Agricultural Outlook for 2013

Joseph W. Glauber
Chief Economist, USDA
USDA 89th Agricultural Outlook Forum
February 21, 2013
US agricultural exports projected at record high

FY 2013 exports: $142.0 b
FY 2013 imports: 112.5 b
Net trade bal: 29.5 b
China remains top destination for US agricultural exports for 2\textsuperscript{nd} straight year
Soybeans and cotton account for two-thirds of US agricultural exports to China
Export values forecast up in FY 2013 for most commodity categories

- Tree nuts
- F&V-frozen
- F&V-fresh
- Cotton
- Dairy products
- Poultry
- Pork
- Beef and veal
- Soybeans
- Corn
- Rice
- Wheat

2013
2012
But export volumes flat or down for most commodities

- Wheat: +7.4%
- Rice: +2.7%
- Corn: -37.5%
- Soybeans: -4.7%
- Beef and veal: -4.1%
- Pork: -2.0%
- Broilers: n/c
- Cotton: -0.6%
Brazil corn exports to surpass U.S. exports?

Global ending stocks tighten for grains

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>76</td>
<td>96</td>
<td>112</td>
<td>110</td>
<td>104</td>
<td>96</td>
</tr>
<tr>
<td>Corn</td>
<td>62</td>
<td>69</td>
<td>65</td>
<td>55</td>
<td>54</td>
<td>50</td>
</tr>
<tr>
<td>Rice</td>
<td>69</td>
<td>77</td>
<td>79</td>
<td>81</td>
<td>84</td>
<td>80</td>
</tr>
<tr>
<td>Soybeans</td>
<td>83</td>
<td>72</td>
<td>93</td>
<td>101</td>
<td>80</td>
<td>84</td>
</tr>
<tr>
<td>Upland Cotton</td>
<td>187</td>
<td>208</td>
<td>144</td>
<td>156</td>
<td>245</td>
<td>281</td>
</tr>
</tbody>
</table>

Days of use

lowest since 1973/74
China builds cotton inventory

Million bales

- Rest of world
- China
Much of area exiting CRP is located in Plains states

Source: Farm Service Agency
Planted acres projected to decline in 2013

<table>
<thead>
<tr>
<th>Crop</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013F</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>93.5</td>
<td>86.0</td>
<td>86.4</td>
<td>88.2</td>
<td>91.9</td>
<td>97.2</td>
<td>96.5</td>
<td>-0.7</td>
</tr>
<tr>
<td>Soybeans</td>
<td>64.7</td>
<td>75.7</td>
<td>77.5</td>
<td>77.4</td>
<td>75.0</td>
<td>77.2</td>
<td>77.5</td>
<td>+0.4</td>
</tr>
<tr>
<td>Wheat</td>
<td>60.5</td>
<td>63.2</td>
<td>59.2</td>
<td>53.6</td>
<td>54.4</td>
<td>55.7</td>
<td>56.0</td>
<td>+0.5</td>
</tr>
<tr>
<td>Upland cotton</td>
<td>10.5</td>
<td>9.3</td>
<td>9.0</td>
<td>10.8</td>
<td>14.4</td>
<td>12.1</td>
<td>9.8</td>
<td>-19.0</td>
</tr>
<tr>
<td>Minor feed grains</td>
<td>15.5</td>
<td>15.8</td>
<td>13.6</td>
<td>11.4</td>
<td>10.6</td>
<td>12.6</td>
<td>12.9</td>
<td>+2.4</td>
</tr>
<tr>
<td>Rice</td>
<td>2.8</td>
<td>3.0</td>
<td>3.1</td>
<td>3.6</td>
<td>2.7</td>
<td>2.7</td>
<td>2.6</td>
<td>-3.7</td>
</tr>
<tr>
<td>Total 8 crops</td>
<td>247.5</td>
<td>253.0</td>
<td>248.7</td>
<td>245.0</td>
<td>249.0</td>
<td>257.5</td>
<td>255.3</td>
<td>-0.9</td>
</tr>
<tr>
<td>CRP</td>
<td>36.8</td>
<td>34.6</td>
<td>33.7</td>
<td>31.4</td>
<td>31.2</td>
<td>29.5</td>
<td>27.1</td>
<td>-8.1</td>
</tr>
<tr>
<td>8 crops + CRP</td>
<td>284.3</td>
<td>287.6</td>
<td>282.4</td>
<td>276.4</td>
<td>280.2</td>
<td>287.0</td>
<td>282.4</td>
<td>-1.6</td>
</tr>
</tbody>
</table>
Drought persists across much of the United States
Corn and soybean production projected to rebound in 2013

<table>
<thead>
<tr>
<th>Crop</th>
<th>Unit</th>
<th>2012</th>
<th>2013</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>Mil bu</td>
<td>10,780</td>
<td>14,530</td>
<td>34.8%</td>
</tr>
<tr>
<td>Soybeans</td>
<td>Mil bu</td>
<td>3,015</td>
<td>3,405</td>
<td>12.9%</td>
</tr>
<tr>
<td>Cotton</td>
<td>Mil bales</td>
<td>17.0</td>
<td>14.0</td>
<td>-17.7%</td>
</tr>
<tr>
<td>Rice</td>
<td>Mil cwt</td>
<td>199.5</td>
<td>192.0</td>
<td>-3.8%</td>
</tr>
<tr>
<td>Wheat</td>
<td>Mil bu</td>
<td>2,269</td>
<td>2,100</td>
<td>-7.4%</td>
</tr>
</tbody>
</table>
Preseason precipitation and Iowa corn yields

Deviation from trend (bu/acre) vs Deviation from Sep-Jan average precipitation (inches)

Corr = 0.059
Weekly ethanol production below RFS caps for conventional biofuels

US corn use for ethanol rebounds, but below 5 billion bushels
Motor gasoline use projected to decline

Source: DOE--Energy Information Administration, Annual Energy Outlook
Commodity prices fall from record levels

<table>
<thead>
<tr>
<th>Crop</th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14F</th>
<th>% Change 2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>4.87</td>
<td>5.70</td>
<td>7.24</td>
<td>7.90</td>
<td>7.00</td>
<td>-11.4%</td>
</tr>
<tr>
<td>Corn</td>
<td>3.55</td>
<td>5.18</td>
<td>6.22</td>
<td>7.20</td>
<td>4.80</td>
<td>-33.3%</td>
</tr>
<tr>
<td>Soybeans</td>
<td>9.59</td>
<td>11.30</td>
<td>12.50</td>
<td>14.30</td>
<td>10.50</td>
<td>-26.6%</td>
</tr>
<tr>
<td>Rice</td>
<td>14.40</td>
<td>12.70</td>
<td>14.50</td>
<td>14.90</td>
<td>15.20</td>
<td>+2.0%</td>
</tr>
<tr>
<td>Cotton</td>
<td>62.9</td>
<td>81.5</td>
<td>88.3</td>
<td>71.0</td>
<td>73.0</td>
<td>+2.8%</td>
</tr>
</tbody>
</table>

*Wheat, corn and soybeans in dollars per bushel; rice in dollars per hundredweight; cotton in cents per pound. Numbers in red denote record levels.*

*Source: USDA-NASS and Office of the Chief Economist, February 2013*
High feed costs keep feed ratios at low levels

Dairy and Broilers

Hogs

Dairy
Broilers
Hogs

Jan-05
May-05
Sep-05
Jan-06
May-06
Sep-06
Jan-07
May-07
Sep-07
Jan-08
May-08
Sep-08
Jan-09
May-09
Sep-09
Jan-10
May-10
Sep-10
Jan-11
May-11
Sep-11
Jan-12
May-12
Sep-12
Livestock, dairy and poultry prices projected to increase in 2013

<table>
<thead>
<tr>
<th>Animal products</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013F</th>
<th>% Change 2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dollars per cwt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td>83.25</td>
<td>95.38</td>
<td>114.73</td>
<td>122.86</td>
<td><strong>129.50</strong></td>
<td>5.4</td>
</tr>
<tr>
<td>Hogs</td>
<td>41.24</td>
<td>55.06</td>
<td>66.11</td>
<td>60.88</td>
<td>63.00</td>
<td>3.5</td>
</tr>
<tr>
<td>Broilers</td>
<td>77.60</td>
<td>82.90</td>
<td>79.90</td>
<td>86.6</td>
<td><strong>95.00</strong></td>
<td>9.7</td>
</tr>
<tr>
<td>Milk</td>
<td>12.83</td>
<td>16.26</td>
<td>20.14</td>
<td>18.51</td>
<td>19.25</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Prices in red denote record levels.

*Source: Office of the Chief Economist, February 2013*
Food CPI to rise in 2013 but likely to remain below levels in 2008 and 2011

ERS forecast: 3.0-4.0% for 2013
Net cash income projected to fall in 2013, but remain high relative to historical levels.
Net cash income projected to fall for most crop producers

Source: Economic Research Service
Net cash income for livestock producers expected to decline in 2013

Source: Economic Research Service