

ACRE

for your acres

By: Chris Cogburn and Hannah Lopez

The Average Crop Revenue Election (ACRE) program is a new part of the farm policy landscape after passage of the 2008 farm bill. The ACRE program is a voluntary replacement of the countercyclical program that was established in the 2002 farm bill.

What You Need to Know

"The current program provides a safety net for a countercyclical payment that is triggered only if we have a price lower than the trigger price at the national level," says James Richardson, Professor of Agriculture Economics and Co-Director of the Ag and Food Policy Center (AFPC) at Texas A&M University. "Put simply, the ACRE program triggers on low price and on low yield. The old program only triggered on low price at the national level."

ACRE payments will replace countercyclical payments if a producer wishes to participate in the program.

"The other thing that producers give up is 20 percent of their direct payment, which is the one thing they can count on with 100 percent certainty right now," Richardson adds. "And if there's a marketing loan declared, your marketing loan and loan deficiency payment would be paid based on a 30 percent lower loan rate."

It is equally as important to under-

stand the difference between current countercyclical programs and the ACRE program as they relate to base acres versus planted acres.

"The ACRE program is based on planted acres, not historical base acres," says Chris Cogburn, National Sorghum Producers (NSP) Strategic Business Director. "Every producer should know that this program is figured on what you plant, not your base."

Enrollment

Once a producer makes the choice to participate in ACRE, that choice remains in effect until the end of the 2012 crop year.

"If farmers elect to participate in ACRE, they are committing to operating under this program for the duration of the 2008 farm bill," says Richardson. "It means that if I sign up in 2009, I have to receive payments from 2009 to 2012 under this program. If I wait until 2010 to sign up, I'm only committing to 2010 through 2012."

ACRE enrollment will be based on farm number and all participants

in the farm must choose ACRE. If a producer makes no choice or chooses to remain with the countercyclical program, then the landlord will also remain with the countercyclical program. The election will remain with the farm number even if the land is sold. With this in mind, a producer can have some farm numbers enrolled in ACRE and some not.

Making a Comparison

ACRE is best compared to a statewide Group Risk Income Protection (GRIP) insurance program since it will only trigger a payment if the state revenue is below the state revenue guarantee. However, ACRE has another component that is a major difference from GRIP insurance. A producer must also suffer an individual loss to receive an ACRE payment once the state trigger is met. GRIP insurance has no such individual loss component.

"This is still not a revenue insurance type program like you would buy for crop insurance because it's not customized to your farm," says

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Richardson. “If you really want revenue coverage, buy Risk Management Agency (RMA) backed crop insurance.”

Key Components

The key components of the ACRE program are the state and individual revenue guarantees. Both of these guarantees, as well as the actual revenues computed each year, are based on planted acres. The Farm Service Agency (FSA) will use actual planted acres as reported by the National Agricultural Statistics Service (NASS) to calculate guarantees and revenues for all crops except sorghum, wheat, corn, barley, and oats.

For these crops, FSA will define planted acres as the sum of the NASS-reported harvested acres plus failed acres as reported to FSA by producers. By using planted acres instead of harvested acres, ACRE should better reflect the effects of a major production problem like drought.

State Revenue Guarantee

The state revenue guarantee is based on the five year Olympic average yield (remove the high and low yields) for each crop in the state. If a crop has irrigated acreage over 25 percent of the state’s planted acres, then FSA will publish both an irrigated and non-irrigated state yield. These yields are known as state benchmark yields.

The other component of the revenue calculation is price. The price used to compute the state revenue is the two-year, simple, national average price of the last two marketing years for the crop.

The marketing year for sorghum is not over until September 30, 2009 and the ACRE deadline as of this issue’s publication date is August 14. Based on last year’s price (\$4.08/bu) and the March World Agriculture Supply and Demand Estimate (WASDE) price of \$3.20 per bushel, the estimated two-year average price for sorghum will be \$3.64 per bushel.

For example, the state benchmark yield in Kansas is 76 bushels per acre so the state revenue guarantee would be \$248.98 per acre [76 bu/ac x \$3.64/bu x 90% (ACRE factor for state revenue)].

Individual Revenue Guarantee

The individual revenue guarantee uses the same price as the state guarantee multiplied by the five year Olympic average yield of planted crop acres for the producer. These yields will be known as individual benchmark yields.

“If a producer isn’t able to provide yield information, FSA will assign a yield for each year and crop a producer can’t show yield history,” says Cogburn. “FSA will assign a percentage of the county yield for those crop years.”

The other component of the individual revenue guarantee is the crop insurance premium per acre on the crop. Only RMA-subsidized crop insurance will be counted in the calculation, so hail insurance premiums will not be counted in the individual revenue guarantee.

For example, a producer with a five year Olympic average benchmark yield of 82 bushels per acre who is paying \$15 per acre in crop insurance premiums would have an individual revenue guarantee of \$313.48 per acre (82 bu/ac x \$3.64/bu + \$15.00/ac).

Actual Revenues

The next components are the actual revenues for the year. The state actual revenue is simply the state planted acre yield multiplied by the national average price. The state planted acre yield will be published by NASS and will be available for the 2009 crop year for sorghum by March 15, 2010. The national average price for sorghum will be available after September 30, 2010.

If the state planted yield in Kansas is 70 bushels per acre and the price is \$3.25 per bushel, the actual state revenue will be \$227.50 per acre (70 bu/ac x \$3.25/bu). In this example, the state revenue trigger would be met since the actual revenue (\$227.50/ac) is less than the trigger revenue (\$248.98/ac).

The actual revenue for the individual is simply the producer’s planted acre yield multiplied by the national average price. A producer with 74 bushels per acre yield and a price of \$3.25 per bushel would have an individual revenue of \$240.50 per acre. In this example, the producer would

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be eligible for the ACRE payment since his actual revenue (\$240.50/ac) was less than his individual revenue guarantee (\$313.48/ac).

But what if....

If, as in the example, the state revenue and the individual revenue triggers are met, the ACRE payment is calculated as follows:

Step 1. The difference between the state revenue guarantee and the actual state revenue, capped at a maximum of 25 percent of the state revenue guarantee.

$$\begin{aligned} \$248.98/\text{ac} - \$227.50/\text{ac} &= \$21.48/\text{ac} \\ 25\% \text{ of } \$248.98 &= \$62.25 \end{aligned}$$

\$21.48 is below the cap of \$62.25, so \$21.48 is the state payment.

Step 2. The state ACRE payment (\$21.48/ac) is multiplied by the ratio of the individual's planted acre yield (82 bu/ac) to the state planted acre yield (76 bu/ac).

$$\begin{aligned} \$21.48 \times (82 / 76) &= \$23.18/\text{ac}, \text{ so} \\ \$23.18 \text{ per acre} &\text{ is the individual} \\ &\text{ACRE payment} \end{aligned}$$

Step 3. The ACRE payment will be paid on 83.3 percent of planted acres for crop years 2009 to 2011 and 85 percent of planted acres for crop year 2012, not to exceed the total base acres.

A producer plants 300 acres of sorghum and has 200 acres of total base (100 acres of sorghum and 100 acres of wheat).

Payment acres are limited to the lesser of 249.9 ac (300 ac x .833) and 200 acres (total base acres).

In this example, the producer will be limited to payment on 200 acres. If a producer plants more than his base acres, he can choose which crop to use for ACRE calculations.

$$\begin{aligned} \text{Total ACRE Payment} &= \$23.18/\text{ac} \times \\ &200.0 \text{ ac} = \$4,636.00 \end{aligned}$$

So will it work for me?

To determine if the producer should enroll in ACRE, the \$4,636.00 ACRE payment from the example must be compared to the direct payments a producer will give up in order to participate in the ACRE program. The 30 percent reduction in loan rates is not addressed in the example because the cost of production for sorghum is substantially higher than the loan rate. If the producer had a direct payment yield of 54 bushels per acre for sorghum and a direct payment yield of 34 bushels per acre for wheat, then a 20 percent reduction in direct payments on the 200 base acres (100 acres of sorghum and 100 acres of wheat) would result in the following direct payment reduction for those acres:

$$\begin{aligned} (\text{DP yield}) \times (\text{base acres}) \times .833 \text{ (DP} \\ \text{on 83.3\% of base)} \times (\text{DP payment} \\ \text{rate}) \times .20 \text{ (ACRE "reduction")} \end{aligned}$$

$$\begin{aligned} \text{Sorghum: } 54 \text{ bu/ac} \times 100 \text{ acres} \times \\ .833 \times \$0.35/\text{bu} \times .20 = \$314.87 \end{aligned}$$

$$\begin{aligned} \text{Wheat: } 34 \text{ bu/ac} \times 100 \text{ acres} \times .833 \\ \times \$0.52/\text{bu} \times .20 = \$294.55 \end{aligned}$$

Total of direct payment reductions: \$609.42

In this example, the ACRE payment in the first year (\$4,636.00) is greater than the reduction in direct payments (\$609.42). In fact, the ACRE payment in the first year is greater than the 20 percent reduction in direct payments for all four years combined. (\$609.42 x 4 = \$2437.68)

Although it may be easier to think of ACRE payments on a per acre basis, the producer should examine the total amount of ACRE payments since ACRE is paid on 83.3 percent of planted acres up to 100 percent of the base acres. Direct payment reductions are made on 83.3 percent of the base acres – regardless of the planted acres.

Looking at the Whole Picture

While this example has only examined sorghum, a producer must consider all crops in his or her operation when deciding on ACRE. However, certain crops may make the decision easier.

“Producers who have mostly cotton acres will most likely stay away from ACRE due to the 30 percent reduction in loan rates when the market price for cotton is below the loan rate,” says Cogburn. “There is also a high probability of cotton base acreage receiving countercyclical payments under the existing program. Since ACRE is based on planted acres, cotton base

Figuring Your ACRE Payment:

Get more help at www.afpc.tamu.edu

1. State Base Payment for a Crop

$$\begin{aligned} &\text{State Guarantee} \\ &- \text{State Actual} \\ \hline &\text{State Base Payment*} \end{aligned}$$

State Base Payment x

*State Base Payment is capped at 25% of State Guarantee.

acres not planted to cotton would not receive ACRE payments but they could still receive countercyclical payments as long as they are not enrolled in ACRE.”

On the other hand, producers who are mainly wheat growers may find ACRE to be a benefit.

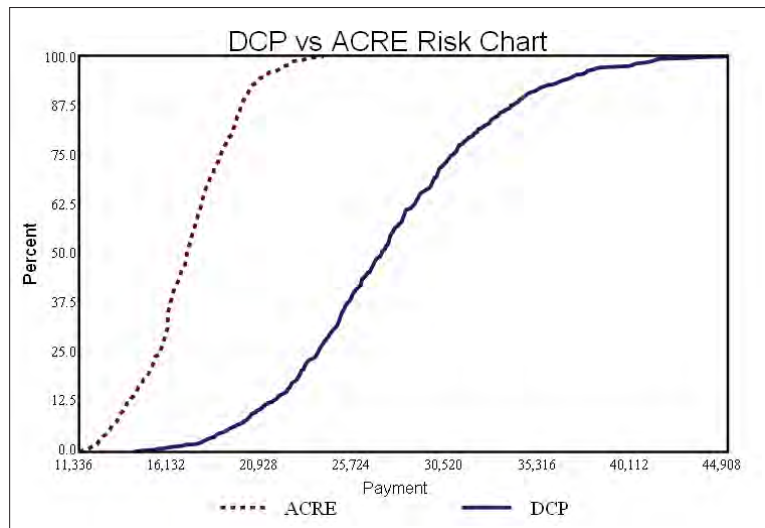
“Most producers will know by the August 14 deadline how their wheat yields

will look, so they will have a good idea of state yields,” says Cogburn. “If wheat prices are still down like they are in early April, ACRE could pay handsomely. The first year ACRE payment could more than offset any reduction in direct payments for the life of the ACRE election.”

Help!

ACRE decision tools, such as the one at www.afpc.tamu.edu, are available to simulate ACRE payments while accounting for state and individual yield variability. Developed by Dr. Richardson and his team at the AFPC, the tool allows a producer to input crop acres, base acres, and yields as well as different price forecasts. Based upon the producer’s individual information, the tool will then return the probability that ACRE payments will be greater than the traditional countercyclical program payments.

This type of decision aid will allow producers to look at multiple crops



This screen shot from the AFPC decision tool shows the full range of total program payments for DCP and ACRE over 2009 to 2012.

at one time and see how ACRE will affect the whole farm, but Richardson cautions against making assumptions about payments.

“You have to run the calculator on every farm, because if you have a little bit of cotton base, that may swing the decision,” says Richardson. “We also caution producers that they need to put in their very best estimate of yield for each farm or unit. When you look at a general crop insurance yield form, the yield reflected is for all farms in one county. To be really accurate, you need to put in each farm number.”

“Your insurance agent may have already provided you with individual farm yields,” says Cogburn, “but if you only have one yield number, be sure to break each farm number out for its unique yield.”

Safe and Accurate

The AFPC decision tool will allow a producer to save information and re-

turn at a later time to alter inputs or re-run reports.

“When you save your farm on our server, it’s going to be highly encrypted,” says Richardson. “We can’t even open it so we will not have access to the producer’s private information. We can’t even e-mail you your password if you forget it, so remember that information.”

Producers should also be sensitive to timing as they

use the AFPC decision tool to calculate farm payments.

“We use the very best, latest information we can get from NASS for state yield data, but it’s going to be updated continuously through our process,” says Richardson. “You may run it today and get one number then run it tomorrow and get a slightly different answer because we have updated NASS numbers.”

Ultimately, both Cogburn and Richardson agree that each producer’s decision on ACRE should be carefully researched and considered on an individual farm basis.

According to Cogburn, “The decision to enroll in ACRE should be based on each individual producer’s cropping mix, base acres, yields, and willingness to forgo some direct payment for a chance at what could be a much larger ACRE payment.”

2. Individual ACRE Payment for a Crop

$$\text{Payment} \times \left(\frac{\text{Individual Benchmark Yield}}{\text{State Benchmark Yield}} \right) = \text{Individual ACRE Payment}$$

3. Total ACRE payment for a Crop

$$\frac{\text{Individual ACRE Payment} \times \text{Payment Acres}^{**}}{\text{Total ACRE Payment for Crop}}$$

**Payment acres are the lesser of 100% of total base acres or 83.3% of total planted acres.