

**August 2021 WASDE Report: Positive Outlook for the Market***Kexin Ding and Ani L. Katchova**Farm Income Enhancement Program**Department of Agricultural, Environmental, and Development Economics**The Ohio State University**August 31, 2021*

The World Supply and Demand Estimates (WASDE) reports provide supply and demand forecasts of agricultural commodities. The WASDE report of August 2021 was released earlier this month by the U.S. Department of Agriculture (USDA). For decades, the WASDE reports have been the primary source of public projection information in the agricultural sector due to their policy relevance and market influence. Approaching harvest and following the start of the new marketing year, this month's WASDE report is of primary importance.

**Overview**

This month's WASDE report noted a downward shift in the U.S. and global wheat stocks, which declined by 12.6 million tons to 279.1 million tons. Similar patterns are observed in the U.S. corn and rice projections with both crops expected to have reduced supplies and lower ending stocks. Although soybeans show a higher beginning stocks projection, they are also predicted to have lower production, crush, and exports. Following the trend, this month's projection for 2021/22 U.S. cotton also shows larger beginning stocks, but lower exports and ending stocks. U.S. beet sugar production for 2020/21 has fallen as well, mostly due to lower-than-expected production of the crop in this quarter. Lower expected beef and pork production result in the decline in the forecast for total meat production in 2021 from last month. Since lower expected beef production is more than offset by higher pork production, the red meat and poultry production forecast has dropped for next year. Lower expected dairy cow numbers cause milk production forecasts for both 2021 and 2022 to decline from last month. Overall, reduced supply reported from August 2021 WASDE brings positive outlook for the market.

## **Corn and Soybeans**

The projections on planting, production, and price of corn and soybeans are of primary importance to the United States, as well as to the state of Ohio. Corn is the most widely produced feed grain and soybeans are the largest source of animal protein feed in the U.S. According to the 2020 State Agriculture Overview, corn and soybeans are the top two crops in Ohio, accounting for 87.8% of planted acres and 74.7% of the value of production.

This month's WASDE report projects the same areas for planted acres of corn and soybeans as last month. Compared to the previous marketing year, corn planted acres are expected to increase to 92.7 million acres and soybeans are expected to increase to 87.6 million acres in 2021/22 as shown in Figure 1. Thus, the influence on the market comes from the changes in production and price projections. Although corn production is expected to increase to 14,750 million bushels in 2021/22 compared to the last marketing year as shown in Figure 2, this is a 415 million bushels downward shift from the last month's estimate. Similarly, the planted area for soybeans is expected to increase to 4,339 million acres in this marketing year, while the soybean production is estimated to be 66 million lower than last month's projections. The decrease in this month's production projections subsequently cause an increase in the projected price, especially for corn. It is also a signal of successive reductions in soybean production in the future, further boosting the positive market outlook.

Compared to last month's projection, corn price is expected to increase by 2.7% from \$5.60 to \$5.75 per bushel while soybean prices hold steady. As Figure 3 depicts, this translates to larger price increases over a year with corn price increasing by 25% to \$5.75 per bushel, and soybean price increasing by 26% to \$13.70 per bushel in 2021/22. From a yearly long-horizon perspective, USDA maintains bullish outlook of production and price for corn and soybeans, based on the strong uptrend of acreage, production, and price shown in Figures 1, 2, and 3. From a monthly short-horizon perspective, the decline in yield and production projections in this month's WASDE report brings a strong increase in corn price projections. The futures market shows a synchronous reaction, with the price of the December corn contract surging dramatically after the release of the WASDE report and increased trading volume as displayed in Figure 4.

## **Related Research**

The usefulness of the WASDE report has faced concerns from both information users and policymakers, however, our recent study suggests that USDA forecasters realize optimality during the forecast data generating process (Ding and Katchova, 2021). Our optimality tests of the USDA's WASDE forecasts for three main crops, corn, soybeans, and wheat, over the period 1988-2019 reverse the findings made by

previous studies that use the traditional quadratic loss function, and cross-validates the findings made using the asymmetric loss method. This indicates that USDA forecasters have a conservative attitude toward predicting corn and soybean price.

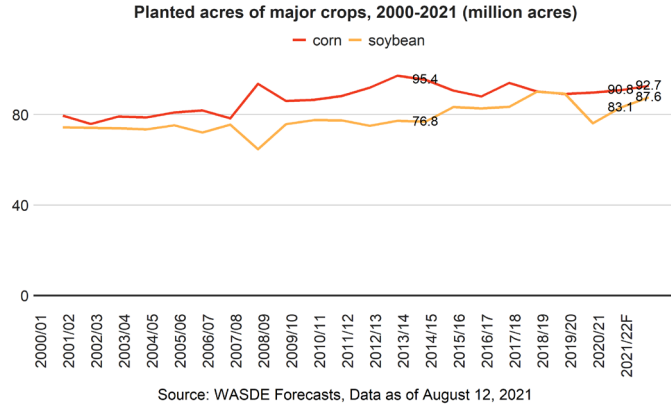


Figure 1 Projections of Planted Acres of Corn and Soybeans

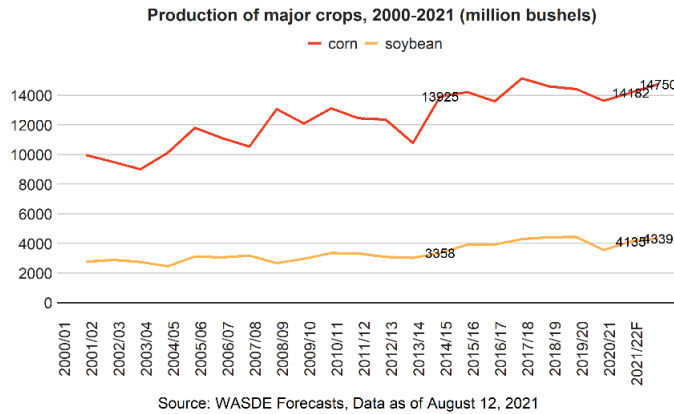
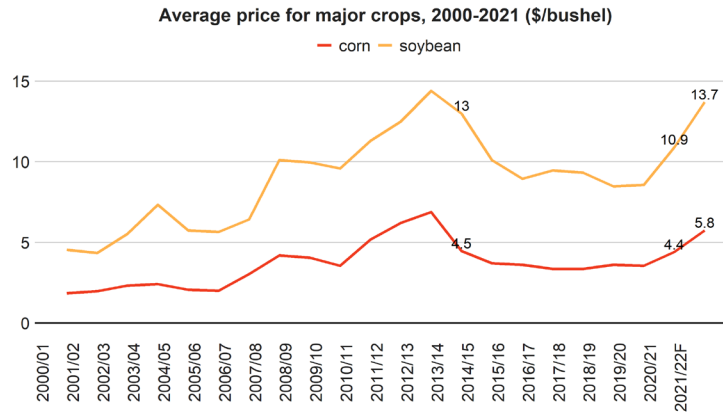


Figure 2 Projections of Production of Corn and Soybeans



Source: WASDE Forecasts, Data as of August 12, 2021

Figure 3 Projections of Price of Corn and Soybeans



Figure 4 Price of Corn December '21

## References

- Ding, Kexin., and Ani L. Katchova (2021). Testing the Optimality of USDA's WASDE Forecasts under Unknown Loss. *Working Paper*.
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