## Comparing Agricultural Risk Coverage to Price Loss Coverage Election in Kansas and the U.S.

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http://www.agmanager.info/policy/commodity/2012/ARC vs PLC Signup.pdf

Farm Service Agency (FSA) recently released data showing farm program elections, base reallocation, and program yield updates as a result of the 2014 Farm Bill. Kansas State University Research and Extension worked extensively over the election time-period, November 17th, 2014 to April 7<sup>th</sup>, 2015, to help farmers make these critical decisions. In total, 231 meetings were conducted by Agricultural Economics faculty and Extension Agents, reaching 18,452 producers. Follow-up individual consultations to help producers with Decision Tools also resulted in 3,553 in-office visits which impacted over 8,700 FSA farm numbers.

There are numerous factors that influenced the program election decisions of producers in Kansas that put them in a different situation then many farmers across the U.S. Table 1 summarizes the percent of base acres that were elected to one of the three different programs; Price Loss Coverage (PLC), Agricultural Risk Coverage-County Level (ARC-CO), and Agricultural Risk Coverage-Individual Level (ARC-IC). Only commodities with a significant number of base acres in Kansas are shown. For a complete list go to the FSA website: <a href="http://www.fsa.usda.gov/programs-and-services/arcplc\_program/index">http://www.fsa.usda.gov/programs-and-services/arcplc\_program/index</a>. All subsequent tables and figures are generated using data released by FSA on this website.

	All of U.S.			Kansas		
	PLC	ARC-CO	ARC-IC	PLC	ARC-CO	ARC-IC
BARLEY	74.8%	21.7%	3.5%	54.5%	45.3%	0.2%
CORN	6.6%	93.1%	0.3%	13.0%	86.3%	0.6%
GRAIN SORGHUM	66.4%	33.4%	0.2%	54.2%	45.6%	0.1%
OATS	32.0%	67.3%	0.7%	30.5%	69.5%	0.0%
SOYBEANS	3.1%	96.6%	0.4%	10.2%	89.5%	0.3%
SUNFLOWERS	55.8%	43.0%	1.2%	34.6%	64.4%	0.9%
WHEAT	42.5%	55.6%	2.0%	24.4%	75.4%	0.3%

Table 1. Percentage of total base acres electing each Commodity Program for U.S. and Kansas

Across the U.S., 76% of base acres were elected to the ARC-CO program, 23% to the PLC program, and less than 1% to the ARC-IC program. The election decision ultimately came down to PLC or ARC-CO for the majority of producers. Across Kansas and all of the U.S., ARC-IC election was minimal. This

can be attributed to the fact that the program only pays on 65% of base acres versus 85% in the other programs, but also the sheer complexity of this program made it hard for producers to understand and select it over the less complicated options. Also ARC-IC required a "large" amount of additional record-keeping by farmers and those records changed each year depending on the crop mix planted.

Program elections are summarized in Figure 1, comparing Kansas to the total United States.

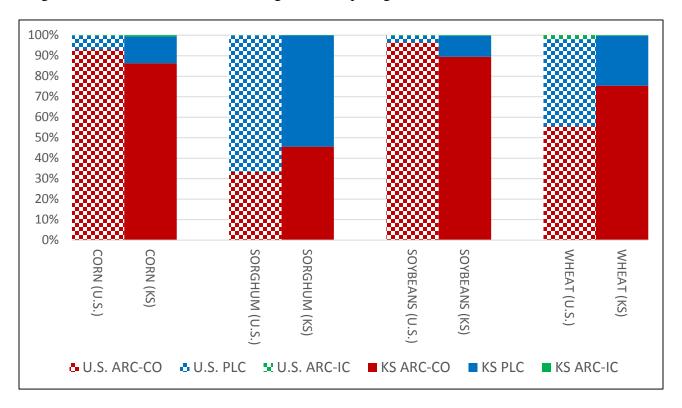


Figure 1. Program Election Percentages by major Kansas Crop

Corn and soybean program election in Kansas showed similar patterns to program election across the entire U.S. Nationally, 93% of corn base acres and near 97% of soybean acres were elected to ARC-CO. Kansas was slightly lower at 86% and near 90% respectively. This is likely due to the ongoing drought in the western areas of Kansas, where multiple years of yield loss have made the 5-year ARC-CO benchmark so low that even a normal year yield would raise Benchmark Revenue high enough to offset any significant marketing year price loss. Many producers that fell into this category likely chose PLC because ARC-CO offered very little in the way of revenue protection.

It was not surprising to see wheat as having more ARC-CO elections in Kansas then across the U.S. This is because 2014 was a dry spring, resulting in low or failed wheat yields across Kansas. Coupling this with a good estimate of Marketing Year Average (MYA) price for wheat for the 2014-2015 marketing year, many producers faced a very likely ARC-CO payment for their 2014 crop and an unlikely PLC payment. While it was plainly communicated at educational meetings that the later 4 years of the Farm Bill could easily produce larger PLC payments if prices continue to fall, many farmers still took the "money-in-hand" approach and chose ARC-CO.

Finally, grain sorghum sat on the fence in respect to program election because of a unique situation at the end of the election period. Originally, as the election period started, it looked like sorghum was a good candidate for PLC because of the higher reference price (\$3.95 versus just \$3.70 for corn). However, as the marketing year progressed, due to the export value of sorghum, the sorghum MYA price basis difference between sorghum and corn continue to widen causing the 2014-2015 PLC sorghum payment to shrink. The most recent monthly MYA price basis for sorghum was 67 cents over the corn MYA monthly price. Without that strong sorghum price basis, the sorghum PLC payment would have been very large. Most experts don't expect that strong sorghum price basis to remain for the life of the 5 year commodity program. The program election was a tough decision in the last hour, and it appears in Kansas that more base acres went to ARC-CO then the nation as a whole.

When looking at the base reallocation decisions made across Kansas and the U.S., Figure 2 summarizes the overall trends. These percentages are looking at the change in base acres from those reported in the 2013 Direct and Counter-Cyclical Program (DCP) and Average Crop Revenue Election (ACRE). Recall that base acres could only be reallocated to commodities planted from 2009-2012 and not increased to match actual acres planted.

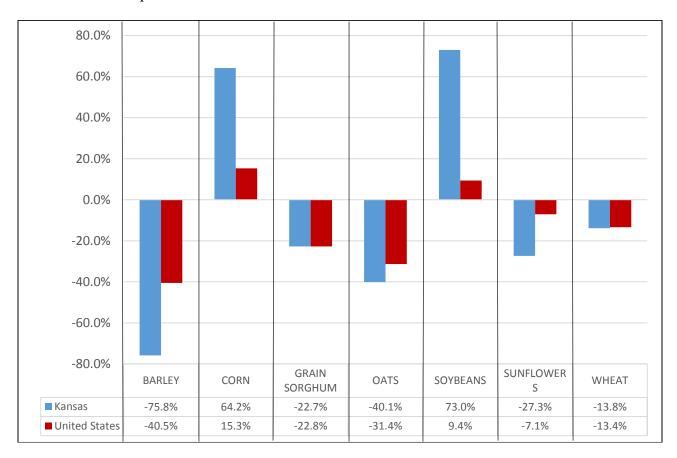


Figure 2. Percentage Change in PLC/ARC-CO Base Acres from the 2013 DCP/ACRE Program Base

On a percentage basis, Kansas reallocated more base acres then the U.S. did in the aggregate, although the overall trend was similar. As Figure 2 shows, barley base was reduced by over 75%, which represented a reduction of 125,105 acres and leaves just 3,049 acres of barley base acres in Kansas. Oats saw the next highest reduction at 40%, reducing oats base to just over 7,000 total acres in Kansas. Grain sorghum was reduced almost 23% or 966,638 acres across Kansas and wheat lost almost 14% of its base acres, representing 1,675,486 acres. It is clear that more corn and soybeans are being grown in Kansas and across the U.S. then those other commodities. Corn base increased in Kanas by 1,769,521 acres or near 76% while soybean base increased 1,153,234 acres or a 73% increase in base acres.

Farmers who didn't reallocate base acres in 2002 (which many didn't), their current base represented crops that were planted on the farm back in the early 1990's. In 2002 farmers could only update their base if they first updated their FSA commodity payment yields on all crops. Recent crop losses would have lowered many of the 2002 FSA commodity payment yields. In the new program updating program yields and reallocating base acres were independent decisions. The 2014 Farm Bill provided a more complicated and less predictable situation, so many farmers simply reallocated so their payments would match commodities grown on their farm.

The other decision farmers had to make was if they should update their farm program yield. To do this, 90% of their average yield from 2008-2012 would have to be higher than their current program yield. FSA did not release state-level values on this so Kansas cannot be compared, but as a whole the nation showed that the opportunity to update program yield did not necessary encourage farmers to elect the PLC program. More farms that elected ARC-CO actually updated program yield then farms that selected PLC, in most commodities. Figure 3 depicts these percentages.

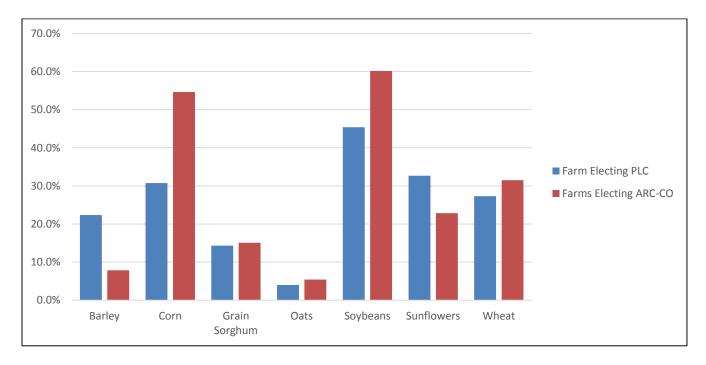


Figure 3. Percentage of Farms that Updated Farm Program Yield by Program Election

Educational programs across Kansas emphasized the importance of updating yields, if possible, no matter which program was chosen. This is because the program yield stays with the farm, however under the 2014 Farm Bill it only effects PLC payments, but future Farm Bills could again use farmers' program yields for other safety net programs.

To look at how much program yields increased, Figure 4 compares the percentage increase from the old Counter-Cyclical yields to the new "PLC" program yields across the entire United States. Most commodities saw around a 30% increase in program yield. This is again because if farmers did not update in 2002 (which many did not), their program yield reflected average farm yield from the early 1980's. Technology has increased yields significantly in 30 years and this level of increase justifies that an opportunity for farmers to update their program yield was indeed warranted. If Kansas were compared, it is likely a lower percentage of producers were able to update and a lower percentage increase would be seen, due to the multiple-year drought.

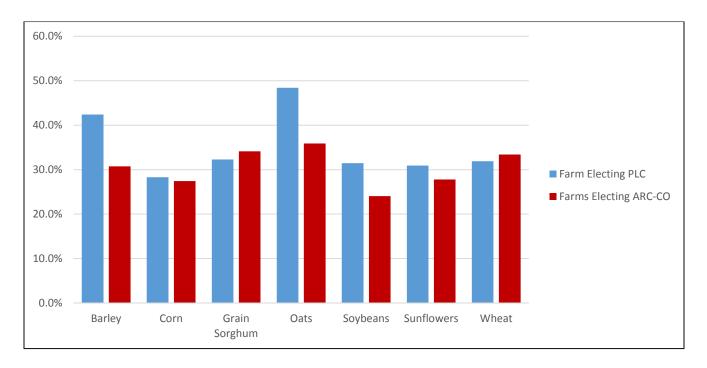


Figure 4. Percentage Change in Program Yield resulting from 2014 Farm Bill update

In summary, educational programing across Kansas produced expected results when looking at decisions made with regards to the 2014 Farm Bill. Each farm had to analyze their unique situation and the options presented to them, since no one program or decision could be recommended for all producers. Time will tell which decisions were right. Unfortunately making the "correct" 5-year commitment to a program with volatile markets and weather is a gamble. 2015 is already proving to be a challenging year with extreme wet weather after multiple years of drought in Kansas, and "low"

commodity prices. Hopefully the intended safety net the Farm Bill created will be enough to keep farms afloat.

Enrollment for these Farm Bill programs will start June 17<sup>th</sup>, 2015 and end September 30<sup>th</sup>, 2015. Producers will need to enroll in the programs every year, but cannot change their program election.

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