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## IFES 2020: 2021 Market Outlook for Corn and Soybeans

## **Scott Irwin and Joe Janzen**

Department of Agricultural and Consumer Economics University of Illinois

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This is a presentation summary from the 2020 virtual Illinois Farm Economics Summit (IFES). A video of the webinar and PowerPoint Slides (PDF) are available here.

The corn and soybean markets have been on a tear since bottoming in mid-August. Both markets have increased over 30% in just three months. This is certainly a welcome change to the economic prospects of corn and soybean producers. An obvious question is how long the rally will last. To answer that question we have to dig into the reasons for the price rally in the first place.

There are several factors driving the rally in corn and soybeans, but the number one reason is clearly export sales. As of early November, total corn export commitments (export shipments + outstanding sales) are running 900 million bushels ahead of the pace a year ago. Soybean export commitments are up almost a billion bushels versus a year ago. The wind behind these export sales was China, which accounted for half of the increase in corn and three-quarters of the increase in soybeans.

Another contributing factor to the price rally was a poor ending to the 2020 U.S. growing season. August ended up being extremely dry in the heart of the Corn Belt and this was amplified by the derecho event that flattened millions of acres of corn and soybeans in Iowa and parts of Illinois on August 10th. The net result was that the USDA estimate of the U.S. corn crop declined by almost 800 million bushels between August and November. The USDA soybean crop estimate declined by over 250 million bushels over the same time period.

Looking forward to the 2020/21 marketing year, the outlook for corn and soybean prices is certainly brighter than we would have expected just a few months ago. The large export sales to China are a major reason for lower projected ending stocks and higher prices for corn and soybeans in the 2020/21 marketing year. A major question to consider is whether this phenomenon will continue into 2021/22 and beyond, especially for corn where US export sales to China were negligible prior to the current marketing year. Unlike soybeans, China was until 2015 largely self-sufficient in corn production. From 2015 and 2019, China met most of its corn import needs with imports from Ukraine. Poor yields for the 2020 Ukraine corn crop account for much, but not all, of the increase in Chinese demand for US corn.

China can meet burgeoning corn demand in three ways: growing domestic production, increasing imports, and reducing stocks. Beyond the current marketing year, it is likely to do all of these. Assuming trendline yields, Chinese domestic corn production growth will reduce the need for imports in 2021/22. If

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Ukrainian production returns to normal and/or Brazilian corn is price-competitive with US export values – both of which appear likely - US exports of corn to China are likely to be lower in 2021/22 than what is projected for the current 2020/21 marketing year. Even so, US corn exports to China will likely be higher than in previous years. Geopolitical factors, including Chinese tariffs and import quotas that may or may not be imposed and mediation of the grain trade by Chinese state-owned enterprises, remain an important wildcard that could dramatically affect this forecast.

With this background, we can consider the outlook for acreage and supply for corn and soybeans in 2021. All signs point towards a significant increase in total principal crop acres in 2021, which had been depressed by low prices and prevented planting in 2019 and 2020. Total principal crop acre looks to rebound to near 320 million acres in 2021, which will leave ample room for increasing total corn and soybean acreage towards 184 million acres.

Market incentives as of early November clearly favor planting soybeans over corn. For example, the soybean/corn price ratio for new crop 2021 futures has been above 2.5 for some time, compared to a breakeven ratio around 2.3. With this incentive in place we expect planted soybean acreage to increase 7.7 million acres to 90.8 million acres. We expect planted corn acreage in 2021 will fall 1.1 million acres to 90.9 million acres. At trendline yields, this will result in a soybean crop of about 4.5 billion bushels and a corn crop of almost 15 billion bushels.

This sets up a very volatile scenario for 2020/21. Even with production at the projected levels, the current size of the demand base for corn and soybeans implies that it will be difficult for ending stocks to increase substantially in 2020/21. For stocks to be replenished to more normal levels, either prices will have to rise further to reduce the size of the demand base, or good weather will be needed first in South America this winter and then the U.S. in the summer of 2021. On top of all this, there is the timing of the expected economic recovery as COVID-19 vaccination proceeds. The roller-coaster ride in the grain markets is unlikely to end anytime soon.