The outlook for 2010: Big crops, big demands

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The outlook for 2010: Big crops, big demands
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Weather has been the big story for this fall. Between the freezing temperatures, early snow, and the steady flow of storms across the state, Iowa crop producers have not enjoyed the fall season. The late maturing crop faced a freeze that was about a week earlier than average. Areas of the state were blanketed by the 1st measurable snowfall of the season in mid-October, well before average. Typically in October, Iowa receives on average 2.5 inches of precipitation. In 2009, precipitation levels ranged from 4 to 8 inches in the month. This combination of weather has brought production expectations and delayed harvest progress. Figure 1 shows harvest progress for U.S. corn (as of Nov. 1) and compares this year’s progress with the year of the slowest harvest between 1985 and 2008. As the graph shows, the 2009 harvest in the U.S. is the slowest of the past 25 years. Figure 2 displays the same information for U.S. soybeans. The weather delays of the harvest have had a substantial impact on the crop markets.

Before the freeze and harvest delays, USDA had estimated national corn and soybean yields at 164.2 bushels per acre and 42.4 bushels per acre, respectively. Iowa yields were estimated at 188 bushels per acre for corn and 52 bushels per acre for soybeans. The mid-October cold snap likely took the top off of these estimates. And while Iowa crop yields will be reduced, larger reductions will be concentrated in the eastern Corn Belt as the corn and soybean crops there were further behind in development. Pre-freeze, USDA projected this year’s crop as the 2nd largest corn crop at 13 billion bushels and the largest soybean crop at 3.25 billion bushels. Post-freeze, we are probably still looking at the 2nd largest corn crop and a soybean crop in the top five. But quality concerns are building with the harvest delays. The wet conditions have not allowed the crops to dry out and crop moisture levels are running higher than
most would like. Also, areas that experienced hail damage this year are seeing increased mold pressures as well. Corn stock rot has been an issue in the southern U.S. And the late season rains are rehydrating some soybean fields and increasing the likelihood of pod splitting. Farmers and elevators are facing additional drying costs again this year. The supply chain is dealing with having two large, but high moisture, crops in a row.

![U.S. Soybean Harvest Progress](image)

**Figure 2. U.S. Soybean Harvest Progress**

While the supply side has been significantly impacted by the weather, the demand side has been helped by outside influences. Corn demand via ethanol was raised again for the 2008 crop, to 3.7 billion bushels. The outlook for the 2009 crop is for 4.2 billion bushels to head to ethanol facilities. Crude oil prices have risen to the upper $70s per barrel range and this has helped ethanol margins remain positive over the past few months. Figure 3 shows ethanol margins from December 2005 through October 2009. After a rough year between June 2008 and June 2009, ethanol margins have moved above break even. The improvement in margins has provided economic incentives to restart some of the idled ethanol plants. And U.S. ethanol production continues to grow. Based on ethanol production during the 1st seven months of 2009, annual production will be roughly 10.8 billion gallons. Looking beyond to the 2010 and 2011 crop years, ethanol demand will continue to build with the Renewable Fuels Standard. With corn-based ethanol filling the conventional biofuel portion of the standard, corn demand through ethanol will increase to 4.4 billion bushels in 2010 and 4.6 billion bushels in 2011. Based on the standard, by 2015, over 5 billion bushels of corn could be used for ethanol production.
Corn feed and residual demand is projected at 5.4 billion bushels, up 169 million from last year. Feed demand has been in decline with the financial difficulties the livestock industry has faced over the past couple of years. Figure 4 shows the fall in livestock numbers. While poultry and cattle producers are slowing the reductions in their animal numbers, dairy and hog producers have not turned the corner. Between higher feed costs, lowered demand with the recession, and the H1N1 outbreak, the livestock industry has encountered wave after wave of troubling news. But part of the projected increase in feed demand is based on improving livestock economics. As of early November, futures prices for livestock and feed products show the potential for a rebound in the livestock industry as we move through the summer of 2010. For corn, feed demand is still the largest demand category. But it is also the demand category with the weakest outlook. If the improved margins fail to materialize, feed demand will slip further.
Figure 4. Livestock Shifts

Corn export demand is estimated at 2.15 billion bushels, up 292 million from last year. Continued weakness in the dollar is supporting the export outlook. USDA's latest projections show the dollar's slide continuing through the end of the calendar year. Figure 5 displays export sales so far this marketing year. Current corn export sales pace is just ahead of last year. Some of our smaller markets have been early buyers this year and that is encouraging. Exports are the big story for soybeans, especially exports to China. USDA increased its export estimate to 1.305 billion bushels. This would top last year's record. In fact, the early sales pace has been very strong. As Figure 5 shows, soybean export sales have actually exceeded corn sales this year. China has already booked over 500 million bushels of U.S. soybeans. To put that in perspective, that amount is roughly the amount of soybeans Iowa producers are projected to grow this year.

Domestic crush demand is projected at 1.69 billion bushels, up 28 million from last year. Projections of increased soybean oil and meal exports are supporting the crush outlook. Biodiesel demand for soybean oil is expected to recover somewhat for the 2009 crop. But biodiesel production is running well behind last year's pace. The Renewable Fuels Standard should provide some support to biodiesel for the next couple of years as the standard calls for increasing amounts of biodiesel. By 2012, one billion gallons of biodiesel is needed to meet the standard. Soybean meal demand is tied to the recovery of the livestock industry.
From their early October outlook, USDA had projected ending stocks for corn at 1.672 billion bushels, roughly the same level as last year. Soybean ending stocks were estimated at 230 million bushels, up 92 million bushels from last year. Season-average prices were projected at $3.35 for corn and $9.00 for soybeans. The cold snap and the resulting reduction in supply will likely lower the ending stock projections and raise expectations for prices. The futures markets have reacted strongly to the freeze and harvest delays. Corn prices rose over 50 cents per bushels, while soybean prices gained over a $1 per bushel. The outlook for better harvest weather has taken some of these gains out, but prices remain above last month’s levels. Current futures prices point to season-average prices around $3.50 per bushel for corn and $9.30 per bushel for soybeans.

As we approach 2010, the crop markets are shaping up for the acreage competition. Figure 6 displays the ratio of November 2010 soybean futures to December 2010 corn futures. Typically this ratio of harvest futures prices is around 2.5. Values below 2.5 imply an advantage to corn. Values above 2.5 imply an advantage to soybeans. For most of the year, the ratio has leaned toward corn, with the exception of the month of August. Futures (as of Nov. 1) indicated 2010 season-average prices of $3.95 for corn and $9.25 for soybeans. Crop input costs have come down from last year’s highs, improving the economic outlook for both crops. Preliminary estimates from Dr. Mike Duffy, ISU Extension, show per bushel costs of roughly $3.60 for corn and $8.75 for soybeans. Based on these projected prices and costs, corn also holds a return advantage going into 2010. So corn will likely gain acreage from soybeans and other crops in 2010. But the land shifts will not be dramatic. Given the situation today, I would expect corn plantings to be around 88 million acres, with soybean area falls slightly to 77 million acres. As in previous years, other crops will lose area to corn and soybeans.
Figure 6. Ratio of Nov. 2010 Soybean Futures to Dec. 2010 Corn Futures