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Weekly Outlook: Will U.S. Corn and Soybean Surpluses Be Reduced Next Year?

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The USDA's November WASDE report projected that U.S. stocks of corn will grow from 1.738 billion bushels at the beginning of the current marketing year to 2.403 billion bushels at the end of the marketing year. Soybean stocks are expected to grow from 197 million bushels to 480 million bushels.

Large increases in stocks are expected even though corn consumption during the current marketing year is expected to exceed that of last year by 948 million bushels (6.9 percent) and soybean consumption is expected to increase by 165 million bushels (4.2 percent). Increased corn consumption is projected in both the feed and residual and export categories. A majority of the expected increase in soybean consumption is in the export category. The expected increase in stocks reflects the extremely large crops produced this year.

The large crops and resulting low prices are creating increased financial stress for corn and soybean producers and a lot of interest in how long surpluses and low prices might persist. For now, much of the focus is on the potential size of the 2017 South American crops and the implications for demand for U.S. crops. Increasingly, the focus will shift to 2017 production prospects in the U.S. The over-riding question is whether surpluses and low prices will persist for another year. It is a bit early to speculate on supply and consumption prospects for the 2017-18 marketing year, but some scenarios can be considered.

For corn, there is a general expectation that U.S. producers will reduce acreage in the year ahead. A decrease of about 3.5 million acres, to 83.3 million acres harvested for grain, seems to be a common expectation right now. With such a reduction and a 2017 U.S. average corn yield near our calculated trend value of 168.8 bushels, the 2017 crop would total 14.06 billion bushels, 1.165 billion bushels less than the 2016 harvest. If corn consumption during the 2017-18 marketing year remained at the elevated level of 14.61 billion bushels projected for the current year, stocks at the end of the 2017-18 marketing year would be reduced to about 1.9 billion bushels.

With a trend yield of 168.8 bushels and a constant level of consumption, any reduction of more than 0.5 million acres would result in some draw down in year ending stocks of corn during the 2017-18 marketing

year. Conversely, a 3.5 million acre reduction in acres along with a constant level of consumption means that an average yield of less than 174.8 bushels would result in some draw down in marketing year ending stocks. However, if combined corn production in Brazil and Argentina in 2017 increases by 945 million bushels, as now projected by the USDA, U.S. corn exports would be expected to decline during the 2017-18 marketing year. If U.S. exports decline by 250 million bushels and acreage is reduced by 3.5 million acres, the 2017 average yield would need to be less than 171.8 bushels in order to reduce year ending stocks.

For soybeans, there is a general expectation that U.S. producers will increase acreage in the year ahead. An increase of about five million acres, to 88 million harvested acres, seems to be a common expectation right now. The extremely high soybean yields of the past three years raise some questions about a potential increase in the trend yield. However, if the 2017 U.S. average soybean yield is near our calculated linear trend value of 47.5 bushels and acreage is increased as expected, the 2017 crop would total 4.18 billion bushels, 181 million bushels less than the 2016 harvest. If soybean consumption during the 2017-18 marketing year remained at the elevated level of 4.108 billion bushels projected for the current year, stocks at the end of the 2017-18 marketing year would grow to about 580 million bushels.

With a trend yield of 47.5 bushels and a constant level of consumption, any increase of more than 2.85 million acres would result in some further growth in year ending stocks of soybeans during the 2017-18 marketing year. On the other hand, a five million acre increase in soybean area along with a constant level of consumption means that an average yield of more than 46.3 bushels would result in some increase in marketing year ending stocks. However, if combined soybean production in Brazil and Argentina in 2017 increases by 210 million bushels, as now projected by the USDA, U.S. soybean exports would be expected to decline during the 2017-18 marketing year. If U.S. exports decline by 100 million bushels and acreage is increased by five million acres, a 2017 average yield of more than 45.2 bushels would result in some increase in year ending stocks.

There are obviously multiple potential acreage, yield, consumption, and ending stocks scenarios for the 2017-18 U.S. corn and soybean marketing year. The most likely scenarios tend to favor a modest reduction in marketing year ending stocks of corn and a modest to large increase in marketing year ending stocks of soybeans. The corn market currently appears to reflect expectations of reduced stocks, with the December 2017 futures price \$0.37 higher than December 2016 price. The soybean market is apparently not convinced that stocks will continue to grow next year, with the January 2018 future price only \$0.06 lower than the January 2017 price. The soybean market appears to be reflecting more production risk than reflected by the corn market. Perceived production risk may stem from current drought conditions in the southeast U.S. and/or uncertainty about potential impacts if a La Niña episode unfolds.

Reference

USDA, National Agricultural Statistics Service. *World Agricultural Supply and Demand Estimates Report* (WASDE) (November 2016). Released November 9, 2016. http://usda.mannlib.cornell.edu/usda/waob/wasde//2010s/2016/wasde-11-09-2016.pdf