2013 and Preliminary 2014

U.S. Organic Cotton Production & Marketing Trends

January 2015

Produced by:

Organic Trade Association

For: Cotton Incorporated

2013 and Preliminary 2014

U.S. Organic Cotton Production & Marketing Trends

EXECUTIVE SUMMARY

Produced by the Organic Trade Association, January 2015

Overall, U.S. organic cotton production increased in 2013. Acres planted to organic cotton increased 6% from 14,787 in 2012 to 15,685 in 2013. And while acres harvested decreased to 9,262 (from 9,842 in 2012), 10,335 bales were produced in 2013, an increase of about 17% over the prior year.

The majority of the U.S. organic cotton crop for 2013 was planted to upland cotton, with pima cotton representing fewer than 1,000 planted acres.

A predominance of survey respondents reported receiving $1.38 per pound for organic upland cotton, with prices reaching as high as $2.20 for organic pima cotton. This price was lower than what producers have reported in past years. Increased global competition was cited as a factor, along with quality issues in the 2013 crop attributed to weather conditions. Most producers indicated that their cotton was sold by a marketing cooperative.

According to USDA's Agricultural Marketing Service, organic cottonseed prices ranged from $500 to $700 per ton.

The need for better weed controls was voiced by nearly every survey participant. This need is compounded by a lack of availability of seasonal labor in cotton-growing regions.

Commercial availability of organic seed continues to be 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 few are working to improve cotton through traditional breeding techniques, promising research is being conducted in this area by a team at Texas A&M AgriLife Research in Lubbock, Texas.

At the USDA Cotton Production & Processing Research Unit in Lubbock, a mechanical de-linting mechanism, non-chemical defoliant methods and other projects that could greatly benefit organic production are under investigation.

Survey respondents reported a 14% increase in acres planted – from 15,973 in 2013 to 18,234 in 2014. This represents the largest number of U.S. acres devoted to organic cotton since 1995. They envision a five-year increase in planted acres to 19,818.

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

BACKGROUND

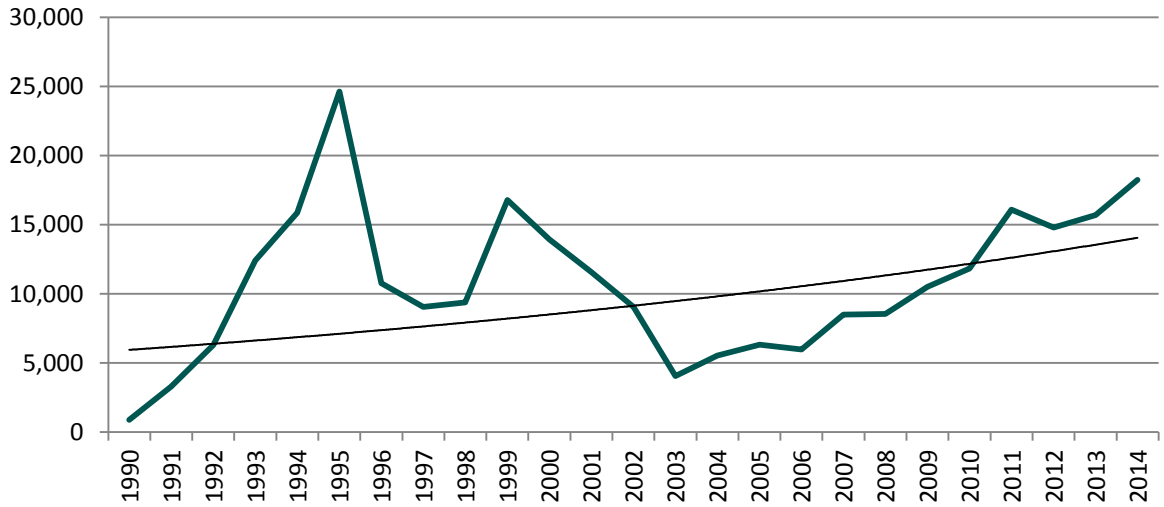
In December 2014, the Organic Trade Association (OTA) identified 62 people and businesses thought to grow organic cotton in Arizona, California, New Mexico, North Carolina and Texas, and mailed a survey to them to identify trends in U.S. organic cotton farming.

The survey collected data on 2013 U.S. organic cotton production and marketing and preliminary information on 2014 organic cotton production. The Texas Organic Cotton Marketing Cooperative (TOCMC) also provided extensive data for this report.

2013 ORGANIC COTTON PRODUCTION OVERVIEW

Overall, U.S. organic cotton production increased in 2013. Acres planted to organic cotton increased 6% from 14,787 in 2012 to 15,685 in 2013. And while acres harvested decreased to 9,262 (from 9,842 in 2012), 10,335 bales were produced in 2013, resulting in an increase of about 17% over the prior year.

Figure 1: U.S. Organic Cotton Acres Planted



ACRES PLANTED / ACRES HARVESTED

Acres planted to U.S. organic cotton grew slightly to reach 15,685 in 2013. U.S. organic cotton producers harvested cotton from 9,262 acres, representing fewer than 60% of their planted acres in 2013, and resulting in production of 10,335 bales – slightly better than a bale per harvested acre. While drought conditions were not as punishing as recent years, yields and quality for the 2013 crop suffered from the impacts of a few severe wind and hail incidents.

PRICING & MARKET

A predominance of survey respondents reported receiving $1.38 per pound for organic upland cotton, with prices reaching as high as $2.20 for organic pima cotton. This price was lower than what producers have reported in past years. Increased global competition was cited as a factor, along with quality issues in the 2013 crop attributed to weather conditions. Most producers indicated that their cotton was sold by a marketing cooperative.

According to USDA's Agricultural Marketing Service, organic cottonseed prices ranged from $500 to $700 per ton. This compares to $240 to $320 per ton for conventional cottonseed. Cottonseed yields ranged from 650 to 750 pounds per bale of ginned lint. Most of the cottonseed is sold to organic dairies, with some saved for replanting (Source: *USDA Organic Cotton Market Survey, Volume 5*).

Prices for U.S. organic cotton continue to experience downward pressure due to the competitive pricing of international organic cotton. For example, India (which produces more than 70% of the global organic cotton supply according to Textile Exchange), is able to offer imported organic cotton for about half the price of domestic organic cotton. (Source: Textile Exchange).

AGRICULTURE

Regardless of farm size, region or varieties grown, the primary need voiced by organic cotton growers is an effective method of weed control. In wet regions (or years), early season weeds can choke out a burgeoning cotton crop. Later in the growing season, weeds can adversely impact yields and quality. Mechanical weeding is standard practice for organic fields. However, a number of factors have severely reduced the availability of seasonal labor in cotton-growing regions. Several growers – particularly those new to farming organic cotton – expressed that the lack of available labor is a hindrance to expanding their production.

Commercial availability of organic seed remains 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.

Herbicide drift is another challenge cited by the organic cotton-growing community.

While few are working to improve cotton through classical breeding techniques, one noteworthy example is Dr. Jane Dever, Associate Professor - Cotton Breeding at Texas A&M AgriLife Research in Lubbock, Texas. There, Dr. Dever and a group of graduate students are working on a variety of projects to improve organic and non-GM cottonseed. Research goals include improved fiber quality and yields, as well as increased tolerance to drought, pests and weeds (more information: Jane Dever, Ph.D., Texas A&M Agrilife Research and Extension Center, Associate Professor, Soil & Crop Sciences).

At the USDA Cotton Production Processing & Research Unit, Dr. Greg Holt is working on several projects that, while not specific to organic, could hold great promise for organic cotton producers. These include a mechanical de-linting apparatus and non-chemical defoliant. Chemical defoliation, standard in conventional production, is not currently allowed under the National Organic Program (more information: Greg Holt, Ph.D., USDA Cotton Production and Processing Research Leader).

FARM SIZE, REVENUES & CROP INSURANCE

Farm size averaged 500 acres, with some farming as few as 40 acres, and others farming as many as 3,000 acres. A majority of growers reported revenues upwards of $100,000 from organic cotton sales in 2013.

2013 represented the third crop year in which USDA's Risk Management Agency (RMA) 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 for crop losses at higher than the rate at which conventional cotton was trading in a given region.

In March, 2014 RMA released a strategic plan and timeline to implement Organic Price Elections for all organic crops. The document articulates that the primary barrier to the expansion of this option for farmers has been RMA's inability to collect reliable five-year price trends for organic crops.

Cotton has been 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. However, RMA's plan and timeline discuss a number of alternative strategies for gathering price information that have allowed it to expand the program to other organic crops. (Source: *A Report from the: Risk Management Agency, U.S. Department of Agriculture, regarding: "The Department of Agriculture's Strategic Plan and Timetable to Implement Organic Price Elections for all Organic Crops Produced in Compliance with the National Organic Program Regulations under the Organic Foods Production Act of 1990."*)

EXPERIENCED PRODUCERS

Organic cotton growers face myriad additional challenges posed by weed and pest pressure without the assistance of conventional herbicides and insecticides, biotechnology, and other commonly employed resources. However, the average organic grower has been certified for 17 years—affording them a wealth of acquired knowledge to combat these problems.

Additionally, U.S. organic cotton growers enjoy a healthy market for their products, cultivated, at least in part, through positive relationships established over their years in business. The majority of the organic cotton produced in the U.S. comes through the Texas Organic Cotton Marketing Cooperative, based in Lubbock, Texas. The Cooperative was founded in 1993, and is comprised primarily of organic cotton farmers based in the South Plains region of Texas (more information: www.texasorganic.com).

OUTLOOK FOR 2014 & BEYOND

Survey respondents reported a 14% increase in acres planted – from 15,973 in 2013 to 18,234 in 2014. This represents the largest number of U.S. acres devoted to organic cotton since 1995. They envision a five-year increase in planted acres to 19,818.

Growing organic cotton in the U.S. is a highly specialized and technical discipline. A few isolated regions of the U.S. offer conditions that make it possible: well-drained soil, a long growing season, moderate rainfall, and a late freeze that minimizes pests and defoliates the plants for harvest. For those reasons, along with a limited supply of labor, the increasing difficulty of weed control, and lack of commercial availability of organic cotton seed, it is likely that gains to U.S. organic cotton production over the next several years will be incremental and hard won. That said, those in the small group of U.S. organic cotton growers are experienced, well-organized and committed to the enterprise.

Figure 2: U.S. Organic Cotton Acres Harvested

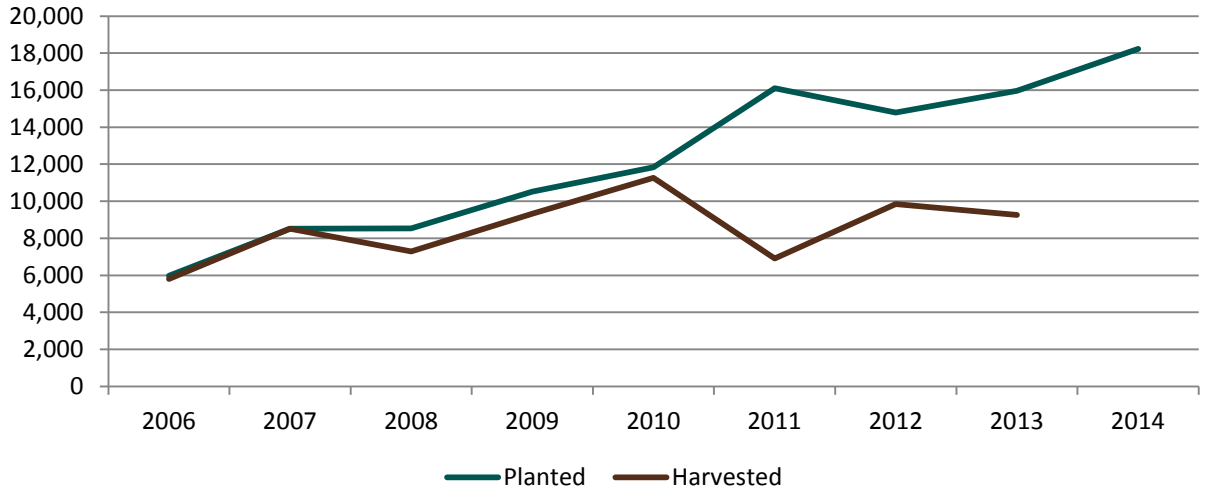
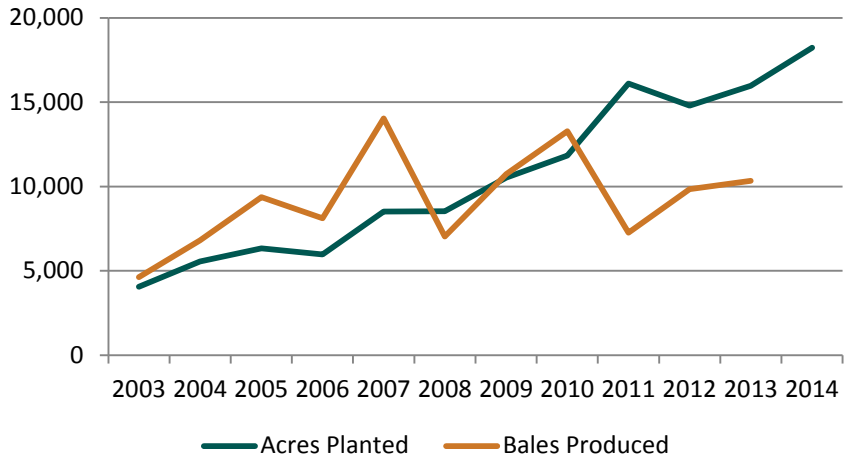


Figure 3: U.S. Organic Cotton Production, 2001-2013



Year Produced	Total Bales
2014	Not yet available
2013	9,262
2012	8,867
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

Global Organic Textile Standard (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 GOTS may now be marketed as organic, with certain restrictions. GOTS is a 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 number of worldwide facilities becoming certified to GOTS increased to 3,085 in 2013, according to the GOTS International Working Group.

The increased adoption of GOTS, is, in part the result of rising awareness of U.S. organic textile policy that requires companies claiming their organic fiber products are "organic" to be certified either to GOTS or the U.S. Department of Agriculture National Organic Program's standards. For more information, see: http://www.ota.com/what-ota-does/public-policy/fiber-and-textiles.

GLOBAL SUPPLY AND DEMAND

According to Textile Exchange, approximately 637,563 bales of organic cotton were produced on 783,094 acres around the globe in 2011-2012. The group reported a decrease in organic cotton production of 21% in 2013. India was the largest producer, followed by (in order of rank) China, Turkey, Tanzania, the United States, Burkina Faso, Egypt, Mali, Uganda and Peru. However, the organization notes that due to the conflict in Syria (which typically ranks second or third in world organic cotton production), no figures were available for that nation.

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.

The primary constraint for domestic cotton production in the U.S. is the particular combination of weather and geographical conditions necessary to make this crop thrive. The area must receive enough rain to germinate the cotton, but not so much as to create undue weed pressure. Once sprouted, cotton prefers warm, dry weather during its relatively long growing season. Organic cotton requires a killing frost to defoliate the plant prior to harvest. These periods of deep cold also help to keep pest pressure to a minimum in organic cotton fields. These conditions describe a relatively limited geographical area in the U.S., and, as noted in this report and others, annual weather conditions must cooperate for the crop to succeed.

Weed control and a lack of availability of seasonal labor in cotton- growing communities discussed above, are the major challenges facing organic cotton growers in the U.S. As other industries – oil, technology, auto – see increasing growth, the perception is that more of the available labor pool is drawn from the cotton-growing regions into year-round work.

Lack of commercial availability of organic seeds is another 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. Little work is being done to improve cottonseed through traditional breeding techniques.

Modern cotton farming requires a scale that can be difficult for beginning farmers to achieve. Outside of west Texas, where most of the domestic organic cotton is cultivated, it can be difficult for organic farmers to find a certified organic gin to handle their crop, or a buyer for smaller quantities of cotton.

Regulatory Oversight

One challenge that threatens the entire organic textile supply chain is a regulatory gap and the resultant possibility for undermining consumer trust in the organic label. The USDA's National Organic Program (NOP) does not regulate or enforce organic claims made on certain products, including processed fiber and textiles. Consumers should be able to trust products that are labeled as organic whether they are sold in the food aisle or the personal care aisle of a retail outlet. Failure to enforce the use of the term organic on all products creates consumer confusion, can be misleading, and can lead to consumers mistrusting the integrity of the word organic.

The Organic Trade Association has urged the Federal Trade Commission to confer with NOP and develop an enforcement policy on the use of organic claims, and to exercise its consumer protection authority to act on misleading and/or fraudulent use of the term "organic" when used on products outside NOP's jurisdiction http://images.magnetmail.net/images/clients/OTA/attach/OTA_FTC_GreenGuides_Comments_P954501.pdf). OTA has expressly requested that FTC acknowledge GOTS, defer to NOP's Policy Memorandum on Textiles, and monitor and enforce the use of the term "organic" on textiles not certified either under NOP or GOTS. For products that are making organic content claims only, OTA has requested that FTC include reference to the Textile Exchange Organic Content Standard (http://textileexchange.org/OCS).

For further information on this issue, please see: https://ota.com/sites/default/files/indexed_files/OTA_FiberAdvocacy_140915.pdf.

AREAS OF OPPORTUNITY

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

1. Organic weed controls
2. Cotton seed varieties better suited to growing conditions
3. Marketing efforts to increase consumer demand for U.S.-grown organic cotton
4. Market development to encourage better gate pricing
5. Improved awareness of the GOTS label within the U.S. market
6. Continued improvements to crop insurance
7. Streamlined administrative process for the organic grower
8. Tax credits, certification cost share and other financial incentives to encourage organic production.

GOVERNMENT AGENCY AND OTHER RESOURCES

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

1. National Resources Conservation Service programs
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. USDA's Farm Service Agency.

METHODOLOGY

In December 2014, the Organic Trade Association mailed surveys to 62 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 2013. 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 2013. 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 2013, 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 an annual basis.

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 2013 organic cotton production trends and a preliminary look at 2014 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
2020 Est.	**19,818**	**4%**
2015 Est.	**19,056**	**5%**
2014	18,234	14%
2013	15,973	8%
2012	14,787	-8%
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
2014	18,234	Not yet available	Not yet available
2013	15,685	9,262	59%
2012	14,787	9,842	67%
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 Produced 2001-2013

Year Produced	Total bales
2014	Not yet available
2013	10,335
2012	8,867
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