Ag Market Outlook

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Ag Decision Maker
The February release of the WASDE report contained a relatively few shifts. For U.S. corn, the only move was to add 50 million bushels to the export projection, as China has continued to purchase. That dropped 2020/21 ending stocks to 1.5 billion bushels. USDA raised its 2020/21 season-average price estimate by 10 cents, to $4.30 per bushel. At the Ag Outlook Forum, USDA released its early projections for the 2021 crops. They see corn acreage up 1.2 million acres and a trend-line yield of 179.5 bushels per acre leading to the potential for a record corn crop of 15.15 billion bushels. On the demand side, they see feed and residual usage rising by 200 million bushels, ethanol by 250 million bushels, and exports by 50 million. The total would bring overall corn usage to 15.125 billion bushels.
bushels. So usage roughly equals productions, stocks budge slightly higher, and the season-average price falls by 10 cents, to $4.20 per bushel.
For soybeans, the U.S. changes for the 2020 crop were smaller. Exports were raised 20 million bushels. 2020/21 soybean ending stocks were lowered that 20 million bushels, to 120 million bushels, continuing the trend of tightening over the last several reports. However, USDA’s 2020/21 season-average price estimate did not move, remaining at $11.15 per bushel. At the Ag Outlook Forum, USDA provided a preview for the 2021 crop. They project soybean acreage to increase by 6.9 million acres, reaching 90 million. With a trend-line yield of 50.8 bushels per acre, soybean production would a record 4.525 billion bushels. Domestic crush is expected to increase by 10 million bushels and exports are projected to be 50 million bushels lower. As with corn, total usage

### U.S. Soybean Supply and Use

<table>
<thead>
<tr>
<th>Marketing Year (2020 = 9/1/20 to 8/31/21)</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Planted (mil. acres)</td>
<td>90.2</td>
<td>89.2</td>
<td>76.1</td>
<td>83.1</td>
<td>90.0</td>
</tr>
<tr>
<td>Yield (bu./acre)</td>
<td>49.3</td>
<td>50.6</td>
<td>47.4</td>
<td>50.2</td>
<td>50.8</td>
</tr>
<tr>
<td>Production (mil. bu.)</td>
<td>4,412</td>
<td>4,428</td>
<td>3,552</td>
<td>4,135</td>
<td>4,525</td>
</tr>
<tr>
<td>Beg. Stocks (mil. bu.)</td>
<td>302</td>
<td>438</td>
<td>909</td>
<td>525</td>
<td>120</td>
</tr>
<tr>
<td>Imports (mil. bu.)</td>
<td>22</td>
<td>14</td>
<td>15</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Total Supply (mil. bu.)</td>
<td>4,735</td>
<td>4,880</td>
<td>4,476</td>
<td>4,695</td>
<td>4,680</td>
</tr>
<tr>
<td>Crush (mil. bu.)</td>
<td>2,055</td>
<td>2,092</td>
<td>2,165</td>
<td>2,200</td>
<td>2,210</td>
</tr>
<tr>
<td>Seed &amp; Residual (mil. bu.)</td>
<td>113</td>
<td>127</td>
<td>105</td>
<td>125</td>
<td>124</td>
</tr>
<tr>
<td>Exports (mil. bu.)</td>
<td>2,129</td>
<td>1,752</td>
<td>1,682</td>
<td>2,250</td>
<td>2,200</td>
</tr>
<tr>
<td>Total Use (mil. bu.)</td>
<td>4,297</td>
<td>3,971</td>
<td>3,952</td>
<td>4,575</td>
<td>4,534</td>
</tr>
<tr>
<td>Ending Stocks (mil. bu.)</td>
<td>438</td>
<td>909</td>
<td>525</td>
<td>120</td>
<td>145</td>
</tr>
<tr>
<td>Season-Average Price ($/bu.)</td>
<td>9.33</td>
<td>8.48</td>
<td>8.57</td>
<td>11.15</td>
<td>11.25</td>
</tr>
</tbody>
</table>

Sources: USDA-WAOB, Ag Outlook Forum

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roughly equals production. Stocks increase slightly, but so does the season-average price to $11.25 per bushel.
While there was no change for domestic production, global corn production in 2020/21 was bumped up slightly. There also wasn’t a lot of movement for our South American competition as the Brazilian and Argentine corn production numbers held steady.
The same story holds for global soybeans. While there was no change for domestic production, global production in 2020/21 was bumped up slightly. There also wasn’t a lot of movement for our South American competition as the Brazilian and Argentine soybean production numbers held steady.
Global markets are concerned by dry conditions in the U.S. and South America.
The seasonal outlook shows drought conditions persisting in the Great Plains and western Iowa, where spots of improvement are seen mainly east of the Mississippi and the Pacific Northwest.
Drier conditions are also limiting the projected crops from South America. Argentina has faced the harshest conditions, but drought impacts are being felt in Brazil as well. Recent precipitation has helped some areas, while slowing harvest and creating problems in others.
The 2020 marketing year starts off with a bang in export sales, as we already have 2.2 billion bushels already sold internationally. We passed last year’s total within the first 12 weeks of the marketing year. However, we also saw the first big week of cancellations several weeks ago. The question becomes was that just a blip partially due to the holidays or a sign of more competition in the international market or the end of the Chinese buying spree. The reports since then show a rebound in sales that will likely force USDA to raise their export estimate again in March.
China is by far the driving factor here. Sales to unknown destinations are also up sharply and those sales mainly end up in China as well. Movements in our other large markets have been more subdued and dwarfed by the Chinese actions.

Just a general note for those viewing my presentation slides, in these export shift slides (corn, soybean, beef, and pork), I use the same basic set-up. The first six bars (with the individual country names) are currently our top 6 export markets for the commodity (so you will see a different list of six countries for each commodity). For the crop slides, the 7th bar is labeled “Unknown”, covering export sales that are currently marked for unknown destinations (For example, a multinational company may purchase corn to be shipped in three months, but they are not sure whether they want the corn delivered to Shanghai, China; Seoul, South Korea; or Taipei, Taiwan. In those cases, the sale is marked as unknown destination. Once the company decides on the port, then the sale is transferred to the appropriate country.) The next bar is labeled “Other” and it represents the export shifts from the rest of the world. And finally, the last bar presents the total shift in export sales and shipments from the U.S. to the global market.
Corn export sales are well on their way to reaching record levels and may put pressure on USDA to raise their export estimate. The concern here is still in the slower pace of corn shipments. At this point for the 2018 crop, roughly 68% of sales had been shipped. For 2019, it was 54%. For 2020, it's 44%.
China is now our leading export market for corn. Sales to China account for 32% of all corn export sales. But it is good to see growth beyond China, with growth in all of our major markets and the rest of the world totals.
Feed demand for corn, soybean meal, and distillers grains was being supported by record meat production. The 2020 estimates account for COVID-19 impacts. The 2021 projections display a rebound in meat production and a return to record production. The longer-term action in livestock and meat will depend on the ability to move meat from the farm/ranch to customers, both domestic and international.
The 2020 beef marketing year ended with record export quantities. The first several weeks of 2021 export sales maintain that record pace.
China is the major mover here as well, but South Korea has also picked up the buying pace early this year. Overall, sales are up 20%.
Pork exports are hit record quantities in 2020, but there were some significant cancellations at the end of the year. The first several weeks of 2021 data show pork sales have fallen off that record pace, mainly the shift is from China. While China did purchase a sizable amount of pork, it is dwarfed by last year’s sales.
With the drop in sales to China as they look to recover from the African Swine Fever outbreak, pork sales in other parts of the world have moved higher to partially offset the loss. Mexico, Canada, and Australia have increased purchases, along with some sizable sales to the Philippines.
Ethanol exports were at record levels prior to the trade fights. And while recent data (latest monthly data is for December 2020) showed a rebound, the combination of the COVID-19 outbreak and lower oil prices are limiting export markets. The data for March-May confirmed that. But since May, ethanol exports have stabilized, with a bit of recovery in August and again in October. Sales growth this fall was led by South Korea and the EU. As the calendar has moved to 2021, there is renewed hope of additional sales into South and East Asia, especially China.
The weekly ethanol production data shows the significant decline in ethanol production last spring. The decline was nearly a 50% cut in weekly grind for corn. The combination of lower fuel usage, due to COVID-19, and larger oil supplies, due to the Saudi Arabia-Russia dispute, was a double-barreled hit to the industry, forcing some plants to idle. The data shows the recovery seen thus far, as corn grind bounced back above 95 million bushels per week. The ethanol industry has brought back roughly three-quarters of the capacity shutdown during the virus outbreak. USDA’s outlook indicates a full recovery for the industry will not occur until 2022. The extreme cold snap two weeks ago also significantly impacted ethanol production. Between the rolling electrical blackouts and natural gas freeze-outs, many plants had to curtail production and it is taking a week or two to ramp production back up.
Ethanol stocks had risen to record levels. With the reduction in travel across the country due to COVID-19 and the ongoing oil production fight between Saudi Arabia and Russia, fuel prices fell and fuel stocks rose. The re-opening of the economy helped boost fuel demand and led to a pulldown on ethanol stocks. With areas of the country re-open for business, fuel usage has increased, providing opportunities to bring ethanol stocks back down to manageable levels. The drop was over 300 million gallons, putting ethanol stocks near their lowest level in 3.5 years. However, the data over the last several weeks has shown a (seasonally expected) rebuilding of ethanol stocks, which usually continues into the spring. The recent production cut did provide a chance to drain some ethanol from stocks.
Another factor behind the tremendous price increase of the past six months has been the surge in long positions by outside investors. As the graphic shows, those positions have recently reached the highest level over the past couple of years. But these investors can also be very quick to move out of those positions, especially if there is not a steady stream of positive fundamental news or if a profit-taking mentality sweeps through the markets.
For soybeans, outside investors had been decreasing their long positions for the past few weeks, as precipitation chances improve in South America. But that reversed as the markets lined up for USDA’s Ag Outlook Forum projections.
The season-average price estimates for corn (the large numbers on the graph), based on futures prices, for 2020 and 2021 have increased over the past few months. Based on ISU's 2021 production cost estimate of $3.41 per bushel, current prices put corn margins back above zero.
New crop soybean pricing prospects are exceeding what 2019 had for us. With 2021 projected cost in the $8.95 per bushel range, new crop soybeans have popped up above breakeven.
The pricing pattern last year flipped the seasonal pattern upside down. The largest drops are associated with COVID-19. The heavy black line is roughly the estimated ISU production cost level for both crops. The derecho and drought impacts are showing up in trading. The last few months of trading action put margins above zero, but at the cost of some Iowa production. The combination of production concerns and export (mainly Chinese) sales have corn and soybean prices rising well past pre-COVID-19 highs. But as last few weeks have shown, outside investors are ready to exit if they sense weakness in market fundamentals.
The early pricing levels for the 2021 crops are encouraging. The heavy black line is roughly the 2021 estimated ISU production cost level for both crops. Projected margins are well above zero for the upcoming crops.
When going into the unknown, it’s best to study history. Often, we are set up to repeat it. Harvest pricing lows are driven by ample supplies coming out of the fields. The derecho put at least a scare into supplies and provided some counter-seasonal support for crop prices as we approached harvest. Export sales have remained strongly supportive throughout the fall and winter.
While the issues that are moving the markets are new, our responses should not be. The standard array of marketing tools still cover what we need for our markets to function and function well.
Thank you for your time!

Any questions?

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