

2021 USDA Farm Commodity Programs: Should I choose ARC-CO or PLC?



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Goals for Today

- Revisiting ARC & PLC Programs
 - Sign-up deadlines & background
- Things to consider in making the choice
- Analysis from on-line decision tools
 - Punchline: looks to be PLC for corn and ARC-CO for soybeans* (at least in Eastern NC)









Commodity Programs

- Important enrollment information:
 - Need to enroll every year

| | Contract Year | Enrollment Dates | |
|---|------------------|--|------------------|
| | 2019 | September 3, 2019 through March 15, 2020 | |
| | 2020 | October 7, 2019 through June 30, 2020 | |
| < | 2021 | October 2020 through March 15, 2021 | \triangleright |
| | 2022 | October 2021 through March 15, 2022 | |
| | 2023 | October 2022 through March 15, 2023 | |

– One ARC vs PLC choice for 2019 & 2020, with chance to change in 2021, 2022, & 2023 – more flexibility!





Commodity Programs

- Agricultural Risk Coverage (ARC) and Price Loss Coverage (PLC) programs were reauthorized under the 2018 Farm Bill
 - ARC offers revenue protection
 - ARC-CO makes a payment on 85% of base acres when county revenue falls below the county revenue guarantee
 - ARC-I makes a payment on 65% of base acres when individual farm revenue falls below the individual revenue guarantee
 - PLC offers price protection
 - PLC makes a payment when effective price is below reference price





Price Loss Coverage (PLC)

- Payments made when Effective Price falls below the Reference Price
 - Effective Price is the higher of National Marketing Year Ave. Price (NMYAP) or Marketing Loan Rate (MLR)

| Commodity | Reference Price | Unit of Measure |
|-------------------|--------------------|--------------------|
| Wheat | \$5.50 | bushel |
| Corn | \$3.70 | bushel |
| Grain Sorghum | \$3.95 | bushel |
| Barley | \$4.95 | bushel |
| Oats | \$2.40 | bushel |
| Long Grain Rice | \$14.00 | hundredweight |
| Medium Grain Rice | \$14.00 | hundredweight |
| Soybeans | \$8.40 | bushel |
| Other Oilseeds | \$20.14 | hundredweight |
| Peanuts | \$535.00 | ton |
| Dry Peas | \$11.00 | hundredweight |
| Lentils | \$19.97 | hundredweight |
| Small Chickpeas | \$19.04 | hundredweight |
| Large Chickpeas | \$21.54 | hundredweight |
| Seed Cotton | \$0.367 | pound |







Price Loss Coverage (PLC)

- Recall:
 - PLC Payment = 0.85 × Base Acres × Payment Yield x PLC Payment Rate
 - where:
 - PLC Payment Rate = [Ref. Price NMYAP/MLR]
 - Base Acres = average acres of each program crop historically grown on a farm at first enrollment years ago
 - Payment Yield = Historical average yield for program crops grown on an FSA farm
 - If choose PLC, can purchase SCO "shallow loss" crop insurance





ARC-CO Program

• Recall ARC-CO program:

- Payments when Actual County Revenue < County ARC Revenue Guarantee (CARG)
- Where:
 - CARG = 86% x County Benchmark (i.e., a revenue benchmark)
 - County Benchmark = 5-yr Olympic Ave. County Yield x 5year Olympic Ave. NMYAP (i.e., like county average revenue)
 - Actual County Rev. = Actual County Yield x NMYAP
 - ARC Payment Rate = CARG Actual County Rev
 - (up to 10% of county benchmark "cap on ARC payment rate")
 - ARC Payment = 85% x Base Acres x ARC Payment Rate





ARC-CO Program

- County ARC varies by county, PLC does not
- Not eligible for SCO
- Main idea: like county-level revenue insurance (e.g., ARPI), with an 86% coverage level
- Difference from Crop Insurance:
 - Uses 5-Year Olympic Average prices and county yields to determine guarantee (rather than APH)
 - Uses national marketing year average price as the actual price (rather than futures market prices)





Participation in NC

- Should I choose ARC-CO, ARC-I, or PLC?
- Historical participation in NC:

| Сгор | % Farms Electing PLC | % Farms Electing ARC-CO | % Farms Electing ARC-I |
|----------|-------------------------|----------------------------|---------------------------|
| Corn | 4% | 96% | 0% |
| Soybeans | 3% | 97% | 0% |
| Wheat | 17% | 83% | 0% |
| Sorghum | 12% | 88% | 0% |
| Peanuts | 99% | 1% | 0% |

Source: USDA FSA data





Commodity Programs

- Important considerations:
 - Expected returns from ARC-CO vs PLC
 - Depends on individual expectations on prices and yields
 - Coverage preference
 - Revenue vs price protection
 - Payment caps & limits
 - ARC-CO limit at 10% of average county revenue; PLC is loan rate
 - \$125,000 payment limit on all payments from commodity programs
 - Preference for SCO "shallow loss" coverage
 - With ARC-CO, you cannot purchase SCO, but with PLC you can
 - Wait to enroll near deadline reduce uncertainty





Decision Tools

- Two simulation-based decision tools available:
 - U. of Illinois: <u>https://fd-tools.ncsa.illinois.edu/</u>
 - Texas A&M: https://www.afpc.tamu.edu/tools/farm/farmbill/2018/
- Illinois:
 - Focus on corn, soybeans, and wheat
 - 5 year payment estimates using 1000 model runs
- Texas A&M:
 - All commodity crops
 - 1 (or 2) year payment estimates using 500 model runs





• Corn, Pasquotank County







Corn, Chowan County



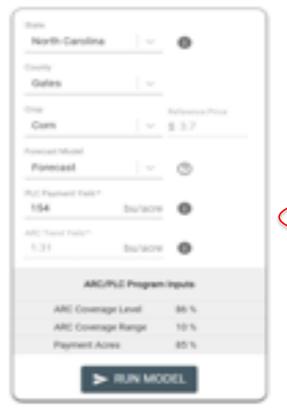
2019 numbers are actual values of ARC/PLE payments. All 2019 yields and prices are final.







• Corn, Gates County





2018 numbers are actual values of ARC/PLE payments. All 2019 yields and prices are final.





Illinois Estimates

Soybeans, Pasquotank County •

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Illinois Estimates

Soybeans, Chowan County •

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2019 numbers are actual values of ARC/PLE payments. All 2019 pebbs and proces are final.







• Soybeans, Gates County

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• Wheat, Pasquotank County



N.C. A&T



• Wheat, Chowan County







• Wheat, Gates County

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Model data last updated Jan 5,2021

2019 numbers are actual values of ARC/PLE payments. All 2019 yields and prices are final.





Crop Insurance Update

- Enhanced Coverage Option (ECO)
 - Additional coverage of deductible for 95%-86% (or 90% to 86%)
 - County-trigger, 44% subsidy
- Sales Closing Date
 - Corn & Soybeans: Feb 28, 2020

100% 95% Deductible (no coverage) ECO Coverage Deductible (ECO band) (95% to 86%) 86% SCO Coverage Deductible (SCO band) 75% (86% to 75%) Individual Coverage RP, RP-HPE, or YP (75% coverage level) 0% County-level Farm-level formdocoally

Figure 1. Illustration of ECO, SCO, and 75% Individual Coverage



Take Home Messages

- Take note of sign-up deadlines
 - March 15, 2021
 - Choice will apply only for 2021 crop year
 - Can change choice in 2022 and 2023



- Choice between ARC-CO & PLC largely depends on yield and price expectations
 - Most analysis point to PLC for corn and ARC-CO for soybeans* for Eastern NC counties
 - Probabilities of payment for both are generally low (soy)*
 - Analysis is based on forecasts still a long way out
 - NMYAP for 2021 crop year not established till Sept/Oct 2022





Thank you!

- Questions?
 - Contact: Rod M. Rejesus, NC State University Tel No. (919)513-4605
 Email: rod_rejesus@ncsu.edu
- Websites:
 - Agricultural Policy and Farm Bill Extension Website at NC Dept. of Ag. & Resource Economics:
 - <u>https://cals.ncsu.edu/are-extension/policy-and-regulation/agricultural-policy-and-farm-bill/</u>
 - FSA website:
 - <u>https://www.fsa.usda.gov/programs-and-services/arcplc_program/index</u>









• Corn, Camden County

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Model data last updated. Jan 5, 2021

2019 numbers are actual values of ANC/PUE payments. All 2019 yields and prices are final.





• Corn, Currituck County







Illinois Estimates

Soybeans, Camden County •

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2018 sumbers are actual values of ARC/PLC payments. All 2019 yields and prices are final





• Soybeans, Currituck County

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• Wheat, Camden County

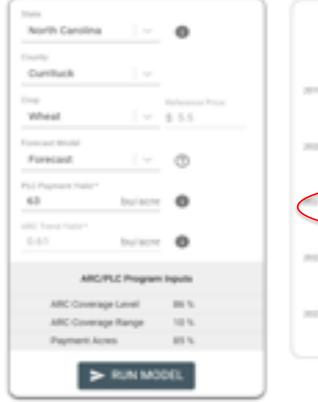


2019 numbers are actual values of ARC/FLC pagments. All 3019 pields and prices are final.





• Wheat, Currituck County





Model data/last updated: Jan 5, 2021

3211 numbers are actual values of IRIC/PLC payments. All 3211 yields and prices are final.



