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Agricultural Outlook Forum
U.S. Department of Agriculture
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USDA Cotton Outlook

Joanne Werken



United States Department of Agriculture

AGRICULTURAL OUTLOOK FORUM

Smart Agriculture in the 21st Century

A Discussion on Innovation, Bio-technology, and Big Data

February 19-20, 2015 — Crystal Gateway Marriott Hotel, Arlington, Virginia



Cotton Outlook

Friday, February 20, 2015

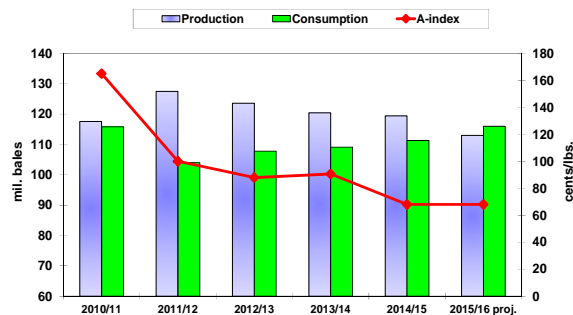
www.usda.gov/oce/forum

THE WORLD AND UNITED STATES COTTON OUTLOOK

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U.S. Department of Agriculture

Introduction

World Production, Consumption, and Prices 2010/11 through 2015/16 projection

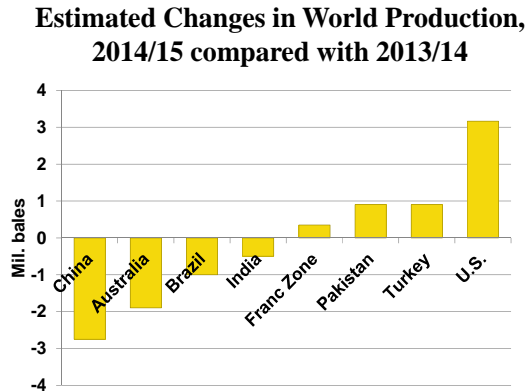


The U.S. Department of Agriculture's (USDA's) first 2015/16 world cotton projections anticipate that consumption will exceed production for the first time in six years, but that global ending stocks will remain excessive. World stocks more than doubled between 2010/11 and 2014/15, due mainly to cotton policies in China, which supported domestic and world prices above market-clearing levels. For 2014/15, China's government has shifted from a price support to an income support program and intends to impose much stricter limits on imports--the China policy reversal is largely responsible for driving this season's A Index down an estimated 25 percent. Responding to sharply lower prices, world consumption is projected to exceed production by 3 million bales in 2015/16, drawing world stocks down to about 107 million bales, the equivalent of 92 percent of projected global consumption. With most of the world's stock drawdown occurring in China, ending stocks in other countries are reduced slightly. The A Index is expected to remain level with the current season at 68 cents per pound.

U.S. cotton production is pegged at 14.0 million bales for 2015/16, as producers are anticipated to reduce planted area by about 12 percent. Domestic mill use is projected marginally above the 2014/15 level and exports are projected marginally lower, with ending stocks about unchanged from the beginning level.

World Cotton Situation, 2014/15

World Cotton Production, 2014/15



Global 2014/15 cotton production is expected to fall 1 percent from the previous year to 119.4 million bales. The estimated crop decline is primarily the result of reductions in China, Australia, Brazil, and India partially offset by increases for the United States, Turkey and Pakistan. World 2014/15 area harvested is estimated at 34.3 million hectares, up 4.5 percent from last year, and the world average yield is at 758 kg/hectare, down 5 percent.

China's 2014/15 crop is estimated at 30.0 million bales, an 8-percent drop from last season as farmers in eastern China reduced area significantly due partly to uncertainties regarding changes to China's support policy. The fall in production moves China out of the top position for the first time since 1981/82. China's 2014/15 harvested area is estimated at about 4.4 million hectares, 8 percent below 2013/14. Yields are expected to reach 1,484 kilograms per hectare, about equal to 2013 despite less favorable weather, as the portion of area in the high-yielding Xinjiang Autonomous Region continues to increase.

India's 2014/15 crop is estimated at 30.5 million bales, down slightly from the preceding year on lower yields. The world's largest producer is expected to harvest 12.7 million hectares, up 8.5 percent from a year earlier as a late monsoon shifted area to cotton from other crops. India's 2014/15 yield is estimated at 523 kg/hectare, 9 percent lower than last year due to rainfall deficits resulting from the late monsoon.

Pakistan is expected to produce 10.4 million bales in 2014/15, an increase of nearly 10 percent from the previous year. Pakistan's 2014/15 area harvested is expected to increase slightly to 3.05 million hectares, and yield is estimated at 742 kg/hectare due to favorable weather conditions.

Brazil, the largest producer in the Southern Hemisphere, is forecast to produce 7.0 million bales in 2014/15, down 12.5 percent from the previous year due to deteriorating price prospects for cotton at planting time. Brazil is expected to harvest only 1.0 million hectares in 2014/15, and yields are also expected to be down slightly.

Australia is expected to produce only 2.2 million bales in 2014/15, down 46 percent from the previous year due to limited irrigation supplies combined with dry conditions at planting time. Australia's 2014/15 harvested area is estimated at 235,000 hectares, down 46 percent from the preceding year. Yield is expected to be down only slightly at 2,038 kg/hectare.

2014/15 China Supply and Demand

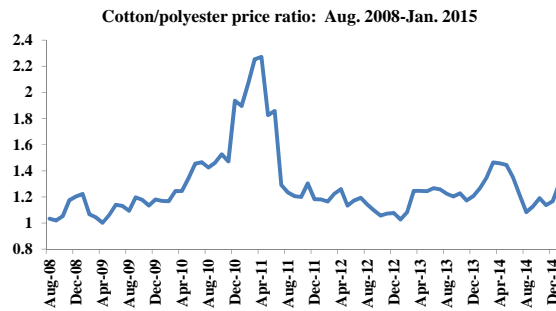
China Cotton Supply and Demand 2013/14 and 2014/15 est.

	<u>Unit</u>	<u>2013/14</u>	<u>2014/15</u>	<u>Change (%)</u>
Beg. Stocks	mil. bales	50.4	62.7	24.5
Production	"	32.8	30.0	-8.4
Imports	"	14.1	7.3	-48.3
Total supply	"	97.2	100.0	2.9
Consumption	"	34.5	35.5	2.9
Exports	"	0.0	0.1	92.3
Total use	"	34.5	35.6	3.0
Ending stocks	"	62.7	64.5	2.8
Reserve stocks	"	54.6	49.0	-10.2
Stocks-to-use	%	182	181	-0.2
% of world stks	"	61.7	58.7	-4.9

Changes to China's cotton support policies are the major drivers of both China and world supply and demand in 2014/15. The two most significant changes thus far are a shift from price support to income support for farmers and much tighter restrictions on imports compared with previous years. From 2011/12 to 2013/14, the government of China supported cotton farmers by setting support prices well above world market-clearing levels and buying up production. As a result, China began the 2014/15 season with estimated stocks of nearly 63 million bales, the equivalent of almost two years of domestic consumption. For 2014/15, the government reversed these policies by: (1) shifting from price to income supports; (2) allowing new-crop cotton to trade at market-clearing prices; and (3) placing more restrictive limits on imports. While China's imports have declined nearly 70 percent over the 3-year period, they remain high enough to contribute to rising stocks. In addition, the government is likely to begin selling cotton from the reserve this spring, but the quantity offered and sales price are as yet unknown.

China's internal cotton price has fallen sharply and 2014/15 consumption is expected to rise about 3 percent to 35.5 million bales, similar to 2012/13, but nearly 30 percent below the 50 million bales realized in 2009/10. While textile production in China continues to grow, domestic cotton spinning has lost ground both to manmade fibers and to cotton yarn imports from other countries (unrestricted by quotas). This season's recovery in cotton consumption has thus far been constrained by falling prices for manmade fibers, which have dampened the expected benefit of falling cotton prices to cotton's share of fiber consumption.

World Cotton Prices Relative to Polyester



Sources: cncotton.com (polyester), Cotlook Ltd. (cotton, A Index)

2014/15 World Consumption, Trade, Ending Stocks, and Prices

World Cotton Supply and Demand 2013/14 and 2014/15 est.

	<u>Unit</u>	<u>2013/14</u>	<u>2014/15</u>	<u>Change (%)</u>
Beg. Stocks	mil. bales	90.0	101.7	13.0
Production	"	120.4	119.4	-0.9
Imports	"	<u>40.6</u>	<u>34.2</u>	<u>-15.7</u>
Total supply	"	251.0	255.2	1.7
Consumption	"	109.1	111.3	2.0
Exports	"	<u>40.7</u>	<u>34.2</u>	<u>-15.9</u>
Total use	"	149.8	145.5	-2.9
Ending stocks	"	101.7	109.8	8.0
Stocks-to-consumption	%	93.2	98.7	5.9

World cotton consumption is expected to increase by 2 percent in 2014/15 to 111.3 million bales. Continued relatively strong global economic growth has resulted in improved aggregate textile demand while falling cotton prices have supported a slight recovery in cotton's fiber share. With

stronger than average growth projected for China's consumption, consumption in the rest of the world is expected to increase by 1.5 percent, mainly in India and Vietnam.

World trade is forecast down 16 percent from last season as the large fall in imports by China overshadows weak import demand growth elsewhere. Imports outside of China are forecast to increase by about 2 percent. India's exports are expected to fall by more than 50 percent due to lower import demand by China and lags in availability due to the India minimum support price (MSP) program.

The accumulation and distribution of world stocks continue to be distorted by the developments in China. World stocks are forecast to increase 8.2 million bales to 109.8 million bales, a fourth consecutive record both in volume and as a percent of world use. Over the three previous seasons, China had accounted for nearly all of the increase in world stocks. However, China's new policies aimed at reducing stocks --especially restrictions on imports--will force the majority of world stock accumulation into countries outside of China. India's stocks are forecast to rise by 3.4 million bales, accounting for about half of the stock accumulation outside of China. U.S. stocks are forecast to increase by nearly 1.8 million bales.

The A Index is forecast to average about 68 cents per pound for 2014/15, a 25-percent drop from last season. The announcement of the elimination of China's price support policy in early 2014 removed a floor under prices in China; with stocks outside of China expanding, the A Index has declined steadily since the beginning of the marketing year.

U.S. Cotton Situation, 2014/15

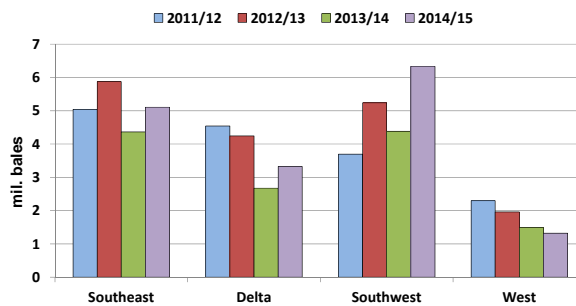
Area and Production

U.S. Cotton Area, Abandonment, Yield, and Production						
		<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	<u>2014/15</u>
Planted acres	mil. acres	11.0	14.7	12.3	10.4	11.0
Harvested acres	mil. acres	10.7	9.5	9.3	7.5	9.7
Abandonment rate	percent	2.5	35.8	24.0	27.5	12.1
Yield/harvested acre	lbs./acre	812	790	892	821	795
Production	mil. bales	18.1	15.6	17.3	12.9	16.1

U.S. all-cotton production in 2014/15 is estimated at 16.1 million bales, up nearly 25 percent from the previous season. Cotton planted acreage increased 6 percent in 2014, due mainly to favorable cotton prices at spring planting. The Southwest region benefitted from much-needed rain during the growing season, which contributed to a reduction in the overall abandonment rate to 12 percent. The U.S. cotton yield fell 26 pounds from 2013 and was below the 10-year average.

Upland production is estimated up 3.2 million bales from the previous year to 15.5 million bales in 2014, with an average yield of 781 pounds per harvested acre. Extra-long staple (ELS) cotton production is estimated down 7 percent at 588,000 bales, as smaller area and a lower yield reduced the crop to its smallest in four seasons.

**U.S. Cotton Regional Production,
2011/12 to 2014/15**



Compared with last season, 2014/15 upland production increased in all Cotton Belt regions except the West. Upland production in the Southwest increased nearly 2 million bales, due mainly to a sharp reduction in the abandonment rate. Planted area expanded to 6.5 million acres in 2014, and the Southwest region accounted for 60 percent of U.S. planted area. Harvested area totaled 5.2 million acres, up 2 million acres from the prior year as the region's abandonment rate dropped from 46 percent to 20 percent. The Southwest upland crop reached 6.3 million bales and accounted for 41 percent of upland production.

Southeast cotton production increased 17 percent in 2014 to 5.1 million bales, while planted area remained unchanged at 2.7 million acres. A reduction in the abandonment rate and an average yield increase of 125 pounds—to 926 pounds per harvested acre—accounted for the increase in Southeast production. Cotton production in the Delta expanded by 24 percent from the previous year to 3.3 million bales, but remained well below the 10-year average. Delta cotton planted acres increased by 18 percent, to 1.5 million acres, while the abandonment rate declined. Yield per harvested acre in the Delta set a record for the third year in a row, reaching 1,114 pounds in 2014.

Upland planted area in the West declined for the third year in a row to 250,000 acres. The region's upland production dropped to 765,000 bales, its lowest level since 2009, while the average yield increased to a record 1,536 pounds per harvested acre. The ELS crop remains concentrated in the West, with planted area falling to 192,000 acres in 2014. Yield decreased to 1,490 pounds per harvested acre, bringing ELS production to 588,000 bales. Total cotton production in the West was 1.3 million bales, compared with 1.5 million bales in 2013.

**U.S. Cotton Supply and Demand
2013/14 and 2014/15 (est.)**

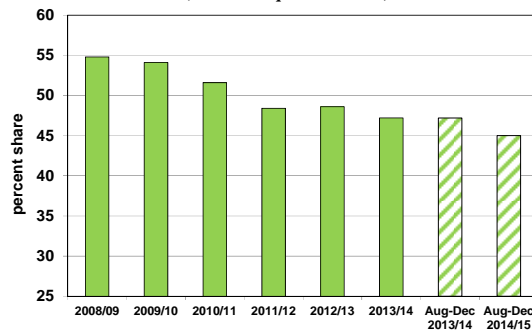
	<u>Unit</u>	<u>2013/14</u>	<u>2014/15</u>	<u>Change (%)</u>
Beginning Stocks	mil. bales	3.8	2.5	-35.5
Production	“	12.9	16.1	24.6
Imports	“	0.0	0.0	0.0
Total Supply	“	16.7	18.5	10.9
Mill Use	“	3.6	3.7	2.8
Exports	“	10.5	10.7	1.6
Total Use	“	14.1	14.4	1.9
Ending Stocks	“	2.5	4.2	71.4
Stocks-to-Use	%	17.4	29.3	68.4
Farm Price	cents/lb.	77.9	61.0	-21.7

Domestic Mill Use

U.S. cotton mill use for 2014/15 is forecast at 3.65 million bales, about 3 percent above the 2013/14 estimate. During the first 5 months of 2014/15, mill use is marginally below last season's corresponding period. However, with lower cotton prices and positive overall economic growth, U.S. cotton mill use is expected to improve during the second half of 2014/15.

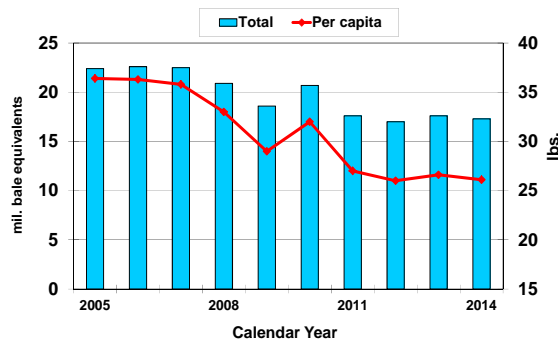
U.S. consumer demand for textile and apparel products follows the global economy. Economic conditions improved in calendar year 2014, and fiber product imports increased nearly 4 percent to their highest level since 2010. However, the gains were concentrated in non-cotton fibers in 2014, as cotton product imports decreased slightly from 17.6 million bale-equivalents in 2013 to 17.5 million bale-equivalents. Despite falling cotton prices, the trend has continued into the 2014/15 marketing year as manmade fiber prices have also fallen. Cotton's share of total imported products averaged 45 percent during the August-December 2014 period, compared with 47 percent for the same period in 2013.

**Cotton's Share of U.S. Textile Imports,
2008/09 to Aug-Dec 2014/15**
(raw fiber equivalent basis)



With U.S. cotton mill use and textile exports similar in magnitude, U.S. domestic consumption of cotton (mill use plus net textile trade) in calendar 2014 is estimated at nearly 17.4 million bale-equivalents, compared with 17.6 million in 2013. Similarly, U.S. per capita cotton consumption decreased half a pound in calendar 2014—to an estimated 26 pounds—and remains one of the lowest since the early 1990s.

**U.S. Domestic Cotton Consumption:
Total and Per Capita**



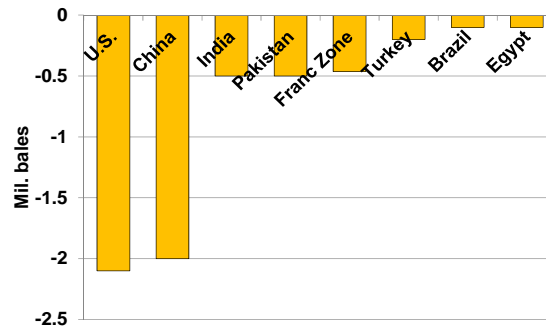
2014/15 U.S. Exports, Ending Stocks, and Prices

U.S. exports for 2014/15 are forecast at 10.7 million bales, marginally above 2013/14. U.S. exports are expected to capture a larger share of the declining foreign import demand due primarily to foreign mills' preference for machine-picked cotton in light of lower expected production by Brazil and Australia. The U.S. marketing loan program has also facilitated a quick response by the producer sector to falling world cotton prices, as the adjusted world price (AWP) fell to a low of 45 cents per pound at the end of January. Export commitments to date have been seasonally strong. Shipments in the early months of the season were slow due to very low carry-in stocks and some delay in harvesting. Ending stocks are forecast at 4.2 million bales, resulting in a stocks-to-use ratio of about 29 percent. The average farm price is expected to fall about 22 percent to 61 cents per pound.

World Cotton Outlook, 2015/16

World Cotton Production, 2015/16

**Projected Changes in World Production,
2015/16 compared with 2014/15**



World cotton production in 2015/16 is expected to decline more than 5 percent to 113 million bales. Production is expected to remain flat or decrease in all major producers, with the largest reductions of about 2 million bales each expected for the United States and China.

China's production is expected to decline to 28.0 million bales as producers respond to the government's new policies. In light of Xinjiang's relatively high target support level of 19,800 RMB/ton in 2014/15 (\$1.44/lb.), producers there are expected to cut planted area only marginally in the spring of 2015. By contrast, producers in the Yellow and Yangtze River regions were guaranteed a much smaller subsidy of at most 2,000 RMB/ton (14.5 cents/lb.), less provincial administrative costs. Producers in these regions have more employment and cropping options than Xinjiang producers, and are projected to reduce planted area by about 25 percent. Because Xinjiang's yields exceed other provinces' yields by a substantial margin, aggregate China production (-7 percent) will fall noticeably less than area (-11 percent).

India's area and yields have trended upward over the past several years; however, 2014/15 area rose and yields fell because the monsoon was delayed and rainfall was deficient, especially in Gujarat and Maharashtra. For 2015/16, planted area of 12.0 million hectares is expected to return to the 2011-2013 average. Assuming normal yields, production would be 30.0 million bales, down 500,000 bales from the 2014/15 estimate, making India the world's largest cotton producer for the second consecutive season.

Pakistan, the African Franc Zone countries, Turkey, and Egypt are all expected to show reductions in 2015/16. In the case of Pakistan, stable area and a return to normal yields following 2014's exceptionally good yields will result in a slight decrease. The Franc Zone countries, Turkey, and Egypt are expected to respond to lower world prices, with reductions of

450,000 bales, 200,000 bales, and 100,000 bales. In addition, the government of Egypt has announced its intention to eliminate subsidies for 2015.

Southern Hemisphere production is difficult to forecast because of the more distant time horizon for planting decisions, but the current outlook is for flat to lower production. Australia's irrigation reserves are currently below year-ago levels, suggesting that producers may have difficulty raising production above 2014/15's expected 2.2 million bales. Producers in Brazil responded to lower world prices by lowering area more than 10 percent in 2014/15, so it is unclear whether further reductions will be made, considering the weak price outlook for corn, which competes with cotton as a second crop following soybeans. While Brazil's government has agreed to raise the minimum support price there for the first time since 2003, the announced level is below current market prices.

USDA Policy Assumptions and Projections for China, 2015/16

As in 2014/15, the most important driver of world cotton supply and demand next season is likely to be China's production, stock, and import policies. China will be in its second year of a direct income support program for cotton. It is possible that the 19,800 RMB/ton (\$1.44/lb.) target price for Xinjiang will be reduced, but the announcement is likely to come too late to have a significant impact on planting intentions. Direct payments in the eastern provinces will be limited to the lesser of 2,000 RMB/ton (14.5 cents/lb.) or 60 percent of that paid in Xinjiang.

USDA is assuming that imports will reach 7.0 million bales in 2015/16 through a combination of WTO TRQ licenses totaling 894,000 tons (4.1 million bales), imports for processing and free trade zones, and cotton imported under the 40-percent out-of-quota duty. Imports are likely to be slightly below 2014/15 due to a lesser amount of quota carried into the 2015/16 season. USDA also anticipates that the government will temper its stocks release price and quantity in order to maintain internal prices at about the current level of 13,000-14,000 RMB/ton (\$0.94-\$1.02/lb.), in part because lower prices would raise the cost of subsidies to producers.

In this policy framework, there is potential for China to reduce stocks for the first time in five years; however, the degree of drawdown will be constrained by the response of production and consumption. USDA projects that China's consumption will rise by slightly more than the average global rate of increase, recovering nearly to its 2011/12 level of 38 million bales and thereby cutting stocks by about 2.6 million bales. With stocks of about 62 million bales, China would hold 58 percent of world stocks. Most of these stocks will continue to be held by the State Reserve.

China Cotton Supply and Demand
2014/15 est. and 2015/16 proj.

	<u>Unit</u>	<u>2014/15</u>	<u>2015/16</u>	<u>Change</u> <u>(%)</u>
Beg. Stocks	mil bales	62.7	64.5	2.8
Production	"	30.0	28.0	-6.7
Imports	"	7.3	7.0	-4.1
Total supply	"	100.0	99.5	-0.5
Consumption	"	35.5	37.5	5.6
Exports	"	0.1	0.1	0.0
Total use	"	35.6	37.6	5.7
Ending stocks	"	64.5	61.9	-4.0
Reserve stocks	"	49.0	45.0	-8.2
Stocks-to-use	%	181.3	164.7	-9.2

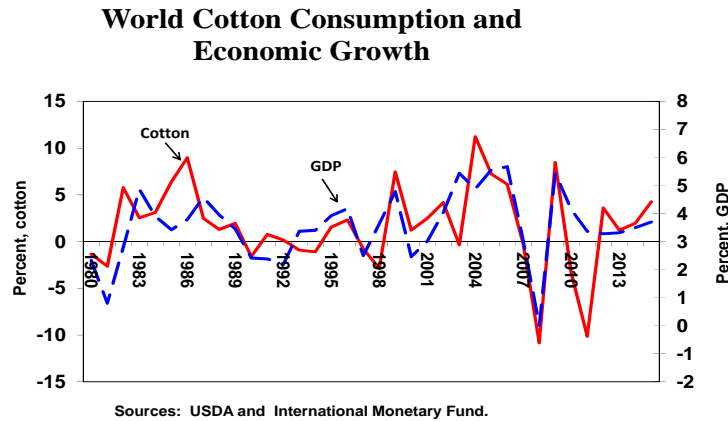
World Cotton Consumption, 2015/16

World cotton consumption is expected to grow at an unusually high rate in 2015/16, largely reflecting the sharp decline in the world cotton price in 2014/15. World economic growth is also expected to accelerate slightly in both calendar 2015 and 2016, providing further support to consumption, which is expected to increase about 4 percent from the year before. This would be the largest annual consumption increase since an 8-percent jump in 2009/10 and more than double the long-run average growth rate.

According to the International Monetary Fund's January 2015 update to its World Economic Outlook (WEO), world income growth in 2015 and 2016 is expected to be its fastest since 2011. At 3.7 and 4.1 percent, respectively, gross domestic product (GDP) growth is forecast slightly above the long-run (1980-2014) average rate of 3.5 percent.

In 2014/15, the A Index declined by an estimated 30.3 percent in inflation-adjusted terms. This decline was smaller in magnitude than the 34.1 percent and 33.2 percent declines that occurred in 2011/12 and 2001/02, but is still one of the largest downward price adjustments since 1980/81. For 2015/16, the A Index is forecast unchanged from the year before in nominal terms, suggesting a decline of 1.8 percent in real terms. Historically, the change in cotton prices from the year before has a substantially greater impact on a given year's cotton consumption than the price changes occurring in that same year; with polyester prices expected to be about unchanged from 2014/15, the current season's sharply lower cotton price supports the projection that world consumption will grow at an unusually large rate. This would be the fourth consecutive year of

rising cotton consumption, matching in duration the string of increases realized during 1999/2000-2002/03.



A downside risk to this forecast is that the GDP forecasts may turn out to have been optimistic. The standard deviation of the errors in such forecasts during 2005-12 was 2.3 percent, and the IMF's January forecasts have been too high in 5 out of the last 6 years. An upside risk to this forecast is that reduced domestic cotton price distortion in China could increase global consumption more than expected. As the gap between domestic China and world prices narrows, some Chinese mill capacity that had been mothballed or diverted to other fibers is likely to return to production. At the same time, spinning capacity has expanded outside of China since 2011 to supply yarn imports to China and to meet demand in other markets that mills in China could no longer profitably supply. While some non-Chinese capacity might be diverted when China's cotton spinning production increases, much is likely to remain active, and the expanding capacity could well result in more competitive yarn prices and higher consumption for cotton textiles.

World and China Cotton Trade, Stocks, and Prices, 2015/16

World trade in 2015/16 is projected about even with 2014/15. China's consumption is expected to grow by almost 6 percent, above the average projected for the world, due to the lagged effect of sharply lower domestic prices in 2014/15. China's imports are expected to stabilize. While total imports outside of China are expected to be nearly unchanged, cotton consumption is expected to continue to shift toward import-dependent countries in Southeast Asia and Bangladesh and away from producer-consumer countries such as Turkey and Pakistan. India's exports are projected to increase based on a record total supply attributable to large carry-in stocks and stable production. U.S. exports are forecast to decline.

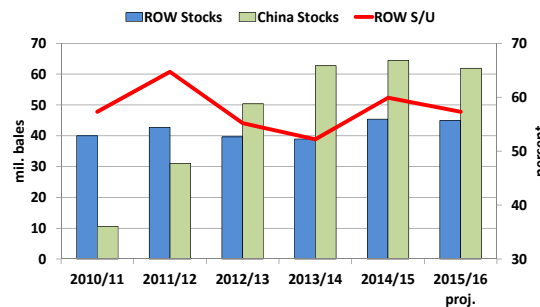
**World Cotton Supply and Demand
2014/15 est. and 2015/16 proj.**

	<u>Unit</u>	<u>2014/15</u>	<u>2015/16</u>	<u>Change</u> <u>(%)</u>
Beg. Stocks	mil bales	101.7	109.8	8.0
Production	"	119.4	113.0	-5.4
Imports	"	34.2	34.0	-0.6
Total supply	"	255.2	256.8	0.6
Consumption	"	111.3	116.0	4.2
Exports	"	34.2	34.0	-0.6
Total use	"	145.5	150.0	3.1
Ending stocks	"	109.8	106.8	-2.7
China stocks	"	64.5	61.9	-4.0
Stocks-to-consumption	%	98.7	92.1	-6.7

World ending stocks would fall nearly 3 percent to about 107 million bales based on these projections. Assuming a continuation of China's current producer support and stocks reduction policies, China is expected to reduce stocks about 4 percent, leaving the rest of the world with a marginal decrease.

Stocks outside of China are likely to remain above the recent historical average both in absolute terms and as a percentage of use, pressuring global prices. Accordingly, the A Index is projected at 68 cents per pound, the same as the 2014/15 estimate, which is a six-year low.

**China's Stocks, Stocks Outside China,
and Stocks Outside China as % of Use**



U.S. Cotton Outlook, 2015/16

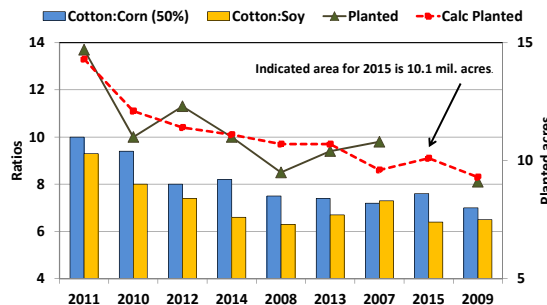
Area, Production, and Supply

U.S. Cotton Area, Yield, and Production 2014/15 est. and 2015/16 proj.

	<u>Unit</u>	<u>2014/15</u>	<u>2015/16</u>	<u>Change(%)</u>
Planted area	mil. acres	11.0	9.7	-11.8
Harvested area	"	9.7	8.4	-13.4
Abandonment rate	%	12.1	13.4	10.7
Yield/harvested acre	lbs./acre	795	800	0.6
Production	mil. bales	16.1	14.0	-13.0

The early USDA projection for 2015 U.S. cotton planted acreage is 9.7 million acres, a decrease of nearly 12 percent from last year, due mainly to relative prices and net returns that favor alternative crops over cotton. The projection is below the roughly 10.0 million acres indicated by statistical analysis, but above the recent National Cotton Council (NCC) survey. The statistical analysis quantifies the effects of relative crop prices as well as the change in cotton prices. The main variables are ratios of cotton to corn and soybean prices (using averages of fall futures prices for the February-March period preceding planting each year) and cotton's own price relationship. For 2015, futures prices as of the end of January are used.

**All-Cotton Planted Acres Based on
Relative Crop Prices and Cotton Own Price
2007-2015**



In addition to price, the 2014 farm legislation is expected to impact cotton area in 2015. While cotton retained some price support in the 2014 Farm Bill via the upland marketing assistance loan program and the continuation of other cotton programs, it was not included as one of the covered commodities eligible for the new Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs. Instead, cotton support shifted to a shallow loss revenue insurance program called STAX. Given that STAX provides within-season risk coverage but does not

support against price declines from one season to the next, the program will have little impact on planting decisions.

By contrast, potential payments for other crops under the ARC and PLC programs may limit cotton acreage in 2015. Growers with cotton base acres (now called generic base acres) can participate in ARC and PLC provided they grow a covered commodity on those acres. Whether these incentives will impact cotton acreage is unknown—the newness of the program and the possibility that farmers could shift plantings of covered commodities to generic base acreage without reducing cotton planted acres makes estimation difficult.

The NCC's survey forecast of 9.4 million acres was released on February 7, reflecting responses received from mid-December through mid-January. Survey respondents reported decreases in upland cotton area for each region of the Cotton Belt. In the Southeast, acreage shifting out of cotton was reportedly moving mainly to soybeans and peanuts. For the Delta States, cotton area was expected to move to soybeans. The survey indicated that Southwest producers will shift acreage away from upland cotton and into wheat, grain sorghum, and corn. Water availability issues and competition from alternative crops also are expected to limit upland cotton area in the West; however, the NCC reported that ELS cotton planted area will rise due to favorable prices relative to upland cotton. USDA's first survey of producer planting intentions—*Prospective Plantings*—will be conducted in early March and published on March 31, 2015.

For the purposes of this analysis, cotton plantings of 9.7 million acres are estimated to result in harvested acreage of 8.4 million acres. The projected U.S. harvested area is based on regional abandonment rates near their long-run averages. As a result, U.S. abandonment of 13 percent is slightly above 2014 but well below the 2011-13 seasons. With the Southwest expected to account for 60 percent of U.S. cotton area in 2015, crop conditions in this region will have a considerable impact on the U.S. crop. The NOAA mid-January seasonal outlook for the Southwest indicates that drought will persist through the end of April for much of the region. Despite recent improvements in some areas of the Southwest, the long-term drought that significantly impacted both planted area and abandonment in recent years remains.

USDA is forecasting a national average yield of 800 pounds per harvested acre, based on 3-year regional averages. U.S. 2015 crop production is projected at 14.0 million bales, 13 percent below 2014 but 8.5 percent above 2013. With carry-in stocks at 4.2 million bales, total supply—18.2 million bales—would decline approximately 2 percent from 2014/15.

U.S. Disappearance, Ending Stocks, and Farm Price

**U.S. Cotton Supply and Demand
2014/15 est. and 2015/16 proj.**

	Unit	2014/15	2015/16	Change(%)
Beg. Stocks	mil bales	2.45	4.20	71.4
Production	"	16.08	14.00	-12.9
Imports	"	0.01	0.01	0.0
Total supply	"	18.54	18.21	-1.8
Mill use	"	3.65	3.75	2.7
Exports	"	10.70	10.20	-4.7
Total use	"	14.35	13.95	-2.8
Ending stocks	"	4.20	4.30	2.4
Stocks-to-use	%	29.3	30.8	5.1
Farm price	cents/lb.	61.0	60.0	-1.6

U.S. domestic mill use is projected at 3.75 million bales, slightly above 2014/15. Mill use has shown steady improvement from a low of 3.3 million bales in 2011/12, when cotton prices peaked relative to polyester. Gains are projected to continue into 2015/16, due to more competitive prices and increased efficiencies from investment. U.S. cotton mill use has been sustained mostly by semi-processed textile and apparel exports—mainly to Mexico and the CAFTA-DR/CBI countries—that are finished and shipped back to the United States. U.S. mill use is also benefitting from cotton yarn shipments to China and from expanding capacity.

U.S. cotton exports are projected at 10.2 million bales in 2015/16, a decline of nearly 5 percent, due to expectations for increased export competition from India and reduced import demand by China. The United States is projected to account for a world trade share near 30 percent in 2015/16, below 2014/15 but one of the highest since 2010/11. Ending stocks, projected at 4.3 million bales, would be about unchanged and account for 31 percent of total disappearance, compared with a 5-year average of 21 percent. However, U.S. stocks as a share of world stocks are expected to remain below 5 percent, consistent with the four previous seasons.

The 2015/16 marketing year average price received by U.S. upland cotton producers is projected to range between 55 and 65 cents per pound, with the mid-point slightly below the 2014/15 estimate of 61 cents per pound. Supporting the price projection are December 2015 cotton futures which, as of early February, were around 63 cents per pound; likewise, prices of corn and soybeans, the main cropping alternatives to cotton, are projected below the current season.