The Economic Outlook
For U.S. Cotton 2011

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Summary

With this economic outlook, NCC economists strive to provide information and analyses that will equip the industry to better address issues and challenges arising in today’s market. An overview of key issues follows in this summary, accompanied by supply and demand estimates for selected countries in Table 1 on page 4. Detailed discussions and data are more thoroughly presented in subsequent sections.

As 2011 begins, the global cotton market is experiencing unprecedented prices with the “A” Index above $1.80 and nearby futures trading in the $1.60’s. Unlike the price spike of March 2008, the current price situation has support from the fundamentals. Global demand exceeded production by a substantial margin in the 2009 marketing year. A post-recession rebound in cotton demand coincided with world cotton area at its lowest since 1986. To offset the shortfall in production, existing stockpiles of cotton were scooped up by the world’s textile mills during calendar 2010. Concerns over crops in China and Pakistan compounded the apprehension caused by the tighter stocks situation. Adding to the uncertainty, India, the world’s 2nd largest cotton exporter, restricted cotton exports either through a ban, strict licensing requirements, or quota applications.

Before summarizing the cotton outlook, it is important to briefly review the assumptions underpinning the forecast. Farm and trade policies prevailing for the 2011 marketing year are assumed to remain aligned with current policies. In terms of the general economy, the outlook relies on the latest projections by the International Monetary Fund (IMF) released in January. According to the IMF, the “two-speed recovery” continues. Growth will be sluggish in advanced economies as unemployment remains high. In many developing economies, overall economic performance is promising but inflation pressures are emerging. For 2011 and 2012, the IMF calls for global real GDP to expand by 4.4% and 4.5%, respectively, which is down from 5.0% in 2010. Continued improvement in the overall economy will be critical to sustaining cotton demand, particularly in this time of higher prices.

With exports accounting for 80% of total offtake of U.S. cotton, developments in international markets have significant impacts on the U.S. cotton outlook. These impacts are clearly evident in the current 2010 marketing year. With tight supplies in international markets, strong import demand by China, and export restrictions by India, U.S. export sales are off to a record-setting pace. As of mid-January, export sales totaled 14.7 million bales, with shipments of 5.1 million. For the 2010 marketing year, U.S. exports are projected to reach 15.3 million bales. However, while the demand for U.S. cotton is strong, achieving exports of 15.3 million bales will require average weekly shipments of 360 thousand bales for the remainder of the marketing year.

Complementing strong export demand is renewed optimism from the U.S. textile industry. After more than a decade of decline due primarily to surging textile imports, U.S. mill use has bounced back in recent months with current monthly estimates running 10% above year-earlier levels. In addition to the improved climate for yarn demand, the optimism in the U.S. textile industry is bolstered by the Upland Cotton Economic Adjustment Assistance Program (EAAP), which was authorized in the 2008 Farm Bill.
EAAP funds have allowed U.S. cotton textile manufacturers to make significant investments in new textile machinery to increase efficiency, add capacity and expand into new product lines. Funding has been used in the construction of new buildings and structural improvements to existing buildings. As a result, textile mills have added jobs, reduced costs, and increased their ability to be more competitive against foreign competition.

Despite the challenges caused by higher cotton prices, improved yarn demand and the EAAP funds are creating a positive tone that will boost U.S. mill use for the 2010 marketing year to an estimated 3.7 million bales, up from 3.5 million bales in 2009. For the coming year, further growth is projected with mill use at 3.8 million bales.

Exports and mill use combine to give total demand of 19.0 million bales for U.S. cotton in the 2010 marketing year. With a 2010 harvest of 18.3 million bales, U.S. stocks that began the marketing year at an already tight level under 3.0 million bales will fall to 2.3 million bales by July 31, 2011. When compared to the past 50 years, ending stocks for the 2010 marketing year will represent a new low. The United States will be essentially sold out of cotton as any remaining stocks will be committed to a textile mill, either in the U.S. or abroad.

Looking ahead to the 2011 marketing year, export demand for U.S. cotton will be determined by developments in international production and demand. With international cotton prices at all-time highs, and well above previous highs, it is not a question of if cotton area will increase, but rather the extent to which it will increase. For 2011, international cotton area is forecast at 76.0 million acres, up from 71.6 million acres in 2010. The 2011 area surpasses the previous high of 75.2 million acres in 2004. The overall increase of 6% may appear conservative given current cotton prices, but it is important to remember that feed and food crop prices are also at very high levels. Also, area in the two largest cotton producing countries – China and India – is expected to be limited by government actions. China will continue to place a priority on grain production, while export restrictions in India are keeping their internal prices at a substantial discount to international prices.

Assuming normal growing conditions and average yields, international cotton production is forecast at 104.1 million bales for 2011.

As the general economy continues to improve, a relatively positive demand climate is expected to prevail. However, growth in demand could be tempered somewhat by the current price environment with the “A” Index trading approximately 80 cents above Asian polyester prices. While anecdotal evidence is emerging regarding a shift to competing fibers, cotton yarn and textile production are continuing to advance.

In 2011, world mill use is projected to grow to 121.1 million bales, up from 116.9 million bales in the 2010 marketing year. Despite the projected 3.6% growth, 2011 mill use is more than 2 million bales below the 2006 peak. India and China are expected to account for more than one-half of the world growth. It should also be pointed out that consumers in developing markets such as China and India will increasingly become the drivers of global retail cotton demand.

Recovery in cotton demand bodes well for total cotton trade. Increased mill use in China will require additional imports as available cotton stocks remain at low levels. In fact, for most countries, beginning stocks for the 2011 marketing year are at the lowest levels in recent years, and leave little room
for further reductions during the upcoming marketing year.

Increased import demand will create a positive environment for U.S. cotton exports. However, increased supplies in West Africa, Australia and Uzbekistan will lead to additional export competition. India’s exports are expected to be constrained by government restrictions. The result of the adjustments in exporting and importing countries offers an opportunity for U.S. exports to increase. For the 2011 marketing year, U.S. cotton exports are forecast at 15.6 million bales, which would be the 2nd highest level after the 2005 marketing year.

When combined with U.S. mill use of 3.8 million bales, the demand base for U.S. cotton totals 19.3 million bales for the 2011 marketing year. However, with little cotton being carried forward into the 2011 year, the offtake of U.S. cotton could be dictated by the size of the 2011 crop.

To gauge the potential for U.S. production, the National Cotton Council conducted the annual early season planting intentions survey. Respondents were asked to give their plantings of cotton, corn, soybeans, wheat, and other crops for 2010 and intended acreage for 2011. The survey results indicate U.S. all-cotton plantings in 2011 of 12.5 million acres, 14.0% higher than 2010 (Table 4 on page 46).

By region, the Southeast indicates a 12.8% increase to 2.9 million acres. Increased cotton acres are coming at the expense of corn and soybeans. In the Mid-South, survey results show that growers intend to plant 2.3 million acres, an increase of 18.9% from the previous year. In each of the five states, the survey suggests that cotton will be pulling acres away from soybeans, while growers in Mississippi, Missouri, and Tennessee also plan to reduce acreage devoted to corn.

Growers in the Southwest are planning to bring 700 thousand acres into cotton production, bringing the regional total to 6.6 million acres (+11.9%). All states in the West region show increases in upland plantings, with the region as a whole up 27.0%. ELS acres are projected to increase 23.1% to 251 thousand acres.

Assuming an average abandonment across the Cotton Belt of 11.0%, harvested area totals 11.1 million acres. For all states, expected yields are aligned with recent trends. Weighting by 2011 area generates a U.S. average yield of 826 pounds. Applying each state’s yield to its 2011 projected harvested acres generates a cotton crop of 19.2 million bales, with 18.5 million bales of upland and 671 thousand bales of ELS.

With a projected crop smaller than total offtake, U.S. stocks are expected to fall to 2.1 million bales by the end of the 2011 marketing year. Globally, a modest increase in stocks is projected, but the overall stocks-to-use relationship does not materially change from 2010.

Relative to recent history, the Council’s economic outlook calls for the overall cotton supply and demand situation to remain tight for the coming year. While the NCC does not project prices, the overall cotton balance sheet, coupled with continued pressure from competing crops, is consistent with cotton prices above historical norms. In the current environment, volatility will tend to be the rule rather than the exception as markets will be more sensitive to unexpected shocks. Of course, as with any outlook, there are a number of risks and uncertainties. A key issue to watch going forward will be the ability to sustain cotton demand in the prevailing market conditions, particularly given the fragile nature of the macroeconomic recovery.
### Table 1 - Balance Sheet for Selected Countries & Regions

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U.S. and World Economy

For 2011, the general consensus calls for global economic growth to continue, albeit at a slower pace than in 2010. Analysts are also quick to caution that numerous downside risks remain. Many of the concerns regarding the anemic recovery stem from continuing problems in developed economies. As the effects of stimulus measures wane, a key question will be the extent to which developed economies can expand in 2011. Although inflation is expected to be fairly modest in the near term, household balance sheets are weak, the housing market is struggling, and unemployment remains at elevated levels.

A global economic outlook released by the United Nations (UN) in December contrasted the slow recovery in developed economies with strong expansion in many developing and emerging economies. The current recovery has been led by the large emerging economies in Asia and Latin America, particularly China, India and Brazil. However, the UN report cautions whether or not the developing economies can sustain their robust growth since their export sectors rely heavily on demand in developed countries. Economic recovery in developing countries also faces risks associated with the increased flow of private capital into these markets. The increased capital flows, which to some degree are associated with the monetary policies in developed economies, have the potential to put upward pressure on these countries’ currencies and inflate domestic assets.

Compounding the aforementioned risks, the International Monetary Fund (IMF), in a recent report, noted that market volatility has increased and investor confidence has declined. However, despite these significant challenges, the IMF suggests that the probability of a sharp global slowdown appears low. The IMF is also quick to note that in their opinion, continued economic recovery will require coordinated policies that support the fundamental adjustments needed for a return to healthy medium-term growth.

Concerns about the current economic recovery are evident from data regarding consumer attitudes. The University of Michigan’s Consumer Sentiment Index is a tool designed to gauge the mood of the American consumer with regards to the economy. After reaching a low of 55.3 in November 2008, the index recovered throughout 2009 (Figure 1). However, little or no improvement in consumer sentiment was observed in 2010 as the index bounced between the upper 60’s and mid 70’s.

![Consumer Sentiment Index](image)

Figure 1 - Consumer Sentiment Index

Preliminary estimates for January 2011 show a slight decline in consumer confidence. Unemployment rates hovering around 9.5% and recent increases in fuel prices have dampened the current sentiments for the U.S. economy. Although the gauge of current conditions remains tempered, the latest consumer survey did offer a more positive picture regarding the expectations of the economy for 6 months from now.
This index of expectations is at its highest level since June 2010.

**U.S. Gross Domestic Product**

As determined by the Bureau of Economic Analysis, the U.S. 2010 third quarter real Gross Domestic Product (GDP) expanded by 2.6% (Figure 2) from the second quarter, following on gains of 3.7% and 1.7% in the first and second quarter, respectively. The increase in real GDP in the third quarter primarily reflected positive contributions from personal consumption expenditures, private inventory investment, nonresidential fixed investment, exports, and federal government spending that were partly offset by a negative contribution from residential fixed investment.

![Change in U.S. Real GDP](image)

**Figure 2 - Change in U.S. Real GDP**

As previously discussed, the latest projections call for modest economic growth to continue into 2011. In their annual economic outlook, the Wells Fargo Economics Group forecasts the U.S. economy to grow in the range of 2.5% to 3.0% over the course of 2011. In their view, consumer spending will improve based on modest improvements in labor and housing markets.

U.S. household consumption declined sharply in late 2008, against the backdrop of a deepening financial crisis. Declines continued through the first two quarters of 2009 due to a weak job market and reduced personal wealth stemming from sharp declines in equity markets (Figure 3).

![Change in U.S. Real Personal Consumption Expenditures](image)

**Figure 3 - Change in U.S. Real Personal Consumption Expenditures**

Both business and residential investment fell to extraordinarily low levels in response to the previous overbuilding of the housing stock and the falloff in demand for goods and services. U.S. private investment, which has been on the defensive since 2005, bottomed out mid-2009 as a diminishing housing market restricted credit lines and eliminated housing wealth. During 2010, residential investment has exhibited a volatile picture with sharp increases followed by equally sharp declines in quarterly estimates (Figure 4).
There are several factors that will have lasting effects on U.S. consumption and private investment beyond the immediate crisis. In the near future, asset prices and household wealth are not likely to return to their pre-crisis highs. Credit conditions are likely to remain tighter than in the past decade, reflecting a renewed appreciation of risks and the decline in wealth—including housing wealth which tends to recover very slowly. However, perceived uncertainty facing households could remain high longer than many economists expect, given the anemic pace of recovery and slow job creation.

**U.S. Employment**

After contracting through much of 2008 and 2009, the U.S. work force showed signs of stabilizing in 2010, but obvious signs of improvement are difficult to discern. After civilian employment fell to a low of 58.2% in December 2009, a brief recovery ensued through May 2010 (Figure 5). However, by the end of 2010, civilian employment had retreated to the low levels observed in late 2009.

A very similar picture prevailed for manufacturing employment. By December 2010, manufacturing jobs totaling 11.7 million are only slightly better than the low of 11.5 million in December 2009 (Figure 6). Furthermore, current manufacturing jobs are 2 million less than pre-recession levels. Economic projections show little hope that those jobs will be fully regained any time soon.

The current economic recovery has been appropriately described as a jobless recovery with unemployment generally hovering between 9.5% and 10.0% throughout 2010 (Figure 7). Considering that as late as July 2008, the unemployment rate was below 6.0%, the current jobless rate is a vivid
reminder of the challenges facing the labor market.

![Figure 7 - Civilian Unemployment Rate](image1)

Most sources conclude that the high rate of unemployment for 2010 will be maintained through most of 2011 and perhaps into 2012. The Wells Fargo projections forecast 2011 unemployment at 9.8% and 9.2% for 2012. Although the high unemployment rate seems daunting, economists note that temporary hiring, length of the workweek and initial jobless claims have shown signs of stabilizing in recent months.

**U.S. Housing Market**

The housing industry is a key barometer of the well-being of the economy. As with most other indicators of the current economic environment, new housing starts appear to have bottomed but have yet to show any signs of rebounding. After hitting a low seasonally-adjusted annual rate of 477 thousand units in April 2009, housing starts bounced between 500 and 700 thousand units through the remainder of 2009 and the whole of 2010 (Figure 8). Underscoring the challenges facing the housing market is the latest news that foreclosures reached a record 1.05 million homes in 2010.

![Figure 8 - U.S. New Housing Starts](image2)

The outlook for 2011 is somewhat mixed as analysts weigh the numerous factors that shape the housing market. The National Association of Realtors called for housing starts of just over 700 thousand units in 2011 while projections by the National Association of Home Builders are below 600 thousand units. Although both projections improve on 2010’s performance, they fall well short of pre-recession levels.

For much of 2010, 30-year mortgage rates continued to drift lower, reaching a low of 4.23 percent in October (Figure 9). Mortgage rates began to climb toward the end of 2010 as yields of Treasury bonds began to rise. For December, Freddie Mac’s survey put the average mortgage rate at 4.71%, up from 4.30% in November. Mortgage rates generally track bond yields, which move inversely to Treasury prices. Surveys in early January show mortgage rates moderating, in part due to bond yields drifting lower following the release of the December employment report, which was weaker than expected.
Federal Reserve Board
The Federal Reserve controls the three tools of monetary policy -- open market operations, the discount rate, and reserve requirements. The Board of Governors of the Federal Reserve System is responsible for the discount rate and reserve requirements, and the Federal Open Market Committee is responsible for open market operations. Primarily, the federal fund rate is the tool for influencing the economy – the interest rate that banks charge each other for overnight loans.

As economic conditions deteriorated in 2008, the Federal Reserve quickly lowered the fund rate into the range of 0% to 0.25% (Figure 10), and the rate remained in that range for both 2009 and 2010. Based on the sluggish labor market and cautious comments by Fed Chairman Ben Bernanke regarding economic recovery, it appears increasingly unlikely that the fund rate will change dramatically in 2011. Fed-funds futures traders still expect the fund rate to rise to 0.5 percentage points by the end of 2011, but the probability of that happening has declined based on recent comments by Chairman Bernanke.

Federal Budget Situation
The severe economic downturn and nearly unprecedented turmoil in the financial systems over the past two years, combined with federal policies implemented in response to those conditions, have caused deficits to climb dramatically.

The Congressional Budget Office (CBO) estimates for fiscal year 2011 that federal spending will total $3.7 trillion and revenue will only reach $2.2 trillion (Figure 11), resulting in a deficit of $1.5 trillion.

The deficits of $1.4 trillion in 2009 and $1.3 trillion in 2010 are, when measured as a share of GDP, the largest since 1945—representing 10.0% and 8.9% of the nation's output, respectively. CBO’s latest projected
The federal budget deficit of $1.5 trillion for fiscal year 2011 exceeds both the previous 2 years (Figure 12). The deficits in CBO’s baseline projections drop sharply over the next few years as a share of output. Their projections, however, are based on the assumption that tax and spending policies unfold as specified in current law. Consequently, they understate the budget deficits that would occur if many policies currently in place were continued, rather than allowed to expire as scheduled under current law.

On an annual average basis, the CPI increased by 1.6%, which followed a decline of 0.4% in 2009. In addition to higher energy costs, consumers also experienced higher health costs and increased prices for certain foods such as meat and dairy products.

On a December-to-December basis, the PPI for finished goods rose in 2010 by 4.0%, which is slightly lower than the 4.3% reported in December 2009 (Figure 14). About three-fourths of the December rise in the finished goods index can be traced to prices for energy goods, which increased 3.7%. Also contributing to the broad-based advance in the finished goods index, prices for consumer foods and for goods other than foods and energy moved up 0.8% and 0.2%, respectively.

**Consumer and Producer Price Indices**

Inflation acts as a tax on investment by increasing the cost of equity-financed investment and reducing corporate equity values. U.S. inflation is commonly measured by the Consumer Price Index (CPI) and the Producer Price Index (PPI).

Measured by the December-to-December change, the CPI rose 1.5% in 2010, according to Labor Department figures, well below the 2.7% gain in 2009 (Figure 13). The more modest inflation figures are largely due to a deceleration in the gasoline index, which increased 13.8% in 2010 after rising 53.5% in 2009. The energy index as a whole, which rose 18.2% in 2009, increased 7.7% in 2010.
Figure 14 - Producer Price Index, Finished Goods

For the year as a whole, the PPI for finished goods increased by 4.3%, which is in line with average inflation for 2003 through 2007.

Energy Prices and Supply

The latest projections by the Department of Energy’s Energy Information Administration (EIA) call for a continuing tightening of world oil markets over the next two years. Global oil consumption is expected to grow by an average of 1.5 million barrels per day while the growth in non-Organization of the Petroleum Exporting Countries (non-OPEC) averages less than 100 thousand barrels per day. As a result, the EIA expects that demand growth will be met by reducing inventories and increased crude oil production in OPEC countries.

Crude oil price projections reflect the tightening world market conditions. In late 2010, the West Texas Intermediate (WTI) crude oil price moved from the mid-$70’s up to just under $90 per barrel (Figure 15). For 2011, prices are expected to gradually move higher, closing the year at $95 per barrel.

The EIA’s forecast acknowledges the significant uncertainties surrounding their latest outlook. A decision by OPEC not to increase production would push prices significantly higher. However, overall demand growth will hinge on the rate of economic recovery, both domestically and globally.

Retail diesel fuel prices (Figure 16), which track closely with crude oil prices, averaged $3.24 per gallon in December 2010, up $0.50 per gallon from year-earlier levels. The EIA projects diesel prices to average $3.34 per gallon for January 2011, and steadily increase to $3.43 per gallon by December 2011. Rising crude oil prices are the primary reason for higher retail prices, but higher gasoline and distillate refining margins are also expected to contribute to higher retail prices.
The Henry Hub spot price averaged $4.38 per thousand cubic foot (Mcf) in December 2010 (Figure 17), an increase of $0.56 from November’s price. EIA expects that higher forecasted production during the first half of 2011 compared with the same period last year, combined with a decline in consumption, will moderate natural gas spot prices. By mid-2011, natural gas prices are expected to dip just below $4 per Mcf.

Stocks got off to a fast start in 2011, and historically, early-year performance has been a fairly accurate indicator of the full-year performance. While many market watchers think that a short-term pullback is likely, the longer-term expectations for 2011 remain positive.

**World Economies**

After a deep global recession, economic growth has turned positive as wide-ranging public intervention has supported demand and lowered uncertainty and systematic risk in financial markets. The recovery could be hindered as governments withdraw their support. In addition, households that suffered severe asset price declines will continue to rebuild savings while struggling with high unemployment.

According to the IMF’s January 2011 economic outlook, “the two-speed recovery...
continues. In advanced economies, activity has moderated less than expected, but growth remains subdued, unemployment is still high, and renewed stresses in the euro area periphery are contributing to downside risks. In many emerging economies, activity remains buoyant, inflation pressures are emerging, and there are now some signs of overheating, driven in part by strong capital inflows.”

After contracting by 0.6% in 2009, the IMF estimates that world real GDP grew by 5.0% in 2010, which compares favorably with growth rates observed in 2004 through 2007 (Figure 19). The latest forecast calls for 2011 growth of 4.4%, followed by 4.5% in 2012. The IMF points out that both years fall short of 2010 growth and the recovery remains fragile as strong policies to foster internal rebalancing of demand from public to private sources and external rebalancing from deficit to surplus economies are not yet in place.

After generally responding positively in 2009, Asian equity markets exhibited a more mixed reaction in 2010 (Figure 20). Japan’s Nikkei underperformed compared to their peers for the whole of 2010. In fact, the Nikkei index ended the year at 10,500, which was generally the same level at which the year began. The Hong Kong Hang Seng market jumped 25% from the start of the year, recouping the majority of the losses of 2008.

Looking across key countries and regions, annual real GDP growth in the Euro Area and Japan is expected to remain at or below 2% in 2011 and 2012 (Table 2). A more favorable picture is unfolding for developing countries. China and India are expected to continue to lead the way in the current recovery with growth rates above 8% for India and 9% for China.

### Table 2 - Selected Economies: Real GDP

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<th>2010e</th>
<th>2011f</th>
<th>2012f</th>
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<td>Mexico</td>
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<td>5.2</td>
<td>4.2</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund, January 2011

The IMF projects that output of emerging and developing economies will expand at 6.5% in 2011 and 2012. In advanced economies, growth is projected at 2.5% in both 2011 and 2012. Inflation is projected to stay generally low, amid continued excess capacity and high unemployment, with a few exceptions among the emerging economies. Risks to the forecasts are mainly to the downside.
Exchange Rates
During periods of market uncertainty, traders sell currencies that are perceived riskier and place their bets in safe havens. One sign that stability is returning to the global economy is an easing of the volatility in major currency pairs. Now, many traders turn to a carry-trade strategy as they seek to profit from the interest rate differential between currencies.

After retreating for much of 2009, the U.S. dollar rallied against the Euro during the first half of 2010 as the Fed made modest increases in the funds rate (Figure 21). In addition, concerns over debt levels in some European countries contributed to the rally in the dollar. The value of the dollar declined through October before rallying near the end of 2010.

During 2010, the yen became about 12% stronger compared to the U.S. dollar (Figure 22). From a historic perspective, the strengthening of the yen is in line with the overall trend observed during the last several years; the yen has been getting stronger against the U.S. dollar.

The cause for the strengthening of the yen is that the yen is a currency with net inflows. The reason for this is the combination of the strengthening trend itself, the Japanese trade surplus, the uncertainty around European public debt, the expected monetary policy in the U.S. and the diversification of foreign reserves in other countries away from the U.S. dollar and euro.
An overriding trend across many currency markets played out this past year with an overall weakening of the dollar. This held true for the Brazilian Real, South Korean Won, Indian Rupee, Indonesian Rupiah and the Chinese Yuan (Figures 23-26 and Figure 28). Only in Pakistan did the trend differ (Figure 27).

One factor influencing the value of the dollar is the Quantitative Easing Two (QE2) program announced by the Federal Reserve in November. The program is expected to purchase longer-term Treasury securities at a pace of $75 billion dollars per month, and is expected to continue through 2011. Monetary inflation is one result of QE2 because when the Federal Reserve buys U.S. Treasuries it injects newly created money into the financial system which, in turn, reduces the value of the U.S. dollar. QE2 has been widely criticized by financial and political leaders representing U.S. creditors, exporters and emerging economies.
The Federal Reserve Board publishes a real exchange rate index comparing the dollar to a weighted average of currencies of important trading partners, excluding major developed economies. Since early 2009, the trade weighted index fell 10 percentage points (Figure 29).

Commodity Prices
The Commodity Research Bureau (CRB) maintains an index of commodity price movements. The commodities included in the index range from traditional U.S. agricultural commodities to heavily traded international products such as cocoa, coffee and sugar to metals and energy. The index is a combination of arithmetic and geometric averaging which means its absolute value at any one time is not particularly informative. However, the movement in the index from any base point can be revealing.

Commodities started 2009 under continued pressure through the first quarter, before reversing and climbing modestly throughout the year. The recovery in commodity prices continued through the first quarter of 2010 before dipping in the second quarter of last year (Figure 30). However, in the latter half of 2010, commodities posted solid gains as adverse weather reduced global crops, debt woes in Europe boosted demand for precious metals, and China remained a significant importer of everything from cotton to copper. For December 2010, the index averaged 321.5, an increase of 25% from the low’s posted earlier in the year.

In 2010, commodity prices beat gains in stocks, bonds and the dollar as China led the
recovery from the first global recession since World War II.

The U.S. Department of Agriculture (USDA) publishes monthly indices of prices received by farmers. The crop price index had largely moved in a sideways range between 140 and 160 during the 21 months from January 2009 through September 2010 (Figure 31). However, concerns over global crop production and continued strength in demand fueled prices higher in the last quarter of 2010. By December 2010, the crop price index had risen to 179, reaching its highest level since July 2008. In 2010, livestock prices added to the gains that started in the fourth quarter of 2009. By December, the index reached 135, which is approaching pre-recession levels.

Few commodities enjoyed the magnitude of the price rally exhibited by cotton. In March 2009, the cotton price index hit a recent low of 67. In December 2009, the index was up 57% to 105. By December 2010, the index gained another 34% to reach 141, more than double the low set in March 2009. Factors underlying the tremendous increase in price will be discussed in greater detail in later sections of the report.

USDA also publishes monthly indices of prices paid by farmers for various production inputs. Of particular interest are the indices for energy related inputs such as diesel and nitrogen fertilizer. The index of diesel prices paid fell to a near-time low of 192 in March 2009 and has since rebounded back to 320 by the end of 2010 (Figure 32). Although well below the spike seen in 2008, current diesel prices are approaching the levels observed in 2007. Nitrogen fertilizer prices also recovered as 2010 progressed. After starting the year at 223, the nitrogen index closed 2010 at 269, an increase of 20%. These indices imply that producers could face fuel and nitrogen fertilizer costs in 2011 higher than either 2009 or 2010.
U.S. Net Farm Income

The latest USDA estimates place U.S. net farm income at $81.6 billion in 2010, up 31% percent from 2009 and 26% higher than the 10-year average of $64.8 billion for 2000-2009 (Figure 33). Net cash income at $92.5 billion would be a nominal record, 2.3% above the prior record attained in 2008.

The volatility is reflected in the patterns of farm income during the decade.

The values of both crop and livestock production have trended steadily upward over the last decade. However, the year-to-year movements in the two measures have not always been synchronized. In 2010, the rise in the value of livestock production (16.6%) is expected to be more than 5 times the rise in the value of crop production (3.1%). The forecast for higher farm income in 2010 is responding to increases in cash receipts for all the livestock categories, led by double-digit growth in meat animals and dairy products.

Net value added and net farm income have followed the value of commodity production over both the long term and in year-to-year fluctuations. Because farmers typically do not vary their production mix dramatically from year to year, purchases of production inputs have been relatively stable. Expenses for purchased inputs are projected to show a moderate increase of 2.5%, after posting a 6.4% decline in 2009.

One noteworthy feature of the 2001-2010 period is the high levels of volatility in agricultural commodity and input markets.
2008 Farm Bill
The Food, Conservation, and Energy Act of 2008, hereafter referred to as the 2008 Farm Bill, legislates the provisions of the cotton farm program for the 2008 through 2012 crops. The current farm law maintains the basic structure of previous farm programs by continuing the marketing loan, direct payments, and counter-cyclical payments. Certain marketing loan provisions for upland cotton were modified to reflect changes advocated by the cotton industry. Much-needed support was also introduced for the U.S. textile industry. The 2008 Farm Bill establishes a permanent disaster program designed to partially cover weather-related losses at the whole-farm level. Another new provision is an optional revenue-based counter-cyclical program that producers can choose as an alternative to the target price counter-cyclical program. The new bill also makes significant changes to payment limits and program eligibility requirements.

Base Loan Rates, Marketing Loans and LDP's
The 2008 Farm Bill maintains the upland cotton base loan rate at 52.00 cents/lb (See Table 3 on page 23). The duration of the loan is maintained at nine months from the first day of the month following entry.

The following provisions of the upland cotton marketing loan are effective for the 2008-12 crops:
- Eliminate warehouse location differentials.
- Develop loan schedule premiums and discounts on a 3-year moving average of spot market information, weighted by region’s share of U.S. production.
- Eliminate the split in the micronaire schedule between staple lengths 32 and 33.

- For qualities of cotton in which the leaf grade is more than one grade above the color factor, the premium/discount will be set equal to the premium/discount of the quality with the same color factor but with a leaf grade that is one better than the color factor.
- The calculation of the Adjusted World Price (AWP), which is based on the 5 lowest Far East quotes,
  - Incorporates a seamless transition between marketing years such that current-crop quotes are used through the end of the marketing year, if available.
  - Adjusts to U.S. location by using the average costs to market, including average transportation costs.
  - Institutes the Fine Count Adjustment, which can lower the AWP for qualities better than 31-3-35 based on differences in premiums in the U.S. and international markets.

Storage credits to upland cotton loan repayment values are maintained for the 2008 through 2012 marketing years, but reduced by 10% from the 2006 maximum rate for the 2008 through 2011 marketing years and reduced by 20% from the 2006 maximum rate beginning with the 2012 marketing year. Storage is credited when AWP is less than the total of the loan rate plus interest plus storage.

Marketing loan gains (MLG) will continue to be payable as the difference between the base loan rate and AWP when the former exceeds the latter. For eligible producers that agree to forego placing upland cotton in CCC loan, the marketing loan gain is available as a loan deficiency payment (LDP).
The loan rate for ELS cotton is maintained at 79.77 cents/lb.

**Base Acres and Payment Yields**

In general, the upland cotton base acres and payment yields established by the 2002 Farm Bill that were effective September 30, 2007, will constitute the base acres and payment yields for the 2008-12 crops. However, the new law requires adjustments to base acres under various circumstances. These include, but are not limited to, adjustments based on the likelihood that land returns to agricultural use, and changes in the status of a Conservation Reserve Program (CRP) contract.

For 2009, USDA’s preliminary enrollment reports indicate that 17.60 million acres of upland cotton base enrolled in the Direct and Counter-cyclical Program (DCP).

**Direct Payments**

For upland cotton, the direct payment is maintained at 6.67 cents/lb (See Table 3 on page 23). There is no direct payment available for ELS cotton. For the 2009-11 crops, direct payments are paid on 83.3% of an eligible producer’s base acres multiplied by payment yield. In 2012, the percentage of base acres receiving direct payments is increased to 85%. Direct payments remain decoupled from current production decisions.

**Target Price**

For upland cotton, the 2008 Farm Bill authorizes a target price of 71.25 cents/lb for the life of the legislation (See Table 3 on page 23). The current farm bill makes no provision for a target price for ELS cotton. Target prices for wheat, soybeans and some minor feed grains are increased for the 2010-12 crops.

Target prices are used in the calculation of counter-cyclical payments (CCP). The CCP rate is determined as: (target price) minus (greater of 12-month marketing year average price or loan rate). When the sum of the direct payment and the marketing year average price exceeds the target price, the corresponding counter-cyclical payment is zero. Counter-cyclical payments are decoupled from production, as are the direct payments. Counter-cyclical payments will continue to be made on 85% of base acres and payment yields.

**Average Crop Revenue Election Program**

As an alternative to the price-based counter-cyclical program, producers have the option to elect a revenue-based program beginning with the 2009 crop.

In return for accepting a 20% reduction in direct payments and 30% reduction in loan rate, producers may make an irrevocable election to enroll all covered commodities and peanuts in a state-level revenue counter-cyclical program, known as the Average Crop Revenue Election, or ACRE, program. For producers with qualifying losses, the program makes payments on a portion of planted acres based on the difference between 90% of the product of a state average yield factor times the national seasonal average price for the previous 2 years for the commodity and the actual state revenue for the commodity. Producers who choose not to participate in the ACRE program beginning in 2009 have the ability to choose the program in each subsequent year. However, once an affirmative ACRE decision is made, the producer may not return the farm to the target price counter-cyclical program.

Initial enrollment data show just 966 farms with 30 thousand acres of upland cotton base chose the ACRE program. Oklahoma accounts for 732 of the ACRE farms, with another 184 farms in Texas.
**Producer Agreement Requirements for Payments**

For a producer to be eligible for payments, they must:

1. Comply with conservation requirements;
2. Comply with planting flexibility requirements;
3. Maintain land in an agricultural or conserving use;
4. Submit annual acreage reports.

**Payment Limitations and Eligibility Requirements**

Taking effect with the 2009 crop, the 2008 Farm Bill includes a number of changes in both limits and eligibility.

The farm bill eliminates the limit on marketing loan gains and LDP’s, which was $75,000 prior to 2009. The limits on direct payments and counter-cyclical payments are $40,000 and $65,000, respectively. For producers with some or all of their farms enrolled in the ACRE program, the limit on direct payments is reduced from $40,000 by an amount equal to the 20% reduction in direct payments. The limit on revenue-based ACRE payments is increased from $65,000 by the amount of the reduction in the direct payment (DP) limit.

The 2008 Farm Bill eliminates the 3-entity rule, and direct attribution is applied to all commodity program payments. The rules for spouse eligibility were enhanced such that an actively engaged spouse is automatically credited with making a significant contribution of labor and management.

While the farm bill statute included no changes in the determination of those “actively engaged in farming,” USDA, through the rule-making process, instituted significant new restrictions that all members of a farming entity make a regular, identifiable, documentable, separate and distinct contribution of active personal labor or active personal management.

Income means tests for commodity and conservation payment eligibility are more restrictive under the 2008 Farm Bill. If an entity or individual earns an average of more than $500,000 in adjusted non-farm income during the 3 years prior to the year proceeding the applicable year, the individual or entity is ineligible for any commodity program payments for the year (example: for 2009 crop, use average of 2005, 2006 and 2007).

If an individual or entity earns an average of more than $750,000 in adjusted farm income during the 3 years prior to year preceding the applicable year, the individual or entity is ineligible for direct payments for the year. The definition of farm income is also expanded to include other sources of income derived from a farming or agricultural enterprise.

For conservation payments, if during 3 years prior to the year preceding the applicable year, an individual or entity earned an average of more than $1.0 million in adjusted non-farm income or more than $1.0 million in adjusted gross income (if less than $66⅔’s is from farming, ranching or forestry), that individual or entity is ineligible for conservation program payments for the year (but does not apply to easement programs).

In addition, USDA has placed unnecessary payment limits on the Conservation Stewardship Program (CSP). The 2008 Farm Law clearly establishes a five-year payment limit of $200,000 per “person or legal entity” for “all contracts” entered into during any “five-year period.” Without basis, USDA has instituted an overly-restrictive limit of $40,000 per year on CSP participants and a five-year limit of $200,000 per contract, regardless of the number of participants associated with the contract.
Cotton Import Provisions
When the average U.S. quote in the international market exceeds the prevailing world market price for 4 consecutive weeks, a Special Import Quota equal to 1 week’s mill use is triggered. Cotton imported under this quota must be purchased within 3 months and enter the U.S. within 6 months. Imports under this quota cannot exceed 10 weeks of mill use in a marketing year.

Authority for Global Import Quotas is also extended by the current farm law. Whenever the base quality spot price for a month exceeds 130% of the average for the previous 36 months, a limited global import quota equal to 3 weeks of mill use must be opened for a 3-month period. Limited global quota periods cannot overlap, nor can a limited global quota be established if a special import quota is already in effect.

ELS Cotton Competitiveness Provisions
Competitiveness payments for eligible domestic users and exporters of American Pima cotton are continued for the 2008-12 crops. The payment rate reflects the difference between the American Pima quote in the Far Eastern market (APFE) and the lowest foreign quote in the Far East (LFQ), adjusted for quality. If the APFE quote exceeds the LFQ for 4 consecutive weeks and the LFQ is less than 134% of the base loan rate, then the payment rate equals the difference between the APFE and the LFQ in the fourth week of the 4-week period.

Economic Assistance to Users of Upland Cotton
Beginning August 1, 2008 through July 31, 2012, the Secretary is required to make a payment to domestic users of 4 cents/lb for all upland cotton consumed by U.S. textile mills. Beginning August 1, 2012, the rate is adjusted to 3 cents/lb.

Payments must be used for purposes specified in the 2008 Farm Bill and include acquisition, construction, installation, modernization, development, conversion, or expansion of land, plant buildings, equipment, facilities, or machinery; such capital expenditures must be directly attributable and certified by the user for the purpose of manufacturing eligible upland cotton into eligible cotton products in the United States.

Export Programs
Title III of the 2008 Farm Bill makes a number of changes to trade promotion and facilitation programs important to the U.S. cotton industry. Specifically, the law repeals the Intermediate Export Credit Guarantee Program (GSM-103) and the Supplier Credit Guarantee Program. The Export Credit Guarantee Program (GSM-102) is authorized with $4 billion in credit guarantees and $40 million in budget authority.

The Market Access Program (MAP) and the Foreign Market Development (FMD) Program are funded at annual amounts of $200 million and $34.5 million, respectively.
Table 3 - Support Rates in the 2008 Farm Bill

<table>
<thead>
<tr>
<th></th>
<th>Loan Rate</th>
<th>Target Price</th>
<th>Direct Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'08-09</td>
<td>'10-12</td>
<td>'08-09</td>
</tr>
<tr>
<td>Upland Cotton (lb)</td>
<td>0.5200</td>
<td>0.5200</td>
<td>0.7125</td>
</tr>
<tr>
<td>ELS Cotton (lb)</td>
<td>0.7977</td>
<td>0.7977</td>
<td>NA</td>
</tr>
<tr>
<td>Rice (cwt)</td>
<td>6.50</td>
<td>6.50</td>
<td>10.50</td>
</tr>
<tr>
<td>Wheat (bu)</td>
<td>2.75</td>
<td>2.94</td>
<td>3.92</td>
</tr>
<tr>
<td>Barley (bu)</td>
<td>1.85</td>
<td>1.95</td>
<td>2.24</td>
</tr>
<tr>
<td>Oats (bu)</td>
<td>1.33</td>
<td>1.39</td>
<td>1.44</td>
</tr>
<tr>
<td>Corn (bu)</td>
<td>1.95</td>
<td>1.95</td>
<td>2.63</td>
</tr>
<tr>
<td>Sorghum (bu)</td>
<td>1.95</td>
<td>1.95</td>
<td>2.57</td>
</tr>
<tr>
<td>Soybeans (bu)</td>
<td>5.00</td>
<td>5.00</td>
<td>5.80</td>
</tr>
<tr>
<td>Peanuts (ton)</td>
<td>355.00</td>
<td>355.00</td>
<td>495.00</td>
</tr>
<tr>
<td>Other Oilseeds (cwt)</td>
<td>9.30</td>
<td>10.09</td>
<td>10.10</td>
</tr>
</tbody>
</table>

ACRE Program Provisions

<table>
<thead>
<tr>
<th>ACRE Program Provisions</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACRE State Program Guarantee</td>
<td>90% * (5-yr Olympic rolling avg state yield per planted acre) * (2-yr rolling avg of national average market price); Starting in 2010, the ACRE guarantee shall not increase or decrease by more than 10% from the preceding marketing year. Provisions to allow separate guarantees for irrigated and non-irrigated land under certain conditions.</td>
</tr>
<tr>
<td>Actual State Revenue</td>
<td>Actual state yield per planted acre * higher of national avg. market price and 70% of marketing loan rate.</td>
</tr>
<tr>
<td>Actual Farm Revenue</td>
<td>Actual farm yield * higher of national MYA price and 70% of marketing loan rate.</td>
</tr>
<tr>
<td>Farm ACRE Benchmark Revenue</td>
<td>(5-yr Olympic rolling avg farm yield) * (2-yr rolling avg national market price) + per-acre crop insurance premium</td>
</tr>
<tr>
<td>Payment Rate per Acre</td>
<td>Lesser of (ACRE State Program Guarantee – Actual State Revenue) or 25% of ACRE State Program Guarantee</td>
</tr>
<tr>
<td>Individual Farmer Payments</td>
<td>Payment Rate * Payment Acres * (5-yr Olympic rolling avg farm yield / 5-yr Olympic rolling avg state yield)</td>
</tr>
</tbody>
</table>
World Trade Organization

Trade issues continue to command the attention of the U.S. cotton industry. In the World Trade Organization (WTO), there was little progress in the ongoing Doha trade negotiations, but the trade dispute with Brazil moved beyond the arbitration phase with Brazil now having the right to seek retaliation.

Brazil Trade Dispute

In August 2009, a WTO Arbitration Panel ruled that Brazil could seek retaliation for the U.S.'s failure to comply with an earlier panel regarding the export credit guarantee programs and certain provisions of the upland cotton farm program.

The Panel developed distinct awards that are ultimately summed together for the purpose of determining whether or not Brazil is allowed to seek retaliation beyond trade in goods. The Panel adopted a formula approach to retaliation authority applicable to the export credit guarantee program (also known as the GSM program) and stated that the formula would authorize $147.4 million in retaliation authority for the GSM program based on 2006 data. The Panel also authorized $147.3 million (a fixed amount) in retaliation authority for cotton -- far less than Brazil had requested. The Panel also adopted a formula approach concerning so-called "cross-retaliation" that requires the parties to sum the two awards outlined above and determine whether that sum exceeds a "trigger" level which would authorize Brazil to cross-retaliate against intellectual property rights of U.S. companies.

Brazil claimed retaliation authority of $829 million for 2010. On March 8, 2010, Brazil published a list of 102 products that were scheduled for increased tariffs to go into effect on April 7. Brazil’s announcement indicated that tariffs will be increased on $591 million worth of imports from the U.S., while it plans to retaliate against U.S. goods valued at $238 million in the services or intellectual property sector.

On March 15, 2010, Brazil published a list of 21 items under consideration for cross-retaliation through the suspension of patent and intellectual property rights. With sanctions estimated at $238 million, the list included agricultural chemicals and biotechnology products, veterinary medicines, software, books, music and films.

Before any retaliation was actually implemented, the United States and Brazil concluded a June 17 Framework Agreement that delays trade retaliation by Brazil through the development of the 2012 farm bill and further indicates that a mutually agreed outcome in the next farm bill would provide a long-term settlement of the dispute.

Regarding U.S. upland cotton policy, the Framework calls for an annual limit on trade-distorting cotton subsidies that would be "significantly lower" than the average for the marketing years ’99-05 (the years covered by the WTO dispute). Furthermore, the actual level of the limit and the extent to which support counts against the limit would depend on the types of trade-distorting domestic support provided. Finally, Green Box, or non-trade-distorting, support does not count toward the limit.

The Framework also provides benchmarks for changes to the U.S. export credit guarantee program that would affect all participating U.S. commodities. Allocations for the program will be announced in two equal installments at the beginning and midpoint of the fiscal year. The export credit guarantee changes call for a reduction in the length of the guarantees by October 2012 to a weighted-average length of no more than
16 months. In addition, fee increases will be based on the use of the program in the previous 6-month period. Program usage greater than $1.5 billion results in a fee increase not less than 15%. Program usage between $1.3 billion and $1.5 billion will result in an 11% fee increase.

The Framework also calls for quarterly meetings between the two countries to discuss progress in the 2012 farm bill debate. As long as the Framework is in place, Brazil agreed not to impose trade sanctions. However, Brazil reserved its rights to terminate the Framework Agreement at any time with a 21-day notice.

**Doha Trade Negotiations**
The U.S. cotton industry has consistently delivered the message that a Doha agreement must balance gains in market access with the reductions imposed on domestic support. Unfortunately, the current text, which was originally tabled by WTO Director General Pascal Lamy in July 2008, does not contain the necessary balance between domestic support and market access. The NCC continues to convey this message to U.S. negotiators and have been encouraged that U.S. officials are carrying that message to other countries.

As 2011 begins, there are once again renewed efforts by the WTO to push the negotiations forward. Director General Lamy has called for the negotiating committees to engage during the first quarter with the intent of releasing new texts in the spring. While Lamy has indicated that 2011 offers a window of opportunity to conclude an agreement, the path forward appears difficult given the differences that remain between the various negotiating positions.

**Textile Trade Issues**
Textile trade policy continues to have a substantial impact on the U.S. textile industry, both in terms of opportunities to export textiles and the pressures brought to bear by imported textiles and apparel. 2010 brought relatively few changes for U.S. textile trade policy. Agreements have been negotiated with Panama, Colombia and South Korea, but those agreements are currently stalled in the approval process.

**China**
Following their entry into the WTO in late 2001, China has dramatically expanded their role in world textile trade. China has made full use of WTO provisions to increase their textile imports to the U.S.

A China-specific safeguard allowed the U.S. and other WTO member countries that believed imports of Chinese-origin textile and apparel products were, due to market disruption, threatening to impede the orderly development of trade in these products to request consultations with China with a view to easing or avoiding such market disruption. Countries had authority to impose safeguards through the end of 2008. In addition, the U.S. and China signed a broad bilateral agreement on Chinese textile imports into the U.S. The agreement went into effect on January 1, 2006 and ended on December 31, 2008. In general, U.S. imports of Chinese goods covered by the agreement were allowed to grow by 10 to 12.5% in 2006, 12.5% in 2007, and 15 to 16% in 2008, depending on the item. Furthermore, in 2006, the agreement imposed tighter limits on U.S. imports from China’s “core” apparel products. The “core” apparel products are cotton knit shirts, MMF knit shirts, woven shirts, cotton trousers, MMF trousers, brassieres and underwear.

The loss of the import restrictions on China came at a time when the U.S. was experiencing a large downturn in the retail market due to the recession. Therefore, the impact of the expiration of the agreement on the U.S. was not as apparent as it would
have been if quotas were removed at a time when the retail market wasn’t experiencing such a downturn, since this decline caused a decrease in total U.S. textile imports. Even with the decline in the U.S. retail market and subsequent decline in U.S. textile and apparel imports from China in 2008, China continues to be the largest single importer of textile and apparel products into the U.S.

China’s market share for all U.S. textile and apparel imports increased even more after the removal of the quotas at the expense of many of the countries with which we have free trade agreements that encourage the use of U.S. cotton. Looking at U.S. market share for all textile and apparel imports for calendar years 2009 and 2010, China’s market share of U.S. imports through November 2009 was 44% while Western Hemisphere countries (such as the countries of NAFTA, CAFTA, and the Andean) totaled 14% of the U.S. market share (Figure 34). Through November 2010, China’s market share for all textile and apparel imports continued to increase to 47% while Western Hemisphere countries remained at 14% of the U.S. market share.

The AGOA legislation requires an annual determination to determine which countries are eligible to receive benefits under the trade act. Countries must make continued progress toward a market-based economy, rule of law, free trade, and economic policies that will reduce poverty, and protect workers’ rights. There are now 37 countries that are eligible for economic and trade benefits under AGOA. Of those 37 Sub-Saharan countries, 25 of them are eligible to receive AGOA’s apparel benefits. Seventeen of those countries also qualify for AGOA’s provisions for handloomed and handmade articles. Five countries qualify for AGOA’s ethnic printed fabric benefits.

**Figure 34 - Market Share of U.S. Textile Imports (All Fibers)**

**AGOA**
The African Growth and Opportunity Act (AGOA) provides preferential access of textile and apparel products to the U.S. market for qualifying countries in Africa. In 2004, legislation extended AGOA from its planned expiration date of 2008 to 2015. Other key provisions of the legislation included the extension of authority for the use of third country fabrics from September 2004 to September 2007. Rules-of-origin provisions were amended to allow non-AGOA produced collars and cuffs for apparel import categories. The “folklore” provision was expanded to allow ethnic fabrics that are made on machines to qualify for AGOA duty-free treatment. The legislation also included provisions for the development of sustainable infrastructure and technical assistance, including the assignment of 20 people to sub-Saharan Africa to assist and advise them on sanitary and phyto-sanitary standards to meet requirements for the U.S. market. In 2006, provisions of AGOA were extended to provide for use of non-U.S., non-AGOA components through September 2008. However, beginning October 2008, 50% of the fabric used in apparel qualifying for preferential access must be manufactured in AGOA countries. The legislation also established tax credits for companies with facilities in AGOA countries or that conduct business in AGOA countries.
Although first signed by President Bush in August 2005, the Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR) has been implemented in stages as participating countries meet their internal approvals. The CAFTA-DR entered into force for El Salvador on March 1, 2006, for Honduras and Nicaragua on April 1, 2006, for Guatemala on July 1, 2006, for the Dominican Republic on March 1, 2007 and for Costa Rica on January 1, 2009.

According to the provisions of the CAFTA-DR agreement, textiles and apparel are duty-free and quota-free immediately if they meet the agreement’s yarn-forward rule of origin. This means that only apparel using yarn and fabric from the U.S., Central America and the Dominican Republic qualifies for duty-free benefits.

The textile provisions also include a number of avenues for 3rd-country participation, including ‘cumulation’, Tariff Preference Levels (TPLs) which authorize the use of a specified quantity of 3rd country components, a fabric-forward rule of origin for certain products and allowances for ‘single transformation’ for a number of others. ‘Single transformation’ means only one manufacturing step has to be taken in a country in order for products made from components sourced from anywhere to qualify for benefits.

Cumulation is a concept that brings countries that are not signatories to an agreement into the agreement provided they are signatories to another trade agreement. The signatories of CAFTA-DR agreed to cumulation with Mexico and Canada for woven apparel. This allows a limited amount of inputs from Mexico and Canada to be used in Central American/Dominican apparel that will still qualify for duty-free benefits in the U.S. Cumulation under CAFTA-DR is subject to an annual cap of 100 million SME. This cap can grow to 200 million SME, but the growth is tied to an increase in CAFTA-DR trade. Under the overall cap of 100 million SME, there is a 1 million SME cap on wool, 20 million SME cap on blue denim, and 45 million SME cap on cotton and man-made bottom weights. Mexico and Canada must provide reciprocal benefits to U.S. and Central American textile and apparel exports. Canada and Mexico must also agree to strengthen Customs enforcement measures. The CAFTA-DR Cumulation provision became effective on August 15, 2008. The TPLs for CAFTA-DR cumulation for the period of January 1, 2010 through December 31, 2010 was 100,000,000 SME. During that time, imports applied to this preference level equaled 9,606,819 SME, implying a 9.6% fill rate. The TPLs for CAFTA-DR cumulation for the period of January 1, 2011 through December 31, 2011 is 100,000,000 SME.

CAFTA-DR provides Nicaragua with a TPL of 100 million SME which phases out over 10 years. CAFTA-DR does not contain TPLs for El Salvador, Honduras or Guatemala. The TPL for Nicaragua was 99,238,862 SME for the 2010 preference period. During this period, 98,770,250 SME of imports were applied to this TPL, implying a 99.5% fill rate.

CAFTA-DR provides Costa Rica with TPLs for certain apparel of wool fabric, tailored wool apparel, and certain women’s swimwear. Combined, these TPLs were 1,106,000 SME for the 2010 preference period. During this period, 69,876 SME of imports were applied to these TPLs, implying a 6.3% fill rate.

CAFTA-DR contains a special textile safeguard which allows the U.S. to impose tariffs on certain goods when injury occurs due to import surges. A safeguard cannot
last more than 3 years for a specific good. The Committee for the Implementation of Textile Agreements (CITA) applied a textile safeguard measure on imports of cotton socks from Honduras in 2008.

The agreement also contains a revised short supply process that includes tighter timelines than in earlier short supply processes, allows items to be deemed in partial short supply, and provides for items to be added to and removed from the short supply list.

An amendment regarding pocketing material became effective in August 2008. Under this CAFTA-DR amendment, material for pockets going into apparel made in the CAFTA region have to be made in the U.S. or CAFTA countries for the product to enter the U.S. duty free.

**Andean Countries**

The U.S. – Peru free trade agreement entered into force on February 1, 2009. Under the U.S. – Peruvian agreement, 80% of U.S. consumer and industrial product exports and two-thirds of U.S. agricultural exports to Peru were duty-free immediately. The textile and apparel provisions are based on the yarn-forward rule of origin. There are no provisions for TPLs or exceptions to the requirement that qualifying products contain components manufactured in the U.S. or Peru. As in NAFTA, a list of components not manufactured in either country has been developed and only those products may be sourced from a third country.

On November 22, 2006, the U.S. – Colombia Trade Promotion Agreement was signed. On June 28, 2007, the United States and Colombia signed a Protocol of Amendment revising the Agreement to reflect the bipartisan consensus on trade of May 10, 2007. As of mid-January 2011, the U.S. – Colombia Trade Promotion Agreement was still pending Congressional approval.

Under the U.S. – Colombia agreement, over 80% of U.S. exports of consumer and industrial products to Colombia will be duty-free immediately, and an additional 7% will be duty free within five years. All remaining tariffs will be eliminated within ten years. The textile and apparel provisions are generally based on the yarn-forward rule of origin. Exceptions to the rules of origin will be handled through an expedited “short supply” determination process after entry into force, or through a similar process under the Andean Trade Preference Act before entry into force. The U.S. and Colombia agreed on 20 “short supply” items as part of the agreement. The agreement does not make use of TPLs. A “de minimis” provision will allow limited amounts of specified third-country content to go into U.S. and Colombian apparel. Also, a special textile safeguard will provide for temporary tariff relief if imports under the agreement prove to be damaging to domestic producers.

Colombia, Peru, Ecuador, and Bolivia received duty-free benefits under the Andean Trade Preference Act (ATPA). As part of the Trade Act of 2002, Congress renewed and enhanced the trade preferences for all four countries under the Andean Trade Promotion and Drug Eradication Act (ATPDEA), which was scheduled to expire on December 31, 2006. Since it was not possible for Congress to approve legislation implementing the FTAs with Peru and Colombia before the ATPDEA expired, U.S. textile and apparel groups have continually urged Congress to act to ensure that preferential access for products produced in the Andean region containing U.S. cotton, yarn, and fabric was not interrupted. The most recent extension was enacted on January 1, 2011. It extends tariff preference programs for Colombia and Ecuador.
through February 12, 2011. Peru was not included because its free trade agreement with the U.S. is expected to be implemented soon.

**Haiti**

In December 2006, legislation – the Haitian Hemispheric Opportunity through Partnership for Encouragement Act (HOPE) - was enacted that would provide expanded duty-free, quota-free access to certain apparel products assembled in Haiti. To qualify, Haitian products are required to have 50% of the value of the finished product be provided by the U.S., Haiti, any U.S. Free Trade Agreement partner or any country in AGOA, Andean and CAFTA regions.

U.S. textile industry organizations expressed strong objections to this legislation due to the very loose rule-of-origin. These organizations argued that the rule-of-origin is unenforceable according to customs and would result in transshipment of Chinese products displacing U.S. exports and disrupting mutually beneficial trade with neighboring CAFTA countries.

HOPE provided that the annual quantity of goods eligible for duty-free benefits will be recalculated for each subsequent 12-month period. HOPE also provided that the annual limit for qualifying apparel imported from Haiti under this provision for the 12-month period beginning on December 20, 2007 will not exceed 1.3% of the total SME of all apparel articles imported into the U.S. from Haiti in the most recent 12-month period for which data are available. The 12-month limit on duty-free benefits for the one-year period beginning on December 20, 2009 and extending through December 19, 2010 was 284,904,116 SME. During that time period, 14,319,670 SME were attributed to the limit, implying a fill rate of 5.0%.

The 2008 Farm Bill included amendments to rules enacted in 2006 by the HOPE Act. These amendments are referred to as the Haitian Hemispheric Opportunity through Partnership Encouragement Act of 2008 (HOPE II). HOPE II extends tariff preferences for 10 years and relaxes rules of origin for textile and apparel products from Haiti. It creates a benefit for apparel wholly assembled or knit-to-shape in Haiti that meets a “3 for 1” earned import allowance. The amendment requires the Secretary of Commerce to establish a program to provide earned import allowance certificates to any producer or entity controlling production of apparel in Haiti, such that apparel wholly assembled or knit-to-shape in Haiti from any combination of fabrics, fabric components, components knit-to-shape, or yarns, regardless of their source, and imported directly from Haiti or the Dominican Republic may enter the United States duty-free, pursuant to the satisfaction of the terms governing issuance of the earned import allowance certificate by the producer or entity controlling production of apparel in Haiti.

In May 2010, President Obama signed into law the Haiti Economic Lift Program Act (HELP). HELP was designed to help Haiti’s economy recover from the devastating earthquake which occurred there in January 2010. HELP expanded existing preferences for apparel and established new preferences for certain non-apparel textile goods. With the exception of the Value-Added TRQ, which expires in December 2018, HELP extended existing trade preference programs for Haiti through September 2020. Key HELP act provisions increase current TPLs for certain knit and woven apparel products.

**Panama**

On December 19, 2006, the U.S. and Panama announced the completion of negotiations on a free trade agreement with the understanding that it is subject to further
Discussions regarding labor. A conceptual agreement between the Democratic Leadership of the U.S. House of Representatives and the Bush Administration regarding labor, environmental and intellectual property provisions of the pending FTAs including the FTA with Panama was reached in May 2007. At the end of June 2007, the U.S. Trade Representative announced that it had reached agreements with each of the pending FTA countries to incorporate these changes into the legal text of the FTAs. As of January 2011, the U.S. – Panama Free Trade Agreement is still pending Congressional approval.

**Korea**

On April 1, 2007, the final day for Congressional notification under Trade Promotion Authority (TPA), the United States concluded a Free Trade Agreement with South Korea. This agreement was signed on June 30, 2007, the last day it could be signed and still be considered under TPA which expired on the same day. As of January 2011, the agreement (referred to as the KORUS FTA) is still pending approval by Congress.

The KORUS FTA should have the largest economic impact on the U.S. of any free trade agreement since NAFTA. Korea’s agricultural sector is heavily protected from imports and will open significantly under the agreement. However, rice was excluded from coverage and high beef tariffs will phase out over a 15-year period. The U.S. Trade Representative’s office reported that more than $1 billion worth of U.S. farm exports to Korea will become duty-free immediately. Trade in cotton fiber is slated to be liberalized quickly under the agreement. The agreement maintained the use of a “yarn-forward” rule of origin for most textiles with some exceptions requiring “fiber-forward” and some requiring “fabric-forward.” In addition, there are no tariff preference levels, no cumulation, and no immediate concessions for the Kaesong Industrial Zones. The KORUS FTA also allows for immediate duty-free access for Korea for most textile and apparel lines (87% of all tariff lines and over 50% of 2006 trade).

Five trade associations representing the U.S. fiber, yarn, and fabric industries have asked the Obama administration to make three fixes to the KORUS agreement and have also written to members of Congress urging a “no” vote on KORUS. These groups said that Korea was a major exporter of textile products to the U.S. and that KORUS favors the Korean industry. According to the National Council of Textile Organizations (NCTO), there are three major problems with the agreement’s textile provisions: 1) Korean manufacturers are provided immediate duty-free access to U.S. markets in sensitive textile categories; 2) the customs enforcement provisions are weak; and 3) the rules of origin for textiles and apparel would provide benefits to China and other countries for a number of important products.

**Looking Ahead**

Trade Promotion Authority (TPA) expired on June 30, 2007. Under TPA, trade agreements are subject to an up-or-down vote, but not amendment, in Congress. When TPA expired, the Administration effectively lost its authority to enter into new FTA negotiations. President Obama has said he would seek an extension of TPA.

In mid-December 2009, the USTR announced that the U.S. will negotiate a trade agreement with the Trans-Pacific Partnership (TPP). The initial TPP negotiation partners included Australia, Brunei Darussalam, Chile, New Zealand, Peru, Singapore, and Vietnam. Malaysia joined the negotiations in October 2010. In addition, Japan is considering whether to
join the talks and other countries are also expressing initial interest. Four rounds of negotiations occurred in 2010. The next round of negotiations is scheduled for February 2011 in Santiago, Chile.

Trade associations representing the U.S. textile industry have opposed certain aspects of the TPP. According to the National Textile Association (NTA), the rules of origin for textiles and apparel under the TPP are substantially different from the rules of origin in most of the FTAs the U.S. is a partner to. The TPP rules of origin for textile and apparel are single-transformation with a 50 percent value added requirement. NCTO has opposed the inclusion of Vietnam in the TPP due to unfair and anti-competitive subsidies, labor and environmental rules.
Planted Acreage
U.S. farmers planted 10.77 million acres of upland cotton in 2010, an increase of 20% from the previous year (Figure 35). Each of the four production regions contributed to the increase in U.S. acreage. Stronger cotton prices relative to primary competing crops such as corn and soybeans explained the acreage increase. In the weeks prior to planting the 2010 crop, cotton-to-corn and cotton-to-soybean price ratios were much more favorable than in 2009. In fact, the ratios were the most favorable to cotton since the 2006 planting season. Growers responded to those market signals by planting more cotton.

Of the four production regions, the Southeast accounted for the largest acreage increase with an additional 706 thousand acres bringing 2010 acres to 2.6 million for the 6-state region (Figure 36). Across the region, all states reported gains with the largest percentage gains of 76% and 47% occurring in South Carolina and North Carolina, respectively. Alabama and Georgia increased by one-third with Virginia adding 30% to their 2009 total. In Florida, growers planted 12% more cotton in 2010. In all states, the increase in cotton area came at the expense of soybeans, and in Georgia, corn also declined at the expense of cotton.

In 2010, plantings in the Mid-South rose by 18% to reach 1.9 million acres (Figure 37). The recovery came after three successive declines that brought cotton area for the 5-state region down from 4.2 million acres in 2006 to just 1.6 million in 2009. As in the Southeast, all states experienced increased acreage in 2010 due to the improved relative price signals. With an additional 115 thousand acres devoted to cotton, Mississippi’s 38% increase was the largest in the region. Tennessee growers increased area by 30%, while Missouri and Louisiana saw increases of 14% and 11%, respectively. The 5% increase for Arkansas was the most modest across the region. With the exception of Louisiana, the additional cotton acres came from soybeans, while in Louisiana, corn acres declined as a result of the shift to cotton.
In the Southwest, upland cotton area increased 12% to 5.9 million acres (Figure 38). Texas, the largest of the 3-state region, added 550 thousand acres to their 2009 total, representing an 11% increase. Kansas and Oklahoma increased their area by 34% and 39%, respectively. In Texas, the additional cotton acres came at the expense of wheat and grain sorghum. Kansas and Oklahoma also saw declines in wheat area.

After five consecutive declines that dropped area by more than 70%, upland area in the West bounced back in 2010 with an increase of 48%, which was the largest percentage increase of the four regions (Figure 39). However, the 2010 total of 366 thousand acres for the 3-state region is still well below the recent 2004 high of 868 thousand acres.

ELS area benefitted from similar factors that contributed to the upland increase in the West. For the U.S. as a whole, ELS acres jumped 44% to 204 thousand acres (Figure 40). California, with 182 thousand acres, accounted for the increase in the U.S. total as additional gains in Arizona were offset by declines in New Mexico and Texas.

Each state experienced a recovery in acres with California’s increase of 75% leading the way. New Mexico increased acres by 51%, while upland plantings in Arizona were up by 34%. Stronger prices and a slightly improved water situation in California contributed to the increased acreage in the region.
Harvested Acreage

For many parts of the Cotton Belt, cotton farmers in 2010 avoided the type of weather events that would cause wide-spread devastating losses. That is not to suggest that the growing season was devoid of challenges or that there were not some localized losses. In the Southeast and Mid-South, crops suffered from very hot and dry conditions during parts of the summer. Localized areas in Texas also suffered hail damage in August and September. But overall, weather conditions were more cooperative than in 2008 and 2009. As a result, national abandonment was estimated at a record low of 2.4% (Figure 41). The ability to harvest more than 97% of planted acres was a welcome change from 2008 and 2009 when un-harvested acres totaled 20% and 18%, respectively.

Yields

The effects of the generally favorable weather conditions were evident in the USDA 2010 crop estimates. The U.S. average cotton yield was estimated at 821 pounds, a 44 pound increase from 2009 (Figure 42). Although 5 pounds below the 5-year average, the 2010 yield was the highest since 2007. In contrast to upland cotton, the ELS average yield of 1,184 pounds fell 205 pounds below the 2009 yield and was almost 80 pounds below the 5-year average.

In the Southeast, the effects of the hot, dry summer were evident in average yields. For the region as a whole, the 2010 yield of 804 pounds was 80 pounds below 2009, but still above the 5-year average (Figure 43). Relative to 2009, the adverse weather conditions were most evident in North Carolina and Virginia. At 685 pounds, Virginia’s average yield was the lowest since 2003. North Carolina’s yield of 854 pounds was more than 130 pounds below 2009. Weather problems were also evident in Georgia as the average yield of 811 was below both 2009 and the 5-year average. In contrast, yields in Alabama (684 lbs.), Florida (809 lbs.) and South Carolina (872 lbs.) exceeded their 5-year averages.
Although producers in the Mid-South faced above-normal temperatures, the lack of rainfall was not as pronounced or persistent as in the Southeast. As a result, yields were generally quite positive for the region. In fact, the 2010 average yield of 971 pounds (Figure 44) was second highest on record, being topped by 2004. Missouri’s yield of 1,068 pounds was the highest of the 5 states, followed by Arkansas’ average yield of 1,049 pounds. After suffering severe harvest-time losses in 2009, average yields in Louisiana (864 lbs.) and Mississippi (983 lbs.) made a solid recovery. At 843 pounds, Tennessee’s average yield equaled the 2009 number and represented an improvement relative to the 5-year average.

<table>
<thead>
<tr>
<th>Mid-South Upland Yields</th>
<th>2009</th>
<th>2010</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>818</td>
<td>1,049</td>
<td>1,011</td>
</tr>
<tr>
<td>Louisiana</td>
<td>745</td>
<td>864</td>
<td>872</td>
</tr>
<tr>
<td>Mississippi</td>
<td>687</td>
<td>983</td>
<td>859</td>
</tr>
<tr>
<td>Missouri</td>
<td>927</td>
<td>1,068</td>
<td>976</td>
</tr>
<tr>
<td>Tennessee</td>
<td>843</td>
<td>843</td>
<td>822</td>
</tr>
<tr>
<td>MID-SOUTH</td>
<td>806</td>
<td>971</td>
<td>915</td>
</tr>
</tbody>
</table>

**Figure 44 - Mid-South Upland Yields**

In the Southwest, better Texas yields (722 lbs.) boosted the region’s average to 724 pounds, an improvement of 81 pounds from 2009 (Figure 45). Kansas growers harvested a record yield of 784 pounds, while Oklahoma, with an average yield of 738 pounds, fell short of their 2009 yield but exceeded their 5-year average by 7 pounds.

<table>
<thead>
<tr>
<th>Southwest Upland Yields</th>
<th>2009</th>
<th>2010</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>748</td>
<td>784</td>
<td>602</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>785</td>
<td>738</td>
<td>731</td>
</tr>
<tr>
<td>Texas</td>
<td>634</td>
<td>722</td>
<td>716</td>
</tr>
<tr>
<td>SOUTHWEST</td>
<td>643</td>
<td>724</td>
<td>715</td>
</tr>
</tbody>
</table>

**Figure 45 - Southwest Upland Yields**

The average upland yield in the West is estimated at 1,478 pounds, 128 pounds above the 5-year average (Figure 46). California led the way with an average yield of 1,639 pounds, which surpasses the 5-year average by almost 300 pounds. Arizona’s average yield of 1,467 pounds surpassed their 5-year average by 57 pounds, while New Mexico’s yield of 1,096 pounds was 70 pounds better than their average.

<table>
<thead>
<tr>
<th>West Upland Yields</th>
<th>2009</th>
<th>2010</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>1,477</td>
<td>1,467</td>
<td>1,410</td>
</tr>
<tr>
<td>California</td>
<td>1,646</td>
<td>1,639</td>
<td>1,363</td>
</tr>
<tr>
<td>New Mexico</td>
<td>1,172</td>
<td>1,096</td>
<td>1,026</td>
</tr>
<tr>
<td>WEST</td>
<td>1,488</td>
<td>1,478</td>
<td>1,350</td>
</tr>
</tbody>
</table>

**Figure 46 - West Upland Yields**

The national average ELS yield is estimated at 1,184 pounds, 61 pounds below the 5-year average (Figure 47). Cool, wet conditions in the spring and early summer delayed crop development and contributed to the below-average yields. With the majority of ELS acres, California heavily influences the U.S. average. With an average yield of 1,216
pounds, California fell short of their 5-year average by more than 90 pounds. Yields in Arizona also fell short of the 5-year average, while New Mexico and Texas experienced a rebound in yields.

<table>
<thead>
<tr>
<th>ELS Yields</th>
<th>Pounds per Harvested Acre</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>1,170</td>
<td>864</td>
</tr>
<tr>
<td>California</td>
<td>1,494</td>
<td>1,216</td>
</tr>
<tr>
<td>New Mexico</td>
<td>686</td>
<td>889</td>
</tr>
<tr>
<td>Texas</td>
<td>836</td>
<td>931</td>
</tr>
<tr>
<td>U.S.</td>
<td>1,389</td>
<td>1,184</td>
</tr>
</tbody>
</table>

Figure 47 - ELS Yields

Production

USDA’s latest estimate places the 2010 U.S. cotton crop at 18.3 million bales (Figure 48), up 6.2 million bales from 2009. The roughly 50% increase in production is the combined result of additional acres devoted to cotton and better yields. Relative to 2009, all regions produced more cotton, with the Southwest accounting for 3.6 million bales of the increase. The upland crop is estimated at 17.8 million bales, and ELS farmers harvested 498 thousand bales.

The Southeast produced 4.3 million bales of upland cotton in 2010, accounting for 24% of the total upland crop (Figure 49). This is 881 thousand bales above 2009 and 277 bales better than the 5-year average. Across the region, increased area more than offset lower yields.

For 2010, the Mid-South accounted for 22% of the total U.S. upland crop. At 3.8 million bales, the 2010 crop was 1.2 million bales higher than 2009 but still well below the 5-year average of 5.4 million bales. Compared to year-earlier results, the larger crop can be attributed to both increased area and better yields. Production in all states recovered, with Mississippi’s crop being more than twice the size of the 2009 crop.

At 8.5 million bales, production in the Southwest accounted for 48% of the U.S. upland crop. The Southwest’s share of U.S. upland production in 2010 is an all-time high. Better yields, increased plantings and lower abandonment contributed to the larger crop, which surpassed the 2009 crop by 3.6 million bales.

The West produced 1.1 million bales of upland cotton in 2010, up 360 thousand bales from the region’s 2009 crop. The region accounted for 6% of U.S. production. Production recovered in all states in the
region. At 590 thousand bales, Arizona’s upland cotton production was the largest since 2005. Likewise for New Mexico, their 105 thousand bales was the largest harvest since 2005.

The 2010 ELS crop of 498 thousand bales was 98 thousand bales better than 2009. At 456 thousand bales, the California ELS crop was their largest crop since 2007 (Figure 50). The state accounted for 92% of the total 2010 U.S. ELS crop. In 2010, production made modest recoveries in Arizona, New Mexico, and Texas.

The decline in ELS stocks was even more dramatic. After beginning the 2009 marketing year with 305 thousand bales of stocks, essentially all stocks were shipped to textile mills, and just 18 thousand bales were being held in warehouses at the start of the 2010 marketing year.

Stock Levels
With total U.S. cotton demand exceeding production for the 2009 marketing year, cotton stocks fell sharply from the high levels of the previous marketing years. The resulting carryout from the 2009 marketing year, and equivalent carry-in or beginning stocks for the 2010 marketing year, fell to 2.9 million bales (Figure 51). That represented a 3.4 million bale decline from the stocks that were brought into the 2009 marketing year. Also, beginning stocks for the 2010 marketing year represented the lowest stock level since the start of the 2006 marketing year. During the 2009 marketing year, stock declines were evident in both upland and ELS cotton. Upland stocks fell from 6.0 million bales to 2.9 million bales.

Total bales of upland cotton placed under the CCC loan have been steadily declining since the 2006 crop. Through 2009, that trend largely reflected the smaller crops that were produced in each of those years. For the 2010 crop, cotton placed under the CCC loan is also lower than year-ago levels. As of December 31, 2010, outstanding CCC loan stocks were 4.5 million bales (Figure 52), down from 5.8 million bales in 2009.
With total U.S. upland production 50% higher than the 2009 crop, the reduced loan placements reflect the current market environment. Strong demand and high market prices have pulled more cotton into the marketing channels.

**Total Supply**

Total supply for the 2010 marketing year is estimated to be 21.3 million bales, up from 18.5 million the previous year (Figure 53). Larger supplies are due entirely to the recovery in U.S. production. The larger crop more than offsets the lower stocks available at the start of the marketing year.

**U.S. Cotton Supply**

![U.S. Cotton Supply](image)

**U.S. Cotton Quality**

As a whole, the quality of the 2010 crop is exceeding the recent 5-year averages for staple and strength. With 16.8 million running bales classed through January 20, the national average staple length (measured in 32nds of an inch) is 35.5, up from a 5-year average of 35.2 (Figure 54). The Southeast staple length of 34.9 is 0.3 better than their 5-year average, and if sustained for the remainder of the crop, the 2010 staple length would equal the 2009 value as an all-time best for the region. In the Mid-South, the average staple length of 35.1 exceeds the 5-year average by 0.1 thirty-second’s. The Southwest’s average staple length of 35.7 exceeds their 5-year average by 0.1. The West reports the longest staple, with an average of 37.2. If maintained for the remainder of the classing season, it would also represent a record average length for the West.

### 2010 Crop Staple and Strength

<table>
<thead>
<tr>
<th>Region</th>
<th>2010</th>
<th>5-Yr.</th>
<th>2010</th>
<th>5-Yr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast</td>
<td>34.9</td>
<td>34.6</td>
<td>29.4</td>
<td>28.7</td>
</tr>
<tr>
<td>Mid-South</td>
<td>35.1</td>
<td>35.0</td>
<td>30.1</td>
<td>29.0</td>
</tr>
<tr>
<td>Southwest</td>
<td>35.7</td>
<td>35.6</td>
<td>30.1</td>
<td>29.2</td>
</tr>
<tr>
<td>West</td>
<td>37.2</td>
<td>36.8</td>
<td>31.4</td>
<td>31.0</td>
</tr>
<tr>
<td>U.S.</td>
<td>35.5</td>
<td>35.2</td>
<td>30.0</td>
<td>29.1</td>
</tr>
</tbody>
</table>

![Figure 54 - 2010 Crop Staple and Strength](image)

The strength of the 2010 upland crop, averaging 30.0 grams/tex, is substantially better than the 5-year average of 29.1. In addition, it represents the first time that the U.S. crop has achieved an average strength of 30. All production regions are exceeding their 5-year averages, and 30.1 grams/tex for the Mid-South and Southwest are all-time highs for those regions.

In total for the Cotton Belt, 90.2% of the 2010 crop is grading 41 or better, which compares to a 5-year average of 88.5% (Figure 55). With 77.8% grading 41 or better, only the Southeast comes in significantly below their 5-year average. With well over 90% achieving SLM or higher, color grades in the remaining production regions are similar to or above their 5-year averages.
The average micronaire of the 2010 upland cotton crop is 45.1, up from the 5-year average of 43.5. At 47.4 and 48.4, respectively, the effects of hot, dry weather during the growing season are evident in the average micronaire for the Southeast and Mid-South. With an average of 42.5, the Southwest micronaire is slightly above the 5-year average, while the West’s micronaire of 43.0 is below their 5-year average.

### Cotton Prices

#### Upland Cotton Prices

The cotton market is experiencing unprecedented prices. At the start of 2009 futures hovered around 40 cents (Figure 56). A steady recovery ensued and through the first half of 2010 prices repeatedly bumped up against 80 cents. After the December 2010 contract closed above 80 cents on August 5, it seemed as if the sky was the limit as the December contract topped $1.50 in early November. After a brief retreat, nearby futures are again hovering around the $1.50 level.

Unlike the price spike of March 2008, the current price situation has support from the fundamentals. Global demand exceeded production by a substantial margin in the 2009 marketing year. The rebound in cotton demand coincided with world cotton area being at its lowest since 1986. To offset the shortfall in production, existing stockpiles of cotton were scooped up by the world’s textile mills.

Concerns over crops in China and Pakistan further compounded the apprehension caused by the tighter stocks situation. On top of these issues, India, the world’s 2nd largest cotton exporter, continued to restrict cotton exports either through a ban, strict licensing requirements, or quota applications. In the short term, India’s export restrictions have contributed to the record pace of U.S. export sales witnessed in recent months.

The “A” Far East (FE) Index has exhibited a similar pattern to futures prices. In recent weeks, the tightness in the physical market is even more evident given the widening spread between the “A” Index and nearby NY futures. By mid-January, the “A” Index was 25 cents above the March futures contract.

Thus far into the 2010 marketing year, spot 4134 values have averaged $1.12/lb.; the average spot 4134 value for the 2009 crop cotton was 68 cents/lb (Figure 57). During 2010, spot market prices generally followed the trend in futures. After starting calendar 2010 at 70 cents, prices closed the year at

---

<table>
<thead>
<tr>
<th>2010 Crop Color and Mike</th>
<th>%SLM+</th>
<th>Micronaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>5-Yr.</td>
<td>2010</td>
</tr>
<tr>
<td>Southeast</td>
<td>77.8</td>
<td>86.0</td>
</tr>
<tr>
<td>Mid-South</td>
<td>97.3</td>
<td>83.9</td>
</tr>
<tr>
<td>Southwest</td>
<td>92.3</td>
<td>92.4</td>
</tr>
<tr>
<td>West</td>
<td>96.4</td>
<td>96.5</td>
</tr>
<tr>
<td>U.S.</td>
<td>90.2</td>
<td>88.5</td>
</tr>
</tbody>
</table>

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**Figure 55 - 2010 Crop Color and Mike**

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**Figure 56 - Nearby NY and "A" (FE) Index**

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**Figure 57 - Spot 4134 Values**
just over $1.35 cents. By January 20, the spot price reached $1.45.

**ELS Prices**
The tremendous surge in prices has not been limited to upland cotton, but is evident in ELS markets as well. Extra-long staple cotton prices began 2010 at $1.17 per pound, after having improved through the latter half of 2009 (Figure 58). After being relatively stable through the first half of 2010, prices began to move much higher in September, closing the year at $2.25. By mid-January 2011, ELS prices had moved up to $2.40. As with upland markets, a tight supply and demand situation is fueling the strength in ELS prices.

**Cottonseed Situation**

**Cottonseed Supply**
USDA estimates 2010 cottonseed production at 6.2 million tons, up sharply from 4.1 million the previous year (Figure 59). The changes in cottonseed production mirror the movements in cotton lint production as average seed-to-lint ratios have remained relatively stable since 2005. For 2010, USDA’s latest estimates indicated an average ratio of 1.4 pounds of seed per pound of lint.

For the 2010 crop, a regional breakdown of production shows that the Southwest produced 3.0 million tons or 48% of the total, the largest of any region (Figure 60). This was followed by the Southeast with estimated production of 1.3 million tons for a 21% share. The Mid-South also produced 1.3 million tons, or 21% of total production, and the West accounted for 596 thousand tons, 10% of the total.
Supplementing U.S. production, beginning stocks of 342 thousand tons bring total cottonseed supply for the 2010 marketing year to 6.5 million tons (Figure 61). Unlike 2009 when a small amount of cottonseed was imported into the U.S., no imports are expected in the 2010 marketing year as domestic supplies have rebounded.

With sharply higher production not fully offset by increased use, stocks of cottonseed are estimated to increase during the 2010 marketing year (Figure 63). With projected ending stocks of 443 thousand tons, 2010 carryover will be 100 thousand tons above the 2009 marketing year.

**Disappearance and Stock Levels**
USDA’s latest estimate places 2010 cottonseed disappearance at 6.1 million tons, up 1.7 million tons from the previous year (Figure 62). Crush is estimated at 2.5 million tons, up 600 thousand tons from 2009. Use of the whole seed for feed purposes recovered to 3.2 million tons after being down sharply in 2008 and 2009. Estimated exports of 349 thousand tons were also improved from the 2009 level. Key export markets for U.S. cottonseed included South Korea, Japan, and Mexico.

**Cottonseed Prices**
The movement in cottonseed prices generally mirrors the changes in competing feed prices more so than the movements in cotton lint prices. In 2010, U.S. average spot prices have moved between $200 and $250 per ton (Figure 64). After staying close to
$200 per ton in the fall of 2010, prices began to creep higher by the close of the year. In early 2011, the U.S. average spot price is again moving higher, closing in on $250.

While cotton prices were strengthening in 2010, the corn market was also experiencing a significant rally. Between August 2010 and January 2011, the December 2011 futures contract gained almost $1.50 per bushel as prospects for U.S. corn production were lowered (Figure 66). Prices were also bolstered by decisions by the Environmental Protection Agency (EPA) to allow increased blends of ethanol to be used in U.S. cars and trucks. By mid-January, the December 2011 contract was approaching $6.00 per bushel, almost $2.00 per bushel above the comparable contract from a year ago.

2011 Planting Intentions

Price Prospects

Cotton growers are approaching the 2011 planting season with the December contract trading at an all-time high for this time of year. As of mid-January, the December 2011 contract was trading between $1.05 and $1.10 per pound (Figure 65). At this time last year, the December 2010 contract was in the low 70’s. Cotton prices strengthened dramatically in the latter half of 2010 as concerns over an already tight balance sheet were heightened due to crop concerns in China and Pakistan and export restrictions by India.

The November 2011 soybean contract has followed a path similar to cotton and corn. Between August 2010 and mid-January 2011, the November 2011 contract traded up by approximately $3.50 per bushel (Figure 67). At just under $13.50 per bushel, the November 2011 contract is $4.00 higher than year-ago levels. Production concerns in South America, coupled with the need to compete for acres in the U.S., have driven soybean markets higher. The soybean market is also experiencing strong import demand in markets such as China.
As growers consider their 2011 planting decisions, they are comparing prices for cotton, corn, soybeans and other regional crops. Growers will also be influenced by production costs, which have declined from the 2008 peak, but will likely increase relative to both 2009 and 2010. While final acreage decisions are influenced by expected returns of cotton and competing crops, farmers will also take into account weather and agronomic considerations such as crop rotation.

2011 U.S. Cotton Acreage Intentions
In mid-December 2010, the NCC distributed the annual early season planting intentions survey. Respondents are asked to give their plantings of cotton, corn, soybeans, wheat, and other crops for 2010 and intended acreage for 2011. As always, the survey results should be viewed as a measure of grower intentions prevailing at the time the survey was conducted. Changing climate and market conditions could cause actual plantings to be significantly different from growers’ stated intentions.

Beginning with the Southeast, survey results indicate a 12.8% increase in the region’s upland area to 2.9 million acres (See Table 4 on page 46), with all states increasing cotton acreage. In percentage terms, Virginia and North Carolina lead the way with increases of 26.9% and 26.1%, respectively. In both states, increased cotton acres are coming at the expense of corn and soybeans. Growers in Florida report a planned increase of 18.3%, while increases in Alabama and South Carolina are 14.0% and 11.2%, respectively. In Alabama and Florida, cotton is the beneficiary of acres moving out of peanuts, while the South Carolina increase coincides with planned acreage reductions in corn and soybeans. Georgia, the largest cotton state in region, reports the smallest increase at 6.0%. The increase is primarily due to a shift of acres from peanuts. Total 2011 acreage for each of the states is as follows: Alabama at 388 thousand acres, Florida at 109 thousand, Georgia at 1.41 million, North Carolina at 694 thousand, South Carolina at 225 thousand, and Virginia at 105 thousand.

In the Mid-South, survey results show that growers intend to plant 2.28 million acres, an increase of 18.9% from the previous year. While all states in the region indicate more acres of cotton, the magnitudes vary from an increase of 8.0% in Arkansas to a 39.5% increase in Tennessee. Mississippi’s survey results indicate an increase of 24.8%, while Missouri and Louisiana are up by 12.4% and 8.9%, respectively. In each of the five states, the survey suggests that cotton will be pulling acres away from soybeans, while growers in Mississippi, Missouri, and Tennessee also plan to reduce acreage devoted to corn. Total 2011 acreage for each of the states is as follows: Arkansas at 589 thousand acres, Louisiana at 278 thousand, Mississippi at 524 thousand, Missouri at 348 thousand, and Tennessee at 544 thousand.

Growers in the Southwest are planning to bring 700 thousand acres into cotton production, bringing the regional total to 6.59 million acres (+11.9%). In percentage terms, Kansas leads the region with an increase of 34.6% as the survey shows wheat and soybean acres being planted to...
cotton in 2011. Acreage in Oklahoma is showing a 14.4% rebound, again largely at the expense of wheat. For Texas, survey respondents intend to expand area by 11.5%. Within Texas, respondents from South Texas and the Blacklands regions indicate larger percentage increases in 2011 cotton acres relative to West Texas. Total 2011 acreage for each of the states is as follows: Kansas at 69 thousand acres, Oklahoma at 326 thousand, and Texas at 6.19 million acres.

All states in the West region show increases in upland plantings, with the region as a whole up 27.0%. In Arizona, intended area of 226 thousand acres represents a 15.8% increase from the previous year. The expected increase in acreage is coming in response to better price signals and less competition from feed crops and specialty crops. At the time of the survey, California farmers intend to plant 172 thousand acres (+38.8%), with the increase coming at the expense of specialty crops. California’s actual plantings could ultimately be dictated by water costs and availability. New Mexico is reporting intentions of 67 thousand acres, up 42.5% from 2010.

Summing across the 4 regions gives intended 2011 upland cotton area of 12.26 million acres, 13.9% higher than 2010.

In response to strong market signals, survey results indicate that U.S. cotton growers intend to increase ELS plantings 23.1% to 251 thousand acres in 2011. Each of the 4 ELS-producing states is indicating more acres with California planting 225 thousand acres, or 23.6% more than last year. In Arizona, a 47.2% increase brings area up to 3,700 acres. In New Mexico, growers intend to plant 3,500 acres (+28.2%), while Texas acres are estimated at 19,300 (+13.7%).

Summing together the upland and ELS cotton intentions shows U.S. all-cotton plantings in 2011 of 12.51 million acres, 14.0% higher than 2010. (See Table 4 on page 46 and Figure 68)

![Figure 68 - U.S. Planted Area](image)

**2011 U.S. Cotton and Cottonseed Supply**

Planted acreage is just one of the factors that will determine supplies of cotton and cottonseed. Ultimately, weather, insect pressures, and agronomic conditions play a large role in determining crop size. However, for the economic outlook, normal or average weather conditions are assumed. In addition, it is assumed that abandonment returns to levels consistent with historical averages.

Assuming an average abandonment across the Cotton Belt of 11.0%, harvested area totals 11.14 million acres (Figure 69). For all states, expected yields are aligned with recent trends. Weighting by 2011 area generates a U.S. average yield of 826 pounds. This compares to a 2010 yield of 821 pounds and a 2005-09 average yield of 823 pounds. Applying each state’s yield to its 2011 projected harvested acres generates a cotton crop of 19.17 million bales, with 18.49 million bales of upland and 671 thousand bales of ELS.
Based on the abandonment and yield assumptions, upland production by region is: Southeast = 4.88 million bales; Mid-South = 4.31 million; Southwest = 7.97 million; and West = 1.34 million.

Combining projected production with expected beginning stocks of 2.28 million bales gives a total U.S. supply of 21.44 million (Figure 70). This is an increase of 177 thousand bales from the 2010 level.

For cottonseed, multiplying the point estimate of lint production by an average lint-seed ratio generates expected production of 6.49 million tons. With 443 thousand tons of beginning stocks, 2011 cottonseed supply totals 6.93 million tons (Figure 71).

Obviously, weather will have a dramatic impact on the final crop size, particularly in light of the fact that Texas is expected to account for 50% of U.S. cotton area. Based on 2011 intended acreage, a repeat of the low abandonment and high yields of 2007 would push the crop to 22 million bales. However, weather problems could also lower the crop to 16 million bales.
<table>
<thead>
<tr>
<th>Region</th>
<th>2010 Actual (Thou.)</th>
<th>2011 Intended (Thou.)</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOUTHEAST</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Alabama</td>
<td>340</td>
<td>388</td>
<td>14.0%</td>
</tr>
<tr>
<td>Florida</td>
<td>92</td>
<td>109</td>
<td>18.3%</td>
</tr>
<tr>
<td>Georgia</td>
<td>1,330</td>
<td>1,410</td>
<td>6.0%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>550</td>
<td>694</td>
<td>26.1%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>202</td>
<td>225</td>
<td>11.2%</td>
</tr>
<tr>
<td>Virginia</td>
<td>83</td>
<td>105</td>
<td>26.9%</td>
</tr>
<tr>
<td>MID-SOUTH</td>
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<td></td>
<td></td>
</tr>
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<td>Arkansas</td>
<td>545</td>
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</tr>
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</tr>
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</tr>
<tr>
<td>Tennessee</td>
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</tr>
<tr>
<td>Kansas</td>
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</tr>
<tr>
<td>Texas</td>
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<tr>
<td>Arizona</td>
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<td>226</td>
<td>15.8%</td>
</tr>
<tr>
<td>California</td>
<td>124</td>
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<tr>
<td>New Mexico</td>
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<td>67</td>
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</tr>
<tr>
<td>TOTAL UPLAND</td>
<td>10,769</td>
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</tr>
<tr>
<td>TOTAL ELS</td>
<td>204</td>
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</tr>
<tr>
<td>Arizona</td>
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</tr>
<tr>
<td>California</td>
<td>182</td>
<td>225</td>
<td>23.6%</td>
</tr>
<tr>
<td>New Mexico</td>
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<td>3</td>
<td>28.2%</td>
</tr>
<tr>
<td>Texas</td>
<td>17</td>
<td>19</td>
<td>13.7%</td>
</tr>
<tr>
<td>ALL COTTON</td>
<td>10,973</td>
<td>12,514</td>
<td>14.0%</td>
</tr>
</tbody>
</table>
U.S. Market

U.S. Textile Industry
Like many other segments of the economy in 2010, the U.S. textile industry experienced more job losses. However, the rate of losses was lower than in previous years. Preliminary data from the U.S. Bureau of Labor Statistics indicate that textile industry employment in 2010 fell by approximately 5,300 workers. These figures represent employment in all three sectors of the U.S. textile industry - textile mills, textile product mills, and apparel mills.

Upland Cotton Economic Adjustment Assistance Program
In 2010, the National Cotton Council (NCC) and the National Council of Textile Organizations (NCTO) surveyed U.S. cotton textile manufacturers regarding the importance of the Upland Cotton Economic Adjustment Assistance Program (EAAP). The EAAP, authorized in the 2008 Farm Bill, has provided U.S. cotton textile manufacturers with much-needed assistance for capital investments and improvements. Respondents to the survey have used the funds received through EAAP to make significant investments in new textile machinery to become more efficient, add capacity and expand into new product lines. Lighting was upgraded and direct current drives were converted to alternating current drives to become more energy efficient. Also, funding has been used in the construction of new buildings and structural improvements to existing buildings.

Positive benefits from capital investments made with EAAP funds include increased efficiency, reduced costs, and increased ability to be more competitive against foreign competition. Increased export capabilities and reclaiming market share from Asian competitors were also noted by survey respondents. Other benefits include: lower energy costs, greater efficiency in style changes giving the ability to adapt to market conditions, improved quality control, increased capacity, reduced water use, and more flexibility to meet customers’ needs.

Survey respondents also noted a positive effect on employment over the past two years because of EAAP. Seventy percent of respondents cited increases in the number of employees while the remaining 30% noted that labor requirements had either stabilized or more hours were required of existing employees.

Future equipment replacement and construction of new plants with EAAP funding is expected to continue the positive effect on employment and efficiency.

Mill Use
Mill use of cotton increased for the first time since 1997 and is estimated at 3.62 million bales in calendar 2010, 9.9% above 2009 (Figure 72). For calendar 2011, NCC forecasts domestic mill use of cotton at 3.76 million bales and estimates the 2010 marketing year at 3.69 million bales (Figure 73). NCC projects domestic mill use of cotton at 3.79 million bales for the 2011 marketing year.

U.S. Cotton Mill Use
(Calendar Year)

<table>
<thead>
<tr>
<th>Million Bales</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

Figure 72 - U.S. Cotton Mill Use (Calendar Year)
By the Department of Commerce accounting methods, there are generally 261 effective working days in a calendar year. Hence, a 1,000 bale increase in daily mill use equates to an increase of 261 thousand bales in annual mill use (Figure 74). By extension, a 4,000 bale increase in daily mill use implies annual gains greater than 1 million bales.

After several years of decline, average daily mill use began to increase in 2010. In January 2010, average daily mill use was 13,846 bales. By November 2010, average daily mill use had risen to 14,203 bales.

Cotton was not the only fiber that experienced an increase in mill use in 2010; U.S. mill consumption of manmade fibers increased as well. NCC estimates mill use of manmade fibers at 15.5 million bales for 2010, an increase of 10.9% from 2009 (Figure 75). Manmade fiber mill use is projected to increase to 16.8 million bales in calendar 2011.

Net Domestic Consumption

Net domestic consumption is a measure of the U.S. retail market’s size. It measures both cotton spun in the U.S. (mill use) and cotton consumed through textile imports. Total fiber consumption in 2010 is estimated to be 48.3 million bale equivalents (Figure 76). Cotton’s share of net domestic consumption decreased 0.8% this past year to 42.4%, which translates to 20.5 million bales. For 2011, NCC projects net domestic consumption of all fibers to increase to 50.9 million bales. With a projected share of 42.1%, cotton’s net domestic consumption is projected to be 21.4 million bales.
Imported goods make up the largest portion of U.S. net domestic consumption. Imported cotton textiles increased from 18.4 million bale equivalents in 2009 to an estimated 20.5 million in 2010 (Figure 77).

For imports, it is important to consider that a significant portion of imported goods contain U.S. cotton. Since much of what the U.S. exports to the NAFTA (North American Free Trade Agreement) and the CBI (Caribbean Basin Initiative) countries is in the form of fabric and piece goods that come back in the form of finished goods, the trade gap is not as wide as implied by gross imports and exports. NCC analysts estimate that 27.0% of all cotton goods imported in 2010 contained U.S. cotton. This is a 0.04% increase over the previous year. In bale equivalents, these imported cotton goods contained 5.5 million bales of U.S. cotton (Figure 79). This is due, in large part, to our trading partners in NAFTA and the CBI.

Textile Trade
Increasing imports over the past several years have devastated the U.S. textile and apparel industries. In calendar 2010, cotton textile imports accounted for over 99% of U.S. net domestic consumption of cotton. Imports of cotton goods in 2010 were estimated to have increased by 11.6% to 20.5 million bale equivalents (Figure 78). In calendar 2011, NCC projects cotton textile imports to increase to 21.3 million bales.

U.S. Cotton Textile Imports
Apparel was once again the largest category of imported cotton goods when compared to yarn, thread and fabric, and home furnishings (Figure 80). Cotton apparel imports were estimated at 15.1 million bale equivalents for 2010, up 10.9% from 2009. Imports of cotton home furnishings (including floor coverings) increased 13.8% in 2010 to an estimated 3.9 million bale equivalents. Cotton yarn, thread and fabric imports increased 21.4% in 2010 to an estimated 1.5 million bales.
Once again, countries in NAFTA and CBI represented significant sources of imported cotton goods in 2010 (Figure 81). Imports from Mexico in 2010 were estimated at 1.3 million bales, up approximately 4.3% from the previous year (Figure 82). Imports of cotton goods from Canada fell to an estimated 79 thousand bales in 2010, sliding 1.1% from the previous year (Figure 83). Imported cotton goods from CBI for the year were estimated at 2.4 million bale equivalents (Figure 84), up 2.7% from the previous year. The CAFTA-DR countries of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic are all part of the CBI region. Imports of cotton goods from CAFTA-DR in 2010 were 2.2 million, or 94.4% of the cotton textile imports from CBI. Combined, imports from NAFTA and CBI countries increased 3.2% and accounted for 18.4% of total U.S. cotton product imports in 2010.
Other top sources of imported cotton goods in 2010 were China, Pakistan, India, Hong Kong, Bangladesh, Vietnam, South Korea, and Turkey. For the sixth consecutive year, China was the largest supplier of cotton textile imports into the U.S. (Figure 85). Total cotton product imports from China increased to an estimated 7.2 million bale equivalents in 2010, up 24.8% from 2009 and up more than 775% from 2001 when China entered the WTO. China’s share of imported cotton goods in the U.S. market accelerated from 10.9% in 2004, 18.6% in 2005, 21.5% in 2006, 25.4% in 2007, 26.2% in 2008, and 31.4% in 2009 to 35.1% in 2010.

Imports of cotton products from Pakistan are estimated at 2.0 million bale equivalents in 2010, an increase of 185 thousand bales. Since 1997, Pakistan imports have increased 196.9%. Pakistan slightly lowered its share of imported cotton goods in the U.S. market last year to 9.7%.

Imports from India stood at 1.6 million bale equivalents for 2010. This was an 11.7% increase from last year and a 127.9% increase from 1997. India now accounts for 8.0% of all U.S. cotton product imports.

Imports from Hong Kong in 2010 were 32 thousand bale equivalents, down 31.1% from 2009. Hong Kong’s share of imported goods in the U.S. declined to 0.2% in 2010.

Bangladesh again showed a boost in cotton product imports into the U.S. when compared to the previous year. Imports from Bangladesh in 2010 were up 9.7% from 2009 to 1.3 million bale equivalents. Bangladesh accounted for an estimated 6.2% of all cotton goods imported into the U.S. in 2010.

Vietnam also showed an increase in cotton product imports into the U.S. when compared to the previous year. Total cotton product imports from Vietnam increased to an estimated 1.1 million bale equivalents in 2010, up 5.9% from 2009. Cotton product imports from South Korea increased 9.0% from 2009 to 191 thousand bale equivalents in 2010.

It is important to note in the following discussion that the most reliable data on imports by product category and by country is in the form of square meter equivalents (SME), rather than pounds or bales. Since different products have different weights per square meter, total imports reported in bale equivalents will not necessarily show the same trend as total imports expressed in SME. NCC expresses imports in bale equivalents.
equivalents whenever possible, but the measurement of SME best represents product categories imported from individual countries.

**Mexico**

Although declining relative to other countries, Mexico remained a large shipper of cotton goods to the U.S. in 2010. Cotton trousers remained the largest category of imported cotton goods from Mexico. Trousers accounted for 33.2% of all cotton product imports from Mexico based on SME (Figure 86). Knit cotton shirts were the next largest category of imports, accounting for 17.6%, followed by cotton hosiery (9.4%) and “other cotton apparel” (5.6%). The U.S. Customs Service category “other cotton apparel” includes items such as waistcoats, swimwear, bodysuits and scarves.

![Figure 86 - Cotton Product Imports from Mexico](image)

**Canada**

U.S. cotton imports from Canada decreased for the eighth consecutive year in 2010. The largest category of imports from Canada in 2010 was “other cotton manufactures”, which accounted for 42.5% of total SME of cotton product imports from Canada (Figure 87). The U.S. Customs Service category “other cotton manufactures” includes items such as tablecloths, napkins, dishtowels and pillow covers. The next largest category was “other cotton apparel” with 6.1% of total imports, followed by cotton twill fabric at 3.8% and coats at 2.8%.

![Figure 87 - Cotton Product Imports from Canada](image)

**Caribbean Basin Initiative (CBI)**

Continuing the recent trend, CBI countries shipped more cotton goods to the U.S. than did NAFTA countries in 2010. The largest category of imported cotton goods from the region was underwear, accounting for 36.2% of total imports, based on SME (Figure 88). Approximately 93.8% of the underwear imports from CBI came from the CAFTA-DR countries. The second largest category, knit shirts, accounted for 34.6% of imports, followed by cotton hosiery (14.2%) and trousers (8.5%). Of these imports, 84.1% of the cotton knit shirts, almost 100.0% of the cotton hosiery and 95.2% of the cotton trousers were from the CAFTA-DR countries.

![Figure 88 - Cotton Product Imports from CBI](image)
**African Growth & Opportunity Act (AGOA)**

Over the past year, total cotton apparel product imports from the AGOA region decreased by 14.1% to an estimated 146.1 million SMEs (Figure 89). Also, during the past year, the percentage of U.S. cotton apparel imports from the AGOA region receiving preferential treatment under the act decreased from 99.5% to 92.5%.

![Figure 89 - Cotton Apparel Product Imports from AGOA](image)

**Pakistan**

The largest category of imported goods from Pakistan in 2010 was “other cotton manufactures” (Figure 90). This category accounted for 35.8% of all cotton product imports from Pakistan based on SME. The second largest category imported from Pakistan was cotton sheets with 14.7% of total imports, followed by bedspreads and quilts (10.5%) and cotton hosiery (6.6%).

![Figure 90 - Cotton Product Imports from Pakistan](image)

**China**

Again last year, the single largest supplier of imported cotton goods into the U.S. market was China. On a SME basis, the largest category of cotton product imports from China in 2010 was “other cotton manufactures”, which accounted for 22.6% of all cotton product imports from that country (Figure 91). Trousers was the second largest category of cotton imports from China in 2010, comprising 11.6% of total cotton product imports from that country. Nightwear accounted for 6.1% of U.S. cotton textile and apparel imports from China in 2010. Knit shirts were the fourth largest category and accounted for 5.6% of cotton product imports.

![Figure 91 - Cotton Product Imports from China](image)
India
As was the case with Pakistan and China, the largest category of imported cotton goods from India in 2010 was the category of “other cotton manufactures” (Figure 92). When based on SMEs, this category represented 30.5% of all cotton goods imported from India. The next largest category was cotton sheets (11.6%), followed by underwear (9.1%) and knit shirts (6.2%).

Hong Kong
Hong Kong’s share of U.S. imports has been declining over the past several years. The largest category of imported cotton goods from Hong Kong in 2010 was woven shirts (Figure 93). When looking at SMEs, woven shirts accounted for 21.6% of all cotton products imported. The second largest category was knit shirts with 15.6% of imports, followed by “other cotton manufacturers” (15.4%) and cotton sweaters (5.0%).

Bangladesh
Based on SMEs, the largest category of cotton goods imported from Bangladesh in 2010 (32.6%) was trousers (Figure 94). The second largest category in 2010 was woven shirts (15.5%). Cotton underwear was the third largest category in 2010, representing 13.7% of total cotton goods imported from Bangladesh, followed by knit shirts at 8.1%.

Vietnam
Vietnam has emerged as a more significant supplier of cotton product imports (Figure 95). U.S. cotton product imports from Vietnam have increased by almost 4,900% based on SME since 2001. In 2001, the U.S. imported 24.3 million SME of cotton goods
from Vietnam. This number increased to an estimated 1.2 billion SME in 2010. The largest category of imported cotton goods from Vietnam in 2010 was knit shirts. Based on SMEs, this category represented 21.2% of all cotton goods imported from Vietnam. The next largest category was trousers (20.3%), followed by cotton underwear (16.9%) and coats (6.8%).

**Turkey**
In 2010, cotton product imports from Turkey reversed their recent downward trend. Based on SMEs, the largest category of cotton goods imported from Turkey in 2010 was cotton sheets, which accounted for 30.5% (Figure 97). The second largest category in 2010 was “other cotton manufactures” (17.8%), followed by bedspreads and quilts (6.9%) and cotton trousers (5.5%).

**South Korea**
Based on SMEs, the largest category of cotton goods imported from South Korea in 2010 was combed cotton yarn, which accounted for 36.7% (Figure 96). The second largest category in 2010 was cotton sheeting fabric (25.7%), cotton hosiery (14.6%) and carded cotton yarn (5.0%).

**U.S. Cotton Product Exports**
For the first time in five years, exports of U.S. cotton textile and apparel products experienced an increase in 2010 (Figure 98). Exports increased by 15.8% in 2010 to an estimated 3.6 million bale equivalents. This increase was due to gains in the export categories of cotton yarn, thread and fabric, and cotton home furnishings (including floor coverings) (Figure 99). Cotton apparel exports decreased by 4.6% in 2010 to 271 thousand bale equivalents. Exports of home furnishings (including floor coverings) rose by 0.1% over the previous year to an estimated 91 thousand bale equivalents. Exports of cotton yarn, thread, and fabric strengthened by 18.6% to 3.3 million bales equivalent in 2010. For 2011, NCC projects U.S. cotton textile exports to decrease 30 thousand bales to 3.58 million bale equivalents.
The top customers of exported U.S. cotton textiles and apparel in 2010 were once again the NAFTA and CBI countries (Figure 100). Exports to the NAFTA countries last year totaled an estimated 907 thousand bale equivalents, down 1.7% from the previous year. Exports to the region accounted for 25.1% of all U.S. cotton product exports. Exports to Mexico decreased to an estimated 686 thousand bale equivalents from 688 thousand in 2009. Cotton product exports to Canada shrunk by an estimated 6.3% to 220 thousand bale equivalents for 2010.

U.S. exports to the CBI countries strengthened last year. In 2010, exports increased 25.5%, totaling 2.4 million bale equivalents or 66.1% of all U.S. cotton exports. Approximately 98.6% of the cotton products exported to CBI went to the CAFTA-DR countries.
World Market Situation

World cotton prices, as measured by Cotlook Ltd.’s “A” Index, ranged between 74.90 and 186.25 cents per pound during the course of calendar 2010 (Figure 101). During the last month of the year, the “A” Index set new record highs on consecutive days. On December 21, 2010, the “A” Index climbed to 182.35 cents per pound. The following day, the “A” Index climbed another 390 points to set its record high of 186.25 cents per pound. Since that time, the “A” Index has dropped slightly and as late January hovered in the 180’s. For the current marketing year-to-date, the “A” Index has averaged 134 cents per pound.

![“A” (FE) Index](image1)

**World**

The 2010 marketing year will mark the first time since the 2006 marketing year that world cotton producers increased cotton production with an estimated world crop of 115.3 million bales (Figure 102). The larger cotton crop was a direct result of higher prices encouraging increased acres. China remains the leading producer while India continues to hold second place. Ranking third in production, the United States produced a crop of 18.3 million bales, 6.1 million bales higher than the 2009 crop.

![World Cotton Supply & Use](image2)

In 2006, world production was roughly 2.0 million bales behind the pace of world consumption. That gap expanded to 3.6 and 2.8 million bales during the 2007 and 2008 marketing years, respectively. In the 2009 marketing year, consumption exceeded production by an astounding 17.0 million bales, leading to a sharp decline in global stocks. For the current marketing year, world consumption is estimated at 116.9 million bales and production at 115.3 million bales, with a crop-to-use deficit of 1.6 million bales.

Production is projected to continue to climb in the 2011 marketing year to 123.3 million bales with a healthy increase in consumption to 121.1 million. Ending stocks will climb to 44.6 million bales resulting in a stock-to-use ratio of roughly 36.8%.

**China**

China remained the largest cotton producer with a 2010 crop of 30.0 million bales (Figure 103). The crop was 2.0 million bales smaller than the 2009 crop. The decrease was based on fewer planted acres along with lower yields. Despite government efforts to boost cotton production, growth in domestic planted area for cotton has been limited by
government support policies to increase grain production and ensure food security, and the relative per-unit returns from cotton versus other competing crops.

However, there are policies in place to help maintain stable cotton production. In 2007, the Government of China (GOC) began to subsidize cotton production through a multi-year “seed subsidy” program. The seed subsidy policy was aimed at stabilizing planted area. It is also expected that cotton quality will be more uniform because selected “high quality varieties”, seeds eligible to be subsidized, are likely to increase in area coverage. The cottonseed subsidy continued to cover all cotton area in the 2010 marketing year. Given the large cotton production-consumption gap and the importance placed on maintaining a stable planting area, the policy is assumed to remain in place for the foreseeable future.

Overall, technology advancements in recent years have improved cotton yields in China. Yields are expected to remain generally stable over the next few years. The technical advancements taking place in the Xinjiang production region and the dissemination of biotechnology (Bt) cotton varieties in the Yangtze and Yellow River regions have played a major role in the stabilizing of cotton yields. Some experts believe that Bt variety coverage reached 100 percent in Henan, Hebei, Shandong, and Anhui Provinces. Additionally, China’s Ministry of Agriculture (MOA) plans to increase the “3-line Cross-bred Bt Cotton Varieties” developed by Chinese scientist. These varieties are reported to increase yield by 25 percent compared to conventional varieties.

However, Bt may not be the answer for all Chinese producers. In Xinjiang, Bt varieties are reportedly not planted due to fewer outbreaks of diseases and pests. The development of conventional varieties with specific traits such as dwarf plant size and early maturity are expected to continue boosting yields. Expanded application of advanced techniques including high density sowing, plastic sheet covering and drip irrigation technology will contribute to additional yield gains. These advancements are particularly significant for Xingjiang Production Construction Corporation (PCC) farms. Industry sources reported that drip irrigated cotton accounted for 80 percent of the PCC planted area in 2008.

With the continued support of the Chinese government and improved cotton prices, an increase in cotton production is expected in 2011. China’s 2011 harvested cotton area is projected at 13.2 million acres, up 642,000 acres from 2010. Assuming trend yields, China is projected to remain the world’s largest cotton producer with a projected 2011 crop of 32.3 million bales.

Along with being the world leader in cotton production, China is also the largest consumer of raw cotton. China’s textile industry remains one of China’s “pillar industries”. According to China’s 11th Five Year (2006-2010) Plan for Development of the Textile Industry, total fiber production is forecast to reach 36 MMT by 2010, with an annual growth rate of 6%. Moreover, per capita fiber consumption is expected to rise from 16.8 to 18.0 kg, an annual growth rate
of 7%. Employees involved in this sector are forecast to reach 23 million, up from 20 million.

Sales of textiles and apparel are increasingly driven by domestic consumption resulting from increased disposable incomes and population growth. According to China’s National Statistics Bureau (NSB), the per capita expenditure on clothing by urban residents remained 5.5 times that of rural people. Nevertheless, as rural income rises, better clothing will be high on their list of new purchases for China’s 800-plus million rural residents.

Despite the expected future growth in China’s consumption of textiles, the current environment is characterized by high cotton prices and increasing labor costs. Both factors are contributing to an environment that will lead to lower mill use in the 2010 marketing year. Current estimates place 2010 mill use at 47.6 million bales, down 2.4 million bales from the 2009 marketing year. For the 2011 marketing year, China’s consumption is projected to rebound to 48.8 million bales as domestic production recovers and economic growth continues.

China remains a net importer of cotton fiber, and the gap between imports and exports has been growing larger for the past few marketing years. For the 2010 marketing year, net imports are expected to grow to roughly 15.3 million bales based on smaller domestic supplies. For the 2011 marketing year, net imports are expected to grow to 16.9 million bales as consumption continues to outpace China’s production.

**India**

The latest estimates have India producing 26.0 million bales for the 2010 marketing year (Figure 104). If these estimates hold, the 2010 crop will be 2.8 million bales higher than the 2009 crop.

Cotton production has been a major success story in Indian agriculture as production more than doubled from 10.6 million bales in the 2002 marketing year to a record 24.0 million bales in 2007. Cotton production in 2008 faltered on late planting due to a prolonged dry monsoon spell in July and August 2008. About 70% of total cotton production occurs in the states of Gujarat, Maharashtra and Andhra Pradesh. The production growth in recent years has been largely fueled by rapid gains in productivity. Cotton yields have gone from 269 pounds per acre in 2002 to 459 pounds per acre in 2010. The rapid growth in yields can be attributed to the introduction and expansion of Bt cotton and improved hybrid cotton varieties, improved crop management practices and overall favorable weather conditions.

With the area under Bt cotton and improved varieties reaching a plateau, the prospect for future productivity growth is limited as most cotton is grown under rain-fed conditions and on small size land holdings. Although potential exists for a further increase in yields, cotton farmers will have to invest more in production technologies to improve management of irrigation, usage of fertilizers and micro nutrients, and control of pests and diseases.
Assuming normal weather and a modest expansion in planted area, India’s cotton production is forecast at 27.2 million bales in 2011. This is roughly 1.2 million bales above 2010 and would be an all-time high in terms of cotton production in India.

After robust growth for three consecutive years, India’s cotton consumption faltered during the 2008 marketing year due to a slowdown in export demand and higher cotton prices. However, the strong depreciation in the value of the Indian rupee vis-à-vis the U.S. dollar since the beginning of 2009 has resulted in a revival in export demand. India’s mill consumption is estimated to grow to 21.6 million bales in the 2010 marketing year, up 1.9 million bales from the previous year. The growth in mill use is bolstered by cotton export restrictions taken by the Indian government that is lowering internal cotton prices relative to the world price. Many believe continued growth in consumption will take place due in part to continued growth in the economy, an expanding middle class and a strong rural economy. If this holds true, then India’s mill use should grow to 22.6 million bales in the 2011 marketing year.

After emerging as the second largest exporter of cotton behind the United States for two consecutive years, India’s cotton exports fell off sharply in the 2008 marketing year as the higher minimum support price (MSP) rendered Indian cotton uncompetitive in the international market. However, India re-emerged as a major player in the international market with an estimated 6.6 million bales of cotton exported in the 2009 marketing year. Major export destinations have been China, Bangladesh, Pakistan, Hong Kong, Indonesia, Vietnam and other Far East countries.

In the 2010 marketing year, India’s imports are limited by various government export restrictions that originally began with an export ban in April 2010. In October, India replaced the export ban with an export quota of 4.3 million 480-lb bales. An export registration process opened on October 1 but was closed on October 10 as registrations exhausted the announced quota. However, as of mid-January, only a portion of the registered quota has actually been shipped. Future export quantities remain uncertain. Since the close of the registration process, India’s prices have remained at a substantial discount relative to the “A” Index. Since October, India’s spot prices have been relatively steady at approximately $1.20 per pound while the “A” Index has moved above $1.70 per pound.

For the 2010 marketing year, this outlook assumes that the full quota will eventually be exported. When combined with exports that occurred between August 2010 and October 2010, the marketing year total exports are set at 4.8 million bales. Looking ahead to the 2011 marketing year, the overall balance between cotton production and cotton consumption is not markedly different than the current year. As a result, total exports for 2011 are assumed to be limited to 5.0 million bales, which is only slightly higher than the current year.

In terms of imported cotton, the United States has been the leading supplier of cotton to India over the past few years, but volumes have declined in recent years due to sufficient domestic supplies. Indian mills importing U.S. pima and upland cotton are appreciative of its quality and consistency. However, U.S. cotton faces increased competition from suppliers such as West Africa and Egypt due to their freight advantage and shorter delivery periods.

**Uzbekistan**

Current estimates put Uzbek cotton production at 4.8 million bales for 2010.
(Figure 105), up 900,000 bales from the previous year. Cotton has been the cash crop in Uzbekistan for generations and a significant source of employment and foreign exchange. However, for the past several years, Uzbekistan has experienced serious problems in cotton production for a number of reasons, including weather, inadequate production incentives (i.e. prices), inadequate and low quality inputs and deteriorating infrastructure, especially irrigation. Currently, all state farms have been privatized and reorganized into private farms. In spite of implementing structural reforms in the agricultural sector, the government still maintains tight control over all aspects of production including area planted, production targets, prices, inputs, procurement and marketing of nearly all of the cotton in Uzbekistan.

The government’s overall cotton policy is still aimed at maintaining stable production, improving quality and fiber characteristics. For the 2011 marketing year, Uzbek cotton production is projected to grow by more than 387,000 bales and pass the 5.0 million bale mark with production estimated at 5.2 million bales.

Domestic supplies of cotton are allocated according to the government’s quota or plan, mainly to State Joint-Stock Company “Ozengilsanoat” which then distributes cotton to domestic mills according to sales contracts. The local textile mills can also buy cotton through the Commodity Exchange.

The government has often stated that it would like to process more of Uzbekistan’s cotton production domestically, but it has had only limited success. Less than 25% of all cotton is consumed domestically. Prior to the world economic slump, the spinning and weaving industries had been investing heavily in new equipment and renovation of existing equipment, as domestic and export demand grew, especially for cotton yarn. As global markets contract, the textile industry more than ever must aggressively pursue quality improvements and production diversification to include more value-added products, rather than to rely mainly on low value yarn based exports if it wants to remain competitive.

Currently, there are more than 42 joint ventures established in the textile industry with partners from Turkey, Germany, South Korea, Japan and Switzerland. As of 2009, foreign investment in the textile industry exceeded $1.0 billion (U.S. Dollars). Cotton yarn production was projected to grow 55,000 tons, stockinet by 20,000 tons, fabrics by 6.0 million square meters, and knitted products by 7.9 million pieces. However, these production goals proved to be unrealistic in light of slack global demand. As a result, Uzbek domestic cotton consumption is estimated at 1.0 million bales in the 2010 marketing year. For 2011, Uzbekistan’s mill use is projected to show modest gains to 1.1 million bales.

There are absolutely no changes in the mechanism of cotton exports which still remain under centralized state control. All cotton lint is still sold either to the trading companies of the Ministry of Foreign
Economic Relations, Investments and Trade (MFERIT) for export and partially allocated to the Republican Commodity exchange that organizes cotton lint sales for domestic consumers. Uzbekistan remains a primary supplier of cotton to Asia, with Bangladesh, China and South Korea the major markets for Uzbek cotton. With those markets, Uzbekistan will remain a net exporter of cotton for the foreseeable future exporting an estimated 4.0 million bales of cotton in the 2011 marketing year.

Pakistan
Pakistan’s economy is heavily dependent on the cotton and textile sectors, which accounts for 7.3 percent of the value-added in agriculture and about 1.6 percent of GDP. Cotton and textile products are Pakistan’s largest exports, accounting for over 55% of its global exports. Therefore, growth in the national economy is essentially linked to the volume and value of cotton and cotton by-products. Major components of Pakistan’s strategy to increase cotton production include: increasing cotton area, encouraging use of certified seeds, discouraging late cotton sowing, subsidizing fertilizers, and developing a focused media campaign.

Despite the government’s best efforts, cotton production fell between the 2009 and 2010 crop years. Serious water, electricity and other energy related crisis in the country are taking their toll on cotton production. Growers in remote areas have limited access to alternative sources of energy. The high cost of inputs combined with escalating operating costs will impact cotton cultivation and productivity. A growing concern is the reduced availability of canal water during the peak sowing season (April-June) for cotton. This situation is compounded in rural areas where irrigation via tube wells is powered by electricity. Even with these concerns, producers continue to plant cotton. In 2010, cotton production was estimated at 8.8 million bales. Increased production is expected for the upcoming marketing year as growers respond to improved prices. Assuming normal weather conditions, low pest infestation and good prices, production is projected to grow to roughly 9.7 million bales in 2011 (Figure 106).

![Pakistan Cotton Supply & Use](image)

Little growth was seen in Pakistan’s consumption numbers between 1991 and 1998, averaging 6.9 million bales. However, cotton mill use increased sharply in 1999 in response to aggressive export pricing of cotton yarn. After nearly a decade of growth, consumption fell to 11.3 million bales in 2008, down roughly 700,000 from the previous year.

Synthetic fiber continues to gain acceptance among consumers who increasingly seek less expensive blended products to compensate for their shrinking buying power. The future growth in cotton versus synthetic fiber will be determined by the relative price of these items. The long-term trend is for synthetics to comprise an increasing share of domestic consumption. Cotton-synthetic blends are popular due to their durability, ease in washing and maintenance under tropical conditions.
Despite these obstacles, Pakistan’s mill consumption is projected to grow to roughly 10.9 million bales for the 2011 marketing year. Pakistan is a net importer of cotton due to strong domestic demand for better grades of cotton. Pakistan remained a net importer of 1.0 million bales during the 2010 marketing year. Pakistan is one of the largest importers of U.S. pima/ELS cotton. Given the need for higher-count yarns, better quality fabrics for the export market, and specialized products for the domestic market, Pakistan’s textile industry is expected to increasingly rely on imported U.S. pima cotton and contamination-free upland cotton for the production of higher quality textile products.

Pakistani firms often import upland cotton for their export programs due to contamination problems in local cotton, particularly with alien fibers, mainly polypropylene and jute. The problem occurs during harvesting and handling. The inclusion of these fibers wreaks havoc in the industry by creating yarn with differential strength and differential dye uptake. Estimates are that contamination increases a mills’ cost by 10% or more. Some mills have standardized their blend for export markets, with a predefined origin and percentage of imported cotton in the product. Importers of long staple cotton prefer U.S. origin cotton due to high quality standards. These practices should keep Pakistan a net cotton importer in 2011. Cotton imports for the 2011 marketing year are expected to be around the 2.1 million bale range.

**Turkey**

Most of Turkey’s cotton is planted between mid-March and mid-May and harvested from mid-August through November. The crop is grown in three main areas: the Aegean region, Cukurova, and Southeastern Anatollia (GAP). Small amounts of cotton also are produced around Antalya and Antakya.

Between 2004 and 2007, Turkey’s production averaged 3.7 million bales. For the 2008 marketing year, Turkey produced an estimated 1.9 million bales (Figure 107). The 2008 marketing year was a difficult year for Turkish cotton growers due to a lack of water and price increases for all agricultural inputs including petroleum, fertilizer, and electricity. In addition to higher input prices, better returns for wheat and corn production, a lack of irrigation water, and lower than expected government payments for cotton all contributed to the drop in cotton production.

![Turkey Cotton Supply & Use](image)

**Figure 107 - Turkey Cotton Supply & Use**

Turkish cotton area and production declined for the third consecutive year in 2009 to an estimated 692,000 acres harvested with 1.8 million bales of production. The continued decline in cotton area and production was the result of low farmer returns on cotton and expectations of better returns on wheat and corn or wheat and corn rotations. In contrast to 2008, when lack of irrigation water was a source of concern, all cotton growing regions received adequate precipitation, and reservoirs had sufficient water for irrigation for the 2009 growing season. In spite of the favorable weather,
farmers planted less cotton because of high input costs, low local prices and no effective production support system.

For 2010, with increased acres and improved yields due to improved planting techniques and increased utilization of certified seeds, cotton production is estimated to increase to 2.3 million bales.

The Turkish textile industry was adversely affected during the last few years by fiscal and monetary policies that strengthened the Turkish Lira, which in turn hurt exports and facilitated imports of low cost yarn and fabric from India, Pakistan, China and Turkmenistan. The 2008 global economic slump in Turkish textile export markets, such as the EU, and the removal of Chinese textile export quotas were other negative factors adding to the already difficult environment. The high cost of labor, electricity and transportation in Turkey caused many mills to suspend operation. Furthermore, some mills moved to low cost countries such as Egypt and others sold their machinery.

Nevertheless, the textile industry continues to be one of the most important sectors for the Turkish economy, accounting for 8% of GNP, 16% of industrial employment and 21% of total exports in 2008. Investments by the Turkish textile industry since 1985 are estimated at about $85 billion U.S. dollars. Following movement of factories to other countries, present production capacity is estimated at 5.5 million spindles and 650,000 rotors in Turkey. In the European market, Turkish textiles exporters have the advantage of faster order response time and higher quality than their East Asian competitors. With that in mind, mill use for the 2011 marketing year should increase modestly to 5.9 million bales, while imports increase to 3.4 million bales.

Canada
Canada’s cotton production was 1 million bales in 2007, the smallest crop in over 20 years. Production in 2008 rose to 1.5 million bales of cotton, an increase of 860,000 (Figure 108). Much needed rainfall in key regions greatly improved the irrigation water supplies leading up to the 2008 marketing year. The increase in harvested area accounts for the increase in production.


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Australia
Australia’s crop was 640,000 bales in 2007, the smallest crop in over 20 years. Production in 2008 rose to 1.5 million bales of cotton, an increase of 860,000 (Figure 108). Much needed rainfall in key regions greatly improved the irrigation water supplies leading up to the 2008 marketing year. The increase in harvested area accounts for the increase in production.


data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAABFwAAAM4CAYAAADoBv8ZAAAABJRU5ErkJggg==

With timely rains, Australia continued to improve production with a 2009 crop estimated at 1.8 million bales.

In 2010, a sharp increase in planted area due to improved production conditions and an expected yield increase had many thinking production could reach its highest levels since the 2005. However, heavy rainfall and flooding has made many revise their earlier estimates for the 2010 marketing year. According to a report released by the Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES) in January 2011, it is estimated that around 7% of total Australian cotton plantings (valued at around $150 million) in 2010-11 have been destroyed and a further 2% are at risk if these cotton crops do not have the opportunity to dry out.
Current estimates put Australia’s cotton production at 3.8 million bales for the 2010 marketing year. A return to more normal weather should allow Australia production to expand to 4.3 million bales in 2011.

Australia exports virtually all of their cotton production. For the 2010 marketing year, exports are estimated to reach 2.7 million bales. With the increase in production in the 2011 marketing year, exports are expected to rise to 4.2 million bales.

**Brazil**

Due to adoption of new biotech cottonseed, many experts have a positive outlook when it comes to Brazil. Brazil’s National Technical Commission of Biosafety (CTNBio) has so far approved five biotech cotton events; however, only two have been commercially released. The three remaining events that carry other needed benefits will enter into the public domain with seed varieties commercialized in 2012. However, these forthcoming and current commercially available biotech varieties do not provide Brazilian producers the necessary broad safeguards against regionally specific pests and disease. Biotechnology adoption for cotton in Brazil may reach 15 percent in 2010 compared to 60 to 80 percent in most other cotton producing countries. Robust research and development of region-specific seed varieties, a two year process, promise improved yields and crop management in the near future. Producers also anticipate the benefits of double-stacked trait seed varieties; such as, insect resistant (Bt) and herbicide tolerant (RR).

The adoption of new biotech cottonseed varieties strong market prices and continued support in the form of government programs add to a positive outlook for the 2010 crop. Current estimates place production for the 2010 marketing year at 8.2 million bales (Figure 109). For the 2011 marketing year, harvested area is estimated at 2.9 million acres, down slightly from 2010. Lower area, along with a slight dip in yield, results in a production estimate of 7.9 million bales.

Brazilian mill use for the 2010 marketing year stabilized at 4.4 million bales. Brazilian cotton consumption will remain relatively stable in the 2011 marketing year with mill use estimated at 4.6 million bales.

In terms of trade, Brazil is expected to export 3.0 million bales of cotton in the 2010 marketing year. For the 2011 marketing year, exports are expected to grow to slightly over 4.1 million bales.

**West Africa**

Cotton area in West Africa is difficult to predict before the annual cotton and input prices are announced through the national pricing policy in each country. Farmer intentions are also influenced by whether or not farmers were paid for the previous year’s crop. Finally, each cotton sector begins the new marketing year with significant old-crop debts and new financing requirements for the next crop. Financing difficulties and delays affect the procurement and distribution of inputs, which affect planting decisions. Input credits are a key incentive for cotton producers to continue to grow cotton. However, the
increase in input prices in recent years have combined with competition for inputs from cereal crops from national cereal production schemes to diminish this incentive.

In the four cotton-producing countries of Mali, Burkina Faso, Benin and Chad (C-4), cotton production continues to play an important role in the economy. The cotton sector in Mali has been in a precarious state for the past couple of years. With the privatization of the Compagnie Malien Pour le Developpement des Textiles (CMDT), the State cotton company, has come a new system that consists of organizing cotton producers in groups called “Systeme de cercles decaution” to constitute a common bank guarantee allowing them to access credit more easily. This system will probably motivate farmers to grow more cotton. Even with this type of restructuring, the cotton industry remains unstable. However, it is unlikely that the government, international organizations and donors will allow cotton to completely fail in Mali. Malian cotton has a huge impact on the trade balance in Mali which is not only a good reason to develop cotton producing areas and stir interest of local producers but also help develop all areas of the cotton sector.

In Burkina Faso there is cautious optimism for cotton producers. However, debt throughout the cotton sector continues to stymie significant sustainable growth.

The government of Benin has taken many steps to revitalize the cotton sector. Benin has higher yields and better port access than other C-4 producers. There is a future for cotton in Benin. However, delays in import, financing and distribution of inputs are annual problems in Benin, as well as other West African countries.

It is a different story in Chad. The future of cotton remains uncertain in the absence of reform of the cotton company Cotontchad.

The structural problems in the cotton sector in Cote d’Ivoire have been compounded by the recent civil war and ongoing political uncertainties. Despite international sanctions, the cotton sector in Cote d’Ivoire has attracted some development assistance and investment. There remains significant potential for cotton production in this part of West Africa. Positive trends of favorable world cotton prices have stimulated the cotton sector in Cote d’Ivoire. Senegal remains the most consistent (albeit small) producer in the region of high quality fiber. This is expected to continue for the upcoming marketing year.

Despite all the obstacles facing cotton producers in this region, cotton remains an important cash crop in most of Francophone West Africa, Cote d’Ivoire and Senegal. In the current price environment, there is an increased emphasis on cotton production. The current projections have West Africa producing 3.2 million bales in 2011 (Figure 110), up from 2.6 million in 2010. With this size crop, West Africa continues to measurably affect the cotton export market, since virtually all of its production is sold abroad. The region exports between 95 and 98% of its cotton production. For the 2010 marketing year, it is estimated that the region will export 2.4 million bales. For 2011, West Africa is expected to increase their exports to 3.0 million bales.

![Figure 110 - West Africa Cotton Supply & Use](image-url)
Longer term, West Africa’s potential for growth and stability depends on whether or not they can address a number of internal issues related to their production, ginning, price discovery, and distribution systems.

**Mexico**

Mexican cotton production for marketing year 2010 grew 198,000 bales, to 620,000 bales. According to the Confederation of Mexican Cotton Associations (CMCA), attractive international prices and an appropriate government coverage program are enticing producers to replant the vast areas of land that have historically been devoted to cotton production. Also, beneficial weather and ample water supplies boosted production. However, increased input costs (particularly fuel and fertilizers), higher costs for purchasing genetically modified (GM) seed varieties, and excessive administrative procedures within the Government of Mexico (GOM) could halt the timely acquisition of imported GM seed. Nevertheless, many experts believe they can overcome this situation since growers have a renewed commitment to cotton.

Cotton yields across the main cotton producing areas vary significantly. The highest yield per hectare is expected in the La Laguna region where cotton growers have adopted the use of genetically modified seed varieties. The CMCA stated that biotechnology continues to be an important tool in reducing pesticide use by more than 50% as well as stimulating an increase in yields. More producers are becoming aware of the benefits genetically modified seeds could provide for production purposes. It is expected that this improved seed will be planted mainly in Chihuahua, Mexicali and the La Laguna region (Coahuila and the Durango states), which all have the best infrastructure and resources to use the seed. Other factors that have influenced better yields in the past few years include improving the cultural practices, such as: narrow furrows, better prevention methods against diseases, and the investment in new equipment. These improved planting practices along with an increase in acres should result in a crop of roughly 791,000 bales in the 2011 marketing year (Figure 111).

![Mexico Cotton Supply & Use](image-url)

In terms of consumption, Mexico’s outlook remains unchanged. Marketing year 2010 mill use is estimated at 1.8 million bales. For the 2011 marketing year, Mexican mill consumption is projected to remain stable at 1.8 million bales.

Cotton imports fell to 1.3 million bales during the 2010 marketing year. The U.S. should continue to be the main supplier, accounting for practically 100% of cotton imports. Due to the fragile economic outlook and the recovery in Mexico’s production, imports are expected to fall slightly during the 2011 marketing year.

**Indonesia**

Indonesian cotton production was estimated to reach 30,000 bales in the 2010 marketing year (Figure 112). Current projections show this number up only slightly for 2011 due to fierce competition from other crops such as corn or rice.
As the main contributor to Indonesian export revenue and a labor intensive industry absorbing approximately 1.3 million workers, the textile industry continues to receive attention from the Indonesian government. With 7.9 million spindles and 110,000 rotors, Indonesian textile mills have been running at 70-80% of capacity during past marketing years. Several fundamental problems have hampered the growth of the industry. Most of the textile machines are more than 20 years old. The industry revitalization program launched by the government of Indonesia in 2007 has updated only 6 percent of the textile machines. Furthermore, higher interest rates have made it more difficult for the industry to get commercial bank loans. Despite these struggles, Indonesian cotton consumption in marketing year 2011 is estimated to improve modestly to 2.0 million bales. The same holds true for imports, estimated at 2.1 million bales for the 2011 marketing year.

Vietnam

Vietnam produces a relatively small amount of cotton and must compete with corn for available area. Corn production is expanding as earnings from corn farming bring higher revenue. In addition, the Vietnamese government has not yet approved the commercialization of transgenic cotton, thereby impeding the development of domestic cottonseed. For the 2010 marketing year, production stands at 20,000 bales with no change expected for the 2011 crop (Figure 113). Vietnam’s domestic consumption continues to increase to meet strong demand from the expanding textile industry. Demand for textiles is strong for both the export and domestic markets. Vietnam is currently home to 145 spinning mills with 3.8 million spindles and a total production capacity of 350,000 tons of fiber. Domestic consumption has been increasing at an average rate of 9-10 percent per year for the last several years.

Estimates place 2010 marketing year mill use at 1.6 million bales, up 38,000 bales from 2009. Growth continues into the 2011 marketing year with consumption climbing to 1.8 million bales.

In order to keep pace with this rising cotton demand, Vietnam will remain a net importer for the foreseeable future, with the U.S. being a significant supplier. For the 2010 marketing year, Vietnam will import 1.6 million bales and estimates are slightly higher for the 2011 marketing year at 1.7 million bales.
**Bangladesh**
Marketing year 2010 cotton production in Bangladesh totaled 48,000 bales (Figure 114). Cotton production is vulnerable to excessive rainfalls/floods and pest infestations which are common in Bangladesh. With that in mind, production for the 2011 marketing year is set at 44,000 bales.

![Bangladesh Cotton Supply & Use](image)

**Figure 114 - Bangladesh Cotton Supply & Use**

The Bangladesh textile industry, the largest manufacturing sub-sector of the industrial sector, provides employment to 5.5 million people. It contributes 10% of the country’s GDP, 40% manufacturing value and 77% of export earnings. Bangladesh currently has 350 spinning mills, 400 weaving mills, 310 dyeing and finishing mills, 800 knitting and knit dyeing mills and 4,500 garment factories. Increasing demand from the rapidly growing private sector spinning mills and steady growth in domestic demand and strong growth in export demand for cotton textiles and ready-made garments are contributing to the escalation in cotton consumption. Marketing year 2010 mill use increased to 4.0 million bales and continued growth is seen in the 2011 marketing year with estimates approaching 4.2 million.

As a result of increasing demand, raw cotton imports have steadily grown. A decade ago, Bangladesh imported 1.0 million bales of cotton. Since that time, imports have increased to an estimated 3.9 million for the 2010 marketing year and further expand in 2011 to roughly 4.2 million.

**United States Trade**
For the 2010 marketing year, U.S. exports of raw cotton are estimated at 15.3 million bales (Figure 115), up 3.3 million from 2009. Exports continue to grow in the 2011 marketing year with projections of 15.6 million bales. The reliance of the U.S. cotton market on exports has increased dramatically over the past decade as the domestic textile industry has contracted. It is estimated that exports will constitute roughly 80% of total use for the 2010 marketing year.

![United States Cotton Supply & Use](image)

**Figure 115 - United States Cotton Supply & Use**

Customers of U.S. exports have changed in recent years. While Mexico remains one of the top customers, China, Turkey, and Indonesia have emerged as significant buyers (Figure 116).
World Trade

In the 2010 marketing year, world cotton trade climbed 2.5 million bales to 38.4 million bales from the previous season due to improvement in the global economy (Figure 117). Current estimates put 2011 marketing year world cotton exports at 42.2 million bales, up 3.8 million bales. As previously discussed, U.S. exports are projected to increase to 15.6 million bales in the 2011 marketing year. India and Uzbekistan are also expected to expand exports.

World Ending Stocks

For the 2011 marketing year, ending stocks are estimated to increase by 2.3 million bales while the stocks-to-use ratio is estimated at 37% (Figure 120). The 3 largest producers – China, India, and the U.S. – are also significant holders of cotton stocks. In the case of China and India, various government programs can play a major role in overall stock levels.

China’s imports should grow along with some of the other traditional Asian consuming and importing markets (Figure 118). Growth in world consumption will spur an increase in cotton trade.
The overall balance sheet remains supportive of prices as the projected world stocks-to-use ratio falls modestly to 37% for the 2011 marketing year but stays well below stocks-to-use relationships of recent years (Figure 121).