

Whole Farm Comparisons of ACRE Payments to Direct Counter Cyclical Payments Using the FSA Acre Calculator

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FSA ACRE Calculator

- Provided by FSA as “a tool to help with calculations for the Average Crop Revenue Election (ACRE) Program.”
- Allows the user to compute estimated ACRE Program payments and compare these to Direct and Counter-Cyclical Program (DCP) payments.

FSA ACRE Calculator Inputs Required

1. Basic Farm Data (base acres, planted acres, direct and counter payment yields)
2. Farm Yield Data (five years)
3. State Yield Data (five years)
4. National Data (2007-2008 average national prices; 2009 projected national prices)

Objective

- Use the FSA ACRE Calculator to compare potential ACRE payments to DCP payments for two different farm situations in Eastern Arkansas:
 1. A 3,240 acre rice – soybean operation in Stuttgart, Arkansas
 2. A 8,250 acre cotton – rice operation in McGehee, Arkansas

Representative Stuttgart Rice - Soybean Farm (Arkansas County)

Stuttgart Representative Farm, Basic Farm Data

<i>Crop</i>	<i>Base Acres</i>	<i>Planted Acres</i>	<i>Direct Payment Yields</i>	<i>CCP Payment Yields</i>
Rice, Long Grain	1620	1620	5540 lbs/ac	5940 lbs/ac
Irrigated Soybeans	1296	1296	29 bu/ac	36 bu/ac
Wheat	235	324	44 bu/ac	44 bu/ac

Source: Texas A&M University, Agricultural & Food and Policy Center (AFPC).

Stuttgart “Farm” Yield Data, 2004-2008

<i>Crop</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
Rice, Long Grain	7144.00	6881.00	7179.00	7211.00	6965.00
Soybeans, Irrigated	44.20	39.50	43.70	44.00	39.90
Wheat	65.60	56.40	70.40	35.10	62.10

Source: Arkansas County yield data from USDA, NASS supplied by the FSA Excel spreadsheet entitled “acre_county_yields_052609.”

Arkansas State Yields Data, 2004-2008

<i>Crop</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
Rice, Long Grain	6960.00	6620.00	6880.00	7200.00	6610.00
Soybeans, Irrigated	42.00	39.00	39.00	40.00	40.50
Wheat	52.00	48.80	59.60	39.90	55.60

Source: Arkansas yield data from USDA-NASS supplied by the FSA Excel spreadsheet entitled "2009_benchmark_yield_latest."

Yields Used to Calculate the Farm and State ACRE Guarantees, Stuttgart Farm

Table 2: Farm Yield Data * Preliminary or Estimated	2009 Benchmark Farm Yield (BFY) *						FSA Use Only: BFY *	2009 Actual Farm Yield *
	Enter 5 previous years (2004 - 2008) OR Average (not both)							
	Actual Farm Yields (Production/Planted Acres)							
	2004	2005	2006	2007	2008	Average*		
Rice, Long Grain	7144.00	6881.00	7179.00	7211.00	6965.00		7096	7096
Soybeans	44.20	39.50	43.70	44.00	39.90		43	43
Wheat	65.60	56.40	70.40	35.10	62.10		61	61

Table 3: State Yield Data * Preliminary or Estimated	2009 Benchmark State Yield (BSY) *						FSA Use Only: BSY *	2009 Actual State Yield *
	Enter 5 previous years (2004 - 2008) OR Average (not both)							
	Actual State Yields *							
	2004	2005	2006	2007	2008	Average*		
Rice, Long Grain	6960.00	6620.00	6880.00	7200.00	6610.00		6820	6820
Soybeans	42.00	39.00	39.00	40.00	40.50		40	40
Wheat	52.00	48.80	59.60	39.90	55.60		52	52

Acre Guarantee Price and 2009 National Average Market Price Data

<i>Crop</i>	<i>Acre Guarantee Price*</i>	<i>2009 National Average Market Price**</i>
Rice, Long Grain (\$/lb)	0.1360	0.1098
Soybeans (\$/bu)	10.0500	8.7600
Wheat (\$/bu)	6.6700	5.3000

•Acre Guarantee Price data from the FSA supplied Excel spreadsheet entitled “acre_prices_values_09.”

** Food and Agricultural Policy Research Institute (FAPRI) 2009 crop price estimates.

Comparison of State and Farm Triggers, Stuttgart Farm

State Trigger	State ACRE Guarantee (SAG) *				Actual State Revenue (ASR) *			State Trigger Met?	
	Benchmark State Yield	Guar. Price	Calc. SAG	Previous year SAG	2009 SAG	2009 Actual State Yield	2009 ACRE Price		2009 ASR
Rice, Long Grain	6820	\$ 0.1360	\$ 834.77	\$ -	\$ 834.77	6820	\$ 0.1098	\$ 748.84	yes
Soybeans	40	\$ 10.0500	\$ 361.80	\$ -	\$ 361.80	40	\$ 8.7600	\$ 350.40	yes
Wheat	52	\$ 6.6700	\$ 312.16	\$ -	\$ 312.16	52	\$ 5.3000	\$ 275.60	yes

Farm Trigger	Farm ACRE Guarantee *				Actual Farm Revenue (AFR) *			Farm Trigger Met?
	Benchmark Farm Yield	Guar. Price	Crop Ins. Premiums per Acre	2009 Farm ACRE Guarantee	2009 Actual Farm Yield	2009 ACRE Price	2009 AFR	
Rice, Long Grain	7096	\$ 0.1360	\$ -	\$ 965.06	7096	\$ 0.1098	\$ 779.14	yes
Soybeans	43	\$ 10.0500	\$ -	\$ 432.15	43	\$ 8.7600	\$ 376.68	yes
Wheat	61	\$ 6.6700	\$ -	\$ 406.87	61	\$ 5.3000	\$ 323.30	yes

Comparison of ACRE Payments and DCP Payments, Stuttgart Farm

Projected Farm Payments											
Enter 'Payment Acres' for each eligible crop. For each crop, the payment acres cannot exceed 83.3% of the planted/PP acres for the crop. For the farm, the total payment acres of all eligible crops cannot exceed the total base acres on the farm.											
ACRE Payments	Max. Farm Eligible Acreage for ACRE (total base acres): 3147.0							Payment = Item 7 times Item 8 times (lessor of Item 8 or 9)			
	1 State Trigger	2 Farm Trigger	3 Payment Acreage %	4 Planted & PP Acres	5 Est. ACRE per acre	6 Potential Payment Acres	7 Payment Acres	8 Farm Prod. Index Factor	9 SAG minus ASR	10 SAG x 25%	Projected ACRE Payment
Rice, Long Grain	yes	yes	83.3%	1620.0	\$ 89.41	1349.5	1349.5	1.0405	\$ 85.93	\$ 208.69	\$ 120,659
Soybeans	yes	yes	83.3%	1296.0	\$ 12.26	1079.6	1079.6	1.0750	\$ 11.40	\$ 90.45	\$ 13,230
Wheat	yes	yes	83.3%	324.0	\$ 42.89	269.9	269.9	1.1731	\$ 36.56	\$ 78.04	\$ 11,576
Maximum Payment Acres have been designated											\$ 145,465
Payment Comparison	DCP			ACRE Program							
	Direct	Counter-cyclical	Total	Direct (80%)		ACRE	Total				
Rice, Long Grain	\$ 175,686	\$ -	\$ 175,686	\$ 140,549		\$ 120,659	\$ 261,208				
Soybeans	\$ 13,733	\$ -	\$ 13,733	\$ 10,986		\$ 13,230	\$ 24,216				
Wheat	\$ 4,479	\$ -	\$ 4,479	\$ 3,583		\$ 11,576	\$ 15,159				
			\$ -				\$ -				
			\$ -				\$ -				
	\$ 193,898	\$ -	\$ 193,898	\$ 155,118		\$ 145,465	\$ 300,583				

How would a higher rice price in 2009 impact the ACRE payment?

Acre Guarantee Price and 2009 National Average Market Price Data

<i>Crop</i>	<i>Acre Guarantee Price*</i>	<i>2009 National Average Market Price**</i>
Rice, Long Grain (\$/lb)	0.1360	<u>0.1131</u>
Soybeans (\$/bu)	10.0500	8.7600
Wheat (\$/bu)	6.6700	5.3000

Converted the \$0.1098/lb FAPRI Projection for 2009 to **\$0.1131/lb** (The November Futures Price as of June 26 2009 less \$1 Basis)

ACRE Payment Results at Alternative Rice Prices

**2009 Rice Price = \$0.1098/lb
(FAPRI Estimate)**

Payment Comparison	DCP			ACRE Program		
	Direct	Counter-cyclical	Total	Direct (80%)	ACRE	Total
Rice, Long Grain	\$ 175,686	\$ -	\$ 175,686	\$ 140,549	\$ 120,659	\$ 261,208
Soybeans	\$ 13,733	\$ -	\$ 13,733	\$ 10,986	\$ 13,230	\$ 24,216
Wheat	\$ 4,479	\$ -	\$ 4,479	\$ 3,583	\$ 11,576	\$ 15,159
			\$ -			\$ -
	\$ 193,898	\$ -	\$ 193,898	\$ 155,118	\$ 145,465	\$ 300,583

**2009 Rice Price = \$0.1131/lb
(November Futures Less \$1 Basis)**

Payment Comparison	DCP			ACRE Program		
	Direct	Counter-cyclical	Total	Direct (80%)	ACRE	Total
Rice, Long Grain	\$ 175,686	\$ -	\$ 175,686	\$ 140,549	\$ 89,066	\$ 229,615
Soybeans	\$ 13,733	\$ -	\$ 13,733	\$ 10,986	\$ 13,230	\$ 24,216
Wheat	\$ 4,479	\$ -	\$ 4,479	\$ 3,583	\$ 11,576	\$ 15,159
			\$ -			\$ -
	\$ 193,898	\$ -	\$ 193,898	\$ 155,118	\$ 113,872	\$ 268,990

How would lower rice yields in 2009 impact the ACRE payment?

Yields Used to Calculate the Farm and State ACRE Guarantees

Table 2: Farm Yield Data * Preliminary or Estimated	2009 Benchmark Farm Yield (BFY) *						FSA Use Only: BFY *	2009 Actual Farm Yield *
	Enter 5 previous years (2004 - 2008) OR Average (not both)							
	Actual Farm Yields (Production/Planted Acres)							
	2004	2005	2006	2007	2008	Average*		
Rice, Long Grain	7144.00	6881.00	7179.00	7211.00	6965.00		7096	6965
Soybeans	44.20	39.50	43.70	44.00	39.90		43	43
Wheat	65.60	56.40	70.40	35.10	62.10		61	61

Table 3: State Yield Data * Preliminary or Estimated	2009 Benchmark State Yield (BSY) *						FSA Use Only: BSY *	2009 Actual State Yield *
	Enter 5 previous years (2004 - 2008) OR Average (not both)							
	Actual State Yields *							
	2004	2005	2006	2007	2008	Average*		
Rice, Long Grain	6960.00	6620.00	6880.00	7200.00	6610.00		6820	6610
Soybeans	42.00	39.00	39.00	40.00	40.50		40	40
Wheat	52.00	48.80	59.60	39.90	55.60		52	52

2009 Actual Rice Farm and State Yields set to 2008 Values

ACRE Payment Results at Alternative Rice Yields

2009 State Rice Yield = 7096 lbs/ac
2009 Farm Yield = 6820 lbs/ac
(Olympic Averages)

Payment Comparison	DCP			ACRE Program		
	Direct	Counter-cyclical	Total	Direct (80%)	ACRE	Total
Rice, Long Grain	\$ 175,686	\$ -	\$ 175,686	\$ 140,549	\$ 120,659	\$ 261,208
Soybeans	\$ 13,733	\$ -	\$ 13,733	\$ 10,986	\$ 13,230	\$ 24,216
Wheat	\$ 4,479	\$ -	\$ 4,479	\$ 3,583	\$ 11,576	\$ 15,159
			\$ -			\$ -
	\$ 193,898	\$ -	\$ 193,898	\$ 155,118	\$ 145,465	\$ 300,583

2009 State Rice Yield = 6965 lbs/ac
2009 Farm Yield = 6610 lbs/ac
(2008 Yields)

Payment Comparison	DCP			ACRE Program		
	Direct	Counter-cyclical	Total	Direct (80%)	ACRE	Total
Rice, Long Grain	\$ 175,686	\$ -	\$ 175,686	\$ 140,549	\$ 153,039	\$ 293,588
Soybeans	\$ 13,733	\$ -	\$ 13,733	\$ 10,986	\$ 13,230	\$ 24,216
Wheat	\$ 4,479	\$ -	\$ 4,479	\$ 3,583	\$ 11,576	\$ 15,159
			\$ -			\$ -
	\$ 193,898	\$ -	\$ 193,898	\$ 155,118	\$ 177,845	\$ 332,963

How would both a higher
rice price and lower rice
yields in 2009 impact the
ACRE payment?

Higher Price and Lower Yield Projections for 2009

- Use November 2009 Futures Rice Price Less \$1 Basis in place of FAPRI Projected Rice Price.
- Use 2008 Farm and State Yields in place of Olympic Average Yields as 2009 Yield Projections.

ACRE Payment Results at Alternative Rice Prices and Rice Yields

2009 State Rice Yield = 7096 lbs/ac

2009 Farm Yield = 6820 lbs/ac

2009 Rice Price = \$0.1098

Payment Comparison	DCP			ACRE Program		
	Direct	Counter-cyclical	Total	Direct (80%)	ACRE	Total
Rice, Long Grain	\$ 175,686	\$ -	\$ 175,686	\$ 140,549	\$ 129,212	\$ 269,761
Soybeans	\$ 13,733	\$ -	\$ 13,733	\$ 10,986	\$ 10,785	\$ 21,771
Wheat	\$ 4,479	\$ -	\$ 4,479	\$ 3,583	\$ 12,714	\$ 16,297
			\$ -			\$ -
	\$ 193,898	\$ -	\$ 193,898	\$ 155,118	\$ 152,711	\$ 307,829

2009 State Rice Yield = 6965 lbs/ac

2009 Farm Yield = 6610 lbs/ac

2009 Rice Price = \$0.1131

Payment Comparison	DCP			ACRE Program		
	Direct	Counter-cyclical	Total	Direct (80%)	ACRE	Total
Rice, Long Grain	\$ 175,686	\$ -	\$ 175,686	\$ 140,549	\$ 122,414	\$ 262,963
Soybeans	\$ 13,733	\$ -	\$ 13,733	\$ 10,986	\$ 13,230	\$ 24,216
Wheat	\$ 4,479	\$ -	\$ 4,479	\$ 3,583	\$ 11,576	\$ 15,159
			\$ -			\$ -
	\$ 193,898	\$ -	\$ 193,898	\$ 155,118	\$ 147,220	\$ 302,338

Representative McGehee Cotton - Rice Farm (Desha County)

McGehee Representative Farm, Basic Farm Data

<i>Crop</i>	<i>Base Acres</i>	<i>Planted Acres</i>	<i>Direct Payment Yields</i>	<i>CCP Payment Yields</i>
Corn	na *	1500	na	na
Cotton	2375	1500	640 lbs/ac	920 lbs/ac
Rice, Long Grain	2375	1875	4500 lbs/ac	5500 lbs/ac
Soybeans, Irrigated	2585	2375	22 bu/ac	30 bu/ac
Wheat	na	1000	na	na

* na = Not available.

Source: Texas A&M University, Agricultural & Food and Policy Center (AFPC)

Acre Guarantee Price and 2009 National Average Market Price Data

<i>Crop</i>	<i>Acre Guarantee Price*</i>	<i>2009 National Average Market Price**</i>
Corn (\$/bu)	4.20	3.70
Cotton (\$/bu)	0.5420	0.5190 ***
Rice, Long Grain (\$/lb)	0.1360	0.1098
Soybeans (\$/bu)	10.0500	8.7600
Wheat (\$/bu)	6.6700	5.3000

* Acre Guarantee Price data from the FSA supplied Excel spreadsheet entitled "acre_prices_values_09."

** Food and Agricultural Policy Research Institute (FAPRI) 2009 crop price estimates.

*** **Cotton Loan Rate = \$0.52/lb**. Loan rates for corn, long grain rice, soybeans, and wheat are \$1.95/bu, \$0.065/lb, and \$5.00/bu, and \$2.70/bu, respectively.

Comparison of State and Farm Triggers, McGehee Farm

State Trigger	State ACRE Guarantee (SAG) *					Actual State Revenue (ASR) *			State Trigger Met?
	Benchmark State Yield	Guar. Price	Calc. SAG	Previous year SAG	2009 SAG	2009 Actual State Yield	2009 ACRE Price	2009 ASR	
Corn	164	\$ 4.2000	\$ 619.92	\$ -	\$ 619.92	164	\$ 3.7400	\$ 613.36	yes
Upland Cotton	1044	\$ 0.5420	\$ 509.26	\$ -	\$ 509.26	1044	\$ 0.5190	\$ 541.84	no
Rice, Long Grain	6820	\$ 0.1360	\$ 834.77	\$ -	\$ 834.77	6820	\$ 0.1093	\$ 745.43	yes
Soybeans	40	\$ 10.0500	\$ 361.80	\$ -	\$ 361.80	40	\$ 8.7600	\$ 350.40	yes
Wheat	52	\$ 6.6700	\$ 312.16	\$ -	\$ 312.16	52	\$ 5.3000	\$ 275.60	yes

Farm Trigger	Farm ACRE Guarantee *				Actual Farm Revenue (AFR) *			Farm Trigger Met?
	Benchmark Farm Yield	Guar. Price	Crop Ins. Premiums per Acre	2009 Farm ACRE Guarantee	2009 Actual Farm Yield	2009 ACRE Price	2009 AFR	
Corn	176	\$ 4.2000	\$ -	\$ 739.20	176	\$ 3.7400	\$ 658.24	yes
Upland Cotton	1092	\$ 0.5420	\$ -	\$ 591.86	1092	\$ 0.5190	\$ 566.75	yes
Rice, Long Grain	6524	\$ 0.1360	\$ -	\$ 887.26	6524	\$ 0.1093	\$ 713.07	yes
Soybeans	39	\$ 10.0500	\$ -	\$ 391.95	39	\$ 8.7600	\$ 341.64	yes
Wheat	50	\$ 6.6700	\$ -	\$ 333.50	50	\$ 5.3000	\$ 265.00	yes

Comparison of ACRE Payments and DCP Payments, McGehee Representative Farm

Projected Farm Payments

Enter 'Payment Acres' for each eligible crop. For each crop, the payment acres cannot exceed 83.3% of the planted/PP acres for the crop. For the farm, the total payment acres of all eligible crops cannot exceed the total base acres on the farm.

ACRE Payments	Max. Farm Eligible Acreage for ACRE (total base acres): 7335.0						Payment = Item 7 times Item 8 times (lessor of Item 9 or 10)				
	1 State Trigger	2 Farm Trigger	3 Payment Acreage %	4 Planted & PP Acres	5 Est. ACRE per acre	6 Potential Payment Acres	7 Payment Acres	8 Farm Prod. Index Factor	9 SAG minus ASR	10 SAG x 25%	Projected ACRE Payment
Corn	yes	yes	83.3%	1500.0	\$ 7.04	1249.5	1249.5	1.0732	\$ 6.56	\$ 154.98	\$ 8,797
Upland Cotton	no	yes	83.3%	1500.0	\$ -	1249.5	1249.5	1.0460	\$ -	\$ 127.32	\$ -
Rice, Long Grain	yes	yes	83.3%	1875.0	\$ 85.46	1561.9	1561.9	0.9566	\$ 89.34	\$ 208.69	\$ 133,484
Soybeans	yes	yes	83.3%	2375.0	\$ 11.12	1978.4	1978.4	0.9750	\$ 11.40	\$ 90.45	\$ 21,990
Wheat	yes	yes	83.3%	1000.0	\$ 35.15	833.0	833.0	0.9615	\$ 36.56	\$ 78.04	\$ 29,282
Maximum Payment Acres have been designated											\$ 193,553

Payment Comparison	DCP			ACRE Program		
	Direct	Counter-cyclical	Total	Direct (80%)	ACRE	Total
Corn	\$ -	\$ -	\$ -	\$ -	\$ 8,797	\$ 8,797
Upland Cotton	\$ 84,453	\$ 233,642	\$ 318,095	\$ 67,562	\$ -	\$ 67,562
Rice, Long Grain	\$ 209,213	\$ -	\$ 209,213	\$ 167,370	\$ 133,484	\$ 300,854
Soybeans	\$ 20,844	\$ -	\$ 20,844	\$ 16,675	\$ 21,990	\$ 38,665
Wheat	\$ -	\$ -	\$ -	\$ -	\$ 29,282	\$ 29,282
	\$ 314,510	\$ 233,642	\$ 548,152	\$ 251,607	\$ 193,553	\$ 445,160

Comparison of ACRE and DCP Payment Results for the Stuttgart and McGehee Farms

Stuttgart Farm

Payment Comparison	DCP			ACRE Program		
	Direct	Counter-cyclical	Total	Direct (80%)	ACRE	Total
Rice, Long Grain	\$ 175,686	\$ -	\$ 175,686	\$ 140,549	\$ 129,212	\$ 269,761
Soybeans	\$ 13,733	\$ -	\$ 13,733	\$ 10,986	\$ 10,785	\$ 21,771
Wheat	\$ 4,479	\$ -	\$ 4,479	\$ 3,583	\$ 12,714	\$ 16,297
			\$ -			\$ -
	\$ 193,898	\$ -	\$ 193,898	\$ 155,118	\$ 152,711	\$ 307,829

McGehee Farm

Payment Comparison	DCP			ACRE Program		
	Direct	Counter-cyclical	Total	Direct (80%)	ACRE	Total
Corn	\$ -	\$ -	\$ -	\$ -	\$ 8,797	\$ 8,797
Upland Cotton	\$ 84,453	\$ 233,642	\$ 318,095	\$ 67,562	\$ -	\$ 67,562
Rice, Long Grain	\$ 209,213	\$ -	\$ 209,213	\$ 167,370	\$ 133,484	\$ 300,854
Soybeans	\$ 20,844	\$ -	\$ 20,844	\$ 16,675	\$ 21,990	\$ 38,665
Wheat	\$ -	\$ -	\$ -	\$ -	\$ 29,282	\$ 29,282
			\$ -			\$ -
	\$ 314,510	\$ 233,642	\$ 548,152	\$ 251,607	\$ 193,553	\$ 445,160

Summary and Conclusions

- The FSA ACRE Calculator was used to estimate both the 2009 DCP and ACRE payments for a Stuttgart rice-soybean farm and a McGehee cotton-rice farm.
- Total estimated 2009 ACRE payments were greater than total estimated DCP payments on the Stuttgart farm.
- Total estimated 2009 DCP payments were greater than total estimated ACRE payments for the McGehee cotton-rice farm.
- ACRE looks favorable for rice farms but unfavorable for cotton farms in 2009 (rice and other crops driven by market conditions due to relatively high crop prices; cotton driven by traditional government program due to cotton prices at or below loan rate).

FSA ACRE Calculator: Other Considerations

- Useful tool for comparing total ACRE payments to total DCP payments for a given year.
- The calculator excludes LDPs. Currently not a problem for most Program crops (rice, corn, soybeans, wheat) but LDPs will likely be paid for cotton.
- Does not project ACRE versus DCP payments over the entire enrolment period (e.g., 2009 – 2012).

Questions?

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