U.S. Soybean Ending Stocks & Average Cash Price

- Ending Stocks (Million Bushels)
  - 2015-16: $8.95
  - 2016-17: $9.47
  - 2017-18: $9.33
  - 2018-19: $8.48 (909)
  - 2019-20: $8.50
  - 2020-21: $8.20

- Average Price
  - Historic: $12.00
  - 2018-19: $11.00
  - Estimated: $10.00
  - Projected: $9.00

Source: USDA WASDE, June 11, 2020

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U.S. Ending Stocks as % of Total Use

- Ending Stocks as % of Total Use
  - 2015-16:
    - Soybeans: 5.0%
    - Corn: 12.7%
  - 2016-17:
    - Soybeans: 7.2%
    - Corn: 15.7%
  - 2017-18:
    - Soybeans: 10.2%
    - Corn: 14.5%
  - 2018-19:
    - Soybeans: 15.5%
    - Corn: 22.9%
  - 2019-20:
    - Soybeans: 15.3%
    - Corn: 22.4%
  - 2020-21:
    - Soybeans: 9.4%
    - Corn: 15.0%

Source: USDA WASDE, June 11, 2020
Iowa Average Corn Costs & Returns
Corn Following Soybeans
(2020 Crop Year)

<table>
<thead>
<tr>
<th></th>
<th>Avg. Yield</th>
<th>Above Avg. Yld</th>
<th>High Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield per acre</td>
<td>198</td>
<td>213</td>
<td>228</td>
</tr>
<tr>
<td>Price per bushel</td>
<td>$3.20</td>
<td>$3.20</td>
<td>$3.20</td>
</tr>
<tr>
<td>Crop revenue</td>
<td>$633.60</td>
<td>$681.60</td>
<td>$729.60</td>
</tr>
<tr>
<td>ARC/PLC</td>
<td>$65.00</td>
<td>$65.00</td>
<td>$65.00</td>
</tr>
<tr>
<td>MFP/CFAP</td>
<td>$30.00</td>
<td>$30.00</td>
<td>$30.00</td>
</tr>
<tr>
<td>Crop insurance</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Gross revenue</td>
<td>$728.60</td>
<td>$776.60</td>
<td>$824.60</td>
</tr>
<tr>
<td>Total non-land costs</td>
<td>$420.00</td>
<td>$420.00</td>
<td>$420.00</td>
</tr>
<tr>
<td>Cash Rent Equivalent</td>
<td>$222.00</td>
<td>$222.00</td>
<td>$222.00</td>
</tr>
<tr>
<td>Net Return to Farmer</td>
<td>$86.60</td>
<td>$134.60</td>
<td>$182.60</td>
</tr>
<tr>
<td>Breakeven Price ($ per bu.)</td>
<td>$3.24</td>
<td>$3.01</td>
<td>$2.81</td>
</tr>
</tbody>
</table>

Federal Government Payments & Subsidies

- **2020 CFAP Payments**
  - Not to exceed 50% of 2019 Production or the Unpriced Bushels as of Jan. 15, 2020 (lesser of the two) X 50%
  - Approx. $30/A Corn
  - Approx. $12/A Soybeans

- **2019 MFP Payments**
  - $67/A average based on 2019 planted acres, 3 total payments received in Aug., Nov. and Feb. ‘20

- **2018 Farm Bill (Implemented with 2019 Crop)**
  - ARC/PLC Payments (PLC Reference Prices: $3.70/bu Corn & $8.40/bu Soybeans)
    - 2019 Corn = $12.75/A (PLC Old Yield) paid in Oct. ‘20
    - 2020 Corn = $65/A (PLC New Yield) paid in Oct. ‘21
    - 2020: Soybeans = $10/A (ARC-CO) paid in Oct. ‘21
    - 2021: Corn = $35/A (PLC New Yield) paid in Oct. ‘22

- **Crop Insurance Subsidies**
  - Varies by farm’s Actual Production History (APH), level of coverage, unit structure, etc.
    - Approx. $50/A for Corn & $30/A for Soybeans
2020 Iowa Average Breakeven Costs

**Corn**

<table>
<thead>
<tr>
<th>Yield</th>
<th>170</th>
<th>175</th>
<th>180</th>
<th>185</th>
<th>190</th>
<th>195</th>
<th>200</th>
<th>205</th>
<th>210</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expense/Acre</td>
<td>$642</td>
<td>$642</td>
<td>$642</td>
<td>$642</td>
<td>$642</td>
<td>$642</td>
<td>$642</td>
<td>$642</td>
<td>$642</td>
</tr>
<tr>
<td>Cost/Bu</td>
<td>$3.81</td>
<td>$3.70</td>
<td>$3.60</td>
<td>$3.50</td>
<td>$3.41</td>
<td>$3.32</td>
<td>$3.24</td>
<td>$3.16</td>
<td>$3.09</td>
</tr>
</tbody>
</table>

Estimated Breakeven

Actual Breakeven

**Soybeans**

<table>
<thead>
<tr>
<th>Yield</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>55</th>
<th>60</th>
<th>65</th>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expense/Acre</td>
<td>$488</td>
<td>$488</td>
<td>$488</td>
<td>$488</td>
<td>$488</td>
<td>$488</td>
<td>$488</td>
<td>$488</td>
<td>$488</td>
</tr>
<tr>
<td>Cost/Bu</td>
<td>$16.17</td>
<td>$15.96</td>
<td>$15.75</td>
<td>$15.54</td>
<td>$15.33</td>
<td>$15.12</td>
<td>$14.91</td>
<td>$14.70</td>
<td>$14.49</td>
</tr>
</tbody>
</table>

Estimated Breakeven

Actual Breakeven

**Busheling Through 2020**

<table>
<thead>
<tr>
<th>Avg. Yield</th>
<th>Above Avg. Yield</th>
<th>High Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>198 bu/A Corn</td>
<td>213 bu/A Corn</td>
<td>228 bu/A Corn</td>
</tr>
<tr>
<td>55 bu/A Soybeans</td>
<td>59 bu/A Soybeans</td>
<td>63 bu/A Soybeans</td>
</tr>
</tbody>
</table>

Corn Breakeven Prices $/bu:

- Avg. Yield: $3.50
- Above Avg. Yield: $3.25
- High Yield: $3.00

Soybean Breakeven Prices $/bu:

- Avg. Yield: $9.85
- Above Avg. Yield: $9.15
- High Yield: $8.45

Corn Breakevens

Soybean Breakevens

IOWA STATE UNIVERSITY
Extension and Outreach

Ag Decision Maker
Iowa Average Corn Costs & Returns
Soybeans Following Corn
(2020 Crop Year)

<table>
<thead>
<tr>
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<th>Avg. Yield</th>
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<th>High Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield per acre</td>
<td>55</td>
<td>59</td>
<td>63</td>
</tr>
<tr>
<td>Price per bushel</td>
<td>$8.20</td>
<td>$8.20</td>
<td>$8.20</td>
</tr>
<tr>
<td>Crop revenue</td>
<td>$451.00</td>
<td>$483.80</td>
<td>$516.60</td>
</tr>
<tr>
<td>ARC/PLC</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>MFP/CFAP</td>
<td>$12.00</td>
<td>$12.00</td>
<td>$12.00</td>
</tr>
<tr>
<td>Crop insurance</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Gross revenue</td>
<td>$473.00</td>
<td>$505.80</td>
<td>$538.60</td>
</tr>
<tr>
<td>Total non-land costs</td>
<td>$266.00</td>
<td>$266.00</td>
<td>$266.00</td>
</tr>
<tr>
<td>Cash Rent Equivalent</td>
<td>$222.00</td>
<td>$222.00</td>
<td>$222.00</td>
</tr>
<tr>
<td>Net Return to Farmer</td>
<td>-$15.00</td>
<td>$17.80</td>
<td>$50.60</td>
</tr>
<tr>
<td>Breakeven Price ($ per bu.)</td>
<td>$8.87</td>
<td>$8.27</td>
<td>$7.75</td>
</tr>
</tbody>
</table>

Example Farm Marketing Plan

<table>
<thead>
<tr>
<th>Farm Description</th>
<th>Breakevens</th>
<th>2020 Pre-Harvest Marketing</th>
<th>Primary Marketing Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Corn</td>
<td>Soybeans</td>
<td>Corn</td>
</tr>
<tr>
<td>1,000 A row crops, 600 A corn, 400 A soybeans; shares machinery, trucks &amp; labor with family members; fall/winter cash flow needs of $200,000. APH: 190 bu/A corn, 55 bu/A soybeans, RP crop insurance @ 85% w/Hail. On-farm storage limited to 100,000 bushels. Needs to price extra bushels of new crop corn and/or soybeans pre-harvest.</td>
<td>$3.24</td>
<td>$8.87</td>
<td>Average Dec. Corn Futures 10,000 bu. @ $4.05 Dec., Sell another 17,000 @ $3.45 the Dec.</td>
</tr>
</tbody>
</table>
Pre-Harvest Marketing Corn Bushels with Revenue Protection (RP)

- Pre-Harvest Sell for Delivery up to 162 Bu/A (likely HTA or Forward Cash Contracts)
- Non-delivery: Use of Hedges or Put Options
- Price Guarantee is the Higher of the Projected Price vs. Harvest Price
- Slight Basis Risk
- Prevented Planting = 55% of Corn Guarantee, 60% of Soybean Guarantee

190 Bu/A Actual Production History (APH)

Deductible 15% = 28 Bu/A

RP @ 85% Level of Coverage = 162 Bu/A Guarantee X $3.88/bu Projected Price = $627/A Revenue Guarantee

*Final Price

Crop Marketing Web Sites

- Ag Decision Maker – ISU Extension
  (Monthly e-Newsletter, Decision Tools, Newsletters, Publications, Voiced Media w/Iowa Commodity Challenge, 2018 Farm Bill & Iowa ARC/PLC Payment Estimator & PLC Yield Update Tool, CFAP Information)
  [www.extension.iastate.edu/agdm](http://www.extension.iastate.edu/agdm)

- Iowa Commodity Challenge
  (Marketing Tools Workbook, Basis Tracking Tables, Learning Activities, etc.)
  [http://tinyurl.com/iacrops](http://tinyurl.com/iacrops)
  Virtual Ag Marketing Clubs (Webinars, Videos, Newsletters, etc.)
  [www.extension.iastate.edu/polk/VAMC](http://www.extension.iastate.edu/polk/VAMC)

- Dr. Chad Hart – Extension Economist/Crops
  [http://www2.econ.iastate.edu/faculty/hart/](http://www2.econ.iastate.edu/faculty/hart/)

- U of Illinois Extension - Farm Doc
  (Daily e-Newsletter, FAST Tools, Publications, Videos & Podcasts, 2018 Farm Bill & ARC/PLC Payment “What If” Tool, PLC Update Tool, ARC-IC Tool)
  [www.farmdoc.illinois.edu](http://www.farmdoc.illinois.edu)