Making Your 2018 Farm Bill Decisions in 2020

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2014 Farm Bill Decision Review

• Most farmers chose ARC-County under 2014 Farm Bill for corn and soybeans

• Forecast was for higher ARC-County than PLC payments over the 5-year life of the Bill making decision easy for most farmers

• Forecast was on-target for 2014 Bill, will it also be true for 2018 Bill choices?
  – Forecasts for 2014 Bill were keyed off of the fact that benchmark revenues for 2014, 2015, and 2016 would be high
  – High benchmark revenues for those years front-loaded ARC-CO payments and made it an easy choice on most farms
  – Situation is much different for the 2018 Bill decision since ARC-CO benchmark revenues are not as high

• PLC needs more consideration this time

• ARC-Individual Coverage is worth considering on some farms
High Corn Prices from ‘10 through ’13 Boosted Benchmark Revenues

U.S. Crop Marketing Year Annual Average Corn Prices

Source: USDA-NASS

Purdue Top Farmer Conference, January 10, 2020
Under 2014 Bill Prices Used to Compute ARC-CO Benchmark
Revenues For Early Years Were Known At Signup Time

Actual ARC-CO Corn Benchmark Prices, 2014-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>$5.29</td>
</tr>
<tr>
<td>15</td>
<td>$5.29</td>
</tr>
<tr>
<td>16</td>
<td>$4.79</td>
</tr>
<tr>
<td>17</td>
<td>$3.95</td>
</tr>
<tr>
<td>18</td>
<td>$3.70</td>
</tr>
</tbody>
</table>

Source: USDA-NASS
Similar to Corn, High Soybean Prices from ‘10 through ‘13 Boosted Benchmark Revenues

U.S. Crop Marketing Year Annual Average Soybean Prices

Source: USDA-NASS
Under 2014 Bill Prices Used to Compute ARC-CO Benchmark Revenues For Early Years Were Known At Signup Time...And PLC Price Was Very Low Relative to Expected Benchmarks

Actual ARC-CO Benchmark Soybean Prices, 2014-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>12.27</td>
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<tr>
<td>2015</td>
<td>12.27</td>
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<tr>
<td>2016</td>
<td>11.87</td>
</tr>
<tr>
<td>2017</td>
<td>10.86</td>
</tr>
<tr>
<td>2018</td>
<td>9.63</td>
</tr>
</tbody>
</table>

Source: USDA-NASS
Historical ARC-CO and PLC Payments for Corn

White County, Indiana Example Farm

|$/Acre|
------------------
|| 14   | 15   | 16   | 17   | 18   | Avg  |
|------------------|------------------|--|------------------|------------------|--|
|$/Acre            | 54.19            | 72.50 | 19.06            | 41.48            | 10.98 | 29.15 |
|                  | ARC-CO           | PLC  | ARC-CO           | PLC  | ARC-CO | PLC  |
Historical ARC-CO and PLC Payments for Soybeans

White County, Indiana Example Farm

$/Acre

- ARC-CO
- PLC

Year: 2014-2018

Avg:
- ARC-CO: $10.11
- PLC: $0

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Program Choices

1) Agriculture Risk Coverage – County (ARC-CO)

2) Price Loss Coverage (PLC)

3) Agriculture Risk Coverage – Individual (ARC-IC)

For ARC-CO and PLC choice is made for each crop and FSA farm

For ARC-IC choice is made by FSA farm for all covered crops
Elements of the Decision

- Decisions Are Made for Each FSA Farm Number
- Make a Decision for Each Crop Individually (Except for ARC-IC)
- Base Acres Will Not Change from 2014 Bill
- Payments Are Made on Base Acres, Not Planted Acres (except for ARC-IC)
- Initial Decision Made for 2019 and 2020 Program Years
  - Deadline: 3/15/20
  - Make your appointment w/FSA now!
Elements of the Decision (continued)

• ARC-CO Actual Revenue
  – County Yields
  – Marketing year average U.S. prices

• PLC Actual Revenue
  – Actual Farm Yields are Used to Compute Program Yields
  – Marketing Year average U.S. prices
Need to Make Yield Update Decision First

Options

1. Retain Current PLC yields

2. Update yields: based on covered commodities planted acreage during 2013 to 2017
   • Corn and Soybeans
     – simple average of yields for years crop was planted x 90% x 90%
   • Wheat
     – simple average of yields for years crop was planted x 90% x 95.45%

3. Decision to update is made by owner
   • operators or owners can provide yields
Updating Yields Is Not an Automatic Decision

• For most producers actual yields today are substantially higher than yields used to compute “old” program yields

• **But** Use of two factors (90% times 90%) effectively pulls down yield calculations for corn and soybeans
  
  — In case of wheat it’s 90% times 95.45%

• **Result:** You have to compute your updated Program Yield and compare it to “old” Program Yield to make your yield update decision...likely not the same decision on every farm and for every crop
Agricultural Risk Coverage - County

– Initial decision by crop and FSA farm for 2019 and 2020 program years

– ARC-CO payments occur when actual crop revenue is below the ARC-CO revenue guarantee for a crop year

– ARC-CO guarantee is 86% of ARC-CO benchmark revenue

– Coverage is capped at 10% of benchmark revenue

– ARC-CO benchmark revenue based on Olympic average of trend adjusted yields times the Olympic average of higher of U.S. MYA Crop price for preceding 5 crop years or $3.70 for corn, $8.40 for soybeans, or $5.50 for wheat

– Payment is made on 85% of base acres
Price Loss Coverage (PLC)

1) Initial decision by crop and FSA farm for 2019 and 2020 program years

2) Payments occur if the higher of U.S. average market price for the crop year less than the crop’s reference price

- Corn Reference Price = $3.70
- Soybean Reference Price = $8.40
- Wheat Reference Price = $5.50

3) Payment is made on 85% of base acres

4) Coverage is capped using reference price & loan price
   a) Max PLC Payment Rates Are
      - Corn = $1.50/bu., Soybeans = $2.20/bu., Wheat = $2.12/bu.
If You Choose Price Loss Coverage (PLC)

You Can Purchase Supplemental Coverage Option (SCO)

– Farms have an option to purchase county level insurance

– Subsidy rate is 65%

– Provides buyer opportunity to buy-up coverage to 86% of benchmark revenue, but the benchmark is county revenue not individual farm revenue
  
  • Provides buyer with a mix of farm level and county level insurance

• Historically county level insurance at 86% level has not been very attractive
What Are Big Differences Between ARC & PLC?

• ARC-CO focuses on benchmark revenue
  – payments are capped at 10% of benchmark revenue

• PLC designed to protect against larger revenue declines
  – but provides less “shallow-loss” protection than ARC

• PLC more competitive under 2018 Bill than it was under 2014 Bill
ARC-CO and PLC Estimated Payments for Corn

White County Example Farm, Indiana

Assumes 2019 Corn Price = $3.80

2020 Corn Prices

-$0  $10  $20  $30  $40  $50$

Variables:
- $3.40
- $3.60
- $3.80
- $4.00
- $4.20

Payments:
- 19 - ARC-CO
- 19 - PLC
- 20 - ARC-CO
- 20 - PLC

Estimated Payments (in $/acre):
- 19 - ARC-CO: $3
- 19 - PLC: $0
- 20 - ARC-CO: $13
- 20 - PLC: $39
ARC-CO and PLC Estimated Payments for Soybeans

White County, Indiana Example Farm

Assumes 2019 Soybean Price = $9.00

2020 Soybean Prices

$0 $5 $10 $15 $20 $25 $30 $35 $40 $45 $50

$8.00 $8.50 $9.00 $9.50 $10.00

13 11 13 13 13

19 - ARC-CO 19 - PLC 20 - ARC-CO 20 - PLC

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What About Agricultural Risk Coverage – Individual? (ARC-IC)

- Initial decision by FSA farm for 2019 and 2020 program years
- ARC-IC payments occur when an FSA Farm’s crop revenue is below the ARC-IC revenue guarantee for a crop year
- ARC-IC guarantee is 86% of ARC-IC benchmark revenue
- Coverage is capped at 10% of benchmark revenue
- ARC-IC benchmark revenue based on Olympic average of revenues for preceding 5 years
  - Revenues calculated using higher of MYA crop prices or “effective price” and proven yields
- Payment is made on 65% of base acres (not 85% of base acres)
When Should You Consider ARC-IC?

Evaluate by individual FSA Farm

1. Sample calculations suggest farms with 20% production losses in 2019 should take the time to evaluate ARC-IC

2. Production losses can be from prevented planting or reduced yields or combination of both

3. Less attractive if you are considering multiple FSA Farms because of weighted averaging of benchmark revenues across farms
Farm Bill Decision Summary

1. Compare updated yields to existing program yields for each crop and FSA farm;

   ✓ update those farms crops & with higher updated yields

2. Program Choices:

   – Corn and Wheat: start with PLC as your initial program choice and evaluate ARC-CO as a challenger

   – Soybeans: start with ARC-CO as your initial program choice and evaluate PLC as a challenger

   – Consider ARC-IC on FSA farms with significant production losses of at least 20% or more in 2019
Farm Bill Tools
### Calculation of PLC and ARC-CO Payments

<table>
<thead>
<tr>
<th>Year</th>
<th>County Yield</th>
<th>MYA Price</th>
<th>PLC</th>
<th>ARC-CO</th>
<th>Benchmark</th>
<th>County Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>198</td>
<td>3.85</td>
<td>$0</td>
<td>$0</td>
<td>201.7</td>
<td>641.84</td>
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<tr>
<td>2019</td>
<td>188</td>
<td>3.60</td>
<td>$13</td>
<td>$0</td>
<td>203.5</td>
<td>647.60</td>
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<td>2020</td>
<td>191</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>687.60</td>
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</table>
### PLC Yield Updating Tool

**Notation**
- Example FSA Farm

**State**
- Indiana

**County**
- White

**Crop**
- Corn

**National Yield Factor**
- 0.9000

**Substitute Yield**
- 135.86

### Current PLC Yield

<table>
<thead>
<tr>
<th>Current yield</th>
<th>Break-even yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>131</td>
<td>161.73</td>
</tr>
</tbody>
</table>

Each FSA farm has a current PLC yield. The average of the farm yields must exceed the break-even yield before updating results in a higher PLC yield.

### Update PLC Yield

<table>
<thead>
<tr>
<th>Year</th>
<th>Farm Yield</th>
<th>Substitute Yield</th>
<th>Used Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>184</td>
<td>135.86</td>
<td>184.00</td>
</tr>
<tr>
<td>2014</td>
<td>194</td>
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<tr>
<td>2016</td>
<td>189</td>
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</tr>
<tr>
<td>2017</td>
<td>185</td>
<td>135.86</td>
<td>185.00</td>
</tr>
</tbody>
</table>

**2013-2017 Average**
- 177.57

**National Yield Factor**
- 0.9000

**Update Yield**
- 143.83

### Result

**Updating will result in a higher PLC yield.**
2018 Farm Bill Information On Home Page of Purdue Center for Commercial Agriculture’s Web Site

Purdue.edu/commercialag
Upcoming Farm Bill Programming from Center for Commercial Agriculture

• Jan. 16th Farm Bill Choices Webinar
  – 9:30 a.m. EST
  – Joint webinar with FSA State Office staff joining us on the set

• 2 Regional Workshops
  – Jointly sponsored by Purdue Extension, Indiana FSA, Indiana Corn Marketing Council, Indiana Soybean Alliance and Indiana Farm Bureau
  – February 5 (Vincennes, IN)
  – February 12 (Huntington, IN)