

2010 and Preliminary 2011 U.S. Organic Cotton Production & Marketing Trends

Produced by the Organic Trade Association

January 2012

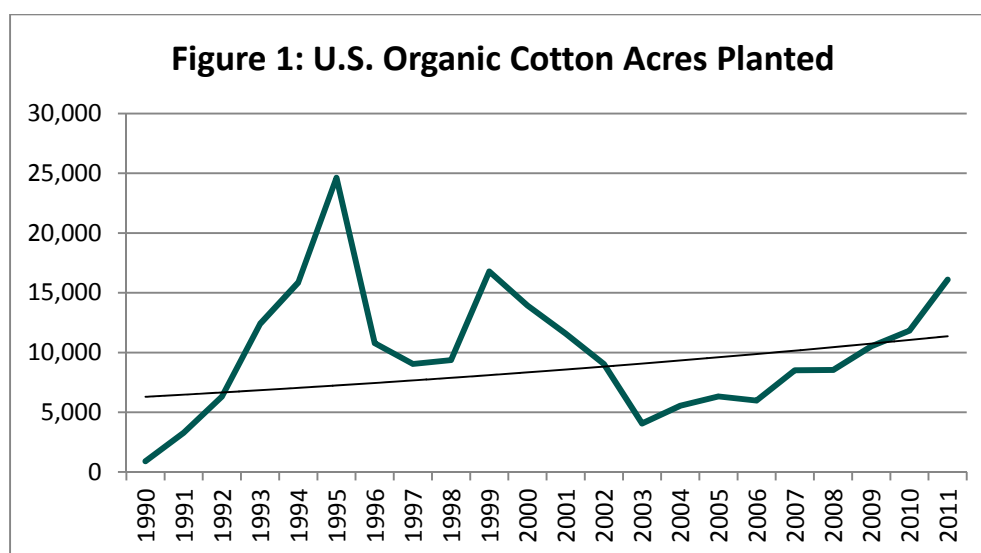
Background

In December 2011, the Organic Trade Association (OTA) identified 79 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 2010 U.S. organic cotton production and marketing and preliminary information on 2011 organic cotton production. The Texas Organic Cotton Marketing Cooperative (TOCMC) also provided extensive data for this report.

2010 Organic Cotton Production Overview

U.S. organic cotton production continues to grow, encouraged by rising consumer demand, favorable price premiums, and regulatory shifts that will ease marketing restrictions for organic cotton products, further bolstering manufacturing activity. Planted acres were up 36% in 2010, while bales harvested were up nearly 24%.



Acres Planted

U.S. organic cotton reached 11,827 acres planted in 2010, having been in an upward trend since 2003. While this figure falls below peak production years in 1995 and 1999, the U.S. market has stabilized substantially and is now growing in a more sustainable fashion – allowing growers who have invested significant time and financial resources to market their crop successfully to a ready audience of both domestic and international buyers. Accelerated planting of organic cotton acres in 1995 and 1999 also appears to correlate with surges in prices for conventional cotton during the same period.

Acres Harvested

U.S. organic cotton producers harvested cotton from 11,262 acres, representing 95 percent of their planted acres in 2010. This resulted in 13,279 bales harvested. Early estimates for 2011 are significantly lower, and will be discussed in detail below.

Production Cost

Survey respondents reported their cost per acre to grow organic cotton ranged from \$350/acre to \$650/acre, with average cost reported at \$440/acre. The U.S. Department of Agriculture's (USDA's) Economic Research Service estimates the total cost to produce conventional cotton in 2010 was \$728.47/acre (<http://www.ers.usda.gov/Data/CostsAndReturns/testpick.htm>).

Note: USDA's report of cotton production costs is a comprehensive comparison of input costs and overhead expenses. Because organic cotton growers were not supplied with specific parameters when responding to this survey, direct comparisons may be misleading.

Pricing and Market

A predominance of survey respondents reported receiving \$1.50 per pound for organic cotton, with prices ranging from as high as \$2.40 for organic Pima cotton to a low of \$1.35 for one organic Upland producer. Most producers indicated that their cotton was sold by a marketing cooperative. Several indicated that 100% of their crop was sold to international buyers. According to USDA's Market News Portal, the market price for a pound of conventional Upland cotton was \$.95 per pound in December 2011, while the price per pound for conventional Pima cotton was \$1.50.

Farm Size

Farm size averaged 447 acres, with some farming as few as 46 acres, and others farming as many as 4,500 acres.

Most farmers shared their sales information in the survey. Nine farmers reported total **gross, annual farm sales** in 2010 of over \$100,000; one reported sales of \$25,000 to \$49,000, and one reported \$50,000 to \$99,999 in sales. Six farmers had gross annual sales from their **organic cotton alone** of over \$100,000, and three had gross annual sales from organic cotton of \$50,000 to \$99,999.

Experienced Producers

Organic cotton growers face myriad additional challenges posed by weed and pest pressure without the assistance of conventional pesticides, biotechnology seeds, and other commonly employed resources. However, the average organic grower has been certified for 15 years – affording them a wealth of acquired knowledge to combat these problems.

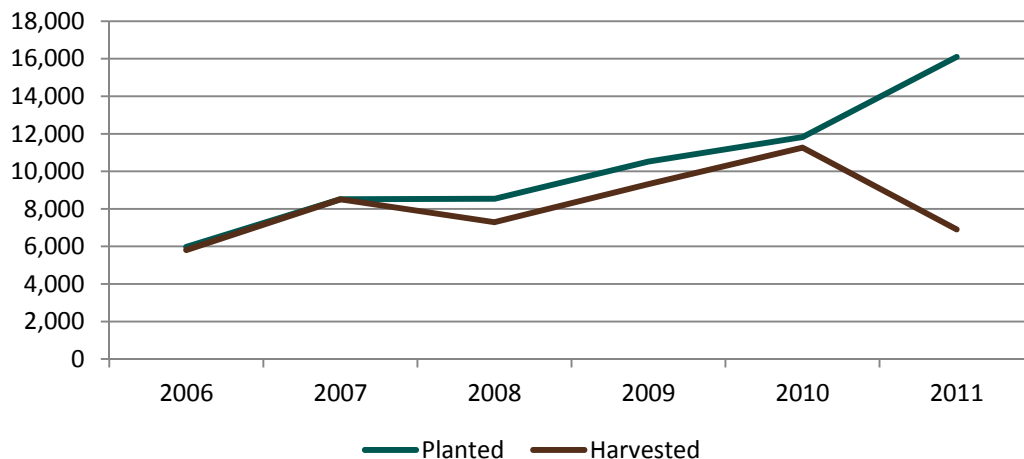
Additionally, U.S. organic cotton growers enjoy healthy demand for their products, cultivated at least in part through positive relationships established over their years in business.

Outlook for 2011

Despite the fact that 2011 saw the largest number acres of U.S. organic cotton planted since 1999, both acres and bales harvested are expected to be down, by 38 and 45 percent, respectively, due to crippling drought conditions in the Southern Plains.

The year 2011 brought abnormally hot and dry conditions to Texas, home to the Texas Organic Cotton Marketing Cooperative (TOCMC) and representing the lion's share of organic cotton production in the United States. The National Weather Service station at Lubbock, TX, measured average temperatures across the Southern Plains at a record 3.4 degrees hotter than any other summer on record.

Figure 2: U.S. Organic Cotton Acres Harvested



According to the National Weather Service:

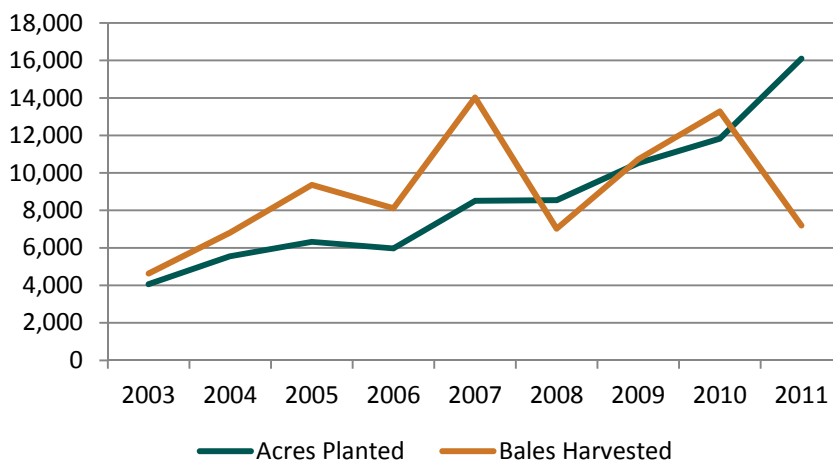
“High temperatures reached 90 degrees or higher EVERY DAY during meteorological summer (June 1-August 31), the first time on record that this has ever occurred. Additionally, the mercury exceeded 100 degrees 44 times, or about one half of the days of meteorological summer. As a result, the average high temperatures were record-breaking by a big margin and were 2.6 degrees higher than the next closest year! However, it was not just high temperatures that pushed this summer over the edge in record-breaking fashion, as overnight low temperatures were unusually warm as well. The low temperature was 75 degrees or higher about 1/3 of the summer.”

In addition to the punishing temperatures, the region experienced extremely dry conditions. Again, quoting the National Weather Service:

“At Lubbock, the extremely dry conditions have persisted from spring through the entire summer. This June through August easily ranks as the driest such period on record. 2011 will go down as the only year that has ever had less than an inch or even less than two inches of rain during this same period.”

The drought conditions forced TOCMC farmers to abandon more than 10,000 acres – just over 65 percent of its planted crop in 2011. The vast majority of its dryland acreage crop simply never sprouted due to lack of moisture. Compounding matters, irrigated acres were expected to yield less cotton due to the lack of additional rainfall.

Figure 3: U.S. Organic Cotton Production, 2001-2011



Year harvested	Total bales
2011 (est.)	7,240
2010	13,279
2009	10,731
2008	7,026
2007	14,025
2006	8,116
2005	9,360
2004	6,814
2003	4,628

Looking to the future

Survey respondents anticipate only modest net gains in acreage for 2012 and looking five years ahead to 2016. For 2012, they forecast a 2% acreage gain, bringing U.S. organic cotton acres to 16,406, and foresaw another two percent net gain in their five-year forecast, bringing the total to 16,716. This largely reflects a mature, established business for the TOCMC growers. Where opportunity exists for significant expansion of U.S. organic acreage is most likely in nascent organic cotton-growing regions such as North Carolina, where in 2011, a first crop of 65 acres was harvested, yielding 25,000 pounds of organic cotton.

GOTS Organic?

In May 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 were processed according to the Global Organic Textile Standard (GOTS) may 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. The move represents the removal of a barrier for organic cotton producers; USDA's updated position enables organic textile manufacturers to make production and processing claims just as manufacturers of organic food and beverages can.

Growing Demand

The global organic textiles industry grew by 20 percent in 2010 to reach an estimated \$5.6 billion, according to a report by Textile Exchange.

The 2010 Global Market Report on Sustainable Textiles reported that the top ten organic cotton-using brands and retailers globally last year included many consumer powerhouses, including Nike, Anvil, Disney and Target. Several brands and retailers more than doubled their usage of organic cotton and plan to do so in 2012 as well. Thus, Textile Exchange projected the global organic cotton market would increase to \$6.2 billion in 2011, and to \$7.4 billion in 2012.

Growth constraints

Several growers noted the widespread adoption of biotech seeds as a major factor discouraging more farmers from growing organic cotton. Not surprisingly, weed control was also among the farmers' top difficulties. A small percentage mentioned competition from international markets as an inhibitor to market growth. One grower lamented "excess paperwork," and another cited the three-year certification period as reasons more growers do not choose to farm organic cotton.

Given the current weather conditions, nearly every farmer mentioned weather, lack of water, or "drought conditions" among their biggest challenges.

Government Agency Resources

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

1. USDA's Farm Service Agency
2. 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>
3. Environmental Quality Incentive Program (EQIP)
<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip>
4. National Resources Conservation Service programs.

Areas of Opportunity

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

1. Cotton seed varieties better suited to growing conditions

2. Market development to encourage better gate pricing
3. Tax credits and other financial incentives to encourage organic production.

Methodology

In December 2011, the Organic Trade Association mailed surveys to 79 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 2010. 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. In addition, all states in which producers grew conventional cotton in 2009, based on 2010 crop production data from the U.S. Department of Agriculture's National Agricultural Statistics Service, were asked if they knew of producers in their states that grew organic cotton. Cotton Incorporated funded the survey.

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, 11 of the completed surveys qualified for and were included in the survey analysis because the respondents grew organic cotton in 2010. These surveys include eight respondents who are members of the Texas Organic Cotton Marketing Cooperative (TOCMC), and three other qualifying surveys from farmers not associated with TOCMC. In 2010, TOCMC had a total of 32 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 2010 organic cotton production trends and a preliminary look at 2011 data.

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

Appendix: Data Resources

Table 1: Estimated U.S. Organic Acreage Planted

Year	Planted acres	% change
2016 Est.	16,716	2%
2012 Est.	16,406	2%
2011	16,097	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
2011	16,097	6,910	43%
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
2011 (est.)	7,240
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