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Analyzing ACRE: Results for 2009 and Decisions for 2010

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Analyzing ACRE: Results for 2009 and Decisions for 2010

Market Report	Yr Ago	4 Wks Ago	3/12/10
Livestock and Products,			
Weekly Average			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight.....	\$80.07	\$87.57	\$92.54
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb.	112.43	117.55	124.07
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb.	94.02	101.56	102.33
Choice Boxed Beef, 600-750 lb. Carcass.	135.70	139.32	149.40
Western Corn Belt Base Hog Price Carcass, Negotiated.	55.41	64.34	70.33
Feeder Pigs, National Direct 50 lbs, FOB.	*	*	71.26
Pork Carcass Cutout, 185 lb. Carcass, 51-52% Lean.	58.19	68.36	74.25
Slaughter Lambs, Ch. & Pr., Heavy, Wooled, South Dakota, Direct.	93.75	*	*
National Carcass Lamb Cutout, FOB.	247.01	251.06	271.57
Crops,			
Daily Spot Prices			
Wheat, No. 1, H.W. Imperial, bu.	5.20	3.84	3.80
Corn, No. 2, Yellow Omaha, bu.	3.83	3.51	3.43
Soybeans, No. 1, Yellow Omaha, bu.	9.09	9.22	9.06
Grain Sorghum, No. 2, Yellow Dorchester, cwt.	5.82	5.39	5.43
Oats, No. 2, Heavy Minneapolis, MN, bu.	1.93	2.32	2.18
Feed			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton.	190.00	135.00	135.00
Alfalfa, Large Rounds, Good Platte Valley, ton.	77.50	87.50	87.50
Grass Hay, Large Rounds, Premium Nebraska, ton.	85.00	*	*
Dried Distillers Grains, 10% Moisture, Nebraska Average.	128.00	105.00	104.00
Wet Distillers Grains, 65-70% Moisture, Nebraska Average.	48.62	35.00	40.00
*No Market			

In 2009, agricultural producers participating in federal farm programs had to decide between staying in the existing Direct and Counter-Cyclical Program (DCP), and the new Average Crop Revenue Election Program (ACRE). If producers chose to keep the DCP, their farm income safety net is strictly tied to crop prices, with a combination of marketing loans, counter-cyclical payments and direct payments. If producers chose the new ACRE program, they changed their farm income safety net to a combination of price and revenue. The new ACRE component is based on revenue and replaces the counter-cyclical payment. The other parts of the safety net for ACRE participants remain tied to price, albeit at lower levels (direct payments reduced 20 percent, marketing loan rates reduced 30 percent).

The new ACRE program brought with it many complexities and peculiarities that hindered participation in 2009. Beyond the complex payment formulas and support triggers (for details, refer to “Analyzing the ACRE Program,” *Cornhusker Economics*, March 11, 2009 on the web at www.agecon.unl.edu/Cornhuskereconomics.html), the issues included:

- Not all of the variables that contributed to the initial support levels in ACRE were known by the initial sign-up deadline in August 2009. In particular, the two-year average price that factors into the guarantee for fall crops was not known until the 2008 crop marketing year was complete and the final average price for the marketing year was published in October 2009. Estimated price levels for the year were known by the sign-up deadline, but the certainty of a final average price was not available.
- By the time of the 2009 sign-up deadline in August, producers in Nebraska were already expecting large crops and thus smaller chances of payments under the new ACRE program.



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- Complex rules on program guarantees and proven yield histories were not finalized by the time initial sign-up began, and uncertainty continued over specific program rules during much of the sign-up period.
- Producers choosing ACRE had to commit to the program through 2012. Thus, calculating the benefits of the program required estimates of support and potential payments not just for the initial year, but for the next three years as well.
- Producers choosing ACRE had to get all parties on the participating farm to agree to the decision. This made sign-up decisions on rented farms more difficult, with tenants and landlords or multiple landlords involved.
- Producers choosing ACRE could not guarantee how much in ACRE benefits they might receive, but could calculate exactly how much of the direct payment (20 percent) and how much of the marketing loan rate (30 percent) they would give up to enroll in ACRE.

The final factor above, combined with the multi-year commitment, the difficulty of getting agreement from all parties involved and the lingering uncertainty over program rules, made choosing ACRE a very difficult and challenging decision. Add in yield and price expectations as of the sign-up deadline that reduced expected ACRE payments and the result was exceptionally low participation in ACRE in 2009. Nationally, the ACRE program attracted less than 7 percent of farms and less than 13 percent of acreage. Nebraska was a leader in ACRE enrollment, but even in the state, sign-up was limited to approximately 20 percent of farms and 25 percent of acreage (enrollment data from USDA Farm Service Agency). The Nebraska enrollment was substantially higher than the national average, likely due to the expected support under the new safety net relative to the old safety net for corn and soybeans (as opposed to cotton, rice and peanuts in the South). But even in Nebraska the sign-up for ACRE was a small minority of total farm program participants.

For those that did sign up for ACRE in 2009, the question now is how ACRE performed and whether any payments are expected on the 2009 crop. For those that did not sign up for ACRE, the question now should be whether or not to sign up for ACRE in 2010. Having made a decision not to sign up in 2009 does not eliminate the need to analyze the decision again in 2010. Changing guarantee levels and changing yield expectations affect the relative support offered by the ACRE program and may make the ACRE guarantee more important in 2010 than it was in 2009.

Results for 2009

In early March, the United States Department of Agriculture (USDA) published 2009 state average yields for Nebraska for all practices (including irrigated and dryland

yields). While these yields are per harvested acre, and the official yields used in the ACRE calculations are per planted acre (accounting for acres reported as failed to USDA Farm Service Agency), the adjustments in Nebraska have historically been very small, and the harvested yields provide a good conservative estimate of potential ACRE payments in the state. Multiplying the 2009 yields times the expected price for the 2009 crop marketing year produces the actual state revenue to count against the ACRE guarantee for each crop.

The prices used in calculating the revenue in Table 1 (on next page), are estimates based on the mid-point of the forecast price range for the marketing year as published in USDA's monthly supply and demand reports. The exact price will not be known until the marketing year is complete, but the mid-point provides an excellent reference price from which to evaluate potential payments.

Based on the current price estimates, no ACRE payments are expected for the major Nebraska crops for 2009. While the results suggest the ACRE safety net provided no return for the foregone direct payments, it is important to consider the revenue risk protection provided by the ACRE program. The revenue guarantee of \$687 in irrigated corn or \$449 in dryland corn provided sub-substantially more protection for producers than did the existing DCP safety net, which would provide counter-cyclical payments only if the national average corn price fell below \$2.35 per bushel or \$1.95 per bushel (national average loan rate). Similarly, a \$510 revenue guarantee in irrigated soybeans or a \$463 guarantee in dryland soybeans provided much greater downside risk protection than did the old DCP safety net for soybeans, at a counter-cyclical trigger price of \$5.36 per bushel or a national average loan rate of \$5.00 per bushel.

For corn, soybeans and the other major Nebraska crops, the ACRE safety net in 2009 was substantially higher than the old DCP safety net. Even with the record yield levels experienced in 2009, the ACRE safety net would have triggered support payments to producers at price levels far above the old DCP price safety net. The expectation of no payments under ACRE in 2009 is largely a function of strong revenue forecasts from record yields, multiplied by price expectations that largely rallied through the harvest period from levels forecast last summer.

Projections for 2010

While the net result for 2009 is no expected ACRE payments, the forecast for 2010 could be substantially different. That could make ACRE more relevant for those already in the program, and also more attractive for those in the old DCP that will face the ACRE decision again in 2010. Table 2 (on next page) provides an analysis of expected ACRE guarantee levels for 2010 relative to 2009, as well as a reference to prices that would trigger ACRE payments under expected yield conditions.

Table 1. Estimated 2009 ACRE Program Payments in Nebraska*

Commodity	Projected Yield	x	Projected Price	=	2009 Projected Revenue	2009 ACRE Revenue Guarantee	2009 ACRE Projected Payment
Corn-Irr	198		\$3.60		\$712.80	\$687.65	\$0.00
Corn-Dry	149		3.60		536.40	449.76	0.00
Soybeans-Irr	60.5		9.45		571.73	510.53	0.00
Soybeans-Dry	49		9.45		463.05	370.48	0.00
Wheat	48		4.90		235.20	232.71	0.00
Grain Sorghum	93		3.20		297.60	278.46	0.00

* Projected ACRE payments based on yields and projected prices published by USDA-NASS and USDA-WAOB on March 10, 2010.

Table 2. Projected 2010 ACRE Program Guarantees in Nebraska*

Commodity	5-Year Olympic Avg. Yield	x	2-Year Avg. Price	x	90% =	2010 ACRE Revenue Guarantee	2010 Trend Yield	2010 ACRE Price Trigger at Trend Yield
Corn-Irr	185 (unch.)		\$3.83 (-0.30)		90%	\$637.70 (-49.95)	188.7	\$3.38
Corn-Dry	121 (unch.)		3.83 (-0.30)		90%	417.09 (-32.67)	117.4	3.55
Soybeans-Irr	57.5 (+1.0)		9.71 (-0.33)		90%	502.49 (-8.04)	57.9	8.68
Soybeans-Dry	44 (+3.0)		9.71 (-0.33)		90%	384.52 (+14.04)	41.1	9.36
Wheat	41.4 (+1.4)		5.84 (-0.79)		90%	217.60 (-15.11)	40.3	5.39
Grain Sorghum	90 (+4.0)		3.20 (-0.44)		90%	256.32 (-22.14)	83.3	3.08

* ACRE projected guarantees based on reported yields for 2009 and price projections for 2009 crop marketing year from USDA-NASS and USDA-WAOB, March 10, 2010 (changes from 2009 guarantees shown in parenthesis).

**2010 ACRE projected guarantee impacted by 10% limit on changes in the ACRE guarantee (None as of March 10, 2010).

The five-year Olympic average yield in the 2010 ACRE guarantee equation will be based on yields per planted acre from 2005-2009, as opposed to 2004-2008 for the 2009 ACRE guarantee. For corn, that average yield stays the same because record yields in 2009 replace the previous high yields in 2004 (Olympic averages are calculated by eliminating the high and the low and averaging the rest). For soybeans, wheat and grain sorghum the average yields go up. Record yields in 2009 are not counted, but other high yields that were previously excluded are now counted and contribute to higher yield averages, particularly for dryland soybeans.

Average prices for the 2010 ACRE guarantee come from the 2008 and 2009 marketing year averages, replacing the 2007-2008 marketing year averages used for the 2009 ACRE guarantee. While the 2009 marketing year average prices are not yet certain, current estimates place them all substantially lower than the 2007 marketing year average prices and thus, the two-year average drops substantially for all major Nebraska crops. The resulting

expected ACRE guarantees for 2010 are all lower than the original 2009 guarantees, except for dryland soybeans, where a higher average yield more than offsets the lower expected average price. In all cases, the expected 2010 ACRE guarantees are within the ten percent limit on changes up or down from the 2009 ACRE guarantees.

Based on the expectation of mostly lower ACRE guarantees in 2010 relative to 2009, one might expect even less reason to enroll in ACRE in 2010 than last year. But there is reason to analyze the decision very closely this year. The 2010 ACRE sign-up deadline is June 1 at the USDA Farm Service Agency office. This is 2½ months earlier than the extended deadline producers had in 2009. While the August deadline in 2009 allowed producers a chance to rate expected yields and prices for the year, the earlier, normal deadline in 2010 will provide producers much less foresight of yield potential for the year. If average or trend yields for 2010 are projected as of the sign-up deadline (instead of the record 2009 yields projected as of last August), then the relative risk

protection provided by the 2010 ACRE program may actually look stronger than in 2009. At a 30-year trend yield projection of 188.7 bushels per acre for irrigated corn, the projected \$637 revenue guarantee would start to pay producers at prices below \$3.38 per bushel.

Similar calculations for all major Nebraska crops shows the revenue protection provided by the ACRE program is still substantially higher than the price protection provided by the old DCP. Even under lower guarantee levels in 2010, the relevant price trigger points (at trend yield levels) far exceed the old DCP support levels. As in 2009, there is no guarantee of higher payments under the ACRE program as compared to the old DCP. The only guaranteed payments (direct payments) will still be lower under the ACRE program than under the DCP. But the downside risk protection provided by the ACRE program will certainly remain stronger than the old DCP.

Summary and Other Considerations

For all the analysis, the ACRE decision in 2010 is still a very challenging one. The calculations show that ACRE definitely provides a substantially stronger safety net than the DCP, but it does not guarantee greater farm program payments in 2010, or over the remaining farm program years of 2011-2012. Remember that once chosen on a farm, the producer must stick with ACRE on that farm through 2012. The analysis to support an ACRE decision must consider not just the benefits and costs in 2010, but also the potential benefits from 2011-2012, and the costs of giving up 20 percent of the Direct Payment for all remaining years from 2010-2012.

There are also some caveats to the ACRE decision that cannot be overlooked in the simplified analysis above. First, to receive an ACRE payment the farm must trigger a revenue loss below its benchmark, in addition to the state having a revenue loss below the guarantee discussed above. It appears the likelihood that a farm will not trigger when the state does may be very small. To start, the farm's benchmark is based on 100 percent of yield times price, instead of 90 percent. Then the farm benchmark adds in the farmer-paid crop insurance premium. For those with coverage that adds approximately two to five percent of the expected crop revenue to the benchmark. Thus, a farm would need to have yields that are an additional 10-15 percent above the relative yield expectations at the state level to not trigger ACRE payments when the state triggers ACRE payments. For example, if the state is at average yields and ACRE payments are triggered because of a ten percent price drop, then the farm would need to have yields about 10-15 percent above the farm average to not trigger ACRE payments. If the state has ten percent above average yields and ACRE payments trigger because prices have dropped around 20 percent, then the farm would need

to have yields that are approximately 20-25 percent above average to not trigger payments. Of course, it is also possible that the farm has a revenue loss when the state does not, and there are no ACRE payments to help offset the lost revenue. This simply implies that ACRE is not a replacement for sound crop insurance and risk management decisions that help to address farm-level price, yield and revenue risk.

A second caveat to note is that the payment limit under ACRE could be much more constraining than the payment limit has been under the existing DCP. Under DCP, the payment limits have been \$40,000 for Direct Payments and \$65,000 for Counter-Cyclical Payments per person. Under ACRE, the payment limit for Direct Payments is \$40,000 minus the amount of Direct Payments given up to choose ACRE (20 percent of actual Direct Payments, or effectively \$32,000 at the limit). This amount is then added to the \$65,000 limit on ACRE payments (up to \$73,000 if Direct Payments were at the limit). But the potential ACRE payments could far exceed \$100 per acre if revenue calculations were to drop substantially, meaning ACRE payments could be capped at a much smaller farm size than Counter-Cyclical Payments would be. This doesn't change the economics of ACRE versus DCP, as the total cap on payments effectively ends up the same under both, and ACRE payments grow large enough to reach the cap long before DCP payments would. But in the extreme case that prices fall far enough (well below marketing loan rates), the caps and the impact on loan rates under ACRE could be significant.

Whether producers are analyzing this complicated decision between ACRE and DCP in 2010 or choose DCP now and re-examine the ACRE vs. DCP decision in 2011, they will want to look at the information and use the decision analysis tools available from the University of Nebraska-Lincoln or USDA. The UNL Farm Bill website at farmbill.unl.edu provides an easy link to several publications, presentations, resources and decision tools that will help with the complex farm program decisions. The USDA-FSA website at www.fsa.usda.gov provides specific information and publications regarding ACRE, DCP and other programs, including details on yields and prices used in the program calculations and information on proving or substituting yield information for the farm benchmark. Look at both for further information and insight as the sign-up process continues.

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