Outlook: Grains and Oilseeds

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World Agricultural Outlook Board, OCE, USDA
Outline

• Introduction
• Factors Shaping Forecast
• Outlook
  • Soybean
  • Corn
  • Wheat
• Closing remarks/Summary
Introduction
Timeline for 2021/22 Forecasts

U.S. Agricultural Projections (early release)
- Nov-20

Agricultural Outlook Forum, U.S. Agricultural Projections
- Dec-20

Prospective Plantings
- Jan-21

Initial forecast for 2021/22, Crop Production Forecast (Winter Wheat)
- Feb-21

Acreage report
- Mar-21

2020/21 Production Estimates for Corn + Soybeans, 2021/22 Winter Wheat Seedings
- Apr-21

NASS Crop Production Survey (AYS) for Corn, Soybeans, & Cotton
- May-21

- Jun-21

- Jul-21

- Aug-21
Factors Shaping Forecast
Assumptions: Weather & Policy

- Trend yields used, assuming normal planting progress and growing conditions
- Current policies projected to be “in-place” unless change publicly announced
- No changes to overarching assumptions and approach
Macroeconomic and Economy-wide Assumptions

• Substantial rebound in U.S. and global economic growth
• COVID-19 is more under control, “normal” business activity resumes
• Despite recovery, global real GDP levels are forecast below pre-COVID levels

Source: The World Bank, Global Economic Prospects (Jan 2021)
World production of corn, soy, and wheat continues to grow
Feed use* of grains and oilseeds rising, as well as U.S. exports

Source: PSD Database, USDA/FAS
China’s grain imports bodes well for U.S. grain exports

China MY import estimates of key grains*
Size of bubble represents total tonnage

China CY imports of feed grains/feedstuffs**
Size of bubble represents total tonnage

* Includes corn, barley, sorghum, wheat, and soybeans. Source: PSD/FAS

** Includes corn, barley, sorghum, DDGS, and field peas. Source: TDM
Foreign stocks of corn and soy are tightening
U.S. Corn and Soy markets tightening

Source: PSD Database, AOF
U.S. Wheat market tightening as well

Source: PSD Database, AOF
Higher prices make planting decisions interesting

Cash Prices - Central Illinois (Corn, Soy) and Kansas City (HRW)

Source: CME
Profitable for foreign competition as well
Futures Soy-Corn Price ratios suggest strong rebound in soy acreage
Soy-Corn Price Ratio in the futures market

Corn-Soy Ratio for New Crop (Dec-Corn, Nov-Soybeans)

Source: CME
Interior Cash Price ratios are falling

Source: CME
Where will 3-crop Prevent Planting land?

Million Acres

Corn  Soybeans  Wheat

Source: FSA
Wheat, Corn, and Soybean Planted Acreage for 2021/22

<table>
<thead>
<tr>
<th>Year</th>
<th>Wheat</th>
<th>Corn</th>
<th>Soybeans</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>50</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>2015</td>
<td>50</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>2016</td>
<td>50</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>2017</td>
<td>50</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>2018</td>
<td>50</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>2019</td>
<td>50</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>2020</td>
<td>50</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>2021F</td>
<td>45</td>
<td>92</td>
<td>90</td>
</tr>
</tbody>
</table>
Outlook: Soybeans
Intentions vs. Planted Area: Soybeans

- **Million Acres**
- **USD/bushel**

- **Soybeans, planted**
- **Season Average Price**
- **Prospective Plantings (March)**
China import demand ramping up

Source: TDM
U.S. is price competitive, but is there enough?
### U.S. Soybean Balance Sheet for 2021/22

<table>
<thead>
<tr>
<th>In thousands</th>
<th>Domestic units</th>
<th>2020/21 (Feb)</th>
<th>2021/22</th>
<th>Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area planted (mil. acres)</td>
<td></td>
<td>83.1</td>
<td>90</td>
<td>+6.9</td>
</tr>
<tr>
<td>Yield (bu/acre)</td>
<td></td>
<td>50.2</td>
<td>50.8</td>
<td>+0.6</td>
</tr>
<tr>
<td>Production (mil. Bu)</td>
<td></td>
<td>4,135</td>
<td>4,525</td>
<td>+390</td>
</tr>
<tr>
<td>Imports</td>
<td></td>
<td>35</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>Exports</td>
<td></td>
<td>2,250</td>
<td>2,200</td>
<td>-50</td>
</tr>
<tr>
<td>Crush</td>
<td></td>
<td>2,200</td>
<td>2,210</td>
<td>+10</td>
</tr>
<tr>
<td>Seed and Residual</td>
<td></td>
<td>125</td>
<td>124</td>
<td>-1</td>
</tr>
<tr>
<td>Ending Stocks</td>
<td></td>
<td>120</td>
<td>145</td>
<td>+25</td>
</tr>
<tr>
<td>Farm Average Price ($/bu)</td>
<td></td>
<td>$11.15</td>
<td>$11.25</td>
<td>+$0.10</td>
</tr>
</tbody>
</table>

- Soybean acreage boosted up 6.9 mil. acres to 90 mil
- Production up 390, but with tight stocks supply is down
- Domestic use is up slightly, with lower exports
- Stocks are up slightly from historically low S/U
- Prices up slightly
Outlook: Corn
Intentions vs. Planted Area: Corn
Corn prices supported by strong foreign demand

Source: CME, CNGOIC
U.S. is price competitive with ample supplies

Source: IGC
Will driving return to pre-COVID-19 levels?

Motor Gasoline Product Supplied, Monthly, billion gallons (EIA STEO)

Corn used for ethanol production, billion bushels (NASS)
U.S. Corn Balance Sheet for 2021/22

<table>
<thead>
<tr>
<th>In thousands</th>
<th>Domestic Units</th>
<th>2020/21 (Feb)</th>
<th>2021/22</th>
<th>Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area planted (mil. acres)</td>
<td>90.8</td>
<td>92</td>
<td>+1.2</td>
<td></td>
</tr>
<tr>
<td>Yield (bu/acre)</td>
<td>172.0</td>
<td>179.5</td>
<td>+7.5</td>
<td></td>
</tr>
<tr>
<td>Production (mil. bu)</td>
<td>14,182</td>
<td>15,150</td>
<td>+968</td>
<td></td>
</tr>
<tr>
<td>MY Imports</td>
<td>25</td>
<td>25</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>MY Exports</td>
<td>2,600</td>
<td>2,650</td>
<td>+50</td>
<td></td>
</tr>
<tr>
<td>Feed &amp; Residual</td>
<td>5,650</td>
<td>5,850</td>
<td>+200</td>
<td></td>
</tr>
<tr>
<td>Food, Seed, Industrial</td>
<td>6,375</td>
<td>6,625</td>
<td>+250</td>
<td></td>
</tr>
<tr>
<td>Ending Stocks</td>
<td>1,502</td>
<td>1,552</td>
<td>+50</td>
<td></td>
</tr>
<tr>
<td>Average Farm Price</td>
<td>$4.30</td>
<td>$4.20</td>
<td>-0.10</td>
<td></td>
</tr>
</tbody>
</table>

- Acres up to 92 million, increasing production by 7%
- Domestic usage up on rebound in FSI use and feed
- Exports up on strong prospects to China
- Stocks up slightly
- Prices are lower on returning global competition
Strong demand from China driving up sorghum prices

Source: IGC
U.S. Sorghum Balance Sheet for 2021/22

<table>
<thead>
<tr>
<th></th>
<th>Domestic Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020/21 (Feb)</td>
</tr>
<tr>
<td>Area planted (mil. acres)</td>
<td>5.9</td>
</tr>
<tr>
<td>Yield (bu/acre)</td>
<td>73.2</td>
</tr>
<tr>
<td>Production (mil. bu)</td>
<td>373</td>
</tr>
<tr>
<td>MY Imports</td>
<td>0</td>
</tr>
<tr>
<td>MY Exports</td>
<td>295</td>
</tr>
<tr>
<td>Feed &amp; Residual</td>
<td>70</td>
</tr>
<tr>
<td>Food, Seed, Industrial</td>
<td>10</td>
</tr>
<tr>
<td>Ending Stocks</td>
<td>28</td>
</tr>
<tr>
<td>Average Farm Price</td>
<td>$4.80</td>
</tr>
</tbody>
</table>

- Acreage up on strong profitability
- Projected exports to China to limit domestic use
- Despite larger production, stocks slightly lower
- Prices slightly lower
Outlook: Wheat
Intentions vs. Planted Area: Wheat

- Winter Wheat
- Spring (excl. Durum)
- Durum

Season Average Price, All Wheat
Spring Wheat, Intentions
Durum, Intentions
U.S. Wheat Balance Sheet for 2021/22

- Wheat acreage up slightly, but production is virtually flat
- Exports down, but Feed/residual down up
- Ending stocks lower on tighter carry-in
- S/U ratio falls marginally

<table>
<thead>
<tr>
<th>Domestic Units</th>
<th>2020/21 (Feb)</th>
<th>2021/22</th>
<th>Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area planted (mil. acres)</td>
<td>44.3</td>
<td>45.0</td>
<td>+0.7</td>
</tr>
<tr>
<td>Yield (bu/acre)</td>
<td>49.7</td>
<td>49.1</td>
<td>-0.6</td>
</tr>
<tr>
<td>Production (mil. bu)</td>
<td>1,826</td>
<td>1,827</td>
<td>+1</td>
</tr>
<tr>
<td>MY Imports</td>
<td>120</td>
<td>130</td>
<td>+10</td>
</tr>
<tr>
<td>MY Exports</td>
<td>985</td>
<td>925</td>
<td>-60</td>
</tr>
<tr>
<td>Feed &amp; Residual</td>
<td>125</td>
<td>140</td>
<td>+15</td>
</tr>
<tr>
<td>Food &amp; Seed</td>
<td>1,028</td>
<td>1,030</td>
<td>+2</td>
</tr>
<tr>
<td>Ending Stocks</td>
<td>836</td>
<td>698</td>
<td>-138</td>
</tr>
<tr>
<td>Average Farm Price</td>
<td>$5.00</td>
<td>$5.50</td>
<td>+$0.50</td>
</tr>
</tbody>
</table>
Concluding Remarks
For U.S. Wheat, Soybeans, and Corn in 2021/22…

• **Total acreage** projected to reach **227 million acres**, highest since 2016
  • Soybeans + corn acreage to reach record 182 million acres, eclipsing 2017
  • Wheat acreage rebounds slightly to 45 million acres
• **Disappearance of wheat, soybeans, and corn to increase slightly**
  • Domestic cons. rebounds on increased feed and industrial use
    • Feed (corn/wheat) and crush (soybeans) up
    • Motor gas/ethanol and bio/renewable diesel support higher use
  • **Exports are flat** y/o/y, continuing banner year despite increased competition
• Combined **stocks are lower** slightly, driven by wheat and offset by corn & soy
• Soy and wheat **prices** are projected higher, while corn is slightly lower
Thank you for listening.

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