



Food, Conservation, and Energy Act of 2008: Commodity Program Choice

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The 2008 farm legislation provided producers the option of remaining in the current Direct Counter-Cyclical Payment (DCP) program or enrolling in the new Average Crop Revenue Election (ACRE). The choice between ACRE and DCP is an important decision for farm profitability. The ACRE program is a revenue-based program designed to aid in managing short-term shortfalls in revenue. The DCP program is designed to aid in managing chronic low prices.

ACRE was designed to address a perceived failure of the DCP program to provide an adequate safety net for farm income. The DCP provides a Direct Payment, or DP, and may provide a Counter-Cyclical Payment, or CCP, as well. Congress has established a "target price" of \$3.92 per bushel for wheat (\$4.17 for 2010-2012) and a DP rate of \$0.52 per bushel to support farm income. A CCP is paid when the market price falls below the difference between the target price and the DP rate (in 2009, \$3.92 - \$0.52 = \$3.40 per bushel). However, a maximum CCP occurs when market price falls below the Loan Rate. A market price of \$3.00 per bushel would result in a CCP of \$0.40 per bushel. Both the DP and CCP are paid on 83.3 percent (85 percent in 2012) of the base acres and program yield regardless of the crop or yield actually produced.

A Loan Rate has been established by Congress for each commodity. For wheat, the Loan Rate is \$2.75 (\$2.92 for 2010-2012) per bushel. The Loan Rate enables producers to obtain \$2.75 per bushel at harvest and retain ownership. This is a 9-month loan and producers must sell their commodity within this period or forfeit the commodity for full payment of the loan. This is important for farmers who are required to repay operating loans upon harvest. If the market price falls below the Loan Rate, producers may sell at the market price and receive a Marketing Loan Assistance, or MLA, payment equal to the difference between the Loan Rate and market price for all bushels produced.

DCP

The following table provides a simple example of how the DCP program works for wheat (Table 1). In the first scenario, assume the actual farm yield is equal to the FSA yield and the market price is \$3.00. The producer would receive both DP and CCP payments. The total revenue including farm program payments is \$112,908, \$90,000 from crop sales and \$22,908 in government payments. In Scenario 2, the farm has an above average yield of 40 bu/acre and the market price is \$2.00. The producer receives the same amount in DP, but receives a higher CCP and an MLA payment, increasing total

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ACRE – Average Crop Revenue Election

The new commodity program introduced in the Food, Conservation and Energy Act of 2008.

DP – Direct Payment

A payment based upon a congressionally determined rate for base acres and program yield. This payment is paid regardless of the crop actually produced and is said to be decoupled from both price and production.

CCP – Counter-Cyclical Payment

A payment rate bounded by congressionally determined target price and loan rate. This payment is paid regardless of the crop actually produced and is said to be decoupled from production but not price.

DCP – Direct Counter-Cyclical Payment Program

MLA – Market Loss Assistance

A payment accrued through the repayment of commodity loans at less than the loan rate plus accrued interest when the market price is below the loan rate.

Loan Rate – Price Support Loan Rate

A price floor established by congress for each commodity.

FSA Yield

Yield established by Farm Service Agency based upon historic records.

Base Acres

Commodity acres established by Farm Service Agency based upon the historic use of the farms cropland acres.

revenue. In scenario 3, the farm has a below average yield of 20 bu/acre and the market price is \$4.00. The producer still receives the same amount in DP, but does not receive a CCP payment since the market price is greater than the target price minus the DP rate. The farmer makes less money in scenarios 1 and 3. The producer receives the lowest total revenue under scenario 3, the low yield case. In scenarios

Table 1. DCP example for wheat.

| | Scenario 1 | Scenario 2 | Scenario 3 |
|-----------------------------|--------------|--------------|-------------|
| Actual Sales | | | |
| Market Price | \$3.00 | \$2.00 | \$4.00 |
| Actual Yield (bu/acre) | 30 | 40 | 20 |
| Planted Acres | 1,000 | 1,000 | 1,000 |
| Actual Sales | \$90,000.00 | \$80,000.00 | \$80,000.00 |
| Direct Payments | | | |
| DP Rate | \$0.52 | \$0.52 | \$0.52 |
| Program Yield (bu/acre) | 30 | 30 | 30 |
| Base Acres | 1,000 | 1,000 | 1,000 |
| % of Base Acres | 0.83 | 0.83 | 0.83 |
| Total DP Payment | \$12,994.80 | \$12,994.80 | \$12,994.80 |
| CCP Payments | | | |
| Target Price | \$3.92 | \$3.92 | \$3.92 |
| DP Rate | \$0.52 | \$0.52 | \$0.52 |
| TP - DP | \$3.40 | \$3.40 | \$3.40 |
| Market Price | \$3.00 | \$2.00 | \$4.00 |
| Loan Rate | \$2.75 | \$2.75 | \$2.75 |
| CCP Rate | \$0.40 | \$0.65 | \$0.00 |
| MLA Rate | \$0.00 | \$0.75 | \$0.00 |
| CCP Payment Yield (bu/acre) | 30 | 30 | 30 |
| % of Base Acres | 0.83 | 0.83 | 0.83 |
| CCP Payment | \$9,996.00 | \$16,243.50 | \$0.00 |
| MLA Payment | \$0.00 | \$30,000.00 | \$0.00 |
| Total Revenue | \$112,990.80 | \$139,238.30 | \$92,994.80 |

1 and 3, the CCP program protected against low prices, but did not protect against low yields. When yields are high and prices are low, farmers have large volumes to sell and receive a large CCP. However, when yields are low and prices are high, farmers have less to sell and may not receive a CCP. This potential shortfall in revenue would be protected under the new ACRE program. It is important to note the prices used in this example are somewhat unrealistic given current market conditions. However, this example demonstrates how the DCP program works and shows that wheat producers do not receive CCP payments unless the wheat price falls below \$3.40.

ACRE

The ACRE program was established to protect against short term declines in revenue by protecting against both price and yield risk. For ACRE payments to be made, both a state and farm level trigger must be met. For the state

trigger to be met, the State ACRE Revenue Guarantee must be greater than the Actual State Revenue (Figure 1). For the farm trigger to be met, the Farm ACRE Revenue Guarantee must be greater than the Actual Farm Revenue (Figure 2). Once both triggers are met, a producer enrolled in ACRE is eligible for an ACRE payment (Figure 3).

However, producers who select the ACRE program will not be eligible for CCP payments and will receive a 20 percent reduction in DP and 30 percent reduction in marketing loans. Producers must enroll all base acres on a farm, but do not have to enroll all farms in ACRE. Producers can enroll in ACRE in any year between 2009-2012, but once enrolled, must remain in ACRE for the remainder of the period the 2008 farm legislation is in effect. The deadline to sign up for ACRE for the 2009 crop year is June 1, 2009. ACRE payments will be issued after October 1 of the year following harvest.

Table 2 provides an example of a possible scenario for the 2009-2012 crop years. The market prices are from the February 2009 USDA 10-year forecast. In this example, ACRE only pays out in the 2009 crop year.

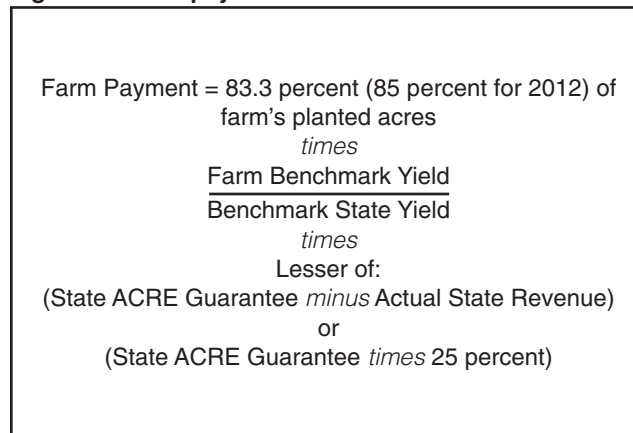
Figure 1. State trigger.



Figure 2. Farm trigger.



Figure 3. ACRE payment calculation.



DEFINITIONS:

Benchmark State Yield

Olympic average of State yields per planted acre for the five most recent crop years (excludes high and low yields).

2009 Calculation:

| Year | Yield |
|------|-------|
| 2004 | 34.5 |
| 2005 | 31.9 |
| 2006 | 23.6 |
| 2007 | 27.8 |
| 2008 | 36.9 |

Olympic Average =

$34.5 + 31.9 + 27.8 = 94.2 / 3 = 31.4$

Actual State Planted Yield

Total amount of actual production in a crop year divided by total planted acres.

ACRE Guarantee Price

Simple 2-year average of the national marketing year price. For the 2009 crop, this is based on the 2007/08 and 2008/09 marketing year's prices. See <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=dccp&topic=landing> for more details.

Farm Benchmark Yield

Olympic average of farm yields per planted acre for the five most recent crop years (excludes high and low yields).

Producer-Paid Crop Insurance Premium

The per acre crop insurance premium paid by producers. For farms that are not insured or covered by NAP or a CAT policy, this amount equals zero. Producers are not required to purchase crop insurance or NAP coverage to participate in ACRE.

Table 2. ACRE example for a farm, 2009-2012 crop years.

| | | 2009 | 2010 | 2011 | 2012 |
|----------------------------|--|--------------|--------------|--------------|--------------|
| Actual Sales | | | | | |
| | Market Price | \$5.75 | \$5.60 | \$5.50 | \$5.35 |
| | Actual Yield (bu/acre) | 35 | 35 | 35 | 35 |
| | Planted Acres | 1,000 | 1,000 | 1,000 | 1,000 |
| | Actual Sales | \$201,250.00 | \$196,000.00 | \$192,500.00 | \$187,250.00 |
| Direct Payments (DP) | | | | | |
| | DP Rate (20% reduction) | \$0.416 | \$0.416 | \$0.416 | \$0.416 |
| | Program Yield (bu/acre) | 32 | 32 | 32 | 32 |
| | Base Acres | 1,000 | 1,000 | 1,000 | 1,000 |
| | Percent of Base Acres | 0.833 | 0.833 | 0.833 | 0.850 |
| | Total DP Payment | \$11,088.90 | \$11,088.90 | \$11,088.90 | \$11,315.20 |
| ACRE Payments | | | | | |
| STATE TRIGGER | State ACRE Guarantee | \$183.12 | \$178.04 | \$156.84 | \$153.31 |
| | Benchmark State Yield | 31.4 | 31.4 | 31.4 | 31.4 |
| | ACRE Guarantee Price | \$6.48 | \$6.30 | \$5.55 | \$5.43 |
| | Actual State Revenue | \$178.25 | \$173.60 | \$170.50 | \$165.85 |
| | Actual State Planted Yield | 31 | 31 | 31 | 31 |
| | Nat'l Avg Market Price or 70 percent of LR | \$5.75 | \$5.60 | \$5.50 | \$5.35 |
| State Trigger: | State ACRE Guarantee > Actual State Revenue | yes | yes | no | no |
| FARM TRIGGER | Farm ACRE Guarantee | 207.36 | 201.6 | 177.6 | 173.6 |
| | Farm Benchmark Yield | 32 | 32 | 32 | 32 |
| | ACRE Guarantee Price | \$6.48 | \$6.30 | \$5.55 | \$5.43 |
| | Crop Insurance Premium | 0 | 0 | 0 | 0 |
| | Actual Farm Revenue | \$132.25 | \$196.00 | \$192.50 | \$187.25 |
| | Actual Farm Yield | 23 | 35 | 35 | 35 |
| | Nat'l Avg Market Price or 70 percent of LR | \$5.75 | \$5.60 | \$5.50 | \$5.35 |
| Farm Trigger: | Farm ACRE Guarantee > Actual Farm Revenue | yes | yes | no | no |
| | Percent of Planted Acres | 0.833 | 0.833 | 0.833 | 0.850 |
| | Planted Acres | 1,000 | 1,000 | 1,000 | 1,000 |
| | Farm Avg Yield / Benchmark State Yield | 1.02 | 1.02 | 1.02 | 1.02 |
| | State ACRE Guarantee - Actual State Revenue | \$4.87 | \$4.44 | -\$13.66 | -\$12.54 |
| | State ACRE Guarantee <i>times</i> 25 percent | \$45.78 | \$44.51 | \$39.21 | \$38.33 |
| | Farm Payment | \$4,138.30 | \$3,767.49 | \$0.00 | \$0.00 |
| Total Revenue ¹ | | \$216,477.20 | \$210,856.39 | \$203,588.90 | \$198,565.20 |

¹Total Revenue also includes a 30% reduction in marketing loans

Table 3. DCP payments, 2009-2012.

| | 2009 | 2010 | 2011 | 2012 |
|-----------------------------|---------------------|---------------------|---------------------|---------------------|
| Actual Sales | | | | |
| Market Price | \$5.75 | \$5.60 | \$5.50 | \$5.35 |
| Actual Yield (bu/acre) | 35 | 35 | 35 | 35 |
| Planted Acres | 1,000 | 1,000 | 1,000 | 1,000 |
| Actual Sales | \$201,250.00 | \$196,000.00 | \$192,500.00 | \$187,250.00 |
| Direct Payments | | | | |
| DP Rate | \$0.52 | \$0.52 | \$0.52 | \$0.52 |
| Program Yield (bu/acre) | 32 | 32 | 32 | 32 |
| Base Acres | 1,000 | 1,000 | 1,000 | 1,000 |
| Percent of Base Acres | 0.83 | 0.83 | 0.83 | 0.85 |
| Total DP Payment | \$13,861.12 | \$13,861.12 | \$13,861.12 | \$14,144.00 |
| CCP Payments | | | | |
| Target Price | \$3.92 | \$3.92 | \$3.92 | \$3.92 |
| DP Rate | \$0.52 | \$0.52 | \$0.52 | \$0.52 |
| TP - DP | \$3.40 | \$3.40 | \$3.40 | \$3.40 |
| Market Price | \$5.75 | \$5.60 | \$5.50 | \$5.35 |
| CCP Rate | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| CCP Program Yield (bu/acre) | 30 | 30 | 30 | 30 |
| Percent of Base Acres | 0.85 | 0.85 | 0.85 | 0.85 |
| CCP Payment | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Total Revenue | \$215,111.12 | \$209,861.12 | \$206,361.12 | \$201,394.00 |

Table 3 shows total revenue under the DCP program using the same assumptions as in Table 2 for the 2009-2012 crop years.

The comparison of the DCP and ACRE programs is shown in Table 4. In this case, ACRE pays out in 2009 and 2010, but the combined ACRE payment is insufficient to offset the loss in direct payments in the next four years. In this example, DCP is the better option. However, if the actual season average market price for 2009 is 10 percent less than USDA has forecast, the 2009 ACRE payment will be large enough to offset the reduction in DP over the four-year period and ACRE becomes the best option (Table 5). A reduced price or yield over the USDA forecast in any of the years will make ACRE a more attractive option. It should be noted that the results also will differ based on different state and farm yield scenarios. In addition, these analyses do not consider the time value of money.

The decision to enroll in ACRE is an important decision for producers. When deciding whether to participate in ACRE, producers also need to take into account possible SURE payments. Fact sheet AGEC-1012 can be used to calculate possible SURE payments and the effect of ACRE payments on SURE payments. Should a crop disaster occur (county disaster declaration and minimum of 10 percent loss in major farm crop) and a farm is eligible for a SURE payment, the SURE payment is reduced by \$0.60 for every dollar in ACRE payments.

Producers should base their DCP versus ACRE enrollment decision on the total income likely under both programs over the entire enrollment period. The ACRE program must pay more than is given up in DP and MLA over the entire enrollment period. Uncertainty related to future prices and yields increases the difficulty of the decision and producers may wish to compare the DCP and ACRE and several price and yield scenarios.

Table 4. DCP and ACRE comparison, 2009-2012 crop years using USDA price and yield forecast.

| | 2009 | 2010 | 2011 | 2012 | Total |
|---------------------------|-------------|-------------|-------------|-------------|-------------|
| DCP | | | | | |
| Direct Payment | \$13,861.12 | \$13,861.12 | \$13,861.12 | \$14,144.00 | \$55,727.36 |
| Counter-Cyclical Payment | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Total Government Payments | \$13,861.12 | \$13,861.12 | \$13,861.12 | \$14,144.00 | \$55,727.36 |
| ACRE | | | | | |
| Direct Payment | \$11,088.90 | \$11,088.90 | \$11,088.90 | \$11,315.20 | \$44,581.89 |
| ACRE Payment | \$4,138.30 | \$3,767.49 | \$0.00 | \$0.00 | \$7,905.80 |
| Total Government Payments | \$15,227.20 | \$14,856.39 | \$11,088.90 | \$11,315.20 | \$52,487.68 |

Table 5. DCP and ACRE comparison, 2009-2012 crop years using 10 percent reduction in USDA price forecast.

| | 2009 | 2010 | 2011 | 2012 | Total |
|---------------------------|-------------|-------------|-------------|-------------|-------------|
| DCP | | | | | |
| Direct Payment | \$13,861.12 | \$13,861.12 | \$13,861.12 | \$14,144.00 | \$55,727.36 |
| Counter-Cyclical Payment | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Total Government Payments | \$13,861.12 | \$13,861.12 | \$13,861.12 | \$14,144.00 | \$55,727.36 |
| ACRE | | | | | |
| Direct Payment | \$11,088.90 | \$11,088.90 | \$11,088.90 | \$11,315.20 | \$44,581.89 |
| ACRE Payment | \$19,270.25 | \$0.00 | \$0.00 | \$0.00 | \$19,270.25 |
| Total Government Payments | \$30,359.15 | \$11,088.90 | \$11,088.90 | \$11,315.20 | \$63,852.14 |

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