

Managing Risk with the New Farm Income Safety Net

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2009 Insurance Workshop

**“MANAGING THE RISKS OF THE VOLATILITY IN
FARM PRICES AND THE GLOBAL RECESSION”**

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Troy Dumler is a K-State Extension Agricultural Economist in southwest Kansas. A native of Kansas with B.S. and M.S. degrees in agricultural economics from Kansas State University, Troy has developed a national reputation as a farm policy analyst. Recently he has focused much of his attention on the 2008 Farm Bill and how it will impact Kansas farmers and ranchers. In addition to his farm policy work, Dumler has also conducted research and extension programs on a variety of crop and livestock management topics, especially dryland and irrigated cropping systems.

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KSU Farm Bill information – www.agmanager.info

USDA Farm Bill information – www.usda.gov/farmbill



The 2008 Farm Bill and the Commodity Program A Changing Farm Income Safety Net

- Existing three-part price safety net
 - Marketing loans and loan deficiency payments
 - Income support tied to national/county price and farm's production
 - Counter-cyclical payments
 - Income support tied to national price and farm's historic production base
 - Direct payment
 - Fixed payment tied to legislated rate and farm's historic production base

- New revenue safety net
 - Average Crop Revenue Election Program
 - Income support tied to state/farm revenue and farm's planted acreage
 - Supplemental Revenue Assistance Program
 - Income support tied to farm revenue and crop insurance coverage

Commodity Program Rates Existing and New Loan Rates

Commodity	2007, 2008	2009	2010-2012
Wheat (bu)	\$2.75	\$2.75	\$2.94
Corn (bu)	\$1.95	\$1.95	\$1.95
Sorghum (bu)	\$1.95	\$1.95	\$1.95
Barley (bu)	\$1.85	\$1.85	\$1.95
Oats (bu)	\$1.33	\$1.33	\$1.39
Upland cotton (lb)	\$0.52	\$0.52	\$0.52
Rice (cwt)	\$6.50	\$6.50	\$6.50
Soybeans (bu)	\$5.00	\$5.00	\$5.00
Other oilseeds (cwt)	\$9.30	\$9.30	\$10.90
Peanuts (ton)	\$355.00	\$355.00	\$355.00
Dry peas (cwt)	\$6.22	\$5.40	\$5.40
Lentils (cwt)	\$11.72	\$11.28	\$11.28
Small chickpeas (cwt)	\$7.43	\$7.43	\$7.43
Large chickpeas (cwt)	-	\$11.28	\$11.28

Commodity Program Rates Existing and New Target Prices

Commodity	2007	2008	2009	2010-2012
Wheat (bu)	\$3.92	\$3.92	\$3.92	\$4.17
Corn (bu)	\$2.63	\$2.63	\$2.63	\$2.63
Sorghum (bu)	\$2.57	\$2.57	\$2.57	\$2.63
Barley (bu)	\$2.24	\$2.24	\$2.24	\$2.63
Oats (bu)	\$1.44	\$1.44	\$1.44	\$1.79
Upland cotton (lb)	\$0.7240	\$0.7125	\$0.7125	\$0.7125
Rice (cwt)	\$10.50	\$10.50	\$10.50	\$10.50
Soybeans (bu)	\$5.80	\$5.80	\$5.80	\$6.00
Other oilseeds (cwt)	\$0.1010	\$0.1010	\$0.1010	\$12.68
Peanuts (ton)	\$495.00	\$495.00	\$495.00	\$495.00
Dry peas (cwt)	-	-	\$8.32	\$8.32
Lentils (cwt)	-	-	\$12.81	\$12.81
Small chickpeas (cwt)	-	-	\$10.36	\$10.36
Large chickpeas (cwt)	-	-	\$12.81	\$12.81

Calculating Program Payments

Estimated 2009 Counter-Cyclical Program Payments*

Counter-Cyclical Payment Rate

$$\frac{\text{target price}}{\text{DP rate}} - \text{MAX} \left(\frac{\text{market price}}{\text{loan rate}} \right) = \text{CCP rate}$$

Counter-Cyclical Payment

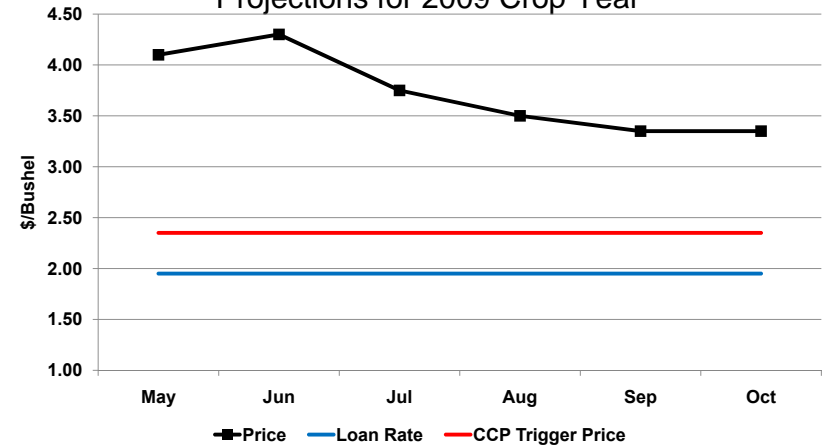
$$\text{CCP rate} \times \text{CCP yield} \times \text{base acres} \times 85\% = \text{CCP}$$

Commodity	Target Price	DP Rate	MAX (Market Price, Loan Rate)	CCP Rate
Corn	\$2.63	\$0.28	\$3.35	\$1.95
Soybeans	5.80	0.44	9.00	5.00
Wheat	3.92	0.52	4.85	2.75
Grain Sorghum	2.57	0.35	2.90	1.95

* Estimated CCP payment rates based on current projected marketing year average prices from USDA-WAOB.

Corn Market Prices and Safety Nets

USDA-FSA and USDA-WAOB
Projections for 2009 Crop Year



The 2008 Farm Bill and the Commodity Title

- New revenue-based safety net called "Average Crop Revenue Election" Program (ACRE) as an option for 2009-2012
 - Crop-specific revenue safety net based on state revenue
 - Decision by farm number, irrevocable through 2012
 - Payment on revenue losses if
 - State crop revenue per acre below guarantee based on average yields and prices
 - **AND**
 - Farm crop revenue per acre below benchmark based on average yields and prices
 - Payment calculated on planted acres, not base acres
 - Replaces counter-cyclical payment and adjusts other payments
 - Direct payment reduced 20%
 - Marketing loan rates reduced 30%

Average Direct Payments for Primary Kansas Crops

	Wheat	Corn	Sorghum	Soybeans
Payment Yield (bu/ac)	34.1	102.1	54.4	22.1
Payment Rate (\$/bu)	0.52	0.28	0.35	0.44
Direct Payment (\$/ac)	17.73	28.59	19.04	9.72
ACRE Reduction (\$/ac)	3.55	5.72	3.81	1.94

Farm Bill Commodity Program Average Crop Revenue Election Option

ACRE State Guarantee

$$\frac{\text{5-year Olympic average state yield}^*}{\text{2-year national average price}} \times 90\% = \text{ACRE state guarantee}$$

Farm Benchmark Revenue

$$\frac{\text{5-year Olympic average farm yield}^*}{\text{2-year national average price}} + \frac{\text{crop insurance premium paid}}{\text{2-year national average price}} = \text{farm benchmark revenue}$$

* Yields per planted acre

Farm Bill Commodity Program Average Crop Revenue Election Option

Actual State Revenue

$$\frac{\text{average state yield}^*}{\text{national average price}} \times \text{MAX} \left(\frac{\text{national average price}}{\text{loan rate} \times 70\%}, \frac{\text{loan rate} \times 70\%}{\text{national average price}} \right) = \text{actual state revenue}$$

Actual Farm Revenue

$$\frac{\text{average farm yield}^*}{\text{national average price}} \times \text{MAX} \left(\frac{\text{national average price}}{\text{loan rate} \times 70\%}, \frac{\text{loan rate} \times 70\%}{\text{national average price}} \right) = \text{actual farm revenue}$$

* Yields per planted acre

Farm Bill Commodity Program Average Crop Revenue Election Option

If state revenue is less than the ACRE state guarantee **and** farm revenue is less than the farm benchmark revenue:

ACRE Payment

$$\text{MIN} \left(\frac{\text{ACRE state guarantee}}{\text{actual state revenue}}, \frac{\text{ACRE state guarantee}}{\text{actual state revenue}} \times 25\% \right) \times$$

$$\left(\frac{\text{Oly. avg. farm yield}}{\text{Oly. avg. state yield}} \right) \times \frac{\text{planted acres}}{\text{planted acres}} \times 83.3\% = \text{ACRE payment}$$

State Yields for ACRE Kansas Yields per Planted Acre

Year	Wheat	Irr Corn	Dry Corn	Milo	Soybeans
2004	34.2	192.0	110.0	76.0	39.5
2005	39.9	187.0	94.0	75.0	36.5
2006	31.8	173.0	72.0	58.0	31.5
2007	32.6	193.0	97.0	79.0	32.5
2008	39.2	185.0	97.0	78.0	36.5
Olympic Average	35.3	188.0	96.0	76.0	35.0

Source: USDA Farm Service Agency.

Market Prices for ACRE

National Average Market Prices

Year	Wheat	Corn	Milo	Soybeans	Sunflower
	\$/bu	\$/bu	\$/bu	\$/bu	\$/lb
2007	\$6.48	\$4.20	\$4.08	\$10.10	\$0.2170
2008	\$6.78	\$4.05	\$3.20	\$9.97	\$0.2185
2007-08 Avg.	\$6.63	\$4.13	\$3.64	\$10.04	\$0.2178

Source: USDA National Agricultural Statistics Service and USDA World Agricultural Outlook Board, Oct 9, 2009.

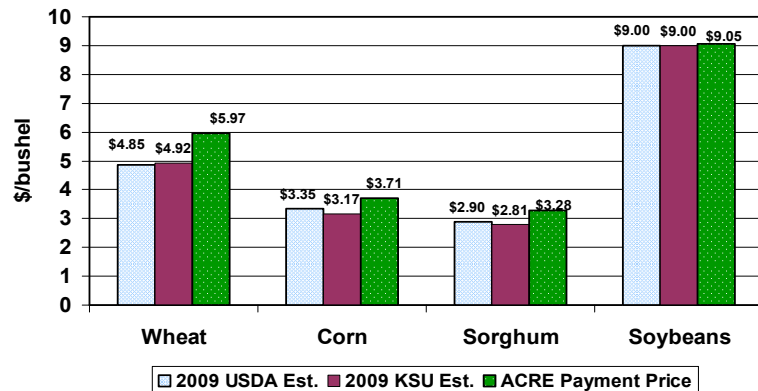
Calculating Program Payments

2009 ACRE Program Guarantees in Kansas*

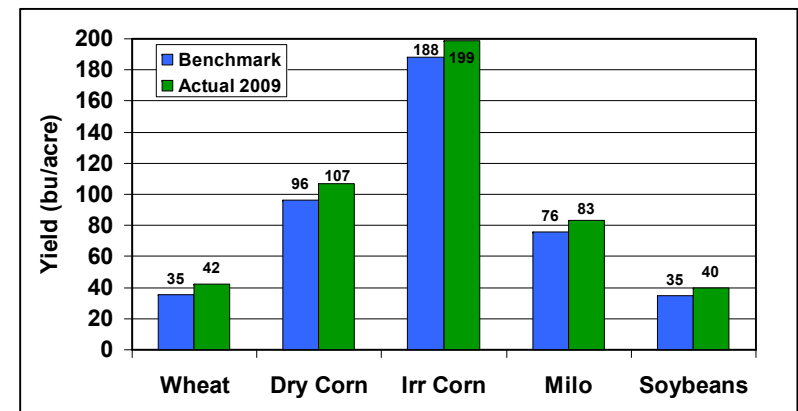
Commodity	5-Year Oly. Avg. Yield	x	2-Year Avg. Price	x	90% =	2009 ACRE Revenue Guarantee	x	25% =	2009 MAX ACRE Payment
Wheat	35.3		\$6.63		90%	\$210.64		25%	\$52.66
Corn-Irr	188		4.13		90%	698.80		25%	174.70
Corn-Dry	96		4.13		90%	356.83		25%	89.21
Grain Sorghum	76		3.64		90%	248.98		25%	62.25
Soybeans	35		10.04		90%	316.26		25%	79.07

* ACRE guarantees based on published statewide average yields and national average prices

2009 MYA Price Estimates and Prices to Generate ACRE Payments at Average Yields



Kansas ACRE Benchmark and Projected Actual Yields



Projected ACRE yields based on yields published by USDA-WAOB on October 9, 2009. Irrigated and dryland yield projections for corn are estimated from published overall yields by USDA-NASS.

Calculating Program Payments

Estimated 2009 ACRE Program Payments in Kansas*

Commodity	Projected Yield	x	Projected Price	=	2009 Projected Revenue	2009 ACRE Revenue Guarantee	2009 ACRE Payment
Wheat	42		\$4.85		\$203.70	\$210.64	\$6.94
Corn-Irr	199		3.35		659.95	698.80	38.85
Corn-Dry	107		3.35		365.15	356.83	0.00
Grain Sorghum	83		2.90		240.70	248.98	8.28
Soybeans	40		9.00		360.00	316.26	0.00

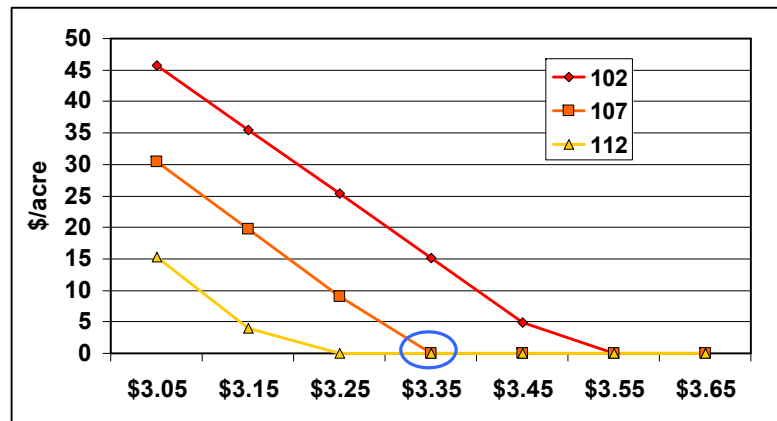
* Projected ACRE payments based on projected prices and yields published by USDA-WAOB and USDA-NASS on October 9, 2009. Irrigated and dryland yield projections for corn are estimated from published overall yields by USDA-NASS.

Kansas Wheat ACRE Payments at Different MYA Prices



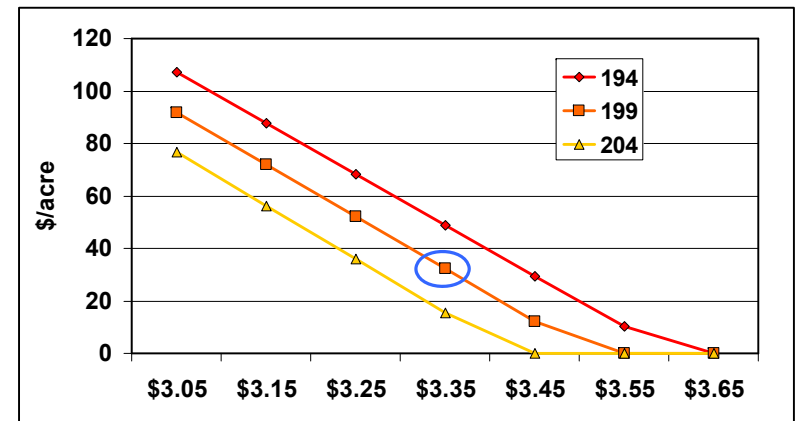
* Based on estimated ACRE yield of 42 bu/acre.

Kansas Dryland Corn ACRE Payments at Different MYA Prices



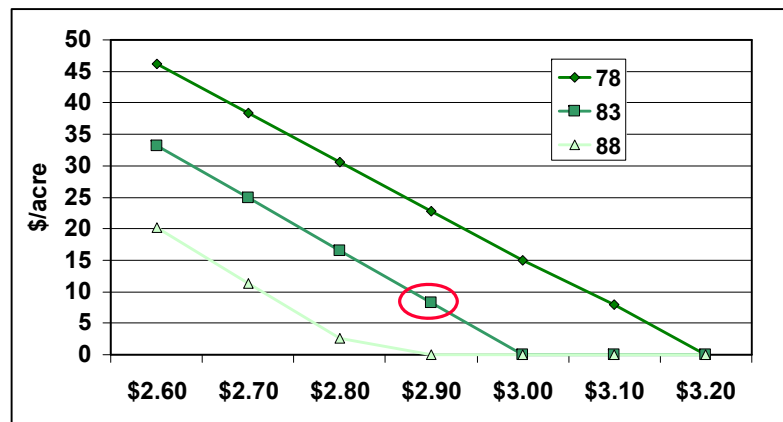
* Based on estimated ACRE yield of 107 bu/acre..

Kansas Irrigated Corn ACRE Payments at Different MYA Prices



* Based on estimated ACRE yield of 199 bu/acre.

Kansas Sorghum ACRE Payments at Different MYA Prices



* Based on 2009 NASS yield of 83 bu/acre.

Kansas Soybean ACRE Payments at Different MYA Prices



* Based on 2009 NASS yield of 40 bu/acre.

2009 ACRE Wheat Payment Estimates

	KS	OK	CO	NE
Benchmark Yield	35.3	31.4	24.5	39.0
Benchmark Price	\$6.63	\$6.63	\$6.63	\$6.63
Revenue Guarantee	\$210.64	\$187.36	\$146.19	\$232.71
2009 Actual Yield	42.0	22.0	39.0	48.0
2009 Actual Price*	\$4.85	\$4.85	\$4.85	\$4.85
2009 Actual Revenue*	\$203.70	\$106.70	\$189.15	\$232.80
2009 Projected Payment	\$6.94	\$46.84	\$0.00	\$0.00

* USDA WASDE estimated price 10-9-09.

2010 ACRE Wheat Projected Benchmarks

	KS	OK	CO	NE
2009 Benchmark Yield	35.3	31.4	24.5	39.0
2010 Benchmark Yield	37.2	27.8	30.1	41.4
2009 Benchmark Price	\$6.63	\$6.63	\$6.63	\$6.63
2010 Benchmark Price	\$5.82	\$5.82	\$5.82	\$5.82
2009 Revenue Guarantee	\$210.64	\$187.36	\$146.19	\$232.71
2010 Revenue Guarantee	\$194.86	\$168.62	\$157.53	\$216.67
2009 - 2010 Difference	\$-15.78	\$-18.74	\$11.34	\$-16.04

ACRE Enrollment in 2009

Selected States	DCP Farms	DCP Acres	ACRE Farms	ACRE Acres	Percent ACRE Farms	Percent ACRE Acres
Nebraska	67,106	11,897,353	16,367	3,927,347	19.6%	24.8%
Colorado	16,030	4,708,231	317	183,064	1.9%	3.7%
Iowa	130,146	18,740,255	17,429	3,660,929	11.8%	16.3%
Kansas	97,963	20,257,427	1,603	587,639	1.6%	2.8%
Missouri	71,118	8,835,931	3,269	775,976	4.4%	8.1%
Oklahoma	36,896	5,593,756	12,158	2,756,908	24.9%	33.0%
South Dakota	40,740	9,797,443	9,164	3,503,300	18.4%	26.3%
U.S. Total	1,541,329	222,044,292	128,620	32,528,628	7.7%	12.8%

Source: USDA Farm Service Agency
Available from USDA-FSA at <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=dccp&topic=landing>

Calculating Program Payments Projected 2010 ACRE Program Guarantees in Kansas*

Commodity	5-Year Oly. Avg. Yield	x	2-Year Avg. Price	x	90% =	2010 ACRE Revenue Guarantee	2010 Trend Yield	2010 ACRE Price Trigger at Trend Yield
Wheat	37.2 (+1.4)		\$5.82 (-0.81)		90%	\$194.86 (-15.78)	35.2	\$5.53
Corn-Irr	188 (unch.)		3.71 (-0.44)		90%	628.92** (-69.88)	191.8	3.27
Corn-Dry	96 (unch.)		3.71 (-0.44)		90%	321.15** (-35.68)	98.0	3.27
Grain Sorghum	77 (+1.0)		3.05 (-0.59)		90%	224.08** (-24.90)	80.1	2.79
Soybeans	35 (unch.)		9.49 (-0.55)		90%	300.20 (-16.06)	40.9	7.33

*ACRE projected guarantees based on estimated yields in 2009 and price projections for 2009 crop marketing year from USDA-WAOB, October 9, 2009.

**2010 ACRE projected guarantee impacted by 10% limit on changes in the ACRE guarantee.

What Producers Can Do Now!!

- **Gather historical yield data by FSA Farm Number**
 - If they are in ACRE for '09, will need to see if you can prove up benchmark farm yield above county plug
 - If they are not in ACRE, historical yields will help make future ACRE decisions
- **Monitor 2009 MYA crop prices, projections for 2010, and monitor yields for various crops at farm level, and at state level**

What About 2010 Signup? (If you are not already in ACRE)

- **Don't get in any hurry!!!!**
- **Make decision based on updated price and yield projections closer to the signup deadline (June 1, 2010)**
 - **Become familiar with calculation tools, so you can make an informed decision**

The Farm Income Safety Net

“A Multiplicity of Confused Concepts”

Scope of Risk Protection	Farm Level	Area Level	National Level
Price		Hedging ML/LDP	PCCP
Revenue	RA/IP DP RA-HPO/CRC	AGR GRIP SURE	ACRE
Production	CAT APH	GRP PRF	

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