

2011 and Preliminary 2012 U.S. Organic Cotton Production & Marketing Trends

January 2013



- Executive Summary
- Background
- 2011 U.S. Organic Cotton
- Production Overview
- Acres Planted / Acres Harvested
- Pricing & Market
- Agriculture
- Farm Size, Revenues & Crop Insurance
- Experienced Producers
- Outlook for 2012 and Beyond
- GOTS
- Global Supply & Demand
- Growth Constraints
- Areas of Opportunity
- Government Agency Resources
- Methodology
- Acknowledgements
- Appendix: Data Resources

Produced by:



For:



2011 and Preliminary 2012 U.S. Organic Cotton Production & Marketing Trends

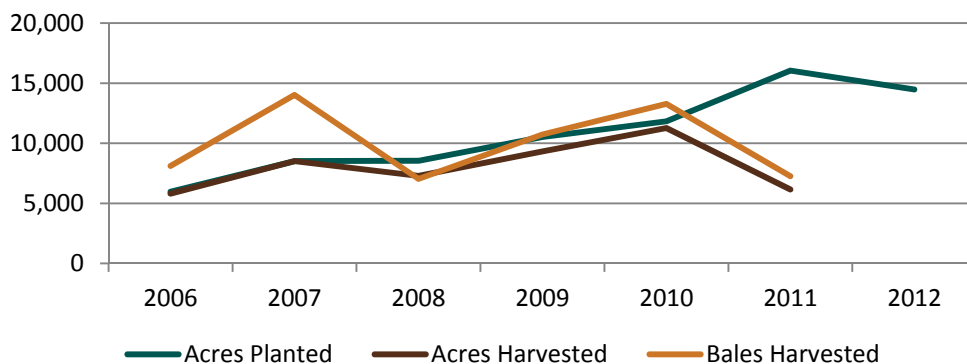
EXECUTIVE SUMMARY

Produced by the Organic Trade Association, January 2013

U.S. organic cotton production contracted in 2011, due in large part to the sweeping drought in the Southern Plains. While acres planted to organic cotton rose 36% from 11,827 in 2010 to 16,050 in 2011, acres harvested plunged to 6,151 – with nearly two thirds of the planted crop abandoned to drought. As a result, 7,259 bales were harvested in 2011, representing a 45% reduction in the overall U.S. organic cotton harvest for that year.

The majority of the U.S. organic cotton crop for 2011 was planted to upland cotton, with pima cotton representing fewer than 1,000 planted acres.

Figure 1: U.S. Organic Cotton Production



A predominance of survey respondents reported receiving \$1.50 per pound for organic upland cotton, with prices reaching as high as \$3.00 for organic pima cotton. These prices were roughly in line with U.S. organic cotton prices for the past several years. It is important to remember that while the U.S. supply of organic cotton was dramatically lessened in 2011, cotton remains one of the most volatile global organic commodities. Thus while drought conditions severely decreased the U.S. organic cotton supply, the same was not true for all international organic cotton suppliers, some of which were able to deliver organic cotton to the U.S. for less than the price of domestic organic cotton.

Commercial availability of organic seed is a major hurdle for organic cotton producers. Genetically Modified (GM) seeds have become dominant in the marketplace as major seed companies have purchased smaller labels and discontinued their organic, non-GM and non-treated cottonseed offerings.

On a positive note, 2011 represented the first crop year in which USDA's Risk Management Agency allowed organic producers to opt for an "Organic Price Election," when purchasing multi-peril crop insurance. This meant that, for an additional premium, organic farmers were compensated at a rate of \$.37 per pound higher than the rate at which conventional cotton was trading in the region.

The Southern Plains drought that devastated the 2011 organic cotton crop continued into 2012. However, it appeared to have taken a less extreme toll on cotton in 2012. While 14,481 acres were planted to organic cotton in the U.S. in 2012, final harvest numbers are not yet available.

For more information, see the full report, or contact Angela Jagiello at (802) 275-3800.

BACKGROUND

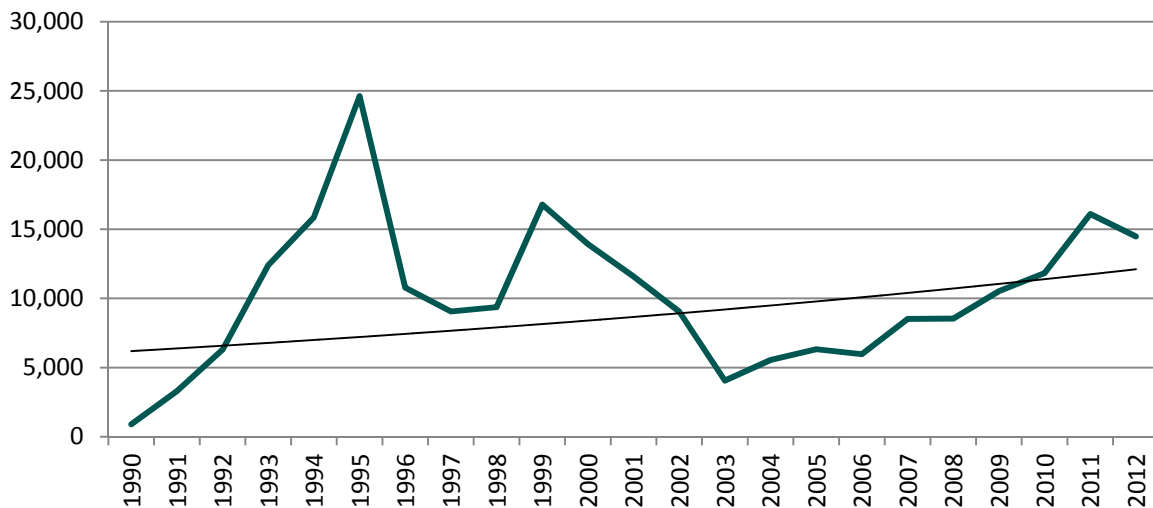
In December 2012, the Organic Trade Association (OTA) identified 83 people and businesses thought to grow organic cotton in Arizona, California, New Mexico, North Carolina and Texas, and mailed a survey to them to identify trends in U.S. organic cotton farming.

The survey collected data on 2011 U.S. organic cotton production and marketing and preliminary information on 2012 organic cotton production. The Texas Organic Cotton Marketing Cooperative (TOCMC) also provided extensive data for this report.

2011 ORGANIC COTTON PRODUCTION OVERVIEW

U.S. organic cotton production contracted in 2011, due in large part to the sweeping drought in the Southern Plains. While acres planted in organic cotton rose 36% from 11,827 in 2010 to 16,050 in 2011, acres harvested plunged to 6,151 – with nearly two thirds of the planted crop abandoned to drought. As a result, 7,259 bales were harvested in 2011, representing a 45% reduction in the overall U.S. organic cotton harvest for that year.

Figure 1: U.S. Organic Cotton Acres Planted



ACRES PLANTED / ACRES HARVESTED

U.S. organic cotton reached 16,050 acres planted in 2011, continuing an eight-year upward trend. While this number falls below peak production years in 1995 and 1999, it is worth noting that unstable demand levels, coupled with price fluctuations in the conventional cotton market, resulted in steep declines in acres planted immediately following those peak years.

U.S. organic cotton producers harvested cotton from 6,151 acres, representing only 38 percent of their planted acres in 2011. This resulted in 7,259 bales harvested. Because dryland acreage outpaces

irrigated acres for organic cotton by a factor of nearly two to one, U.S. organic cotton was particularly hard hit by the drought conditions of 2011. The result was nearly 10,000 acres abandoned due to the lack of moisture. Further, several large organic cotton producers indicated that they did not bother to plant a 2012 crop, potentially further reducing supplies in future years.

PRICING & MARKET

A predominance of survey respondents reported receiving \$1.50 per pound for organic upland cotton, with prices reaching as high as \$3.00 for organic pima cotton. These prices were roughly in line with U.S. organic cotton prices for the past several years. It is important to remember that while the U.S. supply of organic cotton was dramatically lessened in 2011, cotton remains one of the most volatile global organic commodities. Thus, while drought conditions severely decreased the U.S. organic cotton supply, the same was not true for all international organic cotton suppliers, some of which were able to deliver organic cotton to the United States for less than the price of domestic organic cotton. Most producers indicated that their cotton was sold by a marketing cooperative.

AGRICULTURE

Commercial availability of organic seed is a major hurdle for organic cotton producers. Genetically Modified (GM) seeds have become dominant in the marketplace, as major seed companies have purchased smaller labels and discontinued their organic, non-GM and non-treated cottonseed offerings. Most survey respondents reported using at least a portion of their own saved cottonseed from year to year, while others reported having lost their seed stocks due to drought.

As one expert source observed, although it may still be possible to source organic – or at least untreated – seeds, unfortunately little corporate or federally funded research has been conducted to improve the drought resistance, or other key performance measures, of these seed varieties. That said, it is worth noting that there are a few dedicated researchers, such as Texas A&M's Jane Dever, Ph. D., who continue to make strides in the realm of cotton breeding.

FARM SIZE, REVENUES & CROP INSURANCE

Farm size averaged 525 acres, with some farming as few as 14 acres, and others farming as many as 3,200 acres. Although several growers reported revenues upwards of \$100,000 from organic cotton sales in 2011, many others were forced to abandon their entire crops.

On a positive note for U.S. organic cotton growers, 2011 represented the first crop year in which USDA's Risk Management Agency allowed organic producers the option of an "Organic Price Election," when purchasing multi-peril crop insurance. This meant that, for an additional premium, organic farmers were compensated at a rate of \$.37 per pound higher than the rate at which conventional cotton was trading in a given region. For example, in an instance where conventional cotton may have been trading for \$.93 per pound, an organic farmer, who had opted for the Organic Price Election would have been compensated for lost crops at \$1.30 per pound, or nearly 40% more than the conventional price.

Cotton is one of only a handful of crops where organic growers have the option of insuring their crops at a higher rate than their conventional counterparts.

EXPERIENCED PRODUCERS

Organic cotton growers face myriad additional challenges posed by weed and pest pressure without the assistance of conventional pesticides, biotechnology, and other commonly employed resources. However, the average organic grower has been certified for 13 years—affording them a wealth of acquired knowledge to combat these problems. A handful of newcomers to organic cotton have brought the average length a farm has been certified down by two years since the previous study.

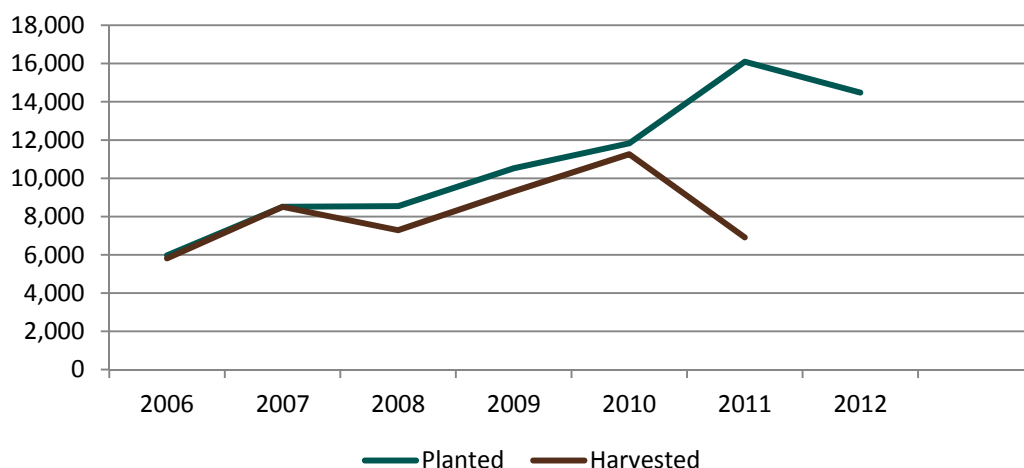
Additionally, U.S. organic cotton growers enjoy healthy demand for their products, cultivated, at least in part, through positive relationships established over their years in business.

OUTLOOK FOR 2012 & BEYOND

The Southern Plains drought that devastated the 2011 organic cotton crop continued into 2012. However, it appeared to have taken a less extreme toll on cotton in 2012. Final harvest numbers are not yet available for the organic cotton crop of 2012. However, addressing the ongoing drought's effects on the overall crop (conventional and organic), USDA's Economic Research Service said:

While conditions have been dry in many cotton-producing regions of the United States, they are much improved from the drought conditions experienced in 2011. Yields for the 2012 crop are now estimated (in the November WASDE report) at 802 pounds per acre, up from 790 for the 2011 crop. And, despite 2.38 million fewer acres planted to cotton this year, harvested acreage is expected to exceed 2011 levels by nearly 1 million, reflecting sharply lower abandonment this year. The result is that U.S. cotton production in 2012 is now expected to exceed 2011 levels by about 1.9 million bales, or about 12%.

Figure 2: U.S. Organic Cotton Acres Harvested

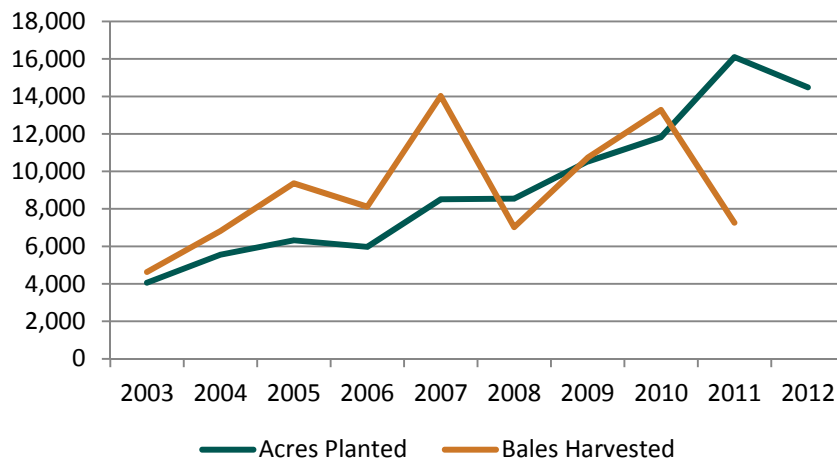


According to the National Weather Service at Lubbock, Texas:

The year of 2012 will go down as one of the warmest and driest years on record in West Texas. In fact, although the summer was not as hot as in 2011, the year in its entirety will go down as the warmest year on record at both Lubbock and Childress. While precipitation amounts improved from 2011, they remained below the long-term average for most locations and were not sufficient to bring an improvement in the drought conditions across the South Plains. The South Plains area was not suffering alone with the warm and dry weather. According to the National Weather Service, the 2012 drought was the most extensive drought to affect the U.S. since the 1930s; drought conditions affected more than half the country for a majority of 2012. Additionally, 2012 was the warmest year on record for the lower 48 states.

Anticipating the continuation of drought conditions from 2011, several organic cotton farmers –Texas-based and otherwise—reported that they had not planted a crop in 2012. As with 2011, much of the dryland acreage crop failed to thrive owing to the lack of moisture. Compounding matters, irrigated acres were expected to yield less cotton due to the lack of additional rainfall. Further frustrating the potential for the 2012 organic cotton crop, several areas experienced early frost, potentially harming the developing cotton fibers.

Figure 3: U.S. Organic Cotton Production, 2001-2012



Year harvested	Total bales
2012	Not yet available
2011	7,259
2010	13,279
2009	10,731
2008	7,026
2007	14,025
2006	8,116
2005	9,360
2004	6,814
2003	4,628

Survey respondents reported a ten percent decrease in acres planted – from 16,050 in 2011 to 14,481 for 2012. They envision a five-year increase in planted acres to 16,240, slightly more than the 2011 total for planted acres. Where opportunity exists for significant expansion of U.S. organic acreage is most likely in nascent organic cotton-growing regions such as North Carolina.

GOTS

In 2011, USDA issued a policy memorandum addressing labeling of textile products containing certified organic fibers including cotton, linen and wool. According to USDA, products containing organically grown fibers that have been processed according to the Global Organic Textile Standard (GOTS) may now be marketed as organic, with certain restrictions. GOTS is the stringent voluntary global standard for the entire post-harvest processing (including spinning, knitting, weaving, dyeing and manufacturing) of apparel and home textiles made with organic fiber.

While it is too soon to tell what effect the widespread adoption of GOTS may have on the demand for domestic organic cotton, it is certainly a positive development for the market as a whole.

GLOBAL SUPPLY AND DEMAND

According to Textile Exchange, approximately 693,900 bales of organic cotton were grown on 802,047 acres around the globe in 2010-2011. India grew the most, followed by (in order of rank) Syria, China, Turkey, the United States, Tanzania, Egypt, Mali, Kyrgyzstan, Peru, Pakistan, Uganda, Burkina Faso, Benin, Paraguay, Israel, Tajikistan, Brazil, Nicaragua, and Senegal. However, the organization also notes that global organic cotton production declined 35 percent from 241,697 metric tons in 2010-2011 to 151,079 for the 2011-2012 growing season.

GROWTH CONSTRAINTS

The weather conditions affecting supply are discussed above. However, there are additional factors limiting the supply of U.S. organic cotton at this time.

Lack of commercial availability of organic seeds is a major factor inhibiting the growth of U.S. organic cotton. Growing cotton organically also involves overcoming pressures faced by all cotton farmers, but made more difficult by the constraints of the organic regulations. These pressures include weeds, drought conditions and the presence of common pests such as the boll weevil. Compounding these difficulties, very little work is being done to improve cottonseed through traditional breeding techniques.

AREAS OF OPPORTUNITY

U.S. organic cotton growers responded that they could further benefit from the development of the following resources:

1. Market development to encourage better gate pricing
2. Improvements to crop insurance
3. Cotton seed varieties better suited to growing conditions
4. Tax credits and other financial incentives to encourage organic production
5. Streamlined administrative process for the organic grower

GOVERNMENT AGENCY RESOURCES

There are numerous resources utilized by U.S. organic cotton growers. In order of popularity, farmers responded that they had benefited from:

1. USDA's Farm Service Agency
2. National Resources Conservation Service programs.
3. Organic Cost Share Program
<http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateQ&leftNav=NationalOrganicProgram&page=NOPCostSharing&description=Organic%20Cost%20Share%20Program&acct=nopgeninfo>
4. Environmental Quality Incentive Program (EQIP)
<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip>
5. Appropriate Technology Transfer for Rural Areas (ATTRA), which is the National Sustainable Agriculture Information Service, sustained with funding from USDA through the Rural Business Cooperative Service.

It is worth noting that several of these programs were eliminated or restricted as part of the negotiations that helped the United States avert the much discussed "fiscal cliff." While it is possible they may be restored in the next five-year farm bill, there is no certainty of this. At a minimum, these resources will be unavailable in 2013.

METHODOLOGY

In December 2012, the Organic Trade Association mailed surveys to 83 people/companies believed to be farming organic cotton. Surveys were sent to Arizona, California, New Mexico, Texas and North Carolina, thought to represent all the states with growers of organic cotton in the United States in 2011. OTA identified growers from a list of farmers of organic cotton from the prior year's survey, state agencies and certification programs, and a cooperative in the United States that works with organic farmers.

Several of those who were sent surveys were removed from the survey population because they did not grow or no longer grew organic cotton, or their land is being farmed by another farmer. Of those contacted, 12 of the completed surveys qualified for and were included in the survey analysis because the respondents grew organic cotton in 2011. These surveys include eight respondents who are members of the Texas Organic Cotton Marketing Cooperative (TOCMC), and four other qualifying surveys from farmers not associated with TOCMC. In 2011, TOCMC had a total of 30 members who were certified organic and grew organic cotton.

ACKNOWLEDGEMENTS

This annual survey is only possible because U.S. organic cotton farmers generously contribute their limited time during the growing and harvest seasons to complete the farm survey and respond to

telephone calls and e-mails. Their time and sharing of data about their farming operations are greatly appreciated. Many have contributed information on a yearly basis, making this survey a reality.

Many thanks to Kelly Pepper of Texas Organic Cotton Marketing Cooperative for again sharing his time and data on the cooperative, both of which were invaluable in developing an accurate profile of 2011 organic cotton production trends and a preliminary look at 2012 data.

Most importantly, thanks to Cotton Incorporated which made this survey possible with a grant to the Organic Trade Association.

For inquiries about this report, contact Angela Jagiello at (802) 275-3800.

APPENDIX: DATA RESOURCES

Table 1: Estimated U.S. Organic Acreage Planted

Year	Planted acres	% change
2017 Est.	16,240	12%
2012 Est.	14,481	-10%
2011	16,050	36%
2010	11,827	12%
2009	10,521	23%
2008	8,539	0%
2007	8,510	43%
2006	5,971	-6%
2005	6,325	14%
2004	5,550	37%
2003	4,060	-55%
2002	9,044	-22%
2001	11,586	-17%
2000	13,926	-17%
1999	16,785	79%
1998	9,368	4%
1997	9,050	-16%
1996	10,778	-56%
1995	24,625	55%
1994	15,856	28%
1993	12,402	97%
1992	6,306	92%
1991	3,290	266%
1990	900	N/A

Table 2: Estimated Organic Cotton Acreage

Year	Planted acres	Acres Harvested	Percent Harvested
2012	14,481 (est.)	Not yet available	Not yet available
2011	16,050	6,151	38%
2010	11,827	11,262	95%
2009	10,521	9,321	89%
2008	8,593	7,289	85%
2007	8,510	8,510	100%
2006	5,971	5,811	97%

Table 3: Bales Harvested 2001-2011

Year harvested	Total bales
2012	Not yet available
2011	7,259
2010	13,279
2009	10,731
2008	7,026
2007	14,025
2006	8,116
2005	9,360
2004	6,814
2003	4,628
2002	No data available
2001	9,897