

PREPARED BY

Gary Adams, Vice President, Economic and Policy Analysis Shawn Boyd, Agricultural Economist Michelle Huffman, Agricultural Economist

Lational Council

nal Bancil



Rationa Ottoi

> National Cotton Council

Summary

As 2012 begins, the repercussions of \$2 cotton are still being felt throughout the global cotton market. Even though \$2 cotton, as measured by Cotlook's "A" Index, lasted for a relatively brief time in early 2011, the speed and magnitude of the price movements created tremendous financial stress on textile mills and cotton merchandisers. Consider that between August 1, 2010 and March 8, 2011, the "A" Index roughly tripled from an initial value of \$0.86 to a peak of \$2.44. Prices quickly retreated from those extremely high levels, and by the beginning of the current 2011 marketing year, the "A" Index stood at \$1.15 per pound. Looking at today's market, the ripple effects include new government policies being implement, increased contract cancellations, a record number of arbitrations, and a loss of market share to manmade fibers.

It is against this backdrop that NCC economists have developed U.S. cotton's economic outlook. An overview of key issues follows in this summary, accompanied by supply and demand estimates for selected countries in Table 1 (pages 4and 5). Detailed discussions and data are more thoroughly presented in subsequent sections.

Projecting into the future is always a difficult task, but it is made even more difficult when there exists so much uncertainty around the current situation. This is certainly true with respect to global cotton mill use. For the current 2011 marketing year, private estimates of world mill use vary by almost 10 million bales. USDA's January World Agricultural Supply and Demand Estimates (WASDE) places mill use at approximately 110 million bales, down from a 2010 estimate of 114.3 million bales. Clearly, the mood in the latter months of 2011 was decidedly pessimistic as textile mills continued to work through yarn inventories spun from cotton priced well above current fiber prices. In addition, apparel retailers are taking a conservative approach with orders and seem inclined to reduce pipeline inventories. However, with the "A" Index trading between \$0.90 and \$1.10 and yarn prices giving a firmer appearance, the mood among textile mills improved in the early weeks of 2012.

For the 2011 marketing year, the NCC outlook estimates world mill use at 109.9 million bales, a level similar to the USDA January estimate. Declines are expected in most major countries, with China down 1.8 million bales from the 2010 marketing year and India off 1.2 million bales from their 2010 number. At 3.4 million bales for the 2011 marketing year, the U.S. textile industry is estimated to be down 500 thousand bales from the previous year.

While estimates of 2011 cotton production are not yet finalized, the current estimate of 122.8 million bales should prove to be a good gauge of the overall crop. The 7.5 million bale increase from 2010 resulted from substantially higher world area and generally favorable crop yields, with the southwestern region of the U.S. being the notable exception. Some local estimates suggest that final production in China and India may be adjusted lower, but even in that event, cotton production will exceed mill use by a wide margin in the 2011 marketing year.

The current differential between production and mill use is estimated at 12.9 million bales and is the largest in recent memory, rivaled only by the 12.5 million bale differential in the 2004 marketing year. The result is a much different market situation than a year ago when there were concerns about lack of cotton supplies. Currently, supplies are adequate to meet demand, and as a result, world stocks are projected to recover to 58.4 million bales by July 31, 2012.

Despite the concerns regarding demand and the expected increase in world stocks, cotton prices have maintained a firm appearance, largely the result of China's reserves policy. In September 2011, China initiated a policy to purchase cotton into their national reserves in an effort to support prices to their growers at a rate of 19,800 yuan per metric ton. At current exchange rates, that equates to approximately \$1.35 per pound. A marketing differential implies an equivalent world price between \$1.10 and \$1.20 per pound. By late January, more than 11 million bales have been purchased into the reserve, with some speculating that total purchases could exceed 15 million bales. While China's policy is providing shortterm support to the cotton market, the future implementation of the reserves policy is the single largest wildcard in the cotton market.

For the 2012 marketing year, the strength of cotton demand will hinge on the overall health of the global economy and be dependent on cotton prices that are less volatile and more competitive with polyester than what was observed in 2011. Before addressing the demand side in greater detail, it is important to summarize the outlook for 2012 cotton production.

Today's "A" Index of approximately \$1.00 is substantially lower than year-ago levels of \$1.70. As a result, international cotton area is estimated to decline by approximately 5%. China's cotton area is projected to be down 8%, while India is expected to reduce plantings by 3%. The relatively modest decline in India is based on the fact that cotton is still their most profitable alternative. Declines are also expected in Pakistan, Australia, Brazil and Turkey with larger declines coming in countries that have viable alternatives such as grains and oilseeds. However, cotton acreage declines are not expected to be universal. Specifically, it is projected that cotton area in West Africa will expand by 8% in 2012 as growers in those countries are only now beginning to realize improved prices.

Assuming yields in line with recent trends gives a 2012 international crop of 101.1 million bales, down from 107.2 million bales in 2011.

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 2011 and intended acreage for 2012. The survey results indicate U.S. all-cotton plantings in 2012 of 13.6 million acres, down 7.5% from 2011 (Table 4 on page 45). Declines are expected in all production regions as survey respondents generally indicated a shift to corn and peanuts in the Southeast, corn in the Mid-South, wheat in the Southern Plains and specialty crops in the West.

Of course, planted acreage is just one of the factors that will determine cotton production. Ultimately, weather, insect pressures, and agronomic conditions play a large role in determining crop size. Since the NCC economic outlook does not attempt to forecast weather patterns, the standard convention is to assume yields in line with recent trends and abandonment consistent with historical averages. However, 2012 is not starting out as a normal year for the Southwest region, particularly Texas and Oklahoma. Drought conditions persist, and weather forecasts based on the La Nina weather pattern call for below normal precipitation for that region of the Cotton Belt. As a result, abandonment rates above

historical averages are assumed for Texas and Oklahoma. In addition, yields per harvested acre are set below trend.

With abandonment in Texas and Oklahoma assumed at 35% and all other states set at historical averages, Cotton Belt harvested area totals 10.88 million acres. Applying each state's yield to its 2012 projected harvested acres generates a cotton crop of 18.30 million bales, with 17.51 million bales of upland and 783 thousand bales of ELS. When combined with international production of 101.1 million bales, the world crop for 2012 is estimated at 119.4 million bales.

The prospects for the global economy have taken a decidedly pessimistic turn relative to the views held just six months earlier. The consensus of recent forecasts calls for the world economy to expand by 3.0 to 3.5% in 2012 and by another 4.0% in 2013. However, economists are quick to note the potential for significant downside risks, with much of the concern based on the continuing debt crisis in Europe.

Assuming the financial crisis in the Eurozone remains fairly well contained, global economic recovery should provide a climate for modest cotton demand growth. However, demand growth will increasingly be driven by consumers in developing economies. In those markets, demand for cotton textiles and apparel will be very sensitive to relative prices of cotton and polyester. For the 2012 marketing year, world mill use is projected at 113.8 million bales, an increase of 3.5% from 2011. However, growth of this magnitude will only be achieved with competitive pricing and a rebuilding of the textile pipeline.

In the U.S. market, mill use is projected to show modest improvement in the 2012 marketing year with an estimate of 3.5 million bales, as compared to 3.4 million in the current marketing year. U.S. exports are expected to expand to 13.0 million bales as world trade grows due to increased consumption and lower production. However, the growth in demand for U.S. cotton does not match the recovery in supplies, leading to an increase in U.S. ending stocks to 5.7 million bales for the 2012 marketing year.

Barring some major production problems – which is still a possibility given La Nina – global production is projected to exceed consumption and allow world ending stocks to build to 64.1 million bales. While that is a level comparable to 2006 through 2009, it is important to remember that as much as 30% of those stocks could be held in China's government reserves.

While the NCC does not project cotton prices, the overall balance sheet calls for a stocks/use relationship likely to dampen upside price potential. However, current polyester prices and the need for cotton to remain somewhat competitive with grains are supportive of prices on the downside. Of course, as with any outlook, there are a number of risks and uncertainties. In this outlook, none loom larger than China's current and future management of their reserves.

Table 1 - Balance Sheet for Selected Countries & Regions

World	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	85,329	81,150	75,541	74,478	82,761	88,281	85,215
Yield (Pounds/Acre)	687	708	682	655	669	668	673
Production (Thou Bales)	122,162	119,749	107,281	101,682	115,320	122,837	119,426
Trade (Thou Bales)	38,145	39,321	30,476	36,349	35,685	36,485	40,364
Mill Use (Thou Bales)	123,909	123,621	110,315	119,010	114,322	109,944	113,835
Ending Stocks (Thou Bales)	62,420	60,943	60,803	44,391	45,346	58,403	64,140
United States	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	12,731	10,489	7,569	7,529	10,699	9,748	10,877
Yield (Pounds/Acre)	814	879	813	777	812	772	807
Production (Thou Bales)	21,588	19,207	12,815	12,188	18,104	15,674	18,295
Net Exports (Thou Bales)	12,940	13,622	13,261	12,037	14,367	11,065	12,940
Mill Use (Thou Bales)	4,935	4,584	3,541	3,550	3,900	3,400	3,473
Ending Stocks (Thou Bales)	9,479	10,051	6,337	2,947	2,600	3,825	5,706
Australia	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	356	161	405	494	1,458	1,483	1,405
Yield (Pounds/Acre)	1,821	1,913	1,777	1,724	1,383	1,619	1,700
Production (Thou Bales)	1,350	640	1,500	1,775	4,200	5,000	4,977
Net Exports (Thou Bales)	2,129	1,219	1,201	2,115	2,509	4,000	4,892
Mill Use (Thou Bales)	55	50	45	40	40	40	40
Ending Stocks (Thou Bales)	1,204	625	979	749	2,550	3,660	3,855
Bangladesh	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	104	72	82	79	86	89	89
Yield (Pounds/Acre)	254	234	247	304	355	356	350
Production (Thou Bales)	55	35	42	50	64	66	65
Net Imports (Thou Bales)	3,250	3,600	3,800	3,900	3,700	3,150	3,573
Mill Use (Thou Bales)	3,200	3,500	3,800	3,900	3,700	3,300	3,575
Ending Stocks (Thou Bales)	591	716	748	788	842	748	801
Brazil	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	2,703	2,661	2,083	2,066	3,459	3,459	3,186
Yield (Pounds/Acre)	1,243	1,327	1,263	1,266	1,249	1,249	1,259
Production (Thou Bales)	7,000	7,360	5,480	5,450	9,000	9,000	8,358
Net Exports (Thou Bales)	785	2,067	2,689	1,839	1,297	3,800	4,106
Mill Use (Thou Bales)	4,573	4,600	4,200	4,400	4,300	4,300	4,336
Ending Stocks (Thou Bales)	5,408	6,251	4,992	4,353	7,906	8,956	9,022
China	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	14,702	15,320	14,950	13,096	12,726	13,591	12,477
Yield (Pounds/Acre)	1,159	1,159	1,178	1,173	1,150	1,183	1,170
Production (Thou Bales)	35,500	37,000	36,700	32,000	30,500	33,500	30,417
Net Imports (Thou Bales)	10,500	11,468	6,912	10,880	11,857	16,025	17,081
Mill Use (Thou Bales)	50,000	51,000	44,000	50,000	46,000	44,200	45,743
Ending Stocks (Thou Bales)	20,536	20,504	22,366	15,246	11,603	16,928	18,683
India	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	22,649	23,324	23,242	25,476	27,527	30,146	29,219
Yield (Pounds/Acre)	462	494	467	433	443	430	445
Production (Thou Bales)	21,800	24,000	22,600	23,000	25,400	27,000	27,089
Net Exports (Thou Bales)	4,410	6,900	1,560	6,070	4,650	5,550	5,925
Mill Use (Thou Bales)	18,100	18,600	17,750	19,750	20,700	19,500	20,401
Ending Stocks (Thou Bales)	7,129	5,629	8,919	6,099	6,149	8,099	8,862

	Та	ble 2 –	Contir	nued			
Indonesia	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	25	25	22	25	22	22	22
Yield (Pounds/Acre)	622	622	648	583	540	540	550
Production (Thou Bales)	32	32	30	30	25	25	25
Net Imports (Thou Bales)	2,180	2,580	2,280	2,185	2,080	1,880	2,163
Mill Use (Thou Bales)	2,175	2,500	2,250	2,150	2,050	1,900	2,096
Ending Stocks (Thou Bales)	352	414	424	439	444	399	441
Mexico	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	284	272	250	190	287	469	423
Yield (Pounds/Acre)	1,098	1,095	1,091	1,198	1,226	1,227	1,210
Production (Thou Bales)	650	620	567	475	732	1,200	1,065
Net Imports (Thou Bales)	1,178	1,310	1,140	1,318	846	800	729
Mill Use (Thou Bales)	2.100	2.000	1.850	1.900	1.650	1.700	1.746
Ending Stocks (Thou Bales)	1,027	932	764	632	535	810	833
Pakistan	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	8,031	7,413	7,166	7,413	7,166	7,907	7,302
Yield (Pounds/Acre)	574	557	583	622	589	607	605
Production (Thou Bales)	9,600	8,600	8,700	9,600	8,800	10,000	9,203
Net Imports (Thou Bales)	2.088	3.638	1.560	849	850	800	1.899
Mill Use (Thou Bales)	12,000	12,000	11,250	10,800	10,000	10,400	10,677
Ending Stocks (Thou Bales)	4,260	4,473	3,458	3,082	2,707	3,082	3,483
Turkey	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	1,557	1,285	840	692	791	1,186	1,005
Yield (Pounds/Acre)	1,172	1,158	1,103	1,214	1,275	1,255	1,245
Production (Thou Bales)	3,800	3,100	1,930	1,750	2,100	3,100	2,607
Net Imports (Thou Bales)	3,726	2,897	2,783	4,244	3,204	2,325	2,970
Mill Use (Thou Bales)	7,300	6,200	5,100	5,800	5,600	5,300	5,553
Ending Stocks (Thou Bales)	2,047	1,954	1,654	1,928	1,712	1,917	2,020
Uzbe kis tan	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	3,534	3,534	3,509	3,212	3,212	3,311	3,228
Yield (Pounds/Acre)	727	727	629	583	613	609	610
Production (Thou Bales)	5,350	5,350	4,600	3,900	4,100	4,200	4,103
Net Exports (Thou Bales)	4,500	4,200	3,000	3,800	2,650	2,750	2,664
Mill Use (Thou Bales)	900	1,000	1,000	1,100	1,250	1,250	1,306
Ending Stocks (Thou Bales)	1,198	1,348	1,948	948	1,148	1,348	1,480
Vietnam	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	54	32	12	20	22	25	25
Yield (Pounds/Acre)	433	389	466	413	475	447	450
Production (Thou Bales)	49	26	12	17	22	23	23
Net Imports (Thou Bales)	978	1,208	1,251	1,695	1,630	1,500	1,627
Mill Use (Thou Bales)	975	1,200	1,250	1,600	1,650	1,550	1,650
Ending Stocks (Thou Bales)	216	250	263	375	377	350	350
West Africa	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Harvested Area (Thou Acres)	5,421	3,897	3,731	3,447	3,452	4,225	4,559
Yield (Pounds/Acre)	323	303	310	312	317	331	320
Production (Thou Bales)	3,644	2,462	2,412	2,242	2,280	2,917	3,037
Net Exports (Thou Bales)	3,861	2,661	2,146	2,191	2,130	2,336	2,760
Mill Use (Thou Bales)	191	191	188	208	188	188	188
Ending Stocks (Thou Bales)	1,063	673	751	594	556	949	1,038

U.S. and World Economy

Entering 2012, the prospects for the global economy have taken a decidedly pessimistic turn relative to the views held just six months earlier. Although the consensus of recent forecasts calls for the world economy to expand by 3.0 to 3.5% in 2012, economists are quick to note the potential for significant downside risks. As Wells Fargo Securities noted in their January 2012 *Monthly Outlook*, the global economy is not expected to lapse into a recession but is expected to exhibit the slowest annual growth since the sharp downturn in 2009.

Much of the concern for 2012's economic performance is based on the continuing debt crisis in Europe. It appears that the Eurozone is slipping into a mild recession as 4th quarter output is estimated to have contracted. The European recession is projected to persist through the middle of the year. Adding to the concerns of a worsening financial situation in Europe, the continued unrest in the Middle East, most notably the tensions with Iran, could lead to upward pressure on oil prices.

Despite the increased anxiety regarding the global economy, the U.S. economic performance has remained surprisingly buoyant with better-than-expected consumer spending and business investment. The improved mood of U.S. consumers is evident in the latest results from the Thomas Reuters/University of Michigan's Consumer Sentiment Index. The index is designed to gauge the attitudes of the American consumer with regards to the economy.

In August 2011, the index fell to 55.7, which was the lowest value since November 2008 (Figure 1). It was evident that the fallout from Washington's efforts to reach a budget deal had an adverse effect on the consumers' confidence regarding the future of the U.S. economy. However, since that time, the mood has steadily recovered with the preliminary index for January 2012 reaching 74. At its highest level since last May, the index is bolstered by the lowest unemployment in almost three years and less expensive gasoline.



Figure 1 - Consumer Sentiment Index

The Consumer Sentiment Index is often an indicator of near-term consumer spending. With improved confidence, household spending may hold up well in the early months of 2012. However, limited wage gains and falling housing prices may serve to limit the growth in consumer spending.

U.S. Gross Domestic Product

As determined by the Bureau of Economic Analysis, the U.S. 2011 fourth quarter real Gross Domestic Product (GDP) expanded by 2.8% (Figure 2) from the third quarter, following on gains of 1.3% and 1.8% in the second and third quarters, respectively. The increase in real GDP in the fourth quarter reflected positive contributions from private inventory investment, personal consumption expenditures (PCE), exports, residential fixed investment, and nonresidential fixed investment that were partly offset by negative contributions from federal government spending and state and local government spending.



Figure 2 - Change in U.S. Real GDP

The latest projections call for modest economic growth to continue into 2012. In their latest economic outlook, the Wells Fargo Economics Group forecasts the U.S. economy to grow at 2.1% over the course of 2012. Performance in the latter half of 2012 will exceed that of the first six months as consumer spending gains follow the improvement in real income as inflation slows and employment shows modest improvement. On the downside, government spending remains a negative as state and local revenues lag the business cycle.

U.S. real personal consumption expenditures expanded in the fourth quarter of 2011 (Figure 3), albeit at a slower rate than observed in 2010. For the fourth quarter of 2011, real PCEs grew by 2.0%, up from 1.7% in the third quarter. Expansion in both 2010 and 2011 comes after seeing consumer spending shrink for six consecutive quarters in 2008 and 2009.

Spending on durable goods rebounded in the fourth quarter with growth of 14.8%. This comes on the heels of a second quarter growth of 5.7%.



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

In 2008 and 2009, both business and residential fixed 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. Investment generally improved in 2010, but also maintained an uneven appearance as sharp increases in residential investment were followed by equally sharp declines.

During 2011, fixed investment continued to expand, primarily being led by business investment (Figure 4). In the fourth quarter, fixed investment grew at an annual rate of 3.3%, which followed a 13.0% growth in the third quarter. Residential investment grew by 1.3 and 10.9% in the third and fourth quarters, respectively.



Figure 4 - Change in U.S. Real Private Investment

There are several factors that will have lasting effects on U.S. consumption and private investment. 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.

U.S. Employment

After contracting through much of 2008 and 2009, the U.S. work force has since stabilized with some very modest improvement in the second half of 2011. 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. After starting 2011 with some improvement, the percent of the population employed again retreated to the recent low of 58.2%. However, beginning in August, a slight recovery ensued as employment reached 58.5% in November and December.



Figure 5 - Civilian Employment

Overall, a very similar picture prevailed for manufacturing employment. However, unlike the employment percentage, manufacturing jobs did not suffer a dip in mid-2011. In fact, manufacturing jobs have been on the rise since October 2010 (Figure 6), adding 350,000 jobs by December 2011.



Figure 6 - Manufacturing Employment

The current economic recovery has been appropriately described as a jobless recovery. When compared to the prerecession unemployment rates that ranged between 5.0% and 6.0%, the continued apprehensive views held by consumers are understandable with unemployment ranging between 9.5% and 10.0% throughout much of 2010 (Figure 7). However, that picture began to improve in late 2010 and further gains were made throughout 2011. The civilian unemployment rate ended the year at 8.5%, which was the lowest level since February 2009.



Figure 7 - Civilian Unemployment Rate

Projections for 2012 call for a steady to slightly declining unemployment rate. Wells Fargo's latest outlook holds unemployment steady at 8.5% in 2012, while the Federal Reserve Bank indicates that unemployment could end 2012 at 8.2%.

U.S. Housing Market

The housing industry is a key barometer of the well-being of the economy. As with employment indicators, a modest improvement in the housing market became evident during 2011. For December 2011, U.S. housing starts registered a seasonally adjusted annual rate of 657 thousand units (Figure 8). Although down from the November number of 685 thousand units, housing starts ended the year in better shape than the previous year.



Figure 8 - U.S. New Housing Starts

According to Freddie Mac's U.S. Economic and Housing Market Outlook, the expectations for 2012 are somewhat optimistic based on improved unemployment figures, low mortgage interest rates and lower home prices. Home sales are expected to rise between 2 and 5% year-over-year, according to Freddie Mac's survey.

For much of 2011, 30-year mortgage rates continued to drift lower, with a survey by Freddie Mac putting the December average at 3.96% (Figure 9). The recent dip in rates set all-time lows for the 30-year lending rate. Mortgage rates generally track bond yields, which move inversely to Treasury prices. Surveys in early January show mortgage rates increasing, in part due to better economic news. However, no significant changes in interest rates are projected for 2012.



Figure 9 - 30-Year Mortgage Rate

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 2009 through 2011. Despite some improved economic data in the U.S. in recent months, the Federal Reserve is signaling that it still is not satisfied with a recovery widely seen as sluggish and fragile. As a result, Fed Chairman Ben Bernanke indicated that the central bank would keep interest rates exceptionally low until at least late 2014, further into the future than investors had anticipated.



Figure 10 - Federal Funds Rate

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 2012 that federal spending will total \$3.6 trillion and revenue will only reach \$2.5 trillion (Figure 11), resulting in a deficit of \$1.1 trillion.



Figure 11 - Projected U.S. Federal Budget

The 2012 deficit comes on the heels of 3 years with annual deficits exceeding \$1.0 trillion. According to the Congressional Budget Office, the United States is facing

profound budgetary and economic challenges. At 7.0% of GDP, the budget deficits stem in part from the long shadow cast on the U.S. economy by the financial crisis and subsequent recession. Although economic output began to expand again two years ago, the pace of the recovery has been slow, and the economy remains in a severe slump.

In large part because of the significant changes to tax and spending policies that are scheduled to take effect under current law, CBO projects baseline deficits that drop markedly over the next few years—to 3.7% of GDP (\$585 billion) in 2013 and to 2.1% (\$345 billion) in 2014 (Figure 12). From 2015 through 2022, the deficits in the baseline range from 0.9% to 1.6% of GDP.



Figure 12 - U.S. Federal Budget Surplus

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 3.0% in 2011, according to Labor Department figures, well above the 1.4% gain in 2010 (Figure 13). The stronger inflation was due to both higher energy and food prices. The energy index as a whole rose 6.6% in 2011, while food increased 4.7%. On an annual average basis, the CPI increased by 3.1%, which followed an increase of 1.6% in 2010.



Figure 13 - Consumer Price Index

On a December-to-December basis, the PPI for finished goods rose in 2011 by 4.8%, higher than the 3.8% reported in December 2010 (Figure 14). For the year as a whole, the PPI for finished goods increased by 6.0%, which is the second highest inflation in the past decade, trailing 2008's value of 6.3%.



Figure 14 - Producer Price Index, Finished Goods

Energy Prices and Supply

According to the latest projections by the Department of Energy's Energy Information Administration (EIA), absent a significant oil supply disruption, the recent tightening of world oil markets will moderate in 2012 before resuming in 2013. As a result, the EIA expects the price of West Texas Intermediate (WTI) crude oil to average about \$100 per barrel in 2012, \$5 per barrel higher than the 2011 average price (Figure 15).

World oil consumption is projected to grow by an annual average of 1.3 million barrels per day (bbl/d) in 2012. Supply from non-OPEC countries is expected to increase by 0.9 million bbl/d in 2012. The EIA expects that the market will rely on both inventories and increases in production of crude oil and non-crude liquids in OPEC member countries to meet world demand growth.



Figure 15 - WTX Intermediate Crude Oil Price

There are many significant uncertainties that could push oil prices higher or lower than projected. Should a significant oil supply disruption occur, OPEC members not increase production, or projected non-OPEC projects come online more slowly than expected, oil prices could be significantly higher. However, if the pace of global economic growth fails to accelerate in OECD countries, or if economic growth slows in non-OECD countries, reduced demand could lower prices.

Retail diesel fuel prices (Figure 16), which track closely with crude oil prices, averaged \$3.83 per gallon in December 2011, up \$0.60 per gallon from year-earlier levels. The EIA projects diesel prices to average \$3.81 per gallon for January 2012, and rise modestly to \$3.87 per gallon by December 2012.



Figure 16 - Retail Diesel Fuel Price

The Henry Hub spot price averaged \$3.27 per thousand cubic foot (Mcf) in December 2011 (Figure 17), a decline of more than \$1 since June. The lower prices can be attributed to increased natural gas inventories, which ended December 2011 at 3,472 Bcf, a record high for this time of year. An unusually warm winter so far combined with the domestic production increases throughout the year has contributed to large storage accumulations.

The current forecast for 2012 natural gas prices is significantly lower than at this time last year, due in large part to record-high natural gas inventories. The EIA now expects the Henry Hub spot price will average \$3.63 per Mcf in 2012, which compares to \$4.12 in 2011.



Figure 17 - Henry Hub Natural Gas Price

U.S. Equity Markets

After rebounding throughout 2010, U.S. equity markets were on very much of a roller coaster during 2011. After closing 2010 at 11,578, the Dow Jones Industrials Average (Dow) moved to 12,800 by the end of April (Figure 18). However, momentum in the stock market was squelched by uncertainties surrounding the U.S. federal budget situation and the fight to increase the debt ceiling. Despite Congress and the President striking a budget agreement in early August, the stock market continued to move lower and closed September at 10,900. As economic reports offered a more positive tone for the U.S. economy, the Dow rebounded to close the year at 12,019.



Figure 18 - Dow Jones Industrials

Stocks got off to a fast start in 2012, and historically, early-year performance has been a fairly accurate indicator of the fullyear performance. By late January, the Dow Jones industrial average was trading near its highest close since the 2008 financial crisis after solid news on factory orders and strong earnings from U.S. manufacturers highlighted the economy's growing momentum.

World Economies

The world economy in 2010 and 2011 rebounded from the global recession with growth rates of 5.2% and 3.8%, respectively. However, current economic projections are cautioning that slower growth is expected for 2012.

According to the IMF's January 2012 economic update, "the global recovery is threatened by intensifying strains in the euro area and fragilities elsewhere. Financial conditions have deteriorated, growth prospects have dimmed, and downside risks have escalated." Their current projections call for the world economy to grow by 3.3% in 2012 (Figure 19), which is slightly lower than the World Bank's projected growth of 3.4%.



Figure 19 - World Real GDP Growth

This is largely because the Eurozone is expected to go into a mild recession in 2012

as a result of the rise in sovereign yields, the effects of bank deleveraging on the real economy, and the impact of additional fiscal consolidation. Growth in emerging and developing economies is also expected to slow because of the worsening external environment and a weakening of internal demand.

The IMF projects that output of emerging and developing economies will expand at 5.4% in 2012 and 5.9% in 2013. In advanced economies, growth is projected at 1.2% in 2012 and 1.9% in 2013. Looking across key countries and regions, the economy in the Euro Area is projected to contract by 0.5% in 2012 before showing modest growth in 2013 (Table 2). After declining in 2011, Japan's real GDP is projected to turn around with growth of 1.7% in 2012. While a more favorable picture is unfolding for developing countries, projected growth is below the levels of the past two years. China and India are expected to continue to lead the way in the current recovery with growth rates above 7% for India and 8% for China.

Table 3 - Selected Economics, real Obr	Table	3 -	Selected	Economies:	Real	GDP
--	-------	-----	----------	-------------------	------	-----

Y	Year-Over-Year % Changes				
	2010	2011e	2012f	2013f	
World	5.2	3.8	3.3	3.9	
U.S.	3.0	1.8	1.8	2.2	
Euro Area	1.9	1.6	-0.5	0.8	
Japan	4.4	-0.9	1.7	1.6	
China	10.4	9.2	8.2	8.8	
India	9.9	7.4	7.0	7.3	
Russia	4.0	4.1	3.3	3.5	
Brazil	7.5	2.9	3.0	4.0	
Mexico	5.4	4.1	3.5	3.5	
Source: Internati	onal Monetary	Fund, Januar	v 2012		

In general, 2011 was not a positive year for Asia's equity markets (Figure 20). Japan's Nikkei drifted lower for the whole of 2011, closing the year at 8,644 – a drop of 16% from year-earlier levels. In addition to the concerns over Europe's sovereign debt and other macroeconomic uncertainties, Japan's Nikkei index was also negatively affected by the fallout from the devastating earthquake. The Hong Kong Hang Seng market started 2011 with 5 months of gains, but proceeded to give those gains back and closed the year at levels not seen since mid-2009.



Figure 20 - Asian Stock Indexes

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.

The Euro had a second consecutive annual loss against the dollar for the first time in a decade as rising yields on the region's sovereign debt reflected speculation about defaults and stalling economic growth (Figure 21). The euro ended the year at 0.78 per dollar. While this is only slightly weaker than the beginning of 2011, the euro experienced a significant weakening between August and December.



Figure 21 – Euro

During 2010, the yen became about 8% 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.



Figure 22 - Japanese Yen

An overriding trend across many currency markets played out this past year with the dollar generally weakening during the first half of 2011 before strengthening in the later months. This held true for the Brazilian Real, South Korean Won, Indian Rupee, Indonesian Rupiah and the Pakistani Rupee (Figures 23-27). Only in China did the local currency continue to strengthen against the dollar (Figure 28).

With improved prospects for the U.S. economy, the U.S. is attracting record demand for the unprecedented amount of bonds the Treasury Department is selling. Even though Standard & Poor's stripped the U.S. of its AAA rating in August, investors see the nation as a refuge from slower global economic growth and Europe's sovereigndebt crisis.



Figure 23 - Brazilian Real







Figure 25 - Indian Rupee



Figure 26 - Indonesian Rupiah



Figure 27 - Pakistani Rupee



Figure 28 - Chinese Yuan

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. Between early 2009 and mid-2011, the trade weighted index fell by almost 15 percentage points (Figure 29). However, the trend reversed course during the latter half of 2011.



Figure 29 - Real Exchange Rate Index

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 began 2011 by continuing the recovery that prevailed during the second half of 2010. For 2011, the CRB futures index reached a monthly closing high of 364 in April, an increase of 13% in the first 4 months of the year. However, a generally steady decline ensued and the CRB index closed the year at 305, down 16% from the April peak.

With an overall decline in 2011, commodities markets posted their first annual fall since 2008 as they faced headwinds from the European sovereign debt crisis and weaker growth in China. In addition, commodity prices were pulled down by the strengthening dollar.



Figure 30 - Reuters/CRB Futures Index

The U.S. Department of Agriculture (USDA) publishes monthly indices of prices received by farmers. After strong increases in the second half of 2010, the overall crops index moved sideways in 2011. With a December value of 191, the crop price index was similar to the January 2011 value of 189 (Figure 31). Prices exhibited some stronger values during the middle part of the year, but the movements were much less pronounced than those observed between 2008 and 2010.

Unlike crop prices, livestock prices generally continued to build on the gains of 2010. The livestock price index ended the year at 158, an increase of 15% over the January value. Stronger demand from emerging markets and modest expansion in U.S. herds helped support beef prices. Feeder cattle prices jumped more than 20% in 2011, while live cattle rose 14%.

Although cotton futures markets showed tremendous volatility during 2011, cotton's farm-gate prices were more stable. Over the course of the year, the cotton price index ranged between 135 and 155.



Figure 31 - Ag Prices Received Index

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 had more than doubled by the beginning of 2011(Figure 32). With the exception of the spike in 2008, diesel prices for 2011 are at their highest levels, with the index hovering near 400 for much of the year.

Nitrogen fertilizer prices also recovered during 2010 and 2011. After starting 2011 at 284, the nitrogen index closed 2011 at 355, an increase of 25%. These indices imply that producers could face fuel and nitrogen fertilizer costs in 2012 higher than either of the previous 2 years.



Figure 32 - Ag Prices Paid Index

U.S. Net Farm Income

The latest USDA estimates place U.S. net farm income at a record high of \$100.9 billion in 2011, up 28% percent from 2010 (Figure 33). Net cash income, at \$109.8 billion, is forecast up \$17.5 billion from 2010.



Figure 33 - U.S. Net Farm Income

Net farm income and net cash income are both projected to exceed \$100 billion for the first time in 2011. The USDA expects a more than 16% increase in sales of crop and livestock by U.S. farm operations in 2011, with gains spread out among many different categories. Crop sales are expected to exceed \$200 billion for the first time in U.S. history, with record or near-record levels across different crop categories. Livestock sales are predicted to rise almost 17%, with double-digit increases across most categories, especially red meats.

Total production expenses are forecast to jump about \$34 billion, or 12%, in 2011 to nearly \$320 billion, driven by increases in input prices. Every expense except labor and electricity is forecast to increase in 2011. Feed is expected to rise by \$10.3 billion, or 23%. Fertilizer and lime expenses are up 28%, while expenses for fuels and oils are 27% higher in 2011.

One noteworthy feature of 2002-2011 is the high levels of volatility in agricultural commodity and input markets. The volatility is reflected in the patterns of farm income during the decade.

U.S. Farm and Trade Policy

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 24). 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 2010, USDA's preliminary enrollment reports indicate that 18.07 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 24). 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 24). 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

(direct payment) 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 countercyclical 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 countercyclical 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 countercyclical 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 vear. However, once an affirmative ACRE decision is made, the producer may not return the farm to the target price countercyclical program.

For 2010, just over 31,000 acres of upland cotton base enrolled in the ACRE program. Oklahoma accounts for 19,900 of those acres, with another 8,200 acres 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 the 2012 crop, a recent legislative change implements an additional \$1 million means test. This means test includes all income, farm and non-farm, and is applicable only to direct payments.

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 $66^{2}/_{3}$'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.

	Loan Rate		Target Price		Direct Payment	
	'08-09	'10-12	'08-09	'10-12	'08-12	
Upland Cotton (lb)	0.5200	0.5200	0.7125	0.7125	0.0667	
ELS Cotton (lb)	0.7977	0.7977	NA	NA	NA	
Rice (cwt)	6.50	6.50	10.50	10.50	2.35	
Wheat (bu)	2.75	2.94	3.92	4.17	0.52	
Barley (bu)	1.85	1.95	2.24	2.63	0.24	
Oats (bu)	1.33	1.39	1.44	1.79	0.024	
Corn (bu)	1.95	1.95	2.63	2.63	0.28	
Sorghum (bu)	1.95	1.95	2.57	2.63	0.35	
Soybeans (bu)	5.00	5.00	5.80	6.00	0.44	
Peanuts (ton)	355.00	355.00	495.00	495.00	36.00	
Other Oilseeds (cwt)	9.30	10.09	10.10	12.68	0.80	

Table 4 - Support Rates in the 2008 Farm Bill

World Trade Organization

Trade issues continue to command the attention of the U.S. cotton industry. In the World Trade Organization (WTO), there was no progress in the ongoing Doha trade negotiations. Little has changed in the trade dispute with Brazil as provisions of the Framework Agreement are being implemented.

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.

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 crossretaliation 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 2010 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.

In December 2011, the WTO convened a regularly-scheduled ministerial in Geneva. Although there were efforts to include cotton in some type of scaled-back agreement, the United States was successful in not allowing any formal discussions on cotton.

From the broader perspective of the Doha trade talks, there continues to be serious concerns regarding the ability to advance the talks along the lines that have brought them to this point. A significant imbalance exists between the contributions of developed and developing countries. In many cases, proposed exemptions in the draft text for developing countries would offer no gains in market access.

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. 2011 brought relatively few changes for U.S. textile trade policy, with the exception of agreements with Panama, Colombia and South Korea being ratified by Congress and signed by President Obama.

<u>AGOA</u>

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. AGOA is currently set to expire in 2015.

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 40 countries that are eligible for economic and trade benefits under AGOA. Of those 40 Sub-Saharan countries, 27 of them are eligible to receive AGOA's apparel benefits. Twentyseven countries also qualify for the LDC special rule for apparel (third-country fabric). Eighteen countries also qualify for AGOA's provisions for handloomed and handmade articles. Six countries qualify for AGOA's ethnic printed fabric benefits.

CAFTA-DR

The Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR) includes the participating countries of Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, and Nicaragua.

According to the provisions of the CAFTA-DR agreement, textiles and apparel are dutyfree and quota-free 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 dutyfree 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.

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. Mexico and Canada must provide reciprocal benefits to U.S. and Central American textile and apparel exports. The TPLs for CAFTA-DR cumulation for the period of January 1, 2011 through December 31, 2011 was 100,000,000 SME. During that time, imports applied to this preference level equaled 21,516,325 SME, implying a 21.5% fill rate. The TPLs for CAFTA-DR cumulation for the period of January 1, 2012 through December 31, 2012 is 100,000,000 SME.

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.

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. During the 2011 preference period, 99,758,615 SME of imports were applied to this TPL, implying a 99.8% 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 1,112,360 SME for the 2011 preference period. During this period, 142,620 SME of imports were applied to these TPLs, implying a 12.8% 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 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.

Andean Countries

Under the U.S. – Peruvian agreement, 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. The U.S. – Colombia TPA was ratified by the U.S. Congress on October 12, 2011, and signed by President Obama on October 21, 2011. As of late January 2012, the agreement is still pending implementation.

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, but has been extended several times. The most recent extension was enacted on November 5, 2011. It extends tariff preference programs for Colombia and Ecuador through July 31, 2013. Peru was not included because it has a free trade agreement with the U.S. that has already been implemented.

<u>Haiti</u>

The Haitian Hemispheric Opportunity through Partnership for Encouragement Act (HOPE) provides 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.

HOPE provides that the annual quantity of goods eligible for duty-free benefits will be recalculated for each subsequent 12-month period. HOPE also provides 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, 2010 and extending through December 19, 2011 was 324,408,946 SME. During that time period, 15,537,251 SME were attributed to the limit, implying a fill rate of 4.8%.

The 2008 Farm Bill included amendments to rules enacted 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 dutyfree, 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.

<u>Panama</u>

The U.S. – Panama Free Trade Agreement was signed on June 28, 2007. It was ratified by the U.S. Congress on October 12, 2011, and signed by President Obama on October 21, 2011. As of late-January 2012, the U.S. – Panama TPA is pending implementation.

The U.S.-Panama FTA adheres to a yarnforward rule of origin, meaning that qualifying textile and apparel products must be made using U.S. or Panamanian yarns and fabrics. Goods that meet the rule of origin qualify for immediate duty-free market access upon entry into force of the Agreement.

Consistent with other free trade agreements, elastomeric yarns, narrow elastic fabrics, pocketing fabric, thread, and visible linings must be sourced from the region for use in textile and apparel products that qualify for duty free entry.

Similar to CAFTA-DR, a streamlined commercial availability (short supply) determination process will allow yarns or fabrics that are deemed not commercially available in the region to be used in the production of apparel. Also, a textilespecific safeguard mechanism allows for temporary Most Favored Nation tariffs if a surge in imports threatens to cause serious damage to the domestic industry.

<u>Korea</u>

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. The agreement (referred to as the KORUS FTA) was ratified by Congress on October 12, 2011 and signed by President Obama on October 21, 2011. As of late-January 2012, the KORUS FTA is still pending implementation.

Under the KORUS FTA, all qualifying U.S. footwear and non-textile travel goods entering into Korea will be duty-free immediately. Duties on the majority of qualifying U.S. textile and apparel products exported to Korea will be eliminated upon entry into force of the agreement. The remainder will be eliminated in three or five year stages. Qualifying footwear and nontextile travel goods from Korea will be dutyfree into the United States under KORUS, except for a few rubber/fabric and plastic/protective footwear items. Duties on these items will remain at base rates during years one through eight. Beginning on January 1 of year nine, duties shall be reduced in four equal annual stages, and then will be duty-free, effective January 1 of vear 12.

The KORUS adopts a "yarn forward" rule of origin, which requires that the yarn production and all operation forward occur in either South Korea or the United States, but the fiber may be from anywhere. However, there are some exceptions in the rules requiring "fiber forward," and some requiring "fabric forward". Also, there are consultative processes to amend the rules of origin should any fiber, yarn or fabric not be commercially available in the U.S. or South Korea. If a good does not meet the rule of origin requirements, a textile or apparel product might be considered originating if all non-originating fibers and yarns make up less than a "de minimis" seven percent of the total weight of the product.

The KORUS FTA includes a special textile safeguard mechanism which provides for temporary re-application of MFN tariffs, if imports under the agreement increase either absolutely or relative to the domestic market, and are shown to be causing or threatening to cause serious damage to the domestic industry. The safeguard can only be implemented for two years, with the possibility of extension for an additional two years, up to ten years.

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, Canada, Mexico, and Japan have expressed interest in joining the talks.

Ten rounds of negotiations have already occurred. The next round of negotiations is scheduled for early March 2012 in Australia. During the last round of negotiations, which occurred in December 2011 in Malaysia, the achievement of the broad outlines of an agreement was announced. Only selected negotiating groups met during this time for the mini-round, including rules of origin, services, investment, and intellectual property. Some teams negotiating the tariff packages on industrial goods, agricultural and textiles also met bilaterally. All made

further progress in narrowing gaps on issues in the legal texts and market access packages they are seeking to develop. Also, chief negotiators met to discuss a roadmap for concluding the agreement swiftly. They are developing detailed plans for concluding work in each of the more than 20 negotiating groups. The environment group will meet in late January 2012; other negotiating groups are considering additional dates in the coming months. The United States will meet bilaterally in the next two months with some TPP partners to make further progress on the legal texts and tariff packages ahead of the next full negotiating round in early March in Australia.

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 do to unfair and anti-competitive subsidies, labor and environmental rules. In 2011, Rep. Gowdy (R-SC) organized a letter co-signed by 51 members to the USTR urging the inclusion of strong rules of origin for textiles in the TPP negotiations to reduce the risk to the US textile and apparel industry from Vietnam's inclusion. The co-signers included three specific recommendations: 1) establish special market access rules, given Vietnam's nonmarket economy status and inherent advantages provided to its textile and apparel sectors; 2) adopt the basic yarnforward rule of origin for textiles and apparel with no loopholes; and 3) strengthen customs rules. The House members also encouraged USTR to handle textiles and apparel in a separate negotiating group.

U.S. Supply

Planted Acreage

U.S. farmers planted 14.4 million acres of upland cotton in 2011, an increase of 34% from the previous year (Figure 34). 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 2011 crop, cotton-to-corn and cotton-to-soybean price ratios were much more favorable than in 2010. 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.





With an increase of approximately 800 thousand acres, cotton acreage in the Southeast returned to levels comparable to those observed in 2001-2006 (Figure 35). The 31% increase from 2010 resulted in a 2011 acreage of 3.4 million acres for the 6state region. Across the region, all states reported gains with the largest percentage gains of 46% and 50% occurring in North Carolina and South Carolina, respectively. Virginia followed with a 40% increase, while Alabama and Florida registered gains of 35% and 33%, respectively. In Georgia, growers planted 20% more cotton in 2011. Across the region, the increase in cotton area came at the expense of soybeans and peanuts.



Figure 35 - Southeast Upland Planted Area

In 2011, plantings just under 2.5 million acres in the Mid-South represented a 29% increase (Figure 36). The additional acres in 2011 builds on the increase of 2010 but still leaves the region with total cotton area well below the approximately 4.0 million acres planted in 2005 and 2006.

As in the Southeast, all states experienced increased acreage in 2011 due to the improved relative price signals. With an additional 210 thousand acres devoted to cotton, Mississippi's 50% increase was the largest in the region. Tennessee growers increased area by 27%, while Arkansas and Missouri saw increases of 25% and 21%, respectively. The 16% increase for Louisiana was the most modest across the region. As was the case in the Southeast, the additional cotton acres generally came from soybeans.



Figure 36 - Mid-South Upland Planted Area

In the Southwest, upland cotton area increased 37% to 8.0 million acres (Figure 37). The 3-state total was the largest for the region since 1981. In addition to stronger cotton prices, dry weather conditions contributed to the acreage increase as growers turned to cotton, which is the more drought-tolerant alternative. Texas accounted for a 2.0 million acre increase relative to 2010 as acres went from 5.6 to 7.5 million acres. In percentage terms, Kansas led the way with a 57% increase, while Oklahoma registered an increase of 46%. In general, area devoted to grains declined as cotton acres increased.



Figure 37 - Southwest Upland Planted Area

With 500 thousand acres of upland cotton, the West reached their highest level of acreage since 2006 (Figure 38). Each of the

3 states contributed to the 36% increase. Arizona's 250 thousand acres were the largest for the state since 2001. With 68 thousand acres, New Mexico also equaled their largest acreage since 2001. Up 47%, California's upland area rebounded to 182 thousand acres.



Figure 38 - West Upland Planted Area

With a 50% increase, ELS area also benefitted from the stronger cotton prices and better water allocation in 2011 (Figure 39). California accounted for 273 thousand of the U.S.'s 306 thousand acres. Texas followed with 20 thousand acres, an increase of 18% from 2010. Arizona growers planted 10 thousand acres of ELS cotton, up from just 2,500 acres in 2010. In New Mexico, growers devoted 3,400 acres to ELS, up 26% from 2010.



Figure 39 - U.S. ELS Planted Area

Harvested Acreage

In terms of weather, 2011 was a year that many cotton farmers would rather soon forget. In different regions of the Cotton Belt, farmers experienced record-setting floods and record droughts. Flooding in the Mid-South delayed or completely prevented plantings in some areas. In the Southeast, crops faced generally hot and dry conditions for much of the summer, only to be followed by excessively wet conditions during harvest in North Carolina and Virginia. Growers in the Southwest experienced the driest conditions on record. In many areas, dryland crops were a complete loss, and irrigated cotton realized only a portion of its potential.

As a result of the extreme weather conditions, national abandonment reached 34% (Figure 40). This was the highest recorded abandonment since USDA began reporting both planted and harvested area in 1909. The previous high of 27% was recorded in 1933. In the Southwest, growers were unable to harvest 60% of their cotton area. Across the states, Oklahoma registered the largest abandonment with 83% of planted area being a total loss.



Figure 40 - U.S. Cotton Abandonment

Yields

At first glance, the national average yield per harvested acre of 772 pounds does not fully convey the difficulties faced during the 2011 growing season (Figure 41). Falling 50 pounds below the 5-year average, the U.S. yield is bolstered by better than expected productivity in some regions despite the challenging weather conditions. In the Southwest, un-harvested acres with no production are not reflected in the yield per harvested acres.



Figure 41 - U.S. Cotton Yield

Yields across the Southeast present a very mixed picture for 2011. For the region as a whole, the 2011 yield of 745 pounds was 63 pounds below 2010 and 43 pounds below the 5-year average (Figure 42). Georgia led the way with an average yield of 805 pounds. However, that yield falls 28 pounds short of the 5-year average. At 773 pounds, South Carolina was off sharply from the 2010 record of 898 pounds, but still came in above their 5-year average. With a yield of 762 pounds, Alabama is the only state to exceed both the 2010 result and their 5-year average. The effects of the hot, dry conditions are evident in Florida as the state's yield fell more than 100 pounds below their 5-year average. Promising yields in North Carolina and Virginia were reduced as a late-season hurricane and rains caused crop losses.

Southea Pounds	i st Uplan per Harves	d Yiel ted Acro	ds e
	2010	2011	5-Year Average
Alabama	682	762	630
Florida	766	660	772
Georgia	821	805	833
North Carolina	838	630	807
South Carolina	898	773	754
Virginia	732	689	827
SOUTHEAST	808	745	788

Figure 42 - Southeast Upland Yields

Although producers in the Mid-South faced early-season flooding and also dealt with higher than normal temperatures, yields for the region remained close to 5-year averages. Although down from 2010, the 2011 average yield of 913 pounds (Figure 43) was only 11 pounds below the 5-year average. Mississippi's yield of 968 pounds was the highest of the 5 states, followed by Missouri's average yield of 961 pounds. Relative to the 5-year average, the 938 pound average for Arkansas shows the greatest shortfall. Average vields in Louisiana (852 lbs.) and Tennessee (813 lbs.) also fell just short of their recent averages.

Mid-So Pounds	uth Uplan per Harves	d Yiel ted Acro	ds e
	2010	2011	5-Year Average
Arkansas	1,045	938	1,014
Louisiana	842	852	865
Mississippi	993	968	878
Missouri	1,068	961	999
Tennessee	845	813	819
MID-SOUTH	970	913	924

Figure 43 - Mid-South Upland Yields

As previously discussed, the Southwest region faced historically adverse growing

conditions. After a record-high abandonment, the average yield on harvested acres totaled 539 pounds, down 172 pounds from the 5-year average. Average yields were consistently down across the 3 states.

	2010	2011	5-Year Average
Kansas	787	494	629
Oklahoma	750	432	740
Texas	703	542	711
SOUTHWEST	706	539	711

Figure 44 - Southwest Upland Yields

The average upland yield in the West is estimated at 1,447 pounds, 20 pounds above the 5-year average (Figure 45). Arizona led the way with a record average yield of 1,548 pounds, which surpasses the 5-year average by approximately 80 pounds. California's average yield of 1,432 pounds fell short of their 5-year average by 42 pounds, while New Mexico's yield of 1,084 pounds was 20 pounds better than their average.

	2010	2011	5-Year Average
Arizona	1,517	1,548	1,469
California	1,483	1,432	1,474
New Mexico	1,174	1,084	1,064
WEST	1,461	1,447	1,427

Figure 45 - West Upland Yields

The national average ELS yield is estimated at 1,336 pounds, 71 pounds below the 5-year average (Figure 46). With the majority of ELS acres, California heavily influences the U.S. average. With an average yield of 1,376 pounds, California surpassed their 5year average by 47 pounds. Yields in Arizona, New Mexico and Texas also exceeded their 5-year averages.

	2010	2011	5-Year Average
Arizona	845	960	903
California	1,237	1,376	1,329
New Mexico	836	805	782
Texas	902	1,038	822
U.S.	1,200	1,336	1,265

Figure	46 -	ELS	Yields
--------	------	-----	--------

Production

USDA's latest estimate places the 2011 U.S. cotton crop at 15.7 million bales (Figure 47), down 2.4 million bales from 2010. The 13% decrease in production can be attributed to the adverse weather conditions more than offsetting additional plantings. The upland crop is estimated at 14.8 million bales, and ELS farmers harvested 846 thousand bales.



Figure 47 - U.S. Cotton Production

In 2011, the Southeast was the largest production region, with a crop of 5.1 million bales, accounting for 35% of the total upland crop (Figure 48). This is 801 thousand bales above 2010 and 1.3 million bales better than the 5-year average.



Figure 48 - U.S. Upland Cotton Production 2011

For 2011, the Mid-South accounted for 31% of the total U.S. upland crop. At 4.6 million bales, the 2011 crop was 763 thousand bales higher than 2010 but still slightly below the 5-year average of 4.7 million bales. Compared to year-earlier results, the larger crop can be attributed to increased area.

At 3.6 million bales, production in the Southwest accounted for 25% of the U.S. upland crop. The Southwest's crop was the lowest since 1998 due to the extremely adverse weather conditions. Their share of the U.S. upland crop was the lowest since 2001.

The West produced 1.5 million bales of upland cotton in 2011, up 375 thousand bales from the region's 2010 crop. The region accounted for 10% of U.S. production. Production in the region was the largest since 2005, and Arizona's crop of 800 thousand bales was their largest since 1997. The 2011 ELS crop of 846 thousand bales was 342 thousand bales better than 2010. At 780 thousand bales, the California ELS crop was their largest crop since 2007 (Figure 49). The state accounted for 92% of the total 2011 U.S. ELS crop. In 2011, ELS production expanded in all states.





Stock Levels

With total U.S. cotton demand slightly exceeding production for the 2010 marketing year, cotton stocks dropped to their lowest level since the 1990 marketing year. The resulting carryout from the 2010 marketing year, and equivalent carry-in or beginning stocks for the 2011 marketing year, fell to 2.6 million bales (Figure 50). That represented a 350 thousand bale decline from the stocks that were brought into the 2010 marketing year. During the 2010 marketing year, all-cotton stock declines were the result of reduced upland inventories as ELS cotton stocks increased marginally. Upland stocks fell by 357 thousand bales, while ELS stocks grew by 10 thousand bales. Despite the increase in ELS stocks, the market still faced an extremely tight balance sheet.



Figure 50 - U.S. Cotton Beginning Stocks

Total bales of upland cotton placed under the CCC loan have been steadily declining since the 2007 crop. Through 2009, that trend largely reflected the smaller crops that were produced in each of those years. For the 2010 crop, stronger cotton prices led to fewer loan placements. Midway through the 2011 marketing year, reduced production and prices above historical averages are combining to keep loan placements at low levels. As of December 31, 2011. outstanding CCC loan stocks were 4.1 million bales (Figure 51), down from 4.5 million bales in 2010. The Mid-South accounts for approximately 50% of cotton placed under loan.



Figure 51 - CCC Loan Stocks

Total Supply

Total supply for the 2011 marketing year is estimated to be 18.3 million bales, down from 21.1 million the previous year (Figure 52). Reduced supplies are the combined result of lower production and fewer beginning stocks. Total supplies for the 2011 marketing year are comparable to the reduced levels of the 1998 and 2009 marketing years.





Upland Cotton Quality

Despite the challenging weather events, the overall quality of the 2011 crop is exceeding the recent 5-year averages for staple and strength. With 13.9 million running bales classed through January 26, the national average staple length (measured in 32^{nd} of an inch) is 35.5, up from a 5-year average of 35.4 (Figure 53).

The Southeast staple length of 35.6 is 1.0 32nd of an inch better than their 5-year average, and if sustained for the remainder of the crop, the 2011 staple length would be an all-time best for the region. In the Mid-South, the average staple length of 35.8 exceeds the 5-year average by 0.7 thirtysecond's. The Southwest's average staple length of 34.5 will fall well short of the 5year average of 35.8, but that is not unexpected given the extreme drought. The West reports the longest staple, with an average of 36.8.

	<u>Sta</u>	ple	Stre	ength
	2011	5-Year	2011	5-Year
Southeast	35.6	34.6	29.3	28.8
Mid-South	35.8	35.1	30.8	29.2
Southwest	34.5	35.8	29.1	29.5
West	36.8	36.9	31.4	31.1
U.S.	35.5	35.4	29.9	29.4

Figure 53 - 2011 Crop Staple and Strength

The strength of the 2011 upland crop, averaging 29.9 grams/tex, is substantially better than the 5-year average of 29.4. Only the Southwest is expected to fall short of their 5-year average. The Mid-South is exceeding their 5-year average by 1.6 grams/tex.

In total for the Cotton Belt, 89.1% of the 2011 crop is grading 41 or better, which compares to a 5-year average of 88.9% (Figure 54). The U.S. average is largely the result of a Mid-South crop with 95.4% of the crop grading 41 or better. This compares to a 5-year average of 84.9%. Results for the other production regions are coming in slightly below 5-year averages.

	<u>%S</u>	<u>%SLM+</u>		<u>Micronaire</u>	
	2011	5-Year	2011	5-Year	
Southeast	82.0	86.4	46.7	46.2	
Mid-South	95.4	84.9	46.0	45.7	
Southwest	87.8	92.1	43.7	41.8	
West	95.4	96.1	44.0	44.0	
U.S.	89.1	88.9	45.5	44.1	

Figure	54 -	2011	Crop	Color	and	Mike
iguio	U -T		O OP	00101	unu	

The average micronaire of the 2011 upland cotton crop is 45.5, up from the 5-year average of 44.1. At 46.7 and 46.0, respectively, the effects of hot weather during the growing season are evident in the average micronaire for the Southeast and Mid-South. With an average of 43.7, the Southwest micronaire is above the 5-year average, while the West's micronaire of 44.0 is equal to their 5-year average.

Cotton Prices Upland Cotton Prices

During 2011, upland cotton prices moved to a level that few would have previously thought attainable. Nearby NY futures began the year at \$1.45 per pound and continued to build on the upward momentum that started in the fall of 2010 (Figure 55). On February 17, futures closed above \$2.00 and generally traded between \$1.90 and \$2.10 through mid-April. Concerns over available supplies, export restrictions by India, and the need to fix on-call sales by textile mills all contributed to the dramatic price increase.

However, it is often said that the cure for high prices is high prices, and that was evident in the subsequent month. Cotton prices in excess of \$1.50 proved to be too much of a financial burden for textile mills and cotton purchases quickly dropped. Yarn mills were finding it increasingly difficult to pass the higher replacement costs along to their customers, and in some cases, found themselves increasingly burdened by growing stocks of uncompetitive-priced yarn.

As the March and May contracts dropped off the board, the July contract was trading in the \$1.50 range. Weak demand and expectations for a larger world crop added further pressure to new-crop contracts. By July, nearby futures traded in the \$1 range and maintained a trading band between \$0.90 and \$1.10 for the remainder of 2011. In the latter part of 2011, cotton prices found support as China implemented a policy to rebuild their reserves of cotton by aggressively purchasing domestic and international growths. By early 2012, the demand climate was also improving and mills were becoming more active buyers.

The "A" Far East (FE) Index has exhibited a similar pattern to futures prices. In early 2011, the tightness in the physical market was evident as the spread between the "A" Index and nearby NY futures widened. By the end of the year, a more normal relationship had prevailed with the "A" Index being 4-8 cents above the futures contract.



Figure 55 - Nearby NY and "A" (FE) Index

Thus far into the 2011 marketing year, spot 4134 values have averaged \$0.96/lb.; the average spot 4134 value for the 2010 crop cotton was \$1.38 cents/lb (Figure 56). During 2011, spot market prices generally followed the trend in futures. After starting calendar 2011 at \$1.35, prices closed the year at \$0.88, but in between, reached a high of \$2.10.



Figure 56 - Spot 4134 Price

ELS Prices

The tremendous volatility in prices has not been limited to upland cotton, but is evident in ELS markets as well. Extra-long staple cotton prices began 2011 at \$2.25 per pound, after having improved through the latter half of 2010 (Figure 57). The surge in prices continued until early February when the ELS spot price peaked at \$2.60. With little if any active trades reported during the middle months of 2011, spot prices held fixed until new crop reporting commenced in early November at \$1.89 per pound. Prices have since weakened as new crop supplies became more abundant, and spot prices began 2012 at \$1.76 and had fallen below \$1.50 by late January.



Figure 57 - ELS Spot Price

Cottonseed Situation Cottonseed Supply

USDA estimates 2011 cottonseed production at 5.3 million tons, down 830 thousand tons from the previous year (Figure 58). The changes in cottonseed production mirror the movements in cotton lint production as average seed-to-lint ratios have remained relatively stable in recent years. For 2011, USDA's latest estimates indicated an average ratio of 1.4 pounds of seed per pound of lint.



Figure 58 - U.S. Cottonseed Production

For the 2011crop, a regional breakdown of production shows that the Southeast produced 1.6 million tons or 30% of the total, the largest of any region (Figure 59). They were closely followed by the Mid-South with estimated production of 1.5 million tons for a 29% share. The Southwest produced 1.3 million tons, or 24% of total production, and the West accounted for 869 thousand tons, 16% of the total.



Figure 59 - U.S. Cottonseed Production 2011

Supplementing U.S. production, beginning stocks of 617 thousand tons and imports of 100 thousand tons bring total cottonseed supply for the 2011 marketing year to 6.0 million tons (Figure 60). With U.S. production down from 2010, imports of 100 thousand tons represent the largest imports since the 2002 marketing year.





Disappearance and Stock Levels

USDA's latest estimate places 2011 cottonseed disappearance at 5.6 million tons, down 270 thousand tons from the previous year (Figure 61). Crush is estimated at 2.4 million tons, down 160 thousand tons from 2010. A smaller drop is estimated for whole seed feeding with a 2011 marketing year estimate of 2.9 million tons. This is just 50 thousand tons below the 2010 level. Estimated exports of 225 thousand tons are also off 50 thousand tons from the previous year.



Figure 61 - U.S. Cottonseed Disappearance

With sharply lower production more than offsetting declines in usage, stocks of cottonseed are estimated to decrease during the 2011 marketing year (Figure 62). With projected ending stocks of 430 thousand tons, 2011 carryover will be 187 thousand tons below the 2010 marketing year.



Figure 62 - U.S. Cottonseed Ending Stocks

Cottonseed Prices

The movement in cottonseed prices generally mirrors the changes in competing feed prices more so than the movements in cotton lint prices. However, it appears that the volatility in lint prices carried over into the seed market as well. U.S. average spot prices began 2011 at \$230 per ton before advancing to a monthly average high of \$393 in August (Figure 63). However, prices moved down almost as quickly as they advanced, closing the year at \$290 per ton. In early 2012, the U.S. average spot price has dropped further to \$276 but is still 20% higher than the comparable point in 2011.





2012 Planting Intentions *Price Prospects*

Cotton growers are approaching the 2012 planting season with the December contract trading 10-15 cents below last year's level, but still above what would be considered historical norms. As of late January, the December 2012 contract was trading between \$0.90 and \$0.95 per pound (Figure 64). At this time last year, the December 2011 contract was between \$1.05 and \$1.15. After a roller coaster ride during the first half of 2011, cotton prices have settled into a sideways range with harvest progress and tepid demand keeping a lid on the upside and China's reserve purchases lending support to the downside.



Figure 64 - December Cotton Futures

While cotton prices are lagging slightly behind last year's level, the corn market is trading in a range very similar to the 2011 contract. During the first three weeks of January, the December 2012 futures contract averaged \$5.68 per bushel, as compared to \$5.62 per bushel for a comparable period in the 2011 contract (Figure 65). With 40% of U.S. corn production used for renewable fuels, prices have remained firm despite a strengthening dollar and concerns over the general economy.



Figure 65 - December Corn Futures

The November 2012 soybean contract has followed a path similar to corn. Between August 2011 and January 2012, the November 2012 contract declined by approximately \$1.50 per bushel (Figure 66). At \$12.00 per bushel, the November 2012 contract is now approximately \$1.25 lower than year-ago levels. Despite concerns with production in South America, demand-side pressures have allowed soybean prices to drift lower. However, with lower production costs, soybeans are expected to continue to offer formidable competition for area as diesel and nitrogen prices increase.



Figure 66 - November Soybean Futures

As growers consider their 2012 planting decisions, they are comparing prices for cotton, corn, soybeans and other regional crops. Growers will also be influenced by production costs, which are lower than the 2008 spike, but will likely increase relative to both 2010 and 2011. 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. This was certainly evident in 2011 and current conditions suggest weather will again play a significant role in plantings.

2012 U.S. Cotton Acreage Intentions

In mid-December 2011, 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 2011 and intended acreage for 2012. 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% decrease in the region's upland area to 2.97 million acres (See Table 4 on page 45), with all states showing comparable percentage decreases. Across the 6-state region, Alabama shows the largest decline at 17.6% with cotton acres moving to corn. sovbeans and peanuts. Virginia follows with a 16.0% decline as survey results indicated a shift to sovbeans. Georgia's expected acreage is off 12.7% as corn and peanuts are the beneficiaries of the reduced cotton acreage. Growers in North Carolina indicated an 11.3% decline as corn, soybeans and peanuts are increasing area. Both Florida and South Carolina are reporting intentions 10% below year-ago levels. In those states, cotton acres are reported to be moving into peanuts and sovbeans. Total 2012 acreage for each of the states is as follows: Alabama at 379 thousand acres. Florida at 110 thousand. Georgia at 1.40 million, North Carolina at 714 thousand, South Carolina at 273 thousand, and Virginia at 97 thousand.

In the Mid-South, survey results show that growers intend to plant 2.30 million acres, a decrease of 6.9% from the previous year. With the exception of Missouri, all states indicate fewer acres of cotton relative to 2011. When compared to the previous year, Missouri indicated a similar level of cotton area - up 2.3%. Of the remaining states, Louisiana is showing the largest decline at 17.7%. Survey results indicate a move to both corn and soybeans. With a decline of 9.0%, Arkansas shows the next largest drop, with those acres moving to corn. Declines in Mississippi and Tennessee are 6.5% and 5.0%, respectively. In both states, growers are opting for more acres of corn at the expense of cotton. Total 2012 acreage for

each of the states is as follows: Arkansas at 619 thousand acres, Louisiana at 243 thousand, Mississippi at 589 thousand, Missouri at 384 thousand, and Tennessee at 470 thousand.

Growers in the Southwest are indicating the smallest percentage decline with 5.3% fewer cotton acres in 2012, lowering the regional total to 7.62 million acres. In aggregate, growers in Kansas indicated essentially no net change in cotton area as the state total is expected to remain at 80 thousand acres. Acreage in Oklahoma is showing a 10.0% decline as acres are moving to wheat. For Texas, survey respondents intend to reduce area by 5.1%. The relatively small drop in area could reflect the ongoing concerns with the drought and the need to maintain acres in a relatively drought-tolerant crop. Total 2012 acreage for each of the states is as follows: Kansas at 80 thousand acres, Oklahoma at 374 thousand, and Texas at 7.17 million acres.

All states in the West region show decreases in upland plantings, with the region as a whole down 10.4%. In Arizona, intended area of 222 thousand acres represents an 11.3% decrease from the previous year. The expected decrease in acreage is coming in response to reduced price expectations and increased competition from wheat. At the time of the survey, California farmers intend to plant 169 thousand acres (-7.4%), with the decrease due to a shift into specialty crops. California's actual plantings could ultimately be dictated by water costs and availability. New Mexico is reporting intentions of 58 thousand acres, down 15.0% from 2011

Summing across the 4 regions gives intended 2012 upland cotton area of 13.34 million acres, 7.5% lower than 2011.

With ELS prices down from year-ago levels and concerns about water availability in

California, survey results indicate that U.S. cotton growers intend to decrease ELS plantings 6.4% to 287 thousand acres in 2012. The results across the four ELS-producing states are mixed as New Mexico indicated an increase of 9.8%, bringing the state's acreage up to 3,700 acres. The remaining states are expecting to reduce area relative to the previous year. Results are as follows: Arizona planting 9,300 acres (-6.7%); California planting 257 thousand acres (-5.8%); and Texas planting 17 thousand acres (-16.7%).

Summing together the upland and ELS cotton intentions shows U.S. all-cotton plantings in 2012 of 13.63 million acres, 7.5% lower than 2011. (See Table 4 on page 45 and Figure 67)



Figure 67 - U.S. Planted Area

2012 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. Since the NCC economic outlook does not attempt to forecast weather patterns, the standard convention is to assume yields in line with recent trends and abandonment consistent with historical averages. However, 2012 is not starting out as a normal year for the Southwest region, particularly Texas and Oklahoma. Drought conditions persist in those states, and weather forecasts based on the La Nina weather pattern call for below normal precipitation for that region of the Cotton Belt. As a result, abandonment rates above the historical averages are assumed for Texas and Oklahoma. In addition, yields per harvested acre are set below trend.

With abandonment in Texas and Oklahoma assumed at 35% and all other states set at historical averages, Cotton Belt harvested area totals 10.88 million acres (Figure 68), which is 20.3% below planted area. Weighting individual state yields by 2012 area generates a U.S. average yield of 807 pounds. This compares to a 2011 yield of 772 pounds and a 2006-10 average yield of 819 pounds. Applying each state's yield to its 2012 projected harvested acres generates a cotton crop of 18.30 million bales, with 17.51 million bales of upland and 783 thousand bales of ELS.



Figure 68 - U.S. Harvested Area

Based on the abandonment and yield assumptions, upland production by region is: Southeast = 4.96 million bales; Mid-South = 4.43 million; Southwest = 6.77 million; and West = 1.35 million. Combining projected production with expected beginning stocks of 3.82 million bales gives a total U.S. supply of 22.13 million (Figure 69). This is an increase of 3.85 million bales from the 2011 level.



Figure 69 - U.S. Cotton Supply

For cottonseed, multiplying the point estimate of lint production by an average lint-seed ratio generates expected production of 6.19 million tons. With 430 thousand tons of beginning stocks and 50 thousand tons of imports, 2012 cottonseed supply totals 6.67 million tons (Figure 70).



Figure 70 - U.S. Cottonseed Supply

	2011 Actual (Thou.) 1/	2012 Intended (Thou.) 2/	Percent Change
SOUTHEAST	2 406	2.040	13.80/
Alahama	3,400	2,909	-12.8%
Alaballia	400	5/9	-1/.070
Coorgin	122	1 207	-10.0%
North Carolina	1,000	1,397	-12.770
North Carolina	803 202	/14 272	-11.5%
Virginio	505	273	-10.0%
viiginia	110	91	-10.0%
MID-SOUTH	2,475	2,304	-6.9%
Arkansas	680	619	-9.0%
Louisiana	295	243	-17.7%
Mississippi	630	589	-6.5%
Missouri	375	384	2.3%
Tennessee	495	470	-5.0%
SOUTHWEST	8,045	7,620	-5.3%
Kansas	80	80	-0.3%
Oklahoma	415	374	-10.0%
Texas	7,550	7,166	-5.1%
WEST	500	448	-10.4%
Arizona	250	222	-11.3%
California	182	169	-7.4%
New Mexico	68	58	-15.0%
TOTAL UPLAND	14,426	13,341	-7.5%
TOTAL ELS	306	287	-6.4%
Arizona	10	9	-6.7%
California	273	257	-5.8%
New Mexico	3	4	9.8%
Texas	20	17	-16.7%
ALL COTTON	14,732	13,628	-7.5%

Table 5 - Prospective 2012 U.S. Cotton Area

U.S. Market

U.S. Textile Industry

Like many other segments of the economy in 2011, 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 2011 fell by approximately 7,500 workers. These figures represent employment in all three sectors of the U.S. textile industry - textile mills, textile product mills, and apparel mills.

Mill Use

Mill use of cotton decreased from the previous year and is estimated at 3.46 million bales in calendar 2011, 2.4% below 2010 (Figure 71). For calendar 2012, NCC forecasts domestic mill use of cotton at 3.45 million bales and estimates the 2011 marketing year at 3.40 million bales (Figure 72). NCC projects domestic mill use of cotton at 3.47 million bales for the 2012 marketing year.



Figure 71 - U.S. Cotton Mill Use (Calendar Year)





Cotton was not the only fiber that experienced a decrease in mill use in 2011; U.S. mill consumption of manmade fibers decreased as well. NCC estimates mill use of manmade fibers at 14.6 million bales for 2011, a decrease of 3.0% from 2010 (Figure 73). Manmade fiber mill use is projected to increase to 15.2 million bales in calendar 2012.



Figure 73 - Man Made Fiber Mill Use

Upland Cotton Economic Adjustment Assistance Program

The Upland Cotton Economic Adjustment Assistance Program (EAAP), authorized in the 2008 Farm Bill, has provided U.S. cotton textile manufacturers with much-needed assistance for capital investments and improvements.

Under the EAAP, from August 1, 2008 through July 31, 2012, domestic users will receive 4 cents /lb. for all upland cotton consumed. Beginning August 1, 2012 the rate is adjusted to 3 cents/lb. Recipients must agree to invest the EAAP proceeds in plants and equipment. In fiscal year 2011, over 50 U.S. companies received payments under the EAAP.

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 2011 is estimated to be 45.0 million bale equivalents (Figure 74). Cotton's share of net domestic consumption decreased 2.9% this past year to 39.7%, which translates to 17.9 million bales. For 2012, NCC projects net domestic consumption of all fibers to increase to 46.8 million bales. With a projected share of 40.0%, cotton's net domestic consumption is projected to be 18.7 million bales.



Figure 74 - Net Domestic Fiber Consumption

Imported goods make up the largest portion of U.S. net domestic consumption. Imported cotton textiles decreased from 20.6 million bale equivalents in 2010 to an estimated 18.4 million in 2011 (Figure 75).





Textile Trade

Imports of cotton goods in calendar 2011 were estimated to have decreased by 10.6% to 18.4 million bale equivalents (Figure 76). In calendar 2012, NCC projects cotton textile imports to increase to 19.2 million bales.



Figure 76 - U.S. Cotton Textile Imports

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 28.2% of all cotton goods imported in

2011 contained U.S. cotton. This is a 1.4% increase over the previous year. In bale equivalents, these imported cotton goods contained 5.2 million bales of U.S. cotton (Figure 77). This is due, in large part, to our trading partners in NAFTA and the CBI.



Figure 77 - U.S. Cotton Content in Textile Imports

U.S. Cotton Product Imports

Apparel was once again the largest category of imported cotton goods when compared to yarn, thread and fabric, and home furnishings (Figure 78). Cotton apparel imports were estimated at 13.8 million bale equivalents for 2011, down 8.4% from 2010. Imports of cotton home furnishings (including floor coverings) decreased 18.0% in 2011 to an estimated 3.2 million bale equivalents. Cotton yarn, thread and fabric imports decreased 7.4% in 2011 to an estimated 1.4 million bales.

Once again, countries in NAFTA and CBI represented significant sources of imported cotton goods in 2011 (Figure 79). Imports from Mexico in 2011 were estimated at 1.2 million bales, down approximately 6.0% from the previous year (Figure 80). Imports of cotton goods from Canada fell to an estimated 83 thousand bales in 2011, sliding 0.6% from the previous year (Figure 81). Imported cotton goods from CBI for the year were estimated at 2.6 million bale equivalents (Figure 82), up 2.6% 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 2011 were 2.3 million, or 87.3% of the cotton textile imports from CBI. Combined, imports from NAFTA and CBI countries increased 6.5% and accounted for 21.5% of total U.S. cotton product imports in 2011.



Figure 78 - U.S. Cotton Product Imports



Figure 79 - U.S. Import Source of Cotton Products







Figure 81 - U.S. Cotton Product Trade with Canada



Figure 82 - U.S. Cotton Product Trade with CBI

Other top sources of imported cotton goods in 2011 were China, Pakistan, India, Hong Kong, Bangladesh, Vietnam, South Korea, and Turkey. For the seventh consecutive year, China was the largest supplier of cotton textile imports into the U.S. (Figure 83). However, total cotton product imports from China decreased to an estimated 5.8 million bale equivalents in 2011, down 16.1% from 2010 but up by approximately 605% 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 to an estimated 31.5% in 2011.

Imports of cotton products from Pakistan are estimated at 1.7 million bale equivalents in 2011, a decrease of 261 thousand bales. Since 1997, Pakistan imports have increased 150%. Pakistan slightly lowered its share of imported cotton goods in the U.S. market last year to 9.1%.

Imports from India stood at 1.5 million bale equivalents for 2011. This was an 11.3% decrease from last year but a 104% increase from 1997. India now accounts for 7.9% of all U.S. cotton product imports.

Imports from Hong Kong in 2011 were 25 thousand bale equivalents, down 26.9% from 2010. Hong Kong's share of imported cotton goods in the U.S. declined to 0.1% in 2010.

Bangladesh also showed a decline in cotton product imports into the U.S. when compared to the previous year. Imports from Bangladesh in 2011 were down 8.6% from 2010 to 1.2 million bale equivalents. Bangladesh accounted for an estimated 6.5% of all cotton goods imported into the U.S. in 2011.

Vietnam also showed a decrease in cotton product imports into the U.S. when compared to the previous year. Total cotton product imports from Vietnam decreased to an estimated 1.0 million bale equivalents in 2011, down 7.7% from 2010. Cotton product imports from South Korea decreased 24.4% from 2010 to 135 thousand bale equivalents in 2011.



Figure 83 - U.S. Cotton Product Imports from China

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 whenever possible, but the measurement of SME best represents product categories imported from individual countries.

<u>Mexico</u>

Although declining relative to other countries, Mexico remained a large shipper of cotton goods to the U.S. in 2011. Cotton trousers remained the largest category of imported cotton goods from Mexico. Trousers accounted for 32.3% of all cotton product imports from Mexico based on SME (Figure 84). Knit cotton shirts were the next largest category of imports, accounting for 17.2%, followed by cotton hosiery (9.0%) and "other cotton apparel" (7.0%). The U.S. Customs Service category "other cotton apparel" includes items such as waistcoats, swimwear, bodysuits and scarves.



Figure 84 - Cotton Product Imports from Mexico

<u>Canada</u>

U.S. cotton imports from Canada decreased again in 2011. The largest category of imports from Canada in 2011 was "other cotton manufactures", which accounted for 34.7% of total SME of cotton product imports from Canada (Figure 85). 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 7.5% of total imports, followed by coats at 3.7% and terry towels at 2.8%.





Caribbean Basin Initiative (CBI)

Continuing the recent trend, CBI countries shipped more cotton goods to the U.S. than did NAFTA countries in 2011. The largest category of imported cotton goods from the region was knit shirts, accounting for 37.3% of total imports, based on SME (Figure 86). Approximately 84.6% of the cotton knit shirt imports from CBI came from the CAFTA-DR countries. The second largest category, underwear, accounted for 33.6% of imports, followed by cotton hosiery (13.8%) and trousers (8.9%). Of these imports, 90.8% of the underwear, almost 100.0% of the cotton hosiery and 92.1% of the cotton trousers were from the CAFTA-DR countries.





<u>African Growth & Opportunity Act</u> (AGOA)

Over the past year, total cotton apparel product imports from the AGOA region decreased by 10.2% to an estimated 138.9 million SMEs (Figure 87). However, during the past year, the percentage of U.S. cotton apparel imports from the AGOA region receiving preferential treatment under the act increased from 93.3% to 94.4%.



Figure 87 - Cotton Apparel Product Imports from AGOA

<u>Pakistan</u>

The largest category of imported goods from Pakistan in 2011 was "other cotton manufactures" (Figure 88). This category accounted for 30.9% of all cotton product imports from Pakistan based on SME. The second largest category imported from Pakistan was cotton sheets with 12.1% of total imports, followed by bedspreads and quilts (6.6%) and cotton hosiery (4.4%).



Figure 88 - Cotton Product Imports from Pakistan

<u>China</u>

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 2011 was "other cotton manufactures", which accounted for 23.0% of all cotton product imports from that country (Figure 89). Trousers was the second largest category of cotton imports from China in 2011, comprising 11.5% of total cotton product imports from that country. Knit shirts accounted for 6.0% of U.S. cotton textile and apparel imports from China in 2011. Nightwear was the fourth largest category and accounted for 5.5% of cotton product imports.





<u>India</u>

As was the case with Pakistan and China, the largest category of imported cotton goods from India in 2011 was the category of "other cotton manufactures" (Figure 90). When based on SMEs, this category represented 30.3% of all cotton goods imported from India. The next largest category was cotton sheets (12.7%), followed by underwear (9.5%) and knit shirts (6.8%).



Figure 90 - Cotton Product Imports from India

<u>Hong Kong</u>

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 2011 was "other cotton manufactures" (Figure 91). When looking at SMEs, "other cotton manufactures" accounted for 21.0% of all cotton products imported. The second largest category was woven shirts with 17.7% of imports, followed by trousers (12.8%) and knit shirts (12.4%).



Figure 91 - Cotton Product Imports from Hong Kong

<u>Bangladesh</u>

Based on SMEs, the largest category of cotton goods imported from Bangladesh in 2011 (36.6%) was trousers (Figure 92). The second largest category in 2011 was woven shirts (16.9%). Cotton underwear was the third largest category in 2011, representing 13.6% of total cotton goods imported from Bangladesh, followed by knit shirts at 7.0%.



Figure 92 - Cotton Product Imports from Bangladesh

<u>Vietnam</u>

Vietnam has emerged as a more significant supplier of cotton product imports (Figure 93). U.S. cotton product imports from Vietnam have increased by almost 4,600% 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 1.1 billion SME in 2011. The largest category of imported cotton goods from Vietnam in 2011 was underwear. Based on SMEs, this category represented 22.6% of all cotton goods imported from Vietnam. The next largest category was knit shirts (19.6%), followed by trousers (18.6%) and cotton dresses (6.5%).



Figure 93 - Cotton Product Imports from Vietnam

<u>South Korea</u>

Based on SMEs, the largest category of cotton goods imported from South Korea in 2011 was cotton sheeting fabric, which accounted for 35.0% (Figure 94). The second largest category in 2011 was combed cotton yarn (27.9%), cotton hosiery (17.2%) and cotton nightwear (2.8%).





<u>Turkey</u>

Based on SMEs, the largest category of cotton goods imported from Turkey in 2011 was "other cotton manufactures", which accounted for 25.7% (Figure 95). The second largest category in 2011 was cotton sheets (21.0%), followed by bedspreads and quilts (9.9%) and cotton trousers (6.3%).



Figure 95 - Cotton Product Imports from Turkey

U.S. Cotton Product Exports

For the second consecutive year, exports of U.S. cotton textile and apparel products experienced an increase in 2011 (Figure 96). Exports increased by 6.6% in 2011 to an estimated 4.0 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 97). Cotton apparel exports decreased by 7.5% in 2011 to 255 thousand bale equivalents. Exports of home furnishings (including floor coverings) rose by 3.2% over the previous year to an estimated 96 thousand bale equivalents. Exports of cotton varn, thread, and fabric strengthened by 8.0% to 3.6 million bale equivalents in 2011. For 2012, NCC projects U.S. cotton textile exports to decrease 30 thousand bales to 3.92 million bale equivalents.







Figure 97 - U.S. Cotton Product Exports

The top customers of exported U.S. cotton textiles and apparel in 2011 were once again the NAFTA and CBI countries (Figure 98). Exports to the NAFTA countries last year totaled an estimated 899 thousand bale equivalents, down 2.6% from the previous year. Exports to the region accounted for 22.7% of all U.S. cotton product exports. Exports to Mexico decreased to an estimated 663 thousand bale equivalents from 691 thousand in 2010. Cotton product exports to Canada grew by an estimated 1.9% to 236 thousand bale equivalents for 2011.



Figure 98 - U.S. Exports of Cotton Products

U.S. exports to the CBI countries strengthened last year. In 2011, exports increased 9.1%, totaling 2.6 million bale equivalents or 66.9% 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 92.10 and 243.65 cents per pound during the course of calendar 2011 (Figure 99). During the first quarter of the year, the "A" Index set record highs. On March 7, 2011, the "A" Index climbed to 243.25 cents per pound. The following day, the "A" Index climbed another 40 points to set a record high of 243.65 cents per pound. Since that time, the "A" Index has dropped and hovers around 100.00 cents per pound. For the current marketing year-to-date, the "A" Index has averaged 107.39 cents per pound.



Figure 99 - "A" (FE) Index

World

The 2011 marketing year continued to see an increase in cotton production with an estimated world crop of 122.8 million bales (Figure 100). The larger cotton crop was in part due to continued high prices. China remains the leading producer while India and Pakistan continue to be significant producers. The United States produced a crop of 15.7 million bales, 2.4 million bales lower than the 2010 crop.



Figure 100 - World Cotton Supply & Use

After falling short of world mill use in each the 2009 through 2009 marketing years, world production bounced back above mill use in 2010. This trend continues with the most recent 2011 estimates placing world consumption at 109.9 million bales and production at 122.8 million bales.

Production is projected to drop in the 2012 marketing year to 119.4 million bales with an increase in consumption to 113.8 million. Ending stocks will climb to 64.1 million bales resulting in a stock-to-use ratio of roughly 56.3%.

China

China remained the largest cotton producer with a 2011 crop of 33.5 million bales (Figure 101). The crop was 3.0 million bales larger than the 2010 crop. The increase was based on a higher number of planted acres along with slightly higher yields.



Figure 101 - China Cotton Supply & Use

The Government of China's (GOC) seed subsidy program, which covered all cotton area in 2010, continued in 2011. The seed subsidy policy is aimed at stabilizing planted cotton 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 use. 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. Biotechnology (Bt) cotton use remained constant in 2011, supported by the cottonseed subsidy program. 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 vield 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 Xinjiang Production Construction Corporation (PCC) farms due to their organized farming on larger scale farms. However, some advances don't always result in an increase in yields. An increased use of mechanized harvesting equipment in 2010, in an attempt to reduce growing labor costs, reportedly reduced overall cotton yield in Xinjiang. The mechanized harvesting created more loss than the traditional hand picking.

For the 2011 marketing year, the Chinese government has implemented a cotton reserve purchasing system in order to stabilize the market and support farmers. The policy effectively puts a floor on the price at 19,800 yuan per ton. At current exchange rates, that equates to between \$1.35 and \$1.40 per pound. In total, the reserves had purchased more than 11 million bales as of January 20, including almost 7 million bales from Xinjiang. By buying these reserves, the GOC provides a price support for China's cotton producers. China's high reserves also introduce a large source of uncertainty into the market as to how and when China will release the cotton.

Despite the continued support of the Chinese government, a drop in cotton production is expected in 2012 as grain prices and grain subsidies have been increasing. China's 2012 harvested cotton area is projected at 12.5 million acres, down roughly 1.0 million acres from 2011. Assuming trend yields, China is projected to remain the world's largest cotton producer with a projected 2012 crop of 30.4 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 12th Five Year (2011-2015) Plan, the textile industry employees over 23 million people and will focus on restructuring and upgrading its infrastructure. According to China's National Statistics Bureau (NSB), fixed asset investment in the textile industry in 2010 stood at \$33.8 billion, up 26.4% over 2009. It was believed that the textile sector would see additional consolidation in 2011 as small to medium scale textile enterprises face multiple challenges, including higher priced raw materials and rising labor costs. Gains in new textile sector investments in China's central and western regions, up by 55% and 52%, respectively over 2009, and the southeastern region which rose 14%. reflect textile firms search for lower labor inputs and a favorable investment climate.

Sales of textiles and apparel are increasingly driven by domestic consumption resulting from increased disposable incomes and population growth. Growing incomes and rising living standards of Chinese consumers are driving retail consumption to the benefit of cotton products. Urban residents not only increased their clothing budgets but also raised the quality of their choices. Better quality clothing will also be high on the list of purchases by China's 713 million rural residents as their incomes rise. Net population growth was expected to continue throughout 2011, driving more cotton and textile consumption, however competition from manmade fibers remains intense with cotton prices being supported at levels well above polyester.

Current estimates place 2011 mill use at 44.2 million bales, down 1.8 million bales

from the 2010 marketing year. For the 2012 marketing year, China's consumption is projected to rebound to 45.7 million bales.

China remains a net importer of cotton fiber, and the gap between imports and exports has been growing larger in recent marketing years. For the 2011 marketing year, net imports are expected to grow to roughly 16.0 million bales. For the 2012 marketing year, net imports are expected to grow to 17.1 million bales as consumption continues to outpace China's production.

India

The latest estimates have India producing 27.0 million bales for the 2011 marketing year (Figure 102). If these estimates hold, the 2011 crop will be 1.6 million bales higher than the 2010 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 then record 24.0 million bales in 2007. About 80% 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 430 pounds per acre in 2011. 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.

However, it should be noted that the upward trend in yields has slowed since 2008. With the area under Bt cotton and improved varieties reaching an estimated 90% of total area, prospects 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. If prices remain firm and cotton area expands, industry sources suggest that India's cotton production could peak at somewhere over 30.0 million bales within in the next few years.

Assuming normal weather and a slight bump in yields, India's cotton production is forecast at 27.1 million bales in 2012. This is roughly 89,000 bales above 2011 and would be an all-time high in terms of cotton production in India.

India's mill consumption is estimated to fall to 19.5 million bales in the 2011 marketing year, down 1.2 million bales from the previous year. In the wake of the extremely high cotton prices early in 2011, yarn production has declined as some mills continue to work through financial difficulties.

In general, domestic demand for cotton textiles continues to be supported by growing incomes of the expanding middle class and the strong rural economy. If these factors continue to hold true, then India's mill use should grow to 20.4 million bales in the 2012 marketing year. Following the dramatic increase in cotton production after the introduction of Bt cottonseeds, India has emerged as one of the world's leading cotton exporters. Major export destinations have been China, Bangladesh, Pakistan, Hong Kong, Indonesia, Vietnam and other Far East countries. Since April 2010, the Government of India has made various policy changes on exports of raw cotton. For the 2010 marketing year, the government imposed quantitative restrictions on exports of raw cotton. For the 2011 marketing year, India is essentially allowing an open export policy, and is expected to export 6.0 million bales.

India will continue to import ELS and quality long staple cotton, with occasional imports of short staple cotton when international prices are favorable. The United States has been the leading supplier of cotton to India over the past few years. Indian mills importing U.S. Pima and upland cotton recognize its quality and consistency and are ready to pay a premium over competing countries. However, U.S. cotton faces competition from neighboring suppliers like Egypt, West Africa, the Commonwealth of Independent States (CIS), and Australia due to their freight advantage and shorter delivery periods.

Looking ahead to the 2012 marketing year, the overall balance between cotton production and cotton consumption is not markedly different from the current year. As a result, total exports for 2012 are assumed to reach 6.4 million bales, which is slightly higher than the current year. In terms of imported cotton, estimates are unchanged from the 2011 marketing year, 450,000 bales.

Uzbekistan

Current estimates put Uzbek cotton production at 4.2 million bales for 2011 (Figure 103), up 100,000 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.



Figure 103 - Uzbekistan Cotton Supply & Use

The government's overall cotton policy is still aimed at maintaining stable production, improving quality and fiber characteristics.

For the 2012 marketing year, Uzbek cotton production is projected to fall by roughly 97,000 bales to an estimated 4.1 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 spinning and weaving industries continue to invest heavily in new equipment as well as to renovate existing equipment due to improving profitability over the past years. Both domestic and export demand, particularly for cotton yarn, has marginally increased in the past three years. However the worldwide economic crisis hurt the domestic textile industry, and in late 2008 textile production dropped. Recently, however, it has been reviving. The textile mills are trying to pursue quality improvements and production diversification to include more value-added products, rather than continuing with lowvalue varn based exports. Most mills now understand that they need to be extremely competitive in order to remain in the shrinking global market.

Currently, there are more than 43 joint ventures established in the textile industry with partners from Turkey, Germany, South Korea, Japan and Switzerland. As of 2010, foreign investments in the textile industry exceeded \$1.1 billion. The main products produced and exported by textile mills are cotton yarn, gray fabrics and some textile garments. As in the past few years, China, Bangladesh and Russia are still the major buyers. As a result, Uzbek domestic cotton consumption is estimated at 1.3 million bales in the 2011 marketing year. For 2012, Uzbekistan's mill use is projected to remain relatively unchanged at 1.3 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 2.7 million bales of cotton in the 2012 marketing year.

Pakistan

Pakistan is the world's 4th largest producer and 3rd largest consumer of cotton. It is the country's most important non-food cash crop and the lifeline of Pakistan's textile industry. It accounts for 8.6 % of the value added in agriculture and 1.8% of Pakistan's GDP. Textiles account for about 55% of Pakistan's foreign exchange earnings. The textile and clothing industry remains the main driver of the economy in terms of foreign currency earnings and job creation. Millions of farmers are directly associated with the cultivation, harvest, and sale of cotton. Cotton production supports Pakistan's largest industrial sector, comprised of over 400 textile mills, 1,000 ginneries, and 300 oil expellers.

Pakistan's cotton crop is traditionally planted from late April through June and is harvested in the fall. Planting area and production strategy is influenced by a number of factors including international and domestic market trends, relative prices of competing crops, input availability, weather forecast, and government policy. In most of Pakistan's cotton growing areas, early sowing of cotton, especially with biotech seeds, is steadily increasing. It is estimated that half a million acres will be planted earlier this year due to the success of last year's early sowing. Field reports indicate that growers have started planting cotton as early as January, three months

earlier than the normal planting season (April - June).

In 2011, cotton production was estimated at 10.0 million bales. A slight decline in production is expected for the upcoming marketing year as area declines in response to lower cotton prices. Assuming normal weather conditions, low pest infestation and good prices, production is projected to be roughly 9.2 million bales in 2012 (Figure 104).





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 750,000 from the previous year. Since that time, mill use has ranged between 10.0 million bales and 10.8 million bales.

Synthetic and artificial silk yarn continues to gain acceptance among consumers seeking less-expensive blended products. The future growth in cotton versus synthetic fiber will be determined by the relative prices of the products. Share of synthetics is gradually increasing. Cotton-synthetic blends are popular due to their durability and ease in washing and maintenance.

Despite these obstacles, Pakistan's mill consumption is projected to grow to roughly 10.7 million bales for the 2012 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 800,000 bales during the 2011 marketing year. With growing demand for 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. Pakistan is one of the largest importers of U.S. Pima cotton, particularly for its specialized export industry.

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 2012. Cotton imports for the 2012 marketing year are expected to be around the 2.4 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.

For the 2008 marketing year, Turkey produced an estimated 1.9 million bales (Figure 105). 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.



Figure 105 - 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 the 2010 marketing year, with increased acres and improved yields due to improved planting techniques and increased utilization of certified seeds, cotton production increased to 2.1 million bales. Estimates for 2011 have production increasing 1.0 million bales due in large part to increased cotton acreage. Production is estimated to decline slightly to 2.6 million bales in 2012.

The Turkish textile industry experienced a boom in demand during 2010 led by EU origin orders. Increases in domestic demand and production costs had reportedly caused Chinese and Indian producers to focus more on their home markets and adversely affected their focus on international markets. Trade figures available indicate that Turkish textiles and ready-to-wear item exports were up significantly during 2010. The high quality of Turkish textile products, geographical proximity, fast response time, and improved design all contributed to the increase in exports. Additionally, high world cotton prices increased the cost of production for Far-eastern producers who buy and sell in US dollars. The Turkish textile industry however buys its raw materials in US dollars and sells to EU member countries in Euros. Also, Turkish producers were covered by long term cotton purchasing contracts, so they could be slower in increasing prices.

The textile and garment industries continue to be crucial to the Turkish economy, accounting for 8 percent of its GDP, 16 percent of its total industrial production and about 10 percent of its manufacturing jobs. Turkey is the second largest apparel and textile supplier to the EU after China, and is the eighth largest textile exporter and fourth largest apparel exporter in the world. With that in mind, mill use for the 2012 marketing year should increase modestly to 5.6 million bales, while imports increase to 3.1 million bales.

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 106). 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.



Figure 106 - Australia Cotton Supply & Use

With timely rains, Australia continued to improve production with a 2009 crop estimated at 1.8 million bales. Australia appears to have fully recovered from the long and severe drought which began in 2002.

Confidence in cotton production at present is considered to be at an all-time high. Furthermore, historically high rainfall has allowed many producers to carryover much of their irrigation water and, combined with the expected high allocations for the upcoming year, is likely to deliver an abundance of irrigation water for the foreseeable future.

Increased irrigation water availability and high prices are expected to result in increased area planted to high yielding irrigated cotton, increasing overall yield despite a lower total planted area. Current estimates put Australia's cotton production at 5.0 million bales for the 2011 marketing year. A return to more normal weather should allow Australia production to remain relatively unchanged at 5.0 million bales in 2012.

Australia exports virtually all of their cotton production. For the 2011 marketing year, exports are estimated to reach 4.0 million bales. With production unchanged in the 2012 marketing year, exports are expected to rise slightly to 4.9 million bales.

Brazil

Due to adoption of new biotech cottonseed, many experts have a positive outlook for Brazil's production. Brazil's National Technical Commission of Biosafety (CTNBio) has approved six biotech cotton events and five have been commercially released. The single event varieties include: Bollgard (Bt1), Roundup Ready (RR1), Liberty Link (LL) and Widestrike. Only limited quantities of Widestrike seed were available for the 2011 season. However, these single-event genetically-engineered varieties do not provide broad protection against regionally specific pests and disease. There were also limited quantities of the only approved double-stacked trait variety Roundup Ready Bollgard cotton (RR1XBt1). Sources confirm biotechnology adoption for cotton in Brazil should reach 30% in 2011/12, mostly Liberty Link, compared to 60-80% 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 in 2 to 3 years the benefits of second generation double-stacked trait seed varieties, such as, insect resistant (Bt2) and herbicide tolerant (RR2). Adoption of GE cotton varieties are expected to spike and surpass 80% once the desired traits are made available to producers.

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 2011 crop. Current estimates place production for the 2011 marketing year at 9.0 million bales (Figure 107). For the 2012 marketing year, harvested area is estimated at 3.2 million acres, down slightly from 2011. Lower area will result in a production estimate of 8.4 million bales in 2012.





Brazilian mill use for the 2011 marketing year was unchanged at 4.3 million bales. Brazilian cotton consumption will remain stable in the 2012 marketing year with mill use estimated at 4.3 million bales.

In terms of trade, Brazil is expected to export 3.9 million bales of cotton in the 2011 marketing year. For the 2012 marketing year, exports are expected to grow to slightly over 4.2 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. A farmer's decision to grow cotton depends on several factors, including payment received for last year's crop, procurement and distribution of inputs, access to input credits and national pricing policy. Government policies and farmers' associations are pushing aggressive seed cotton production goals by addressing these factors. As a result, cotton production in 2011 increased over 630,000 bales to 2.9 million bales. Policies in Burkina Faso and Mali are driving cotton production in West Africa which account for 88 percent of the increase.

There are a few developments on current activities in the cotton sector in Burkina Faso. During a meeting, organized in September 2011 by the West African Economic and Monetary Union (WAEMU) committee in partnership with the European Union and the International Trade Center (ITC), it revised the 2003-2010 strategy, and its new implementation plan was presented

and adopted by all cotton sectors. The final document is the 2011-2020 revised strategy to increase competitiveness of the cotton textile sector. The new cotton agenda maintains the same goal as the previous agenda: process 25 percent of local cotton production for country members. The new 2011-2020 cotton agenda has five objectives: 1.) Improve productivity of the cotton textile industry in the WAEMU zone; 2.) Improve quality of cotton in the WAEMU zone; 3.) Support development and promotion of cotton and textiles of the WAEMU zone in regional and international markets; 4.) Develop local processing of cotton fiber; 5.) Foster development and the promotion of the cotton seed.

In Mali, The Compagnie Malienne pour le Developpement des Textiles (CMDT), a state-owned company for the development of textiles, monopolizes the country's cotton production. Since 2008, the government of Mali has tried to privatize CMDT and expected to complete the transfer of assets by April 2011. In January 2011, according to the website, www.acp-cotton.org, from the EU-Africa partnership on cotton, it reported that following the tender to purchase CMDT, the consortium between Dagris (France) and Ivoire Coton (Côte d'Ivoire) decided to drop their bids leaving three companies: Olam (Singapore), Yumie (China) and Samab (Mali). Mali is considering creating four subsidiaries whereby capital would be assigned accordingly: 61 percent to the private company, 20 percent to the producers, 17 percent to the Government and two percent to the CMDT staff. To oversee these new subsidiaries, the government of Mali plans to create a regulatory authority that would be responsible for ensuring compliance with rules governing the activities of the cotton sector, proposing measures to improve the functioning of the sector, sanctioning improper activities in the sector, and

contributing to the settlement of disputes between industry players.

In Benin, devastating floods came at a time when the government of Benin was trying to revitalize the cotton sector in several ways including making sure that farmers are fully paid for the previous year's crop, consolidating farmer's organizations, creating village cooperatives, educating small producers and fortifying input committees. Time will tell what kind of impact the weather had on the government's efforts.

The future of cotton remains uncertain in Chad. Poor fiscal management has made it very difficult for the state-owned Cotontchad, the only cotton processing company in Chad, to pay its farmers for their harvest as well as purchase fertilizer and pesticides that it customarily supplies to farmers on credit. The limited quantity or complete lack of fertilizer and pesticides has led to low yields and poor quality. Also, Chad has not raised the price for seed cotton like the rest of its neighbors in West Africa jeopardizing the return of farmers to cotton.

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. The current projections have West Africa producing 3.0 million bales in 2012 (Figure 108), up slightly from 2011. 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 2011 marketing year, it is estimated that the region will export roughly 2.4 million bales. For 2012, West Africa is expected to increase their exports to over 2.8 million bales.



Figure 108 - West Africa Cotton Supply & Use

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 2011 grew 468,000 bales, to 1.2 million 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.

Cotton yields across the main cotton producing areas vary significantly. The highest yielding areas are expected to be the La Laguna and Chihuahua regions where cotton growers have adopted the use of genetically engineered (GE) seed varieties. The CMCA stated that biotechnology continues to be an important tool in reducing pesticide usage. CMCA stated that pesticide application dropped by more than 50 percent due to use of GE seeds and that GE seeds have stimulated yield increases as many varieties are drought tolerant. 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. With continued use of these improved varieties, a crop of roughly 1.1 million bales in the 2012 marketing year is expected (Figure 109).



Figure 109 - Mexico Cotton Supply & Use

In terms of consumption, Mexico's outlook remains basically unchanged. Marketing year 2011 mill use is estimated at 1.7 million bales. For the 2012 marketing year, Mexican mill consumption is projected to remain stable at 1.7 million bales.

Cotton imports fell to 1.1 million bales during the 2011 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 2012 marketing year.

Indonesia

Indonesian cotton production was estimated to reach 25,000 bales in the 2011 marketing year (Figure 110). Current projections show this number unchanged for 2012 due to fierce competition from other crops such as corn and rice and little support from the government.



Figure 110 - Indonesia Cotton Supply & Use

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 2012 is estimated to improve modestly to 2.1 million bales. The same holds true for imports, estimated at 2.2 million bales for the 2012 marketing year.

Vietnam

Vietnam produces a relatively small amount of cotton and must compete with corn for available area. In addition, the Vietnamese government has not yet approved the commercialization of transgenic cotton, thereby impeding the development of domestic cottonseed. For the 2011 marketing year, production stands at 25,000 bales with no change expected for the 2012 crop (Figure 111).



Figure 111 - Vietnam Cotton Supply & Use

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.

Estimates place 2011 marketing year mill use at 1.5 million bales. Growth continues into the 2012 marketing year with consumption climbing to 1.6 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 2011 marketing year, Vietnam will import 1.5 million bales and estimates are slightly higher for the 2012 marketing year at 1.6 million bales.

Bangladesh

Marketing year 2011 cotton production in Bangladesh totaled 66,000 bales (Figure 112). Cotton production is vulnerable to excessive rainfalls/floods and pest infestations which are common in Bangladesh. With that in mind, production for the 2012 marketing year is set at 65,000 bales.



Figure 112 - 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 13% to 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. During the last three decades, the Bangladesh textile sector has received the highest level of investment (around 3.5 billion Euros), and is the second largest sector after agriculture in terms of labor force. 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 2011 mill use was estimated at 3.3 million bales and a slight increase is expected in the 2012 marketing year with estimates approaching 3.6 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 3.2 million for the 2011 marketing year and further expand in 2012 to roughly 3.6 million.

United States Trade

For the 2011 marketing year, U.S. exports of raw cotton are estimated at 11.1 million bales (Figure 113), down 3.3 million from 2010. Exports recover in the 2012 marketing year with projections of roughly 13.0 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 over 75% of total use for the 2011 marketing year.



Figure 113 - 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, Vietnam, and Thailand have emerged as significant buyers (Figure 114).

Top U.S. Raw Cotton Export Destinations				
2000		2011YTD		
Country	(000 480-Lb. Bales)	Country	(000 480-Lb. Bales)	
Mexico	1,819	China	6,024	
Turkey	613	Turkey	885	
Indonesia	541	Mexico	874	
Taiwan	407	Vietnam	387	
Japan	383	Thailand	374	
Hong Kong	297	Korean Republic	312	

Figure 114 - Top U.S. Raw Cotton Export Destinations

World Trade

In the 2011 marketing year, world cotton trade climbed 800,000 bales to 36.5 million bales from the previous season due to slight improvement in the global economy (Figure 115). Current estimates put 2012 marketing year world cotton exports at 40.4 million bales, up 3.9 million bales. As previously discussed, U.S. exports are projected to increase to 13.0 million bales in the 2012 marketing year. India, Brazil and Australia are also expected to expand exports.



Figure 115 - World Cotton Exports

China's imports should grow along with some of the other traditional Asian consuming and importing markets (Figure 116). Growth in world consumption will spur an increase in cotton trade.



Figure 116 - World Cotton Imports

Examining the world trade-to-mill use ratio for the 2011 marketing year shows a climb to 33% from 31% last year (Figure 117). For 2012 the ratio is expected to grow to 35%, the highest since 2005.



Figure 117 - World Trade Share of Mill Use

World Ending Stocks

For the 2012 marketing year, ending stocks are estimated to increase by 5.7 million bales while the stocks-to-use ratio is estimated at 56% (Figure 118). 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.



Figure 118 - World Cotton Ending Stocks

The overall balance sheet indicates continued pressure on prices as the projected world stocks-to-use ratio climbs to 56% for the 2012 marketing year (Figure 119).



Figure 119 - World Cotton Stocks vs Price