



DIVISION OF AGRICULTURE

RESEARCH & EXTENSION

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Supply and Demand for Field Crops

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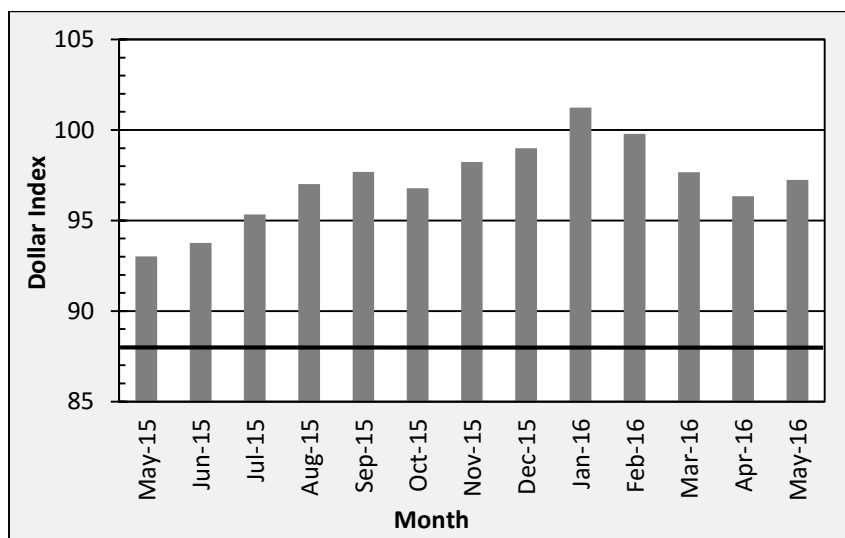
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Supply and Demand

The primary components of market conditions that determine prices for U.S. field crops are the supply and demand situation for each crop and the value of the dollar. Supply and demand conditions are indicated by stocks-to-use (S/U) ratios which are reported monthly (USDA, WASDE 2016). Stocks are the ending quantity of a crop in the final month of the marketing year. Use is total distribution for the marketing year and includes total domestic consumption and exports. Measures of S/U represent the percentage of annual use that is available for the period between the end of the current crop marketing year and the time when production from the subsequent marketing year enters the industry supply. Crop prices attempt to ration supply with anticipated demand to achieve equilibrium stocks-to-use throughout the marketing year.

Crops are traded in global markets with U.S. currency as the common medium of exchange. Fluctuations in the value of the dollar relative to other currencies impacts U.S. crop prices. Increased value of the dollar leads to increased expenditures in terms of currencies for international purchasers of U.S. crops. This results in downward pressure for U.S. prices and could provide incentives for purchases from foreign competitors producing crops.

Figure 1 presents the dollar index for the previous year with a comparison to the 2006-2014 annual average (FSR 2016). Figures 2-16 present S/U measures with a comparison to the average for the 2006-2015 period (USDA, FAS 2016). Marketing years are September-August for corn and soybeans, August-July for rice, cotton, and peanuts, and June-May for wheat. Current price forecasts are compared to historical average prices that correspond to historical S/U measures (USDA, NASS 2016).



The dollar index has been above the 2006-2014 annual average for the previous 13 months. Increasing strength of the dollar results in downward pressure for U.S. commodity prices. The dollar index increased in May after following a decreasing trend in the three previous months.

Figure 1. Broad Dollar Index, Price Adjusted (March 1973 = 100), Monthly May 2015 to May 2016, Average 2006-2014 = 88.0

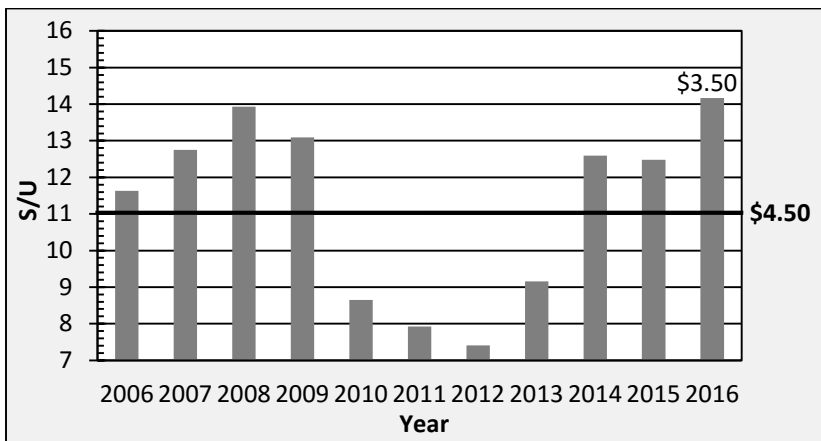


Figure 2. Corn U.S. Stocks-to-Use, 2006-2015, Average = 11.0 and Average Price = \$4.50/bu., 2016 S/U and Price Forecasts

U.S. corn stocks-to-use for 2016 is projected greater than the average for 2006-2015 which results in downward pressure for price that is below the corresponding average of \$4.50/bu. The current USDA price forecast is \$3.50/bu. for the crop harvested in 2016. Historically, U.S. corn price is significantly responsive to S/U.

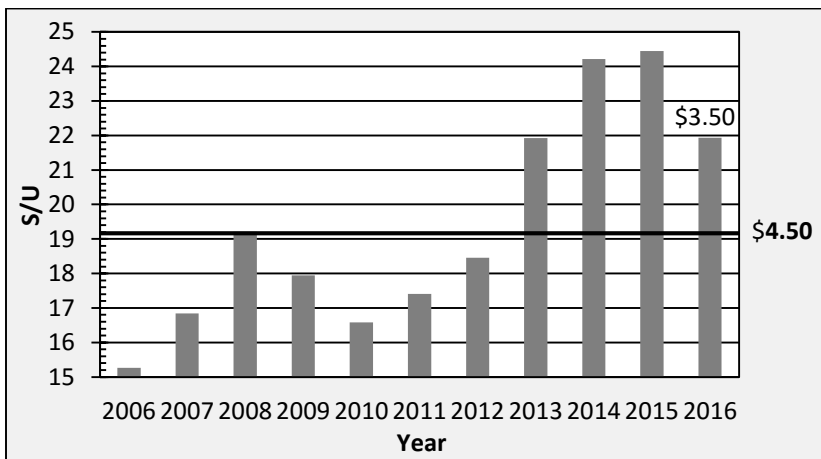


Figure 3. Corn ROW Stocks-to-Use, 2006-2015, Average = 19.2 and Average U.S. Price = \$4.50/bu., 2016 S/U and Price Forecasts

Stocks-to-use in the rest of the world for 2016 is projected greater than the average for 2006-2015 which results in downward pressure for price that is below the corresponding average of \$4.50/bu. The current USDA price forecast is \$3.50/bu. for the crop harvested in 2016. Large foreign supply limits export potential for relieving excessive supply in the U.S. Ending 2016 S/U is projected lower than 2015 S/U. Historically, U.S. corn price is significantly responsive to U.S. S/U and ROW S/U.

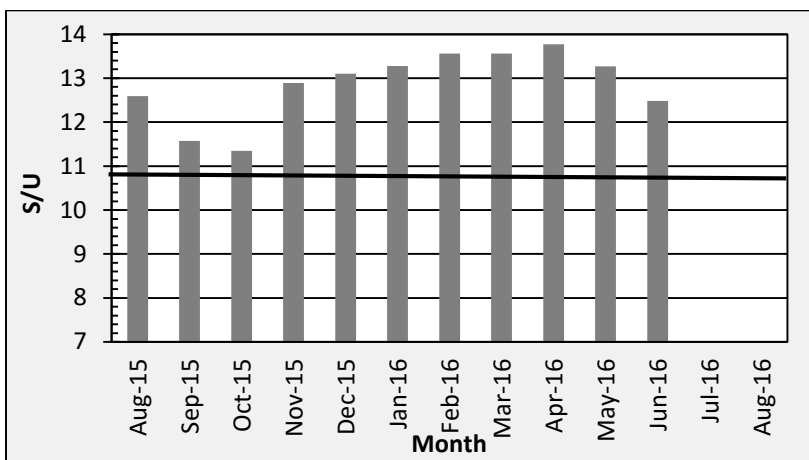


Figure 4. Corn U.S. Stocks-to-Use, Year Ending August 2015, Projected Year Ending August 2016, by September 2015 to August 2016 WASDE Report, Average 2006-2014 S/U = 10.8

Monthly projections for August 2016 U.S. corn stocks-to-use decreased in the June report. The current projection for the 2015-2016 marketing year is less than the ending stocks-to-use in the previous marketing year.

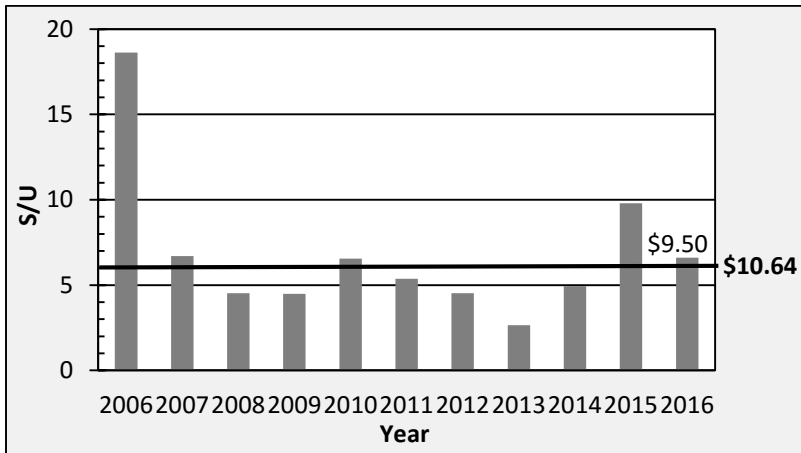


Figure 5. Soybean U.S. Stocks-to-Use, 2006-2015, Average = 5.9¹ and Average 2006-2015 Price = \$10.64/bu., 2016 S/U and Price Forecasts
¹Average S/U omits the highest and lowest annual S/U.

U.S. soybean stocks-to-use for 2016 is projected slightly greater than the average for 2006-2015 which results in downward pressure for price that is below the 2006-2015 average price of \$10.64/bu. The current USDA price forecast is \$9.50/bu. for the crop harvested in 2016. Historically, U.S. soybean price is significantly responsive to S/U.

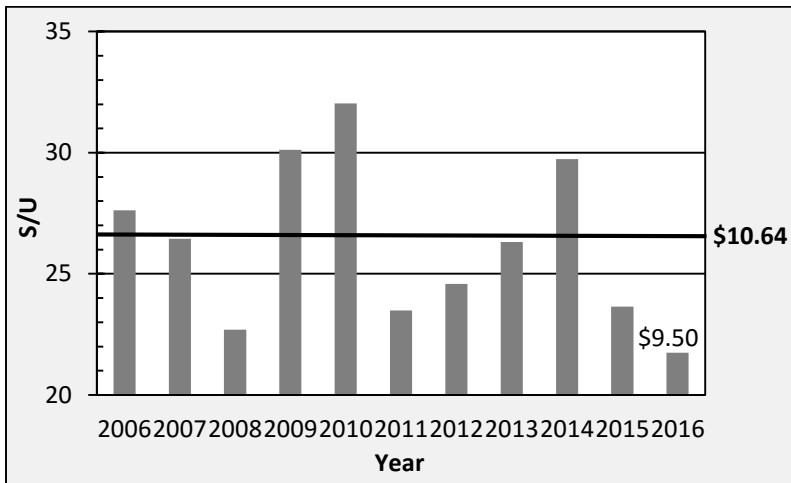


Figure 6. Soybean ROW Stocks-to-Use, 2006-2015, Average = 26.7 and Average U.S. 2006-2015 Price = \$10.64/bu., 2016 S/U and Price Forecasts

Stocks-to-use in the rest of the world for 2016 is less than the 2015 S/U and less than the average for 2006-2015. ROW stocks-to-use indicates potential for increased exports to relieve excessive U.S. supply. However, the current USDA price forecast of \$9.50/bu. for the crop harvested in 2016 is less than the 2006-2015 average U.S. soybean price. Historically, U.S. soybean price is significantly less responsive to ROW S/U than to U.S. S/U.

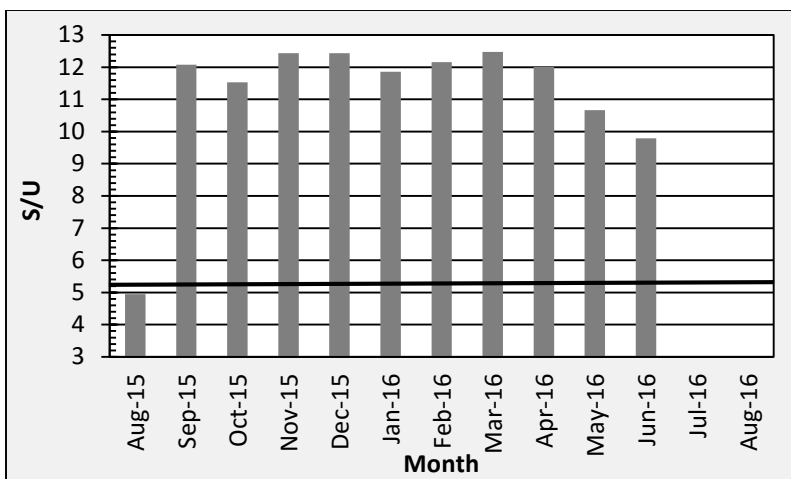


Figure 7. Soybean U.S. Stocks-to-Use, Year Ending August 2015, Projected Year Ending August 2016, by September 2015 to August 2016 WASDE Report, Average 2006-2014 S/U = 5.3¹
¹Average S/U omits the highest and lowest annual S/U.

Monthly projections for August 2016 U.S. soybean stocks-to-use are significantly greater than both the 2006-2014 average and ending S/U in the previous marketing year.

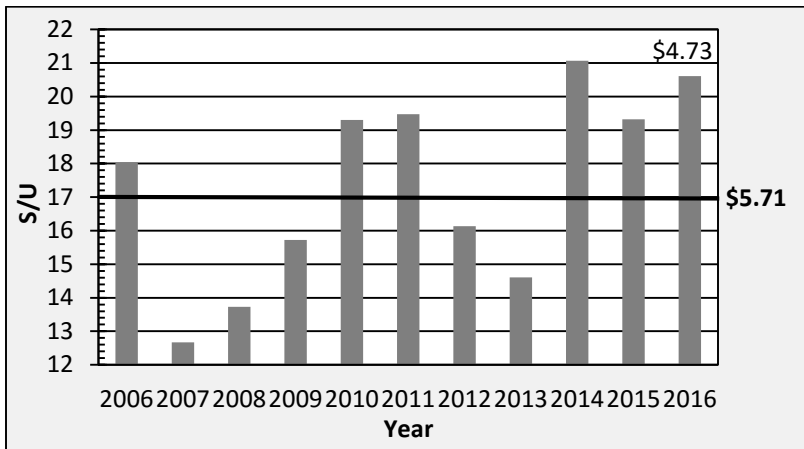


Figure 8. All Rice U.S. Stocks-to-Use, 2006-2015, Average = 17.0 and Average Long-Grain Price = \$5.71/bu., 2016 S/U and Price Forecasts

U.S. all rice stocks-to-use for 2016 is projected greater than the average for 2006-2015 which results in downward pressure for price that is below the corresponding average of \$5.71/bu. The current USDA price forecast is \$4.73/bu. for long-grain rice harvested in 2016. Projected stocks-to-use for 2016 represents an increase from 2015 ending stocks-to-use.

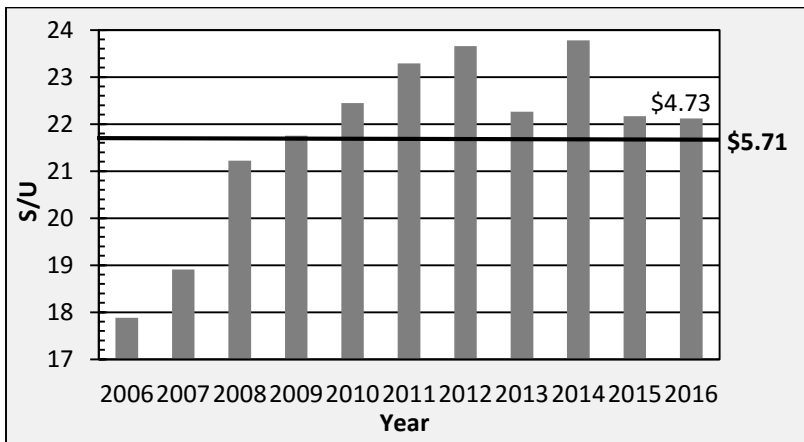


Figure 9. All Rice ROW Stocks-to-Use, 2006-2015, Average = 21.7 and Average U.S. Long-Grain Price = \$5.71/bu., 2016 S/U and Price Forecasts

Stocks-to-use in the rest of the world for 2016 is slightly greater than the average for 2006-2015 which results in downward pressure for price that is below the corresponding average of \$5.71/bu.

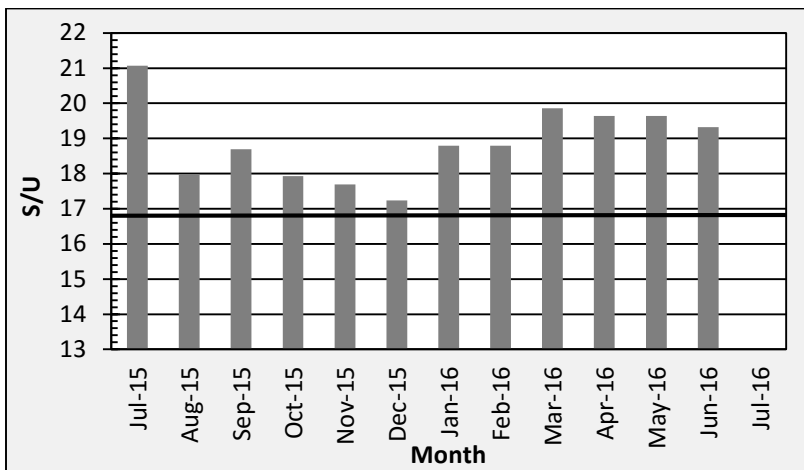


Figure 10. All Rice U.S. Stocks-to-Use, Year Ending July 2015, Projected Year Ending July 2016, by August 2015 to July 2016 WASDE Report, Average 2006-2014 S/U = 16.8

The June projection for July 2016 U.S. all rice stocks-to-use is slightly lower than the May projection. The June projection is lower than the July 2015 level that ended the previous marketing year.

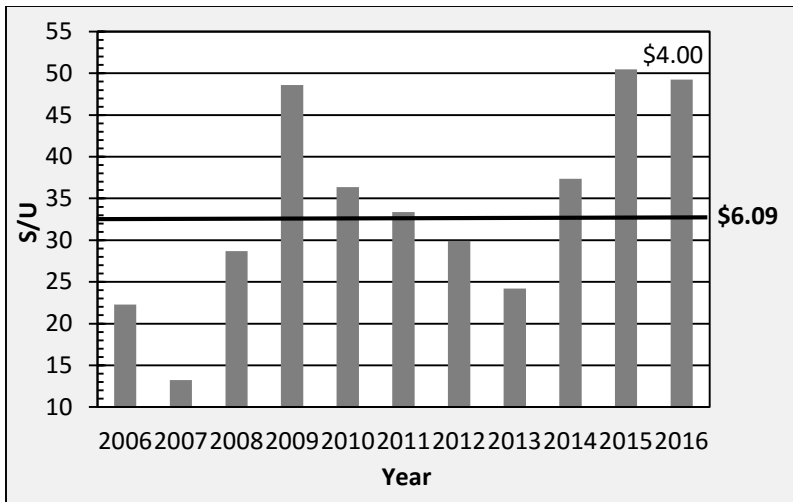


Figure 11. All Wheat U.S. Stocks-to-Use, 2006-2015, Average = 32.4 and Average Price = \$6.09/bu., 2016 S/U and Price Forecasts

U.S. all wheat stocks-to-use for 2016 is greater than the average for 2006-2015 which results in downward pressure for price that is below the corresponding average of \$6.09/bu. The current USDA price forecast is \$4.00/bu. for the crop harvested in the 2016 marketing year. Historically, U.S. wheat price is significantly responsive to S/U. Ending stocks in Figure 11 correspond to beginning stocks for winter wheat planted in 2016 and harvested in 2017.

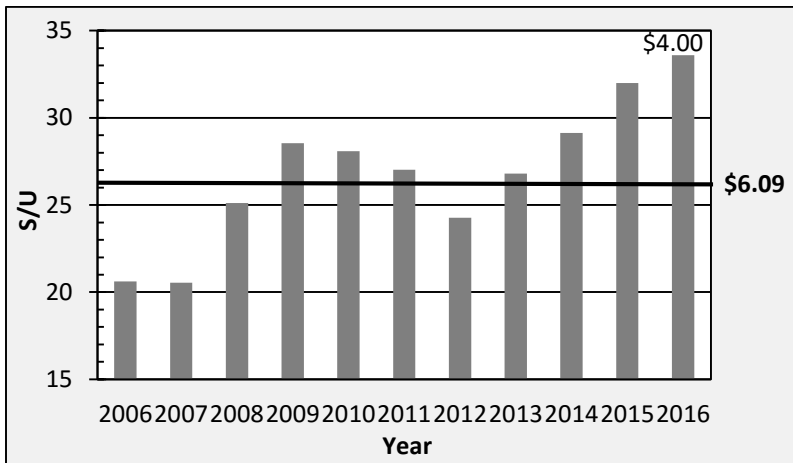


Figure 12. All Wheat ROW Stocks-to-Use, 2006-2015, Average = 26.2 and Average U.S. Price = \$6.09/bu., 2016 S/U and Price Forecasts

Stocks-to-use in the rest of the world for 2016 is greater than the average for 2006-2015 which results in downward pressure for price that is below the corresponding average of \$6.09/bu. The current USDA price forecast is \$4.00/bu. for the crop harvested in 2016. Ending stocks in Figure 12 correspond to beginning stocks for winter wheat planted in 2016 and harvested in 2017.

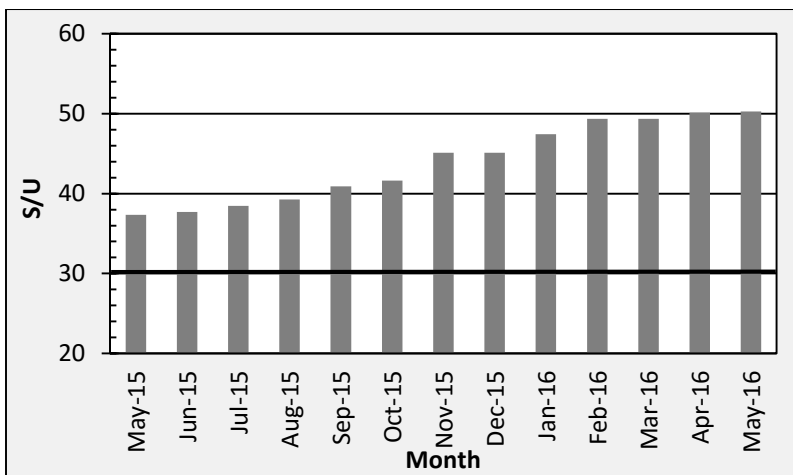


Figure 13. All Wheat U.S. Stocks-to-Use, Year Ending May 2015 and Projected Year Ending May 2016, by June 2015 to May 2016 WASDE Report, Average 2006-2014 S/U = 30.4

Monthly estimates for May 2016 U.S. all wheat stocks-to-use had an increasing trend and were significantly greater than ending stocks-to-use of the previous marketing year.

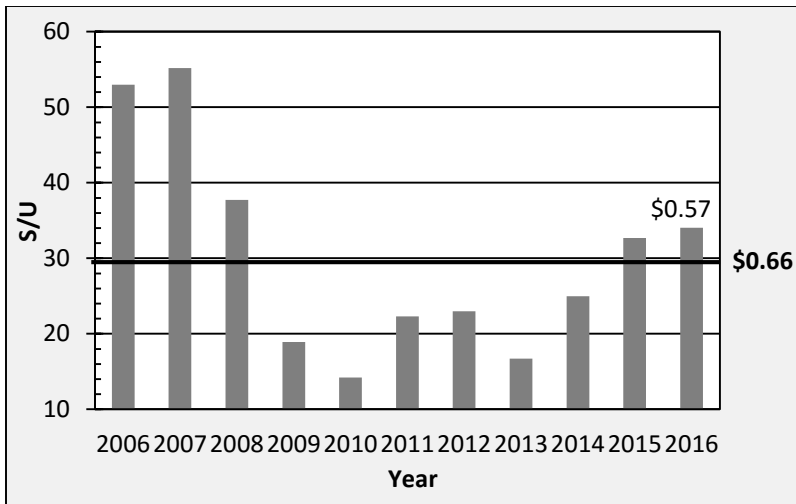


Figure 14. Cotton U.S. Stocks-to-Use, 2006-2015, Average = 29.8 and Average U.S. Price = \$0.66/lb., 2016 S/U and Price Forecasts

U.S. cotton stocks-to-use for 2016 is projected greater than the average for 2006-2015.

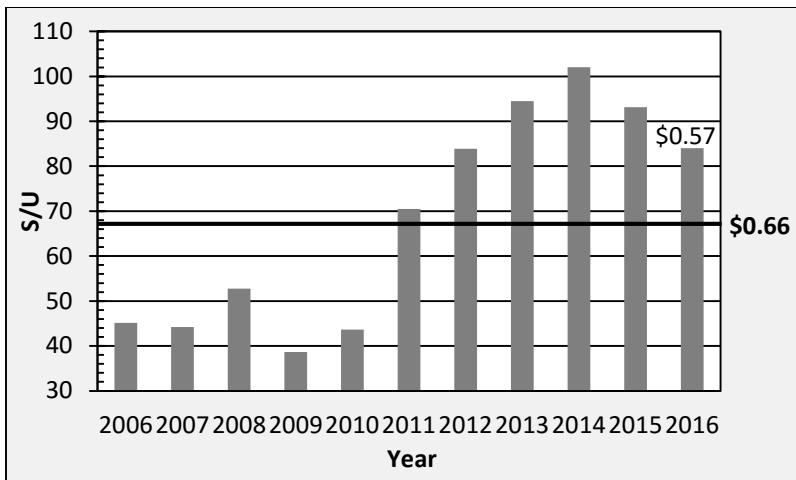


Figure 15. Cotton ROW Stocks-to-Use, 2006-2015, Average = 66.9 and Average U.S. Price = \$0.66/lb., 2016 S/U and Price Forecasts

Cotton stocks-to-use in the rest of the world for 2016 is projected greater than the average for 2006-2015. 2016 ROW stocks-to-use is projected to decline for the second consecutive year.

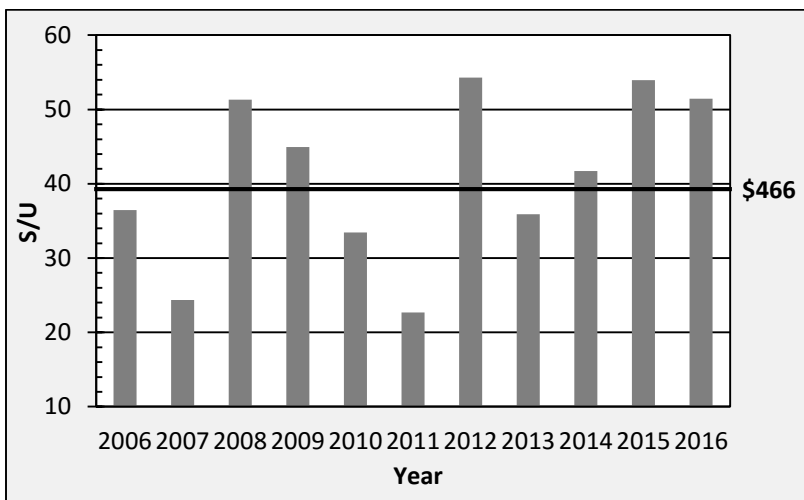


Figure 16. Peanut U.S. Stocks-to-Use, 2006-2015, Average = 39.9 and Average U.S. Price = \$466/ton, 2016 S/U Forecast

U.S. peanut stocks-to-use for 2016 is projected greater than the average S/U for 2006-2015.

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