writing.

The prospects for the next (2016/17) season appear to be similar to those achieved in 2015/16, however, future decline cannot not be ruled out. At the beginning of 2015/16, there was a suggestion that the official aim might be to reduce the production of long staples, in order to avoid any future accumulation of stocks in the prevailing international market climate. As the season progressed and some important structural changes took place, it appears that such plans have been put aside for future consideration. It seems clear nonetheless that, should marketing of the 2016/17 long staple crop prove difficult, a reduction of output could be anticipated in the future. Some private views are for ELS production to potentially be reduced in 2017/18 by half. If this happens, since production in Uzbekistan and Tajikistan has already declined drastically and is unlikely to significantly revive, long staple output in Central Asia could in the not too distant future become a 'thing of the past'.

EGYPTIAN COTTON™

DNA Analysis Proved : 90% of products labeled (Egyptian Cotton) are not genuine





Internal DNA Analysis = Relies on Innate genetic diffference between different species of cotton





Credibility = Get Licensed With Egyptian Cotton Logo Trade Mark

EGYPTIAN COTTON™

Egyptian Cotton Logo Licensing
Cotton Egypt Association
4 Wadi El Nile Street, 4th Floor, Mohandessin, Giza, 12411, Egypt
Tel: +20 2 33047514 & +20 2 37498037 Fax: +20 2 37498038
Email: info@cottonegyptassociation.com www.cottonegyptassociation.com


SUPIMA®
WORLD'S FINEST COTTONS
WWW.SUPIMA.COM
Grown on American family farms for generations.
Carefully nurtured from seed to fiber.
Chosen by the world's leading brands for their most iconic products.