



www.agmanager.info  
abarnaby@agecon.ksu.edu  
(785) 532.1515 (phone)  
(785) 532.6925 (fax)

G.A. "Art" Barnaby Jr.

Copyright 2007. All rights reserved. Contact Art to be added to e-mail list

**Disclaimer:** This web page is designed to aid farmers with their marketing and risk management decisions. The risk of loss in trading futures, options, forward contracts, and hedge-to-arrive can be substantial and no warranty is given or implied by the author or any other party. Each farmer must consider whether such marketing strategies are appropriate for his or her situation. This web page does not represent the views of Kansas State University.

### Will ACRE work on Kansas wheat? <sup>1</sup>

*Good morning Dr. Barnaby*

*I hope you are doing well. It was nice to see you a few weeks ago at the Washington crop insurance meeting.*

*This morning, Dan Morgan did a piece in the Washington Post raising concerns about ACRE. I followed up with USDA and understand RMA has concern with the impact ACRE may have on revenue products and buy up.*

*Have you had a chance to take a look at the program and if so, do you share this view? Just curious what the experts think.*

*Thanks and hope you have a good day.*

*Washington Guy*

Dear Friend,

I will use your question and post it on AgManager.info because I am getting hit with this question from a lot of people. **Disclaimer:** My comments are a first cut

---

<sup>1</sup>Prepared by G. A. (Art) Barnaby, Jr., Professor, Department of Agricultural Economics, K-State Research and Extension, Kansas State University, Manhattan, KS 66506, May 21, 2008, Phone 785-532-1515, e-mail – [barnaby@ksu.edu](mailto:barnaby@ksu.edu).

based on my upstanding of the statute. USDA will write the implementation rules so some of the economic consequences could change.

There have been 3 major crop losses since 1980 on Kansas wheat; 1989, 1996, and 2007. **However ACRE would not have paid on the 2007 Kansas wheat loss!** Also ACRE hit the 25% per acre payment cap on the 1989 Kansas wheat crop failure (see table 1).

Farmers must select ACRE for all of their crops, not just wheat. Crop insurance allows farmers to select different types of coverage and deductibles for different crops.

The state level revenue loss is the first trigger for ACRE payments. The second trigger is the farm must have revenue below the farm level benchmark revenue plus crop insurance premiums, so even if the state triggers payments farmers must have below average revenue to collect.

If farmers collect, they only collect on 83.3% of their acres and there are payment limits too. Crop insurance pays on 100% of the planted acres.

Farmers must give up 20% of their direct payment and accept a 30% cut in the loan rate to select ACRE. This effectively is the same as paying a premium for ACRE coverage.

The loan is worthless in this new market but a 20% cut in a direct payment is real. Assuming an average wheat direct payment of \$15, ACRE would cause a \$3.00 reduction in direct payments. The 28 year average ACRE payment was \$3.07 on Kansas wheat and that assumes farmers also had a farm level loss in all of those ACRE payment years. **So the reduction in direct payments would have paid for ACRE on Kansas wheat.**

However, there will be miss-informed farmers who will cancel their crop insurance coverage because they have ACRE unless your insurance agents educate them on ACRE vs. crop insurance that include:

1. Crop insurance does not require a state level revenue loss for payments.
2. Crop insurance does not have a per acre payment cap of 25%.
3. Crop insurance does not have a farmer payment limit.
4. Higher market prices will eliminate the ACRE payment as occurred on 2007 Kansas wheat. Under crop insurance farmers may buy CRC or the harvest price option so that when prices increase it does not eliminate crop insurance payments but does the opposite by increasing payments. **When farmers have no yield is when they have the greatest need for cash.**
5. There is larger negative price-yield correlation at the state level in core growing states, i.e. Iowa corn, Kansas wheat, etc. It is likely this negative-

price yield correlation has increased because there is very little carry over causing very tight stock-to-use ratios. This means low crop yields in those states often cause prices to increase and eliminate ACRE payments as occurred on the 2007 Kansas wheat crop.

6. In 2007 Kansas wheat yields were good in NW Kansas but not central Kansas. Acre would not have paid and those central Kansas wheat farmers would have had major losses without crop insurance payments.

**Conclusion: It does not appear that ACRE will be a major competitor for crop insurance.** However, ACRE may cause some farmers to drop their crop insurance coverage because they believe crop insurance is overrated in their area. There is evidence to support the argument that in some counties the expected county yield is overstated for GRIP/GRP but in other counties it is understated. University of Illinois on their WEB site FarmDoc will even identify the counties with overstated county yields, making it easier to adverse select. The APH programs are more difficult to rate with short run yield problems. In any case there maybe an argument that the ACRE program will put greater pressure on rating accuracy. When allowed to work even Washington can not ignore the judgment of the market!

#### **Will ACRE work on Kansas wheat? Yes.**

The method for setting expected Kansas wheat yields was changed from the original proposal. The new method is more favorable to Kansas wheat.

The strike price for ACRE is a two year average of the prior two years so when prices start to fall farmers will have a lower expected price. Farmers are in effect buying an in-the-money put option on expected state revenue. However, because of the negative price-yield correlation on Kansas wheat, I would suggest locking in the expected payment with the purchase of a call option.

So it will depend on the market, if farmers should select ACRE on wheat the first year. It will also depend on the markets for the other crops. So one may get a different answer if a farmer's dominate crop is wheat versus corn.

**Conclusion: ACRE is not a “no brainier” on Kansas wheat.** Over the last 28 years the reduction in direct payments would have equaled the sum of the ACRE payments. However, once prices start to decline, then farmers will be able to adverse select on ACRE and there is a 10% cup on the guarantee. The only thing that would have made ACRE better for farmers would have been if farmers could select individual crops for ACRE and not all crops, and if they could switch back to the direct payment in future years.

On must also remember there is a 10% cap, so in some years it is possible the expected market price will be higher than the ACRE strike price. Therefore,

farmers are effectively buying an out-of-the-money put option on state yields. In those years ACRE will provide little risk protection.

**Table 1. Wheat ACRE Program<sup>1,2,3,4</sup>**

Year	Planted Yield	Olympic Average Yield	MYA Price	Benchmark Revenue * 90%	10% Cup/Cap Benchmark	Revenue to Count	Payment on 83.3% Planted Acre	Payment per Planted Acre	Average Payment	State
1980	32.3	28.4	3.99	81.49	69.44	128.91	0.00	0.00		Kansas
1981	21.8	28.3	3.69	99.48	76.39	80.30	19.18	15.97		Kansas
1982	32.5	30.5	3.45	97.90	84.03	112.19	0.00	0.00		Kansas
1983	34.0	32.9	3.51	97.86	92.43	119.18	0.00	0.00		Kansas
1984	32.4	32.4	3.39	103.09	101.67	109.91	0.00	0.00		Kansas
1985	34.9	33.0	3.08	100.65	100.65	107.60	0.00	0.00		Kansas
1986	29.3	33.0	2.42	95.98	95.98	70.83	23.99	19.99		Kansas
1987	34.2	33.5	2.57	81.59	86.38	87.98	0.00	0.00		Kansas
1988	31.7	32.8	3.72	75.31	77.74	117.80	0.00	0.00		Kansas
1989	17.2	31.7	3.72	92.77	85.51	64.08	23.19	19.32		Kansas
1990	38.1	31.7	2.61	106.21	94.07	99.35	6.86	5.72		Kansas
1991	30.8	32.2	3.00	90.36	90.36	92.29	0.00	0.00		Kansas
1992	30.3	30.9	3.24	81.34	81.34	98.23	0.00	0.00		Kansas
1993	32.1	31.1	3.26	86.81	86.81	104.67	0.00	0.00		Kansas
1994	36.4	33.1	3.45	90.86	90.86	125.59	0.00	0.00		Kansas
1995	24.4	31.1	4.55	99.92	99.92	111.22	0.00	0.00		Kansas
1996	21.6	29.0	4.30	111.82	109.91	93.00	18.83	15.68		Kansas
1997	44.0	31.0	3.38	115.32	115.32	148.66	0.00	0.00		Kansas
1998	46.3	34.9	2.65	107.08	107.08	122.57	0.00	0.00		Kansas
1999	43.2	37.2	2.48	94.82	96.38	107.24	0.00	0.00		Kansas
2000	35.5	40.9	2.62	85.93	86.74	92.98	0.00	0.00		Kansas
2001	33.5	40.9	2.78	93.87	93.87	93.04	0.83	0.69		Kansas
2002	27.9	37.4	3.56	99.40	99.40	99.31	0.08	0.07		Kansas
2003	45.7	37.4	3.40	106.70	106.70	155.43	0.00	0.00		Kansas
2004	31.5	33.5	3.40	117.14	117.14	106.93	10.21	8.50		Kansas
2005	38.0	34.3	3.42	102.42	105.42	129.96	0.00	0.00		Kansas
2006	29.7	33.1	4.26	105.29	105.29	126.58	0.00	0.00		Kansas
2007	27.3	33.1	6.65	114.24	114.24	181.47	0.00	0.00	3.07	Kansas

<sup>1</sup>Farmer must also show a revenue loss below the Farm's benchmark revenue to receive a payment + premiums paid for crop insurance.

<sup>2</sup>The farmer's 5 year Olympic average yield is divided by the State 5 year Olympic average yield times the state payment to generate the individual farmer payment.

<sup>3</sup>Farmers selecting ACRE must select this program for all crops.

<sup>4</sup>Enrollment in ACRE will reduce a farmers' direct payments by 20% and reduce their marketing loan rate by 30%.