

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Changes in Southern Cotton and Peanut Producing Regions

Shelbi R. Knisley¹

United States Department of Agriculture- Economic Research Service (USDA-ERS)

Selected Poster prepared for presentation at the 2016 Agricultural & Applied Economics Association Annual Meeting, Boston, MA, July 31—Aug. 2.

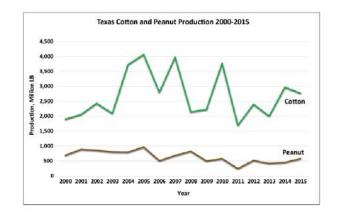
¹ Correspondence: <u>shelbi.knisley@ers.usda.gov</u>.

Changes in Southern Cotton and Peanut Producing Regions

Shelbi R. Knisley USDA- ERS²

Background and Issues

Most U.S. peanuts and cotton are produced in Texas and Georgia and often compete for the same crop land. Peanuts usually rotate with cotton on a 3-4 year cycle (Texas Peanut Producers Board). Georgia is the top peanut producing state with an average of 45 percent of production while Texas production averages 15 percent over the 2000/01-2015/16 marketing year³ (USDA-NASS), therefore averaging 61 percent of total U.S. peanut production for the period. Texas is the lead cotton producing state with 56 percent of U.S. acres for 2015/16 (USDA-NASS).



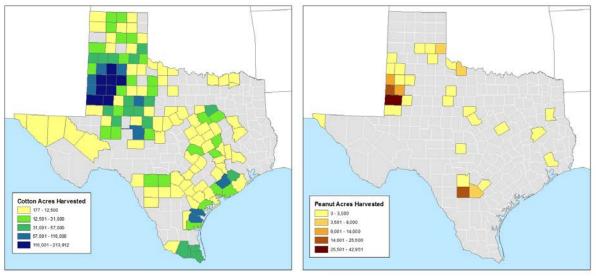


Figure 1- Texas Cotton and Peanut Production

Source: USDA-NASS

² The views in this poster do not necessarily represent those of USDA or ERS.

³ Marketing Year, August-July

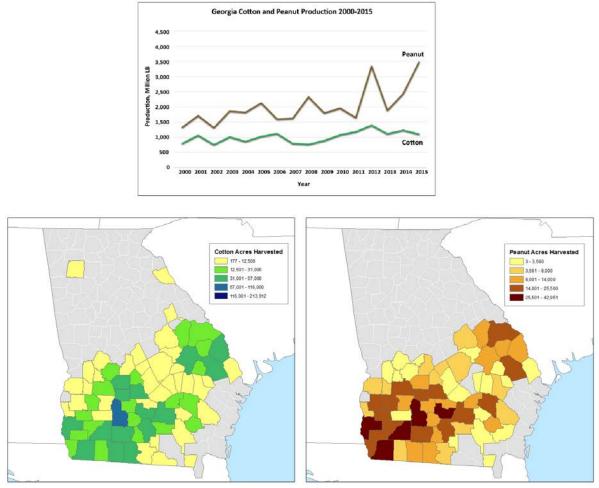


Figure 2- Georgia Cotton and Peanut Production Source: USDA-NASS

U.S. cotton production has been trending downward since 2000 making 2015/16 cottonseed production the 9th lowest on record since 1900 at 8.086 billion pounds (USDA-NASS).

Many factors that could explain the decline in U.S. cotton production, such as substitute products, policy changes or trade disputes. Alternatively, peanut production has increased during this period. This could potentially be explained by lower returns to cotton, encouraging producers to move acres into peanuts.

Objectives

- Describe current market trends in the U.S. cotton and peanut industries.
- Identify recent changes in farm policy for cotton and peanuts.
- Discuss possible reasons for changes in production of both cotton and peanuts.

Peanut and Cotton Markets

U.S. peanut production has been increasing over time, with the exception of some years, such as 2013/14 where weather limited production (USDA-ERS, 2014). U.S. peanut planted acres increased after changes were made in both the 2002 and 2014 farm bills, and since then, U.S. peanut production has reached record production levels. During the 2012/13 marketing year, peanut production reached a record 6.754 billion pounds (USDA-NASS) and for 2015/16 peanut production reached 6.211 billion pounds (USDA-NASS), which is the second highest on record. Despite the overall upward trend, there was a 38 percent decline in peanut production between 2012/13 and 2013/14 due to drought in the south as well as lower peanut prices⁴ (\$0.249/lb.), compared to the previous two years (USDA-NASS and ERS). Even though peanut farm prices remain closer to average than 2011/12, producers expanded production in 2014/15 and 2015/16 which was likely motivated by the \$535/ton (\$0.2675/lb.) reference price established in the Agricultural Act of 2014.

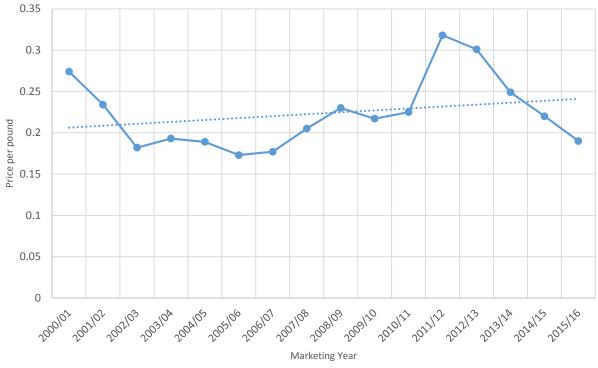


Figure 3- Peanut Prices Received by Farmers Source: USDA-NASS

In 2015/16 U.S. planted peanut area was 1.625 million acres, a 20 percent increase from 2014/15 acres (USDA-NASS). The newly established reference price for peanuts potentially influenced this increase in planted area since it is designed to offset potential lower farm prices and may make planting peanuts more attractive to producers than alternative crops, such as cotton.

⁴ Nominal price

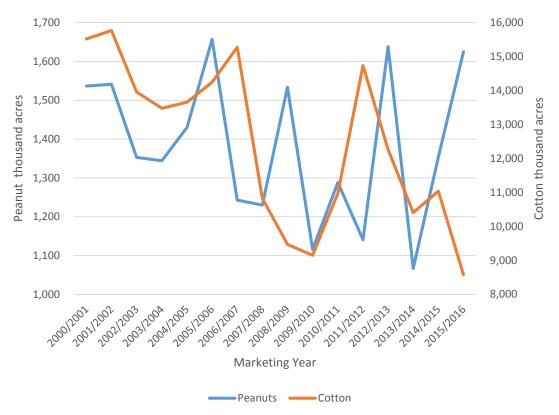


Figure 4- U.S. Cotton and Peanut Planted Area Source: USDA-NASS

In contrast, U.S. cotton production has been declining since its peak in the mid-2000s and planted area remains near record lows (USDA-NASS). Several factors may have impacted the decline, including alternative fibers such as polyester which becomes more competitive as oil prices fall and the long-running U.S.-Brazil WTO cotton case which was not resolved until late 2014. In addition, China began purchasing large volumes of domestic cotton in 2011 and began to stockpile cotton supplies. U.S. cotton farm prices⁵ fell from \$0.94 in 2011/12 to \$0.62 in 2015/16 (USDA-NASS). U.S. cotton exports to China increased between 2009/10 and 2012/13 but have since been declining (USDA-FAS). Recently China announced a plan "to auction about

⁵ Nominal price

2 million metric tons of cotton from May through August" (AgWeb, 2016) which has the potential to curtail imports and depress world cotton prices.

In the Agricultural Act of 2014, cotton was excluded as a covered commodity for a settlement of the U.S.-Brazil WTO case. However, cotton producers did receive the option of crop insurance through the Stacked Income Protection Plan (STAX) program. In 2015/16 U.S. planted cotton area was 8.58 million acres while production was 12.888 million bales. This is a 21 percent decrease from 2014/15 cotton production (USDA-NASS). It is possible that changes to peanut policy have encouraged cotton producers to put more acres into peanuts due to potentially better. Currently cotton producers are requesting that cottonseed be considered as an "other oilseed" under the current farm bill.

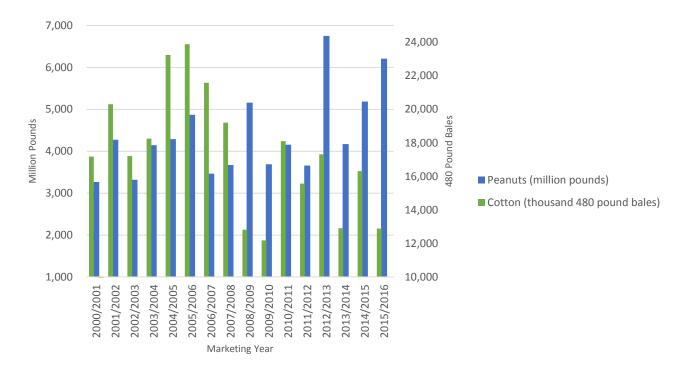


Figure 5- U.S. Cotton and Peanut Production Source: USDA-NASS

Farm Policy

Prior to the Farm Security and Rural Investment Act of 2002, price supports and a domestic marketing quota system limited peanut production, which elevated farm prices and supported farm income for peanuts (Shields, 2015). The 2002 law allowed peanuts to follow the same policies as other program crops, where farm payments were made when the price or crop revenue drop below a guaranteed level (Shields, 2015).

The Agricultural Act of 2014 introduced additional modifications to peanut payment programs. Producers could choose to enroll in either Price Loss Coverage (PLC) or Agricultural Risk Coverage (ARC), but most producers (99.7%) selected PLC due to the attractive potential payments under this program (Shields, 2015). PLC payments depend on reference prices which was set at \$535/ton for peanuts (USDA-FSA).

The Agricultural Act of 2014 also made some changes to cotton programs. Cotton producers were given a one-time option to reallocate crop base acres—other than generic base (former cotton) acres—based on 2009-2012 plantings. In response to the decision of the WTO case between the U.S. and Brazil, cotton was excluded from farm payment programs, such as PLC and ARC. Cotton is covered separately under Title XI: Crop Insurance of the Agricultural Act of 2014 (Farm Bill) through the Stacked Income Protection Plan (STAX).

Conclusions

- U.S. peanut production has increased since the early 2000s while cotton production has declined. These commodities compete for the same acreage in major producing states of Texas and Georgia although barriers to entry such as specialized equipment and rotational needs would limit complete substitution.
- Changing farm policies, among other factors, have likely impacted planting decisions. In 2002 the quota system was eliminated from peanut policy while in 2014, the reference price for peanuts was more favorable than other covered commodity. The 2014 legislation eliminated cotton as a covered commodity in response to the settlement of the WTO case between Brazil and the U.S.
- Other market factors, such as weather, policy changes and substitute products have also impacted these two commodity markets.

References

Farm Journal- Ag Web. *Flood of Chinese Cotton Sends Prices Tumbling Most in Six Weeks*. April 15, 2016. http://www.agweb.com/mobile/article/flood-of-chinese-cotton-sends -prices-tumbling-most-in-six-weeks-blmg/. Date Accessed: April 18, 2016.

- Shields, Dennis A. U.S. Peanut Program and Issues. Congressional Research Service. August 2015. Date Accessed: January 14, 2016.
- United States Department of Agricultural- Economic Research Service (USDA-ERS). Ash, Mark. *Oil Crops Outlook*. July 15, 2013. Date Accessed: April 19, 2016.
- United States Department of Agriculture- Farm Service Agency (USDA-FSA). *Base Acre Reallocation, Yield Updates, Agricultural Risk Coverage (ARC) & Price Lose Coverage (PLC).* 2014 Farm Bill Fact Sheet. September 2014. Date Accessed: January 14, 2016.
- United States Department of Agriculture- Foreign Agricultural Service (USDA-FAS). GATS database.

- United States Department of Agriculture- Risk Management Agency (USDA-RMA). *Stacked Income Production Plan (STAX) for Upland Cotton*. RMA Fact Sheet. August 2014. Date Accessed: December 18, 2015.
- United States Department of Agriculture- National Agricultural Statistical Service (USDA NASS). Quick Stats.