The Agricultural Act of 2014 - Title 1 Programs: PLC and ARC

Aaron Smith
Assistant Professor – Row Crop Economics
Department of Agricultural & Resource Economics
University of Tennessee Extension
Overview

- General Comments
- Crop Insurance
  - Price Loss Coverage (PLC)
    - Supplemental Coverage Option (SCO)
  - Agricultural Risk Coverage – County (ARC-C)
  - Agricultural Risk Coverage – Individual (ARC-I)
- Questions and Considerations
The Agricultural Act of 2014 provides row crop producers and landowners a new set of program and insurance options. Starting with the 2014 crop, producers and landowners of covered commodities must choose between:
- Agricultural Risk Coverage - County (ARC-C)
- Agricultural Risk Coverage - Individual (ARC-I)
- Price Loss Coverage (PLC)

Program Choice is for the life of the Farm Bill. At this time, the USDA has not released the final regulations. Covered Commodities: Wheat, Oats, Barley, Corn, Grain Sorghum, Long Grain Rice, Medium Grain Rice, Pulse Crops, Soybeans, Other Oilseeds, and Peanuts. Cotton is no longer a covered commodity.
Overall payment limit per person is $125,000 combined for PLC, ARC, Loan Deficiency Payments, and Marketing Loan Gains

No change to the spousal rule ($250,000 per couple)

No limit on marketing loan forfeitures

Adjusted Gross Income (AGI) test – 3 year average of $900,000 or less for commodity and conservation program eligibility

Payment limits and AGI test do not apply to crop insurance
Two additional decisions that will influence program choices (landowner):

- Base acre reallocation: Landowners will have the opportunity to reallocate their base acres to crops planted on each farm from 2009 to 2012.
- Yield update: If the PLC option is chosen you have the opportunity to update payment yields to 90% of the 2008-2012 crop year averages or leave the payment yields unchanged on a commodity-by-commodity basis.
  - USDA may let everyone update yields regardless of program choice, however updates will only affect PLC enrolled producers for this Farm Bill.

Producers should consider crop insurance alternatives while considering program elections.

Key in understanding program choices is being able to distinguish between

- Base (generic base) versus planted acres
- County versus individual farm
- Insurance coverage (RMA) versus commodity program (FSA)

Producers/landowners must make an interrelated non-sequential group of decisions when choosing their commodity programs

- Landowners and tenants must communicate to work through the best option for their land

Program elections will be driven by producer price expectations over the life of the Farm Bill.
“For an FSA farm as a whole over the 2014-2018 crop years, are expected ARC-C payments + expected net payments of any crop insurance chosen greater or less than expected PLC payments + expected net payments of any crop insurance chosen + expected net payments from SCO if also chosen?” – Gary Schnitkey – University of Illinois
Crop insurance provides coverage against decreases in prices and/or yield during the growing season.

Covers revenue or yield losses within a production year:
- RP, YP, RP-HPE, ARPI

Limited changes to crop insurance in the 2014 Farm Bill:
- Crop insurance will have different premiums and indemnities for irrigated and non-irrigated acres starting in 2015
- Conservation compliance will be required to receive government premium subsidies (Form AD-1026)
- Beginning farmers and ranchers shall receive premium assistance of 10 percentage points greater than would otherwise be available

Current crop insurance coverage and program election interaction will be very important when making any decisions.

Supplemental Coverage Option (SCO) and Stacked Income Protection Plan (STAX; for cotton only) are available starting in 2015 as additional insurance options.
2013 Soybean Average Crop Insurance Coverage Level

Average Coverage Level (%):
- 50–65
- 65–70
- 70–75
- 75–85
2013 Wheat Average Crop Insurance Coverage Level

Average Coverage Level (%):
- 50–65
- 65–70
- 70–75
- 75–85
## Crop Insurance Premium Cost Share Percentages under the Agricultural Act of 2014

<table>
<thead>
<tr>
<th>Crop Insurance Coverage Level (%)</th>
<th>Basic &amp; Optional Unit Cost Share (%)</th>
<th>Enterprise Unit Cost Share (%)</th>
<th>SCO Cost Share (%)</th>
<th>STAX Cost Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>67</td>
<td>80</td>
<td>65</td>
<td>NA</td>
</tr>
<tr>
<td>55</td>
<td>64</td>
<td>80</td>
<td>65</td>
<td>NA</td>
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<td>64</td>
<td>80</td>
<td>65</td>
<td>NA</td>
</tr>
<tr>
<td>65</td>
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<td>80</td>
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<td>38</td>
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<td>65</td>
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<td>NA</td>
<td>65</td>
<td>NA</td>
</tr>
<tr>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>80</td>
</tr>
</tbody>
</table>
Price Loss Coverage (PLC)

- Delivered by FSA
- Election is made on a covered commodity-by-commodity basis
  - Example: PLC could be elected for corn and ARC-C (not ARC-I) for soybeans
- Payments are decoupled from planted acres, payments are made on base acres only
  - Payments could be received for a covered commodity without planting any acres to that commodity
- Paid on 85% of base acres for a covered commodity
- Payments are made when the effective price is less than the reference price for a covered commodity
- Effective price is the higher of the marketing year average price (MYA) or the national average loan rate for the covered commodity
- Reference prices and (national average loan rates) are set at:
  - Soybeans $8.40/bu ($5.00/bu)
  - Corn $3.70/bu ($1.95/bu)
  - Wheat $5.50/bu ($2.94/bu)
  - Sorghum $3.95/bu ($1.95/bu)
- Reference price is set and remains the same for the life of the Farm Bill
Price Loss Coverage (PLC)

- Payments will not be made until after the end of the marketing year (for corn and soybeans the marketing year is Sept 1 to Aug 31)
  - Payments could be available for corn and soybeans (if any are triggered) after September 30, 2015 for the 2014 crop year
  - At least a 1-year lag will continue for future years due to MYA prices
- If the covered commodity/farm is enrolled in PLC then producers can purchase “additional” crop insurance called the Supplemental Coverage Option (SCO)
  - For individual FSA farms covered commodities enrolled in ARC-C and ARC-I are not eligible for SCO
  - Cotton acres cannot be covered by STAX and SCO
Marketing Year Average and Reference Prices for Corn, Soybeans, and Wheat

Price ($/BU)

- 2009/10: $3.55 Corn, $4.87 Wheat, $5.70 Wheat (Ref = $5.50), $3.70 Corn (Ref = $3.70)
- 2010/11: $5.18 Corn, $5.18 Wheat, $6.22 Wheat (Ref = $5.50), $5.18 Corn (Ref = $3.70)
- 2011/12: $6.22 Corn, $7.24 Wheat, $7.24 Wheat (Ref = $5.50), $6.22 Corn (Ref = $3.70)
- 2012/13: $6.89 Corn, $7.77 Wheat, $7.77 Wheat (Ref = $5.50), $6.89 Corn (Ref = $3.70)
- Projected 2013/14: $4.45 Corn, $6.87 Wheat, $6.87 Wheat (Ref = $5.50), $4.45 Corn (Ref = $3.70)
- Projected 2014/15: $3.50 Corn, $5.90 Wheat, $5.90 Wheat (Ref = $5.50), $3.50 Corn (Ref = $3.70)

Soybeans (Ref = $8.40)

Corn
Wheat
Soybeans
• **Payment Rate** is the difference between the reference price and the effective price

• **Payment Yield** is the FSA yield for the farm. Either the updated payment yield or the 2008 counter-cyclical-payment yield

• **Payment Acres** are 85% of the sum of base acres for a covered commodity plus generic base acres attributable to the covered commodity for the current year

• **Payment Amount** is the product of Payment Rate x Payment Yield x Payment Acres
# PLC Example: Soybeans

Payment Rate ($/bu) x Payment Yield (bu/acre) x 85% = PLC Payment ($/base acre)

<table>
<thead>
<tr>
<th>Marketing Year Average Price ($/bu)</th>
<th>Reference Price ($/bu)</th>
<th>PLC Payment Rate ($/bu)</th>
<th>Payment Yield (bu/acre)</th>
<th>PLC Coverage Level</th>
<th>PLC Payment ($/base acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$8.40</td>
<td>$8.40</td>
<td>$0.00</td>
<td>40 bu</td>
<td>85%</td>
<td>$0</td>
</tr>
<tr>
<td>$8.30</td>
<td>$8.40</td>
<td>$0.10</td>
<td>40 bu</td>
<td>85%</td>
<td>$3.40</td>
</tr>
<tr>
<td>$8.20</td>
<td>$8.40</td>
<td>$0.20</td>
<td>40 bu</td>
<td>85%</td>
<td>$6.80</td>
</tr>
<tr>
<td>$8.10</td>
<td>$8.40</td>
<td>$0.30</td>
<td>40 bu</td>
<td>85%</td>
<td>$10.20</td>
</tr>
<tr>
<td>$8.00</td>
<td>$8.40</td>
<td>$0.40</td>
<td>40 bu</td>
<td>85%</td>
<td>$13.60</td>
</tr>
</tbody>
</table>
# PLC Example: Corn

Payment Rate ($/bu) x Payment Yield (bu/acre) x 85% = PLC Payment ($/base acre)

<table>
<thead>
<tr>
<th>Marketing Year Average Price ($/bu)</th>
<th>Reference Price ($/bu)</th>
<th>PLC Payment Rate ($/bu)</th>
<th>Payment Yield – Updated or CC Yield (bu/acre)</th>
<th>PLC Coverage Level (%)</th>
<th>PLC Payment ($/base acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3.70</td>
<td>$3.70</td>
<td>$0.00</td>
<td>135 bu</td>
<td>85%</td>
<td>$0</td>
</tr>
<tr>
<td>$3.60</td>
<td>$3.70</td>
<td>$0.10</td>
<td>135 bu</td>
<td>85%</td>
<td>$11.48</td>
</tr>
<tr>
<td>$3.50</td>
<td>$3.70</td>
<td>$0.20</td>
<td>135 bu</td>
<td>85%</td>
<td>$22.95</td>
</tr>
<tr>
<td>$3.40</td>
<td>$3.70</td>
<td>$0.30</td>
<td>135 bu</td>
<td>85%</td>
<td>$34.43</td>
</tr>
<tr>
<td>$3.30</td>
<td>$3.70</td>
<td>$0.40</td>
<td>135 bu</td>
<td>85%</td>
<td>$45.90</td>
</tr>
</tbody>
</table>
Crop insurance program (RMA administered)
New crop insurance option available for 2015 crop year
To be eligible a covered commodity cannot be enrolled in ARC
Covers planted not base acres
Provides additional coverage on top of your underlying insurance policy
  - You must have an underlying insurance policy (Yield Protection, Revenue Protection, or Revenue Protection with the Harvest Price Exclusion)
SCO follows the coverage of your underlying policy
  - If your underlying policy covers yield loss SCO covers yield loss
  - If your underlying policy covers revenue loss SCO covers revenue loss
Coverage starts where the underlying insurance policy ends and covers to a maximum of 86%
Federal Government pays 65% of premium cost
  - Premium depends on the crop, county, coverage level, and type of coverage chosen for the underlying policy
Payment trigger is different than the underlying policy
  - For SCO, an indemnity is triggered when there is a county level loss in yield or revenue
Available in select counties for the 2015 crop year for barley, corn, soybeans, wheat, sorghum, and rice
Crop Insurance (CI) and SCO Coverage

Note: SCO uses county level losses to trigger an indemnity payment, so the estimated coverage is for illustration purposes only. Given how indemnities are triggered a payment could be received under SCO and not the underlying policy or vice versa.
2015 SCO Availability (Covered Commodities)

- SCO availability in 2015 is based on the availability of county data from NASS, subject to:
  - NASS county yield estimates being available for at least 20 of the last 30 years
  - NASS county yield estimates being available for 8 of the last 10 years, with an average of at least 10,000 planted acres over those years
  - There being at least 50 or more farming entities for the crop in the county according to the most recent Census of Agriculture

- In 2016 additional crops, areas, and production methods (irrigated v. non-irrigated) will be included in SCO coverage
  - At this time it is unclear when and how coverage will be added. This further complicates program choices in counties where SCO is not currently available
2015 Crop Year Supplemental Coverage Option (SCO) Availability for Corn

Legend
- Program Offered

SCO Corn coverage is estimated to be available for:
99% of acreage insured (based on 2013 crop insurance participation)
98% of all planted acreage (based on 2013 NASS estimates)
2015 Crop Year Supplemental Coverage Option (SCO) Availability for Soybeans

Legend
- Program Offered

SCO Soybean coverage is estimated to be available for:
99% of acreage insured (based on 2013 crop insurance participation)
98% of all planted acreage (based on 2013 NASS estimates)
2014 Crop Year Supplemental Coverage Option (SCO) Availability for Wheat

Legend
- Winter Wheat*
- Spring Wheat**

SCO wheat coverage is estimated to be available for over 80 percent of planted acreage.

* Includes Spring, Durum, and Khosaran types in counties with a June 30 contract change date.
** Includes Durum and Khosaran types in counties with a November 30 contract change date.
In Tennessee, the 2015 winter wheat crop is eligible for SCO coverage in: Crockett, Dyer, Gibson, Haywood, Henry, Obion, Robertson, and Weakley Counties

- Purchased from crop insurance agent (not FSA)
- Decision must be made by the crop insurance sales closing date (September 30)
- Can withdraw from SCO if ARC is chosen or intended to be chosen by the earlier of the acreage reporting date or December 15th without penalty
  - Producers must notify their crop insurance agents prior to the dates to not be charged an SCO premium
  - This only applies to the 2015 crop year
  - If SCO is chosen and ARC elected after the date. You will be required to pay 20% of your SCO premium (to cover administration costs) and not receive SCO coverage (underlying policy would remain in effect)
Assume a producer’s soybean crop has an expected value of $472.50 (45 bu @ $10.50/bu)
The producer buys a revenue protection policy with a 75% coverage level (underlying policy)
The underlying policy covers 75% (or $354.38); 25% is unprotected (or $118.12)
Producer has the option to buy SCO coverage
  - Because the underlying policy provides revenue protection the SCO coverage also provides revenue protection
  - SCO indemnity payments are determined by county level loss
SCO coverage is calculated as:
  - Percent of expected crop value covered by SCO = SCO endorsement less policy coverage level (86% - 75% = 11%)
  - Amount of SCO protection = Percent of expected crop value covered by SCO x expected crop value (0.11 x $472.5 = $51.98)
SCO pays when the county average revenue falls below 86% of its expected value to the coverage level of the underlying policy
Payments could be received from SCO without payments from the underlying policy or vice versa
Agricultural Risk Coverage (ARC)

- Administered by FSA
- PLC is commodity price determined
- ARC is revenue (price and yield) determined
- Covers a portion of losses in revenue for a covered commodity relative to a revenue guarantee
- Two choices under ARC: county or individual farm
  - County (ARC-C) is chosen on a commodity-by-commodity basis (coverage can be elected for ARC-C for one covered commodity and PLC on another covered commodity on the same farm)
  - Individual (ARC-I) applies to all covered commodities on an individual farm (all covered commodities must be elected for the FSA farm)
Agricultural Risk Coverage (ARC) - Terminology

- **Benchmark Revenue** is the product of Olympic average yields and Olympic average national (or substituted reference) prices.
- **ARC Guarantee** is 86% of benchmark revenue.
- ARC payments occur when actual revenue falls below benchmark revenue.
- **Payment Rate** is determined after calculating the difference between ARC Guarantee and actual revenue.
  - Can not exceed 10% (76% to 86% revenue coverage).
- **Payment Amounts** are paid on payment acres (a percentage of base acres and generic base acres).
• Selected on a commodity-by-commodity basis (similar to PLC)
• Paid on 85% of base acres for each covered commodity enrolled
• Covers revenue losses between 76% and 86% of benchmark county revenue for each covered commodity
• Triggered by a loss in revenue at the county level
• Benchmark county revenue is the product of county Olympic average yields and national Olympic average prices
  • Olympic averages are three averages after omitting the high and low
  • Benchmark revenue is a moving calculation for the most recent 5-years
    • For example, 2016 will be Olympic averages for 2011-2015 crop years
Olympic average price calculations use the higher of the Marketing Year Average (MYA) Price or the Reference Price for the covered commodity

- Final prices are determined after the conclusion of the marketing year for each commodity (NASS)
- Reference prices are the PLC Reference Prices for covered commodities

Will allow separate irrigated and non-irrigated county yield guarantees (where available)
## Example: Olympic Average Price Calculation

<table>
<thead>
<tr>
<th>Covered Commodity</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013 (Est.)</th>
<th>Olympic Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybeans (MYA)</td>
<td>$9.59</td>
<td>$11.30</td>
<td>$12.50</td>
<td>$14.40</td>
<td>$13.00</td>
<td>$12.27</td>
</tr>
<tr>
<td>Reference Price</td>
<td>$8.40</td>
<td>$8.40</td>
<td>$8.40</td>
<td>$8.40</td>
<td>$8.40</td>
<td></td>
</tr>
<tr>
<td>Corn (MYA)</td>
<td>$3.55</td>
<td>$5.18</td>
<td>$6.22</td>
<td>$6.89</td>
<td>$4.45</td>
<td>$5.28</td>
</tr>
<tr>
<td>Reference Price</td>
<td>$3.70</td>
<td>$3.70</td>
<td>$3.70</td>
<td>$3.70</td>
<td>$3.70</td>
<td></td>
</tr>
<tr>
<td>Wheat (MYA)</td>
<td>$4.87</td>
<td>$5.70</td>
<td>$7.24</td>
<td>$7.77</td>
<td>$6.87</td>
<td>$6.60</td>
</tr>
<tr>
<td>Reference Price</td>
<td>$5.50</td>
<td>$5.50</td>
<td>$5.50</td>
<td>$5.50</td>
<td>$5.50</td>
<td></td>
</tr>
</tbody>
</table>
Assume, Olympic average county corn yield for 2009-2013 is 156 bu/acre

Olympic average national price for 2009-2013 is $5.28/bu

Benchmark revenue is 156 bu/acre x $5.28/bu = $824/acre
  - Revenue guarantee is $824/acre x 0.86 = $708/acre
  - Payment rate will not exceed $824/acre x 0.10 = $82.40/acre

If actual county yield is 170 bu/acre and MYA price is $4.00/bu:
  - Actual county revenue is 170 bu/acre x $4.00/bu = $680/acre
  - Actual county revenue for corn is less than the revenue guarantee
  - Payment rate would be $708/acre − $680/acre = $28/acre (cannot exceed $82.40/acre)
  - Payment amount per acre is 85% of payment rate or 0.85 x $28/acre = $23.80/base acre
Agricultural Risk Coverage - Individual (ARC-I)

- Benchmark revenue is farm revenue determined by historical farm yields and national prices and is a moving measure of the 5 most recent years.
- Payments are paid on 65% of total farm base and assigned generic base acres.
- Individual ARC will pay when a farmer’s revenue is between 76% and 86% of a 5-year rolling Olympic average.
- Benchmark revenue changes as annual planted acreage changes.
- Reference price substitution for MYA price is the same as for ARC-C.
Assume an FSA farm has 100 total base acres (no generic base)

- In 2014 the farm was planted to 70% soybeans and 30% corn
- Olympic average revenue (2009-2013) is calculated as $650/acre for soybeans and $750/acre for corn (Olympic average farm yield by commodity x Olympic average national price by commodity)
  - Benchmark revenue is ($650/acre x 0.70) + ($750/acre x 0.30) = $680/acre
  - Revenue guarantee is $680/acre x 0.86 = $585/acre
- In 2014 the farm produces yields of 50 bu/acre for soybeans and 170 bu/acre for corn
- MYA prices for 2014 are $10.00 (soybeans) and $4.00 (corn)
- Actual revenue is (50 bu/acre x $10.00/bu x 0.70) + (170 bu/acre x $4.00/bu x 0.3) = $554/acre
- Payment rate is $585/acre - $554/acre = $31/acre, may not exceed $68/acre ($680/acre x 0.1)
- Payment per base acre is $31/acre x 0.65 = $20.15/acre
When will decisions have to be made?
Are ARC-I, ARC-C, PLC, and SCO choices being made to mitigate risk or maximize potential payments?
Should a greater emphasis be placed on potential payments for 2014 and 2015 than later years in the Farm Bill?
What documents will be used to verify payment yields?
Should program choices be diversified?
What choices will be available to Tennessee producers and when?
Will ARC-I be a beneficial choice for some producers?
How will the ratio of base acres to planted acres on an FSA farm influence program selection?
How will generic base acres (previously called cotton base) be allocated when acres are planted to covered commodities?
Planted and Base Acres in Tennessee

- Total: Millions of Acres
- Soybeans: Millions of Acres
- Corn: Millions of Acres
- Wheat: Millions of Acres
- Cotton: Millions of Acres
- Sorghum: Millions of Acres
- Oats: Millions of Acres
- Barley: Millions of Acres
- Rice: Millions of Acres
- Peanuts: Millions of Acres
- Sunflower: Millions of Acres

Legend:
- Black: Planted
- Red: Base
Webpages and Decision Aids

University of Tennessee
  o Crop Economics: http://economics.ag.utk.edu/crop.html
  o Farm Bill: http://economics.ag.utk.edu/farmbill.html

USDA
    • Crop insurance decision aid:
      http://prodwebnlb.rma.usda.gov/apps/CIDT/
  o FSA:

Texas A&M Decision Aid:
https://afpc.tamu.edu/models/decisionaid.php