

## The Impact of Higher Input Prices on Crop Profitability

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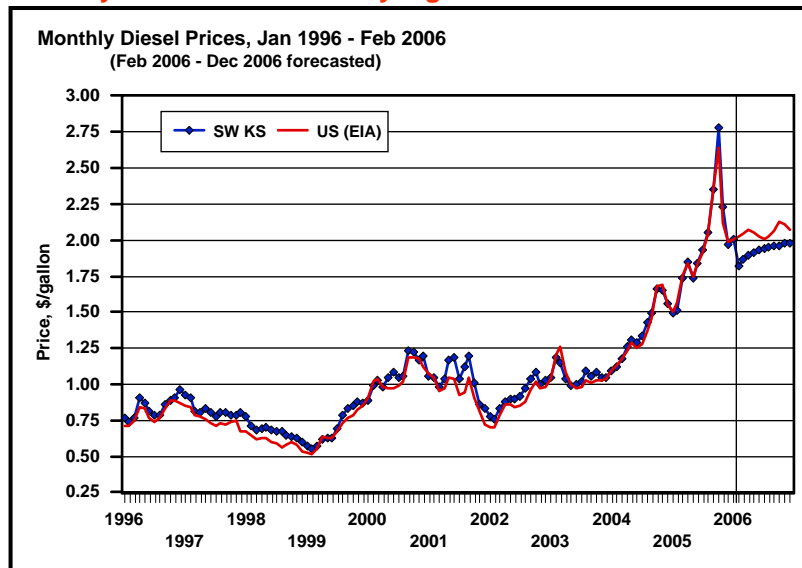
### Background thoughts . . .

- Prices for energy-related inputs are at very high levels relative to what we normally expect
- Producers likely cannot do much about the prices they face, but they need to “understand the numbers” to make good decisions
- Major decisions crop producers have pertain to input levels, crop selection, tillage method, and possibly negotiating leases on rented land

## Historical and forecasted energy-related input prices (diesel fuel, fertilizer, natural gas)

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Diesel prices are forecasted to be below 2005 peak level,  
but they are still at historically high levels ...



Based on 2/15/06 futures closing prices

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**Historical and forecasted diesel prices during principal farming months...**

**Diesel Fuel Prices**

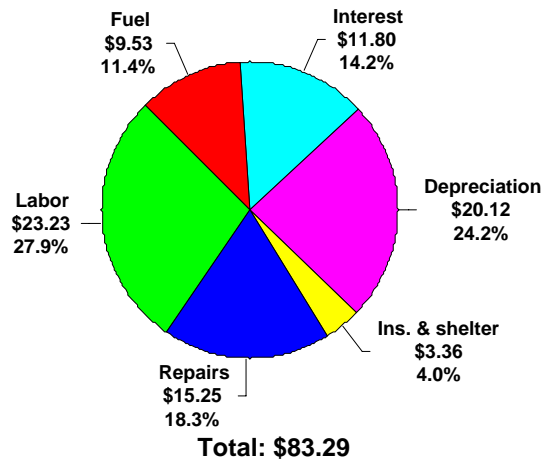
Year	Mar-Oct Diesel Price			Year-to-year percent change		
	SW KS	US (EIA)	Average	SW KS	US (EIA)	Average
2000	\$1.09	\$1.04	\$1.07	----	----	----
2001	\$1.09	\$0.98	\$1.04	0.6%	-6.1%	-2.7%
2002	\$0.94	\$0.88	\$0.91	-14.1%	-10.0%	-12.1%
2003	\$1.05	\$1.05	\$1.05	12.1%	18.6%	15.3%
2004	\$1.37	\$1.34	\$1.36	30.0%	28.4%	29.2%
2005	\$2.04	\$2.02	\$2.03	48.5%	49.9%	49.2%
2006 (F)	\$1.93	\$2.05	\$1.99	-5.2%	1.8%	-1.7%
2006 - 2005	(\$0.11)	\$0.04	(\$0.03)	-5.2%	1.8%	-1.7%
06 - Avg(00-04)	\$0.82	\$0.99	\$0.91	73.9%	93.7%	83.6%

F = forecast

Based on 2/15/06 futures closing prices

**Fuel prices are extremely high, but fuel costs represent one of the smaller cost categories...**

**Machinery Costs Per Acre, Kansas, 2001**  
Source: 182 KFMA Members (Beaton)



## Estimated effect diesel price has on machinery costs per acre based on custom rates...

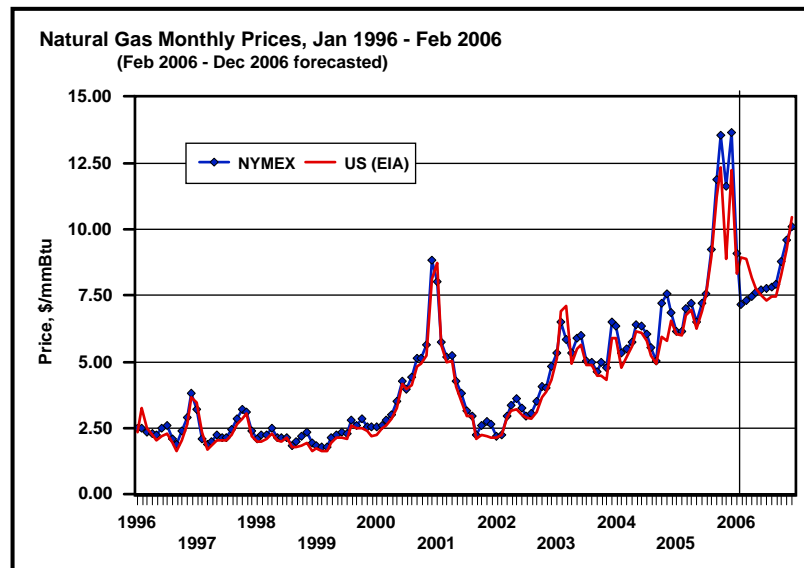
### Diesel Price Impact on Custom Rates for Various Field Operations

Operation	Custom rate*	Fuel price increase, \$/gallon				
		(\$0.10)	(\$0.03)	\$0.10	\$0.25	\$0.50
Increase in custom rate, \$/acre						
Chiseling	\$8.45	(\$0.08)	(\$0.03)	\$0.08	\$0.20	\$0.40
Field cultivation	\$7.13	(\$0.07)	(\$0.02)	\$0.07	\$0.17	\$0.34
Disking	\$6.84	(\$0.06)	(\$0.02)	\$0.06	\$0.16	\$0.32
Min-till planter	\$10.94	(\$0.10)	(\$0.04)	\$0.10	\$0.26	\$0.52
No-till drill	\$11.45	(\$0.11)	(\$0.04)	\$0.11	\$0.27	\$0.54
Sprayer	\$4.26	(\$0.04)	(\$0.01)	\$0.04	\$0.10	\$0.20
Swather-conditioner	\$9.46	(\$0.09)	(\$0.03)	\$0.09	\$0.22	\$0.45
Round baler	\$8.24	(\$0.08)	(\$0.03)	\$0.08	\$0.20	\$0.39
Combine--wheat	\$15.24	(\$0.14)	(\$0.05)	\$0.14	\$0.36	\$0.72
Combine--soybeans	\$21.48	(\$0.20)	(\$0.07)	\$0.20	\$0.51	\$1.02
Combine--corn	\$21.68	(\$0.21)	(\$0.07)	\$0.21	\$0.51	\$1.03

\* 2005 state average reported by Kansas Agricultural Statistics

**Increase in 2005 custom rates      -0.9%    -0.3%    0.9%    2.4%    4.7%**

## Natural gas prices remain at historically high levels...



Based on 2/15/06 futures closing prices

## Historical and forecasted natural gas prices during principal farming months...

### Natural Gas Prices

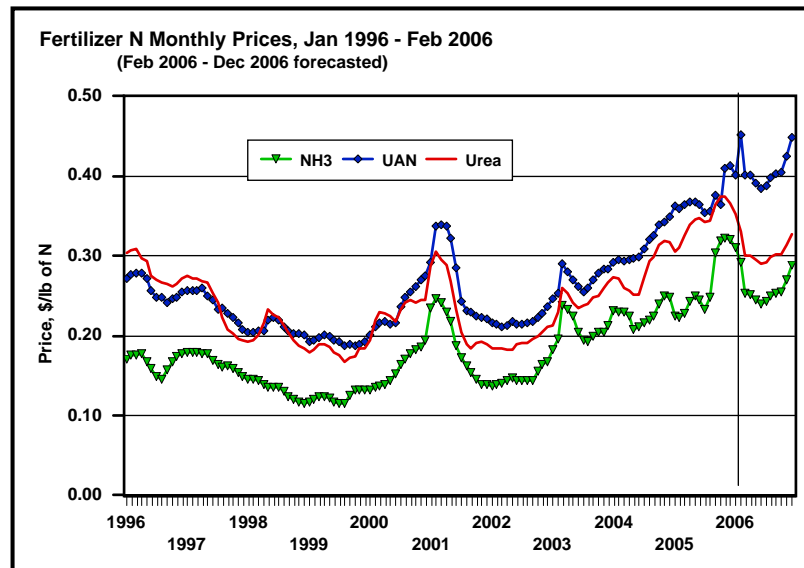
Year	Mar-Sep Natural Gas Price			Year-to-year percent change		
	NYMEX	US (EIA)	Average	NYMEX	US (EIA)	Average
2000	\$3.89	\$3.85	\$3.87	----	----	----
2001	\$3.85	\$3.49	\$3.67	-1.0%	-9.3%	-5.1%
2002	\$3.25	\$3.12	\$3.18	-15.5%	-10.7%	-13.2%
2003	\$5.40	\$5.24	\$5.32	66.0%	68.2%	67.1%
2004	\$5.81	\$5.63	\$5.72	7.6%	7.5%	7.5%
2005	\$8.09	\$8.37	\$8.23	39.2%	48.6%	43.9%
2006 (F)	\$8.01	\$7.87	\$7.94	-1.0%	-6.0%	-3.6%
2006 - 2005	(\$0.08)	(\$0.50)	(\$0.29)	-1.0%	-6.0%	-3.6%
06 - Avg(00-04)	\$3.57	\$3.60	\$3.59	80.3%	84.5%	82.4%

F = forecast

Based on 2/15/06 futures closing prices

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## Nitrogen fertilizer prices are at historically high levels...



Based on 2/15/06 futures closing prices

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## Historical and forecasted fertilizer prices during principal fertilizing months...

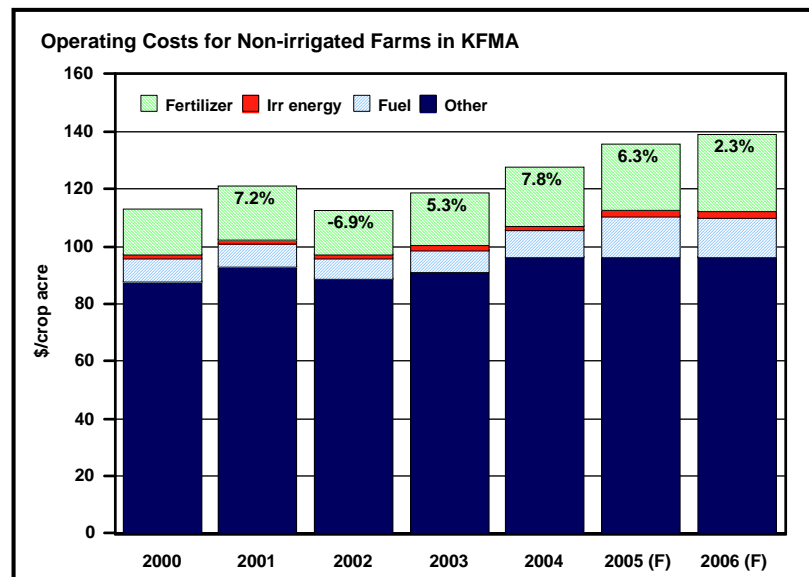
### Fertilizer Prices (Corn Belt)

Year	NH3 (82%)	UAN (32%)	Urea (46%)	- P -	- K -	Wtd Avg	Yr-to-yr % change
Percent of total	40.0%	17.5%	17.5%	20.0%	5.0%	100.0%	
	Oct-May Fertilizer Price*						
2000	0.136	0.204	0.205	0.211	0.148	0.175	----
2001	0.217	0.305	0.272	0.193	0.148	0.234	33.2%
2002	0.141	0.218	0.187	0.201	0.144	0.175	-25.3%
2003	0.195	0.253	0.227	0.209	0.141	0.211	20.7%
2004	0.218	0.290	0.262	0.214	0.141	0.234	10.8%
2005	0.238	0.356	0.322	0.223	0.174	0.267	14.4%
2006 (F)	0.289	0.405	0.337	0.234	0.199	0.302	13.1%
2006 - 2005	\$0.051	\$0.048	\$0.015	\$0.011	\$0.025	\$0.035	13.1%
Percent chg	21.5%	13.5%	4.6%	5.0%	14.3%	13.1%	
06 - Avg(00-04)	\$0.108	\$0.151	\$0.106	\$0.028	\$0.054	\$0.096	46.9%
Percent chg	59.4%	59.4%	46.2%	13.7%	37.5%	46.9%	

\* Oct-Dec of previous year (P = average of 10-34-0 and 18-46-0, K = muriate of potash)  
F = forecast

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## Costs per acre will be up in 2006 for fourth straight year...



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## Projected budgets...

- Crop rotation: wheat (13%), corn (27%), milo (7%), and soybeans (53%) -- no-till production
- Crop prices based on futures market 2/15/06
- Machinery costs: 2000-04 vs. 2006-fuel-adjusted-rate
- Natural gas: 2000-04 avg vs. projected 2006 value
- Fertilizer: 2000-04 avg vs. projected 2006 values
- Inputs based on KSU Farm Management Guides except N fertilizer and irrigation → optimal levels

Focus should be on changes and relative differences rather than absolute values

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## Cost scenarios...

Input	Average Prices	Current Prices
Machinery	2000-04 time-adjusted custom rates	2000-04 time-adjusted rates x 108%
Fertilizer	2000-04 avg	2006 forecast
N	\$0.206/lb	\$0.302/lb (+47%)
P	\$0.205/lb	\$0.234/lb (+14%)
K	\$0.144/lb	\$0.199/lb (+38%)
Irrigation	2000-04 avg \$1.18/inch	2006 forecast \$2.18/inch (+85%)

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Microsoft Excel - KSU-CropBudgets2006 (DG Co - Dryland crops).xls

**Dryland crop budgets**

Comparison of Crop Returns with Nitrogen Fertilizer and Irrigation Water at Economic Optimum Levels								
Crop/System	Wheat	Corn	Sorghum	Soybean	Sunflower	Alfalfa	Rotation1	Rotation2
Rotation (1 or 2, if none enter 0)	1	1	1	1	1	1	100%	0%
Percent of rotation (total - 100%)	13.0%	27.0%	7.0%	53.0%	0.0%	0.0%		
<b>INCOME PER ACRE</b>								
A. Yield per acre	49.8	99.4	79.6	29.1	1,990.1	3.9	---	---
B. Price per unit	\$4.08	\$2.38	\$2.45	\$5.95	\$0.12	\$75.00	---	---
C. Net government payments	\$14.00	\$14.00	\$14.00	\$14.00	\$14.00	\$14.00	\$14.00	n/a
D. Indemnity payments	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	n/a
E. Miscellaneous income	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	n/a
F. Returns/acre ((A x B) + C + D + E)	\$216.98	\$250.16	\$208.53	\$187.07	\$248.68	\$305.00	\$209.49	n/a
<b>COSTS PER ACRE</b>								
1. Seed	\$10.80	\$48.60	\$13.78	\$34.65	\$18.04	\$11.13	\$33.85	n/a
2. Herbicide	5.23	29.66	27.28	11.38	12.11	2.98	16.63	n/a
3. Insecticide / Fungicide	0.00	0.00	0.00	0.00	14.33	6.69	0.00	n/a
4. Fertilizer and Lime	27.66	34.43	26.76	28.32	31.10	21.90	29.78	n/a
5. Crop Consulting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a
6. Crop Insurance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a
7. Drying	0.00	0.00	0.00	0.00	7.76	0.00	0.00	n/a
8. Miscellaneous	8.25	8.25	8.25	8.25	8.25	8.25	8.25	n/a
9. Machinery Expense	45.23	51.08	58.87	45.09	48.65	121.30	47.69	n/a
10. Non-machinery Labor	5.50	9.00	7.00	5.50	6.50	12.50	6.55	n/a
11. Irrigation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a
12. Land Charge / Rent	61.20	61.20	61.20	61.20	61.20	61.20	61.20	n/a
G. SUB TOTAL	\$163.88	\$242.22	\$203.14	\$194.39	\$207.95	\$245.95	\$203.95	n/a
13. Interest on 1/2 Nonland Costs	4.11	7.24	5.68	5.33	5.56	7.39	5.71	n/a
H. TOTAL COSTS	\$167.98	\$249.46	\$208.81	\$199.72	\$213.51	\$253.34	\$209.66	n/a
I. RETURNS OVER COSTS (F - H)	\$48.99	\$0.70	(\$0.28)	(\$12.64)	\$35.17	\$51.66	(\$0.16)	n/a
J. TOTAL COSTS/UNIT (H/A)	\$3.37	\$2.51	\$2.62	\$6.86	\$0.11	\$65.29	---	---
K. RETURN TO ANNUAL COST ((I+13)/G)	32.40%	3.28%	2.66%	-3.76%	19.59%	24.01%	2.72%	n/a

## Dryland crops example profitability summary ...

### Comparison of Crop Returns under Various Input Price Scenarios

Crop	Wheat	Corn	Sorghum	Soybean	Wtd Avg
Base scenario <sup>1</sup>	\$48.99	\$0.70	(\$0.28)	(\$12.64)	(\$0.16)
At forecasted 2006 prices for...					
Fuel <sup>2</sup>	\$45.19	(\$3.60)	(\$5.24)	(\$16.44)	(\$4.18)
Fertilizer <sup>2</sup>	\$40.28	(\$10.00)	(\$7.88)	(\$16.08)	(\$6.54)
Fuel and fertilizer <sup>2</sup>	\$36.48	(\$14.28)	(\$12.82)	(\$19.87)	(\$10.54)
<b>Change, \$/ac</b>	<b>(\$12.51)</b>	<b>(\$14.98)</b>	<b>(\$12.54)</b>	<b>(\$7.22)</b>	<b>(\$10.38)</b>

<sup>1</sup> Returns based on current Farm Management Guide costs except fuel, fertilizer, and irrigation pumping (2000-04 avg) and futures-based crop prices as of 2/16/06.

<sup>2</sup> All other costs and crop prices are the same as in base scenario (yields vary with fertilizer and irrigation costs).

**Irrigated crop budgets**

Comparison of Crop Returns with Nitrogen Fertilizer and Irrigation Water at Economic Optimum Levels								
Crop/System	Wheat	Corn	Sorghum	Soybean	Sunflower	Alfalfa	Rotation1	Rotation2
Rotation (1 or 2, if none enter 0)	1	1	1	1	1	1		
Percent of rotation (total - 100%)	0.0%	73.0%	0.0%	27.0%	0.0%	0.0%	100%	0%
<b>INCOME PER ACRE</b>								
A. Yield per acre	54.3	158.2	118.5	53.4	2,469.8	5.8	---	---
B. Price per unit	\$4.08	\$2.38	\$2.45	\$5.95	\$0.1179	\$75.00	---	---
C. Net government payments	\$26.00	\$26.00	\$26.00	\$26.00	\$26.00	\$36.00	\$26.00	n/a
D. Indemnity payments	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	n/a
E. Miscellaneous income	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	n/a
F. Returns/acre ((A x B) + C + D + E)	\$247.26	\$401.84	\$315.74	\$343.30	\$317.26	\$472.50	\$386.04	n/a
<b>COSTS PER ACRE</b>								
1. Seed	\$7.20	\$54.00	\$17.70	\$44.10	\$19.19	\$11.13	\$51.33	n/a
2. Herbicide	5.20	29.66	27.28	11.20	18.90	16.00	24.68	n/a
3. Insecticide / Fungicide	0.00	0.00	0.00	0.00	14.35	8.60	0.00	n/a
4. Fertilizer and Lime	31.30	59.81	44.21	14.71	41.06	30.63	47.64	n/a
5. Crop Consulting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a
6. Crop Insurance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	n/a
7. Drying	0.00	20.57	15.41	0.00	0.00	0.00	15.02	n/a
8. Miscellaneous	10.00	10.00	10.00	10.00	10.00	10.00	10.00	n/a
9. Machinery Expense	69.58	69.99	73.66	55.65	77.91	153.92	66.12	n/a
10. Non-machinery Labor	8.00	10.00	8.00	6.50	9.00	20.00	9.06	n/a
11. Irrigation	52.38	59.24	54.92	56.58	58.35	77.53	58.52	n/a
12. Land Charge / Rent	91.80	91.80	91.80	91.80	91.80	91.80	91.80	n/a
G. SUB TOTAL	\$275.46	\$405.07	\$342.98	\$290.54	\$340.56	\$419.60	\$374.15	n/a
13. Interest on 1/2 Nonland Costs	5.66	10.03	7.75	6.27	8.27	11.43	9.01	n/a
H. TOTAL COSTS	\$281.13	\$415.10	\$350.73	\$296.81	\$348.83	\$431.03	\$383.16	n/a
I. RETURNS OVER COSTS (F - H)	(\$33.86)	(\$13.26)	(\$34.99)	\$46.49	(\$31.58)	\$41.47	\$2.88	n/a
J. TOTAL COSTS/UNIT (H/A)	\$5.18	\$2.62	\$2.96	\$5.56	\$0.14	\$74.06	---	---
K. RETURN TO ANNUAL COST ((I+13)/G)	-10.24%	-0.80%	-7.94%	18.16%	-6.84%	12.61%	3.18%	n/a

## Irrigated crops example profitability summary ...

### Comparison of Crop Returns under Various Input Price Scenarios

Crop	Corn	Soybean	Wtd Avg
Base scenario <sup>1</sup>	(\$13.26)	\$46.49	\$2.88
<b>At forecasted 2006 prices for...</b>			
Fuel <sup>2</sup>	(\$19.14)	\$41.81	(\$2.69)
Fertilizer <sup>2</sup>	(\$33.58)	\$45.06	(\$12.35)
Irrigation pumping cost <sup>2</sup>	(\$20.61)	\$41.60	(\$3.81)
Fuel, fert, and pumping <sup>2</sup>	(\$45.93)	\$35.49	(\$23.95)
<b>Change, \$/ac</b>	(\$32.68)	(\$11.00)	(\$26.82)

<sup>1</sup>Returns based on current Farm Management Guide costs except fuel, fertilizer, and irrigation pumping (2000-04 avg) and futures-based crop prices as of 2/16/06.

<sup>2</sup>All other costs and crop prices are the same as in base scenario (yields vary with fertilizer and irrigation costs).

## Management options...

- What can producers do in response to these high input prices?
- Choices will center around crop selection and input use (i.e., fertilizer, fuel for machinery and irrigation)

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## Crop selection...

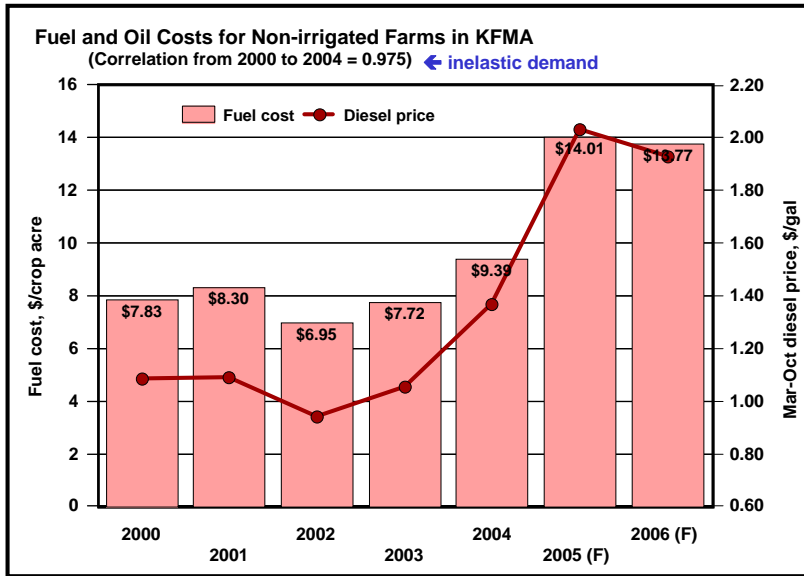
### K-State Crop Budgets as resources

- Projected budgets – Farm Management Guides
- Actual budgets – KFMA Enterprise Analysis
- *KSU-CropBudgets2006.xls*
- All are available on [www.agmanager.info](http://www.agmanager.info)



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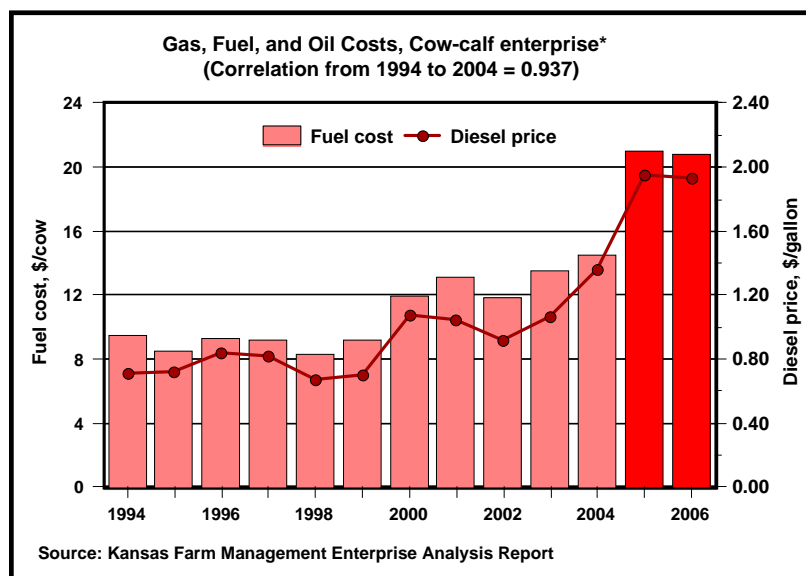
### Fuel costs per acre versus diesel prices...



Without any change, costs in 2005 & 2006 will be up substantially on average.

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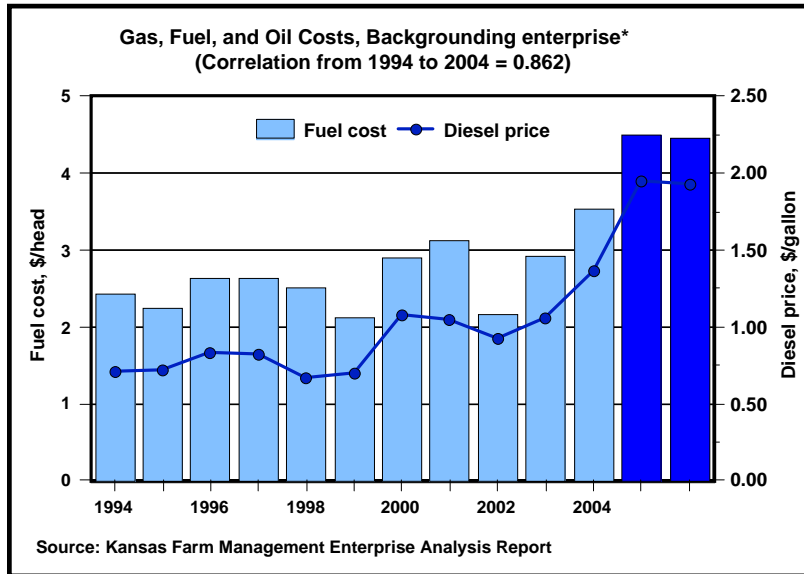
### Cow/calf -- Fuel costs per head versus diesel prices...



Without any change, costs in 2005 & 2006 will be up substantially on average.

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## Backgrounding -- Fuel costs per acre versus diesel prices...



Without any change, costs in 2005 & 2006 will be up substantially on average.

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## What can producers do in response to higher machinery costs?

Without any change, costs of machinery operations will increase about 7-10% from more “normal” times.

### Things to consider...

- Reduce operations?
- Hire custom operators?
- Make sure machinery is properly maintained and used efficiently?
- Pass increased costs on to landowners?
- Nothing?

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USDA-NRCS Energy Consumption Awareness Tool: Tillage - Microsoft Internet Explorer

United States Department of Agriculture  
Natural Resources Conservation Service

# Energy Estimator

Energy Consumption Awareness Tool: Tillage

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## Welcome to Energy Estimator: Tillage

Energy Estimator for Tillage is the first of several tools from Natural Resources Conservation Service (NRCS) developed to increase energy awareness in agriculture. The tool estimates diesel fuel use and costs in the production of key crops in your area and compares potential energy savings between conventional tillage and alternative tillage systems. The crops covered are limited to the most predominant crops in 74 Crop Management Zones (CMZ's). NRCS agronomists have identified these crops and estimated the fuel use associated with common tillage systems. Without including every crop and tillage system, the Energy Estimator gives you an idea of the magnitude of diesel fuel savings under different levels of tillage.

**Step 1: Zip Code**

Begin using this tool by entering your zip code, then click CONTINUE:

Zip Code \* : 66006

Last Modified: 12/06/2005

**Impact of reducing tillage -- <http://ecat.sc.egov.usda.gov/Default.aspx>**

http://ecat.sc.egov.usda.gov - USDA-NRCS Energy Consumption Awareness Tool: Tillage - Microsoft Internet Explorer

United States Department of Agriculture  
Natural Resources Conservation Service

# Energy Estimator

Energy Consumption Awareness Tool: Tillage

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You are here: Home / Step 2: Crop Zone / Step 3: Fuel / Step 4: Cost

## Step 4: Fuel Cost

If you want to checkout different fuel prices, enter a different price per gallon and click "RECALCULATE": \$ 1.99

Total Diesel Fuel Cost Estimate (in dollars per year) based on \$1.99/gal

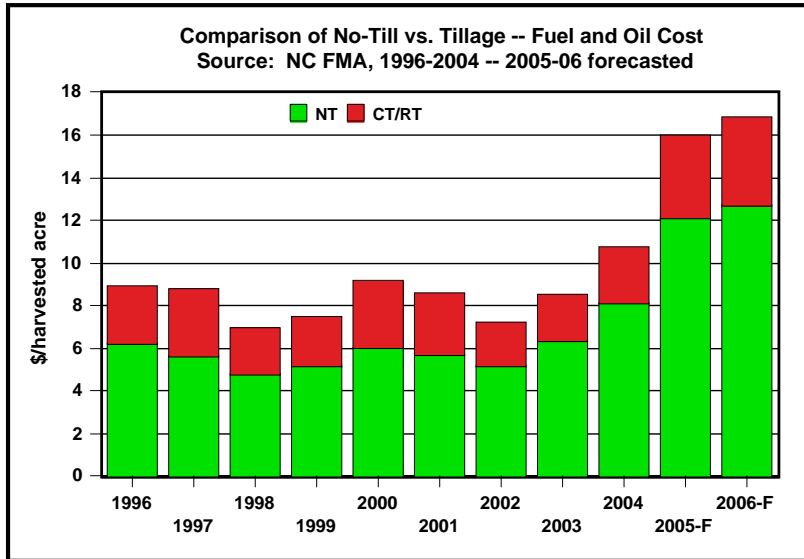
Crop	Acres	Conventional Tillage	Mulch-Till	Ridge-Till	No-Till
Corn	34	\$342	\$283	\$225	\$187
Soybeans	53	\$533	\$442	\$350	\$207
Wheat	13	\$127	\$105	\$50	\$50
<b>Total Fuel Cost</b>		<b>\$1,003</b>	<b>\$630</b>	<b>\$575</b>	<b>\$444</b>
<b>Potential Cost Savings over Conventional Tillage</b>			<b>\$173</b>	<b>\$300</b>	<b>\$559</b>

Total Farm Diesel Fuel Consumption Estimate (in gallons per year)

Crop	Acres	Conventional Tillage	Mulch-Till	Ridge-Till	No-Till
Corn	34	172	142	113	94
Soybeans	53	268	222	176	104
Wheat	13	64	53	25	25
<b>Total Fuel Use</b>		<b>504</b>	<b>417</b>	<b>289</b>	<b>223</b>
<b>Potential Fuel Savings over Conventional Tillage</b>			<b>87</b>	<b>151</b>	<b>281</b>
<b>Savings</b>			<b>17%</b>	<b>30%</b>	<b>56%</b>

**Savings of \$5.59/a vs CT (\$3.86 vs MT) (based on average crop mix in region)**

## Fuel-savings benefit of no-till increases at higher prices...



NT fuel generally 67-75% of CT/RT, savings could be as high as \$4/acre at current diesel prices...

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## What can a producer do?

Hiring custom operators likely will not be the answer...

**CropLife 100** (December 2005 issue)  
22nd Annual Ranking

**ADDING FUEL TO THE FIRE**

As fuel prices increase (and are expected to stay high throughout 2006), retailers are looking for ways to recoup their costs. Here are the most popular options:

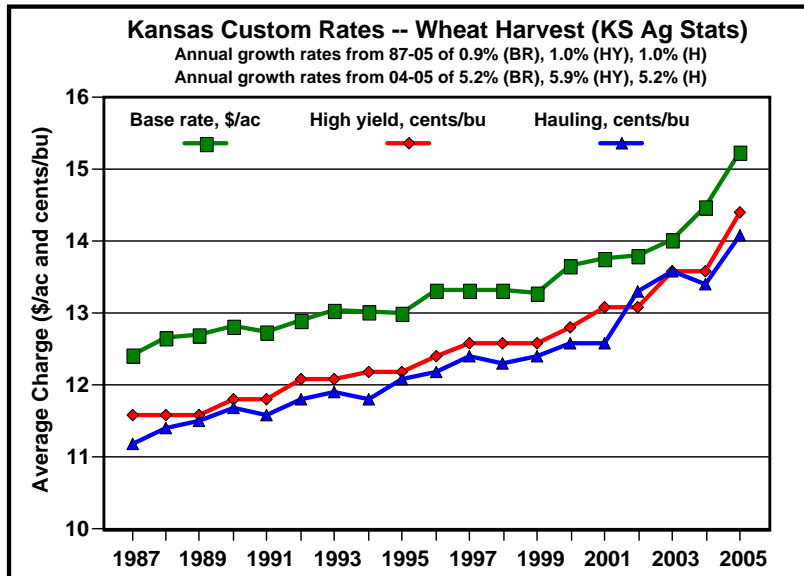
Charging More For Services	71%
Adding a Fuel Surcharge	35%
No Recovery at This Time	24%
Looking at Other Options	3%

Base = 62

... while some custom operators might not increase their rates, something will have to give (quality of work?).

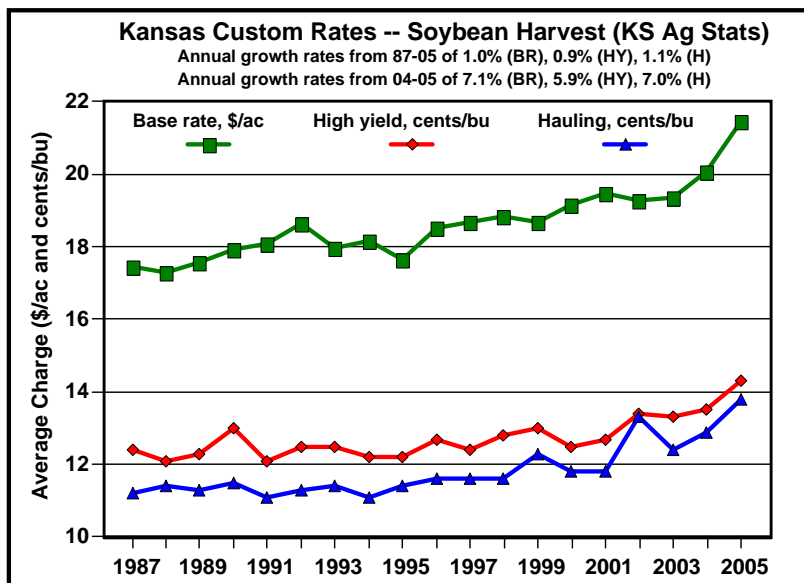
30

## Custom harvesters raised their rates in 2005...



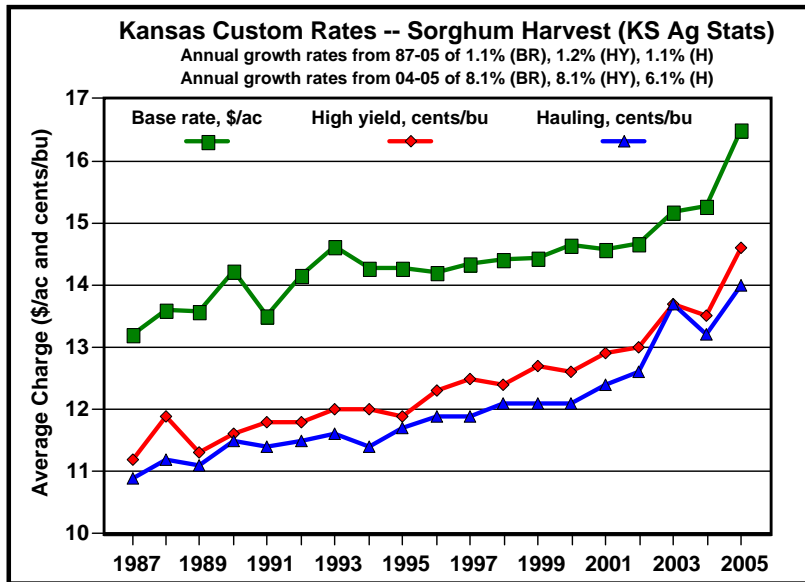
31

## Custom harvesters raised their rates in 2005...



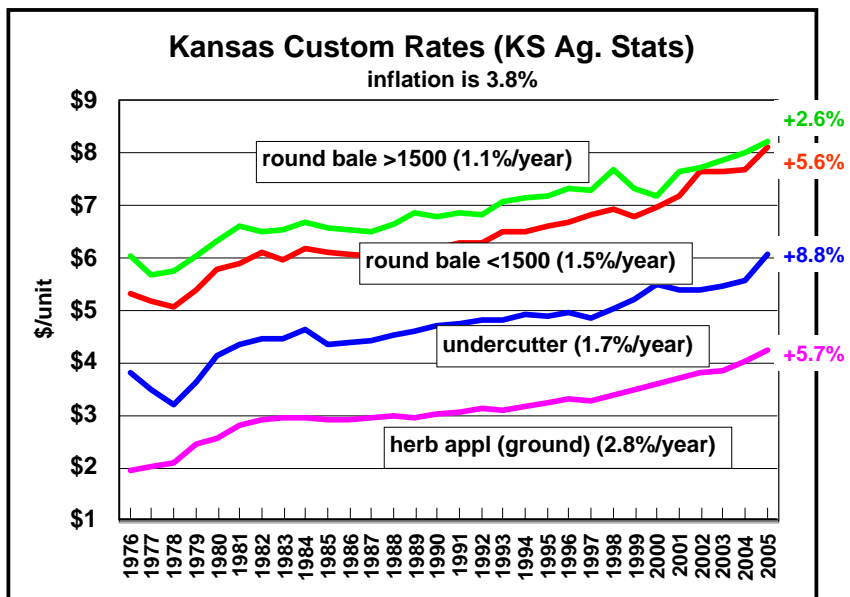
32

## Custom harvesters raised their rates in 2005...



33

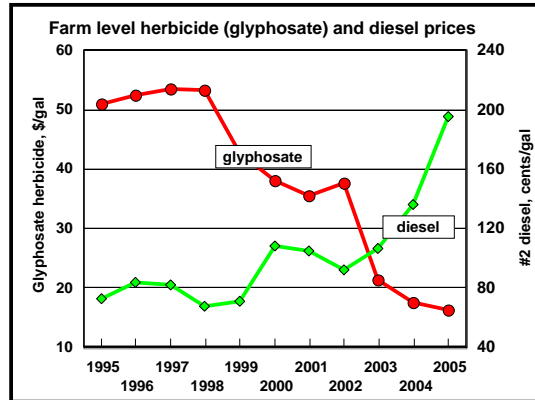
## Not all custom rates increased as much in 2005...



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## What can a producer do?

- Benefits of “improved machinery operation” will depend on current situation. While benefit for most producers is likely quite small, cost of doing so is also likely small → *Just do it!*
- If you have been thinking of no-till, but have been reluctant to make the change --- now might be the time to make the switch!



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Site Updates

- Updated Crop Basis Tool  
February 2, 2006 by David Claywell
- Monthly N2 and Diesel Price Forecasts  
January 31, 2006 by Kevin Claywell
- Crop Basis Maps  
January 27, 2006 by Kevin Claywell
- Updated Cattle Databases  
December 23, 2005 by Jim Minter
- Livestock and Hay Charts  
December 23, 2005 by Jim Minter
- In The Cattle Markets  
December 20, 2005 by Jim Minter/AMC
- Grain Outlook  
December 16, 2005 by Mike Washburn
- KSU-Crop Budgets 2006.xls  
December 13, 2005 by Claywell et al
- Mediating Fertilizer Prices to Reflect Price  
December 2, 2005 by Waters et al
- Impact of Energy Prices on KS Farm Costs  
December 2, 2005 by Claywell et al

KSU-CropBudgets2006.xls can help with nitrogen fertilizer and irrigation questions

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## Modifying KSU nitrogen recommendations based upon prices...

### Nitrogen Recommendations for Wheat

Yield goal, bu/ac	40	50	60	70	80
KSU N rec, lbs/ac	66	90	114	138	162
<b>N price</b>	<b>Price adjusted N rec, lbs/ac</b>				
\$0.25	65	89	113	137	161
\$0.30	64	87	110	134	157
\$0.35	62	85	107	130	153
\$0.40	60	82	105	127	149
\$0.45	58	80	102	124	146
<b>N price</b>	<b>Price adjusted N rec reduction</b>				
\$0.25	0.8%	0.7%	0.7%	0.7%	0.7%
\$0.30	3.7%	3.4%	3.2%	3.1%	3.0%
\$0.35	6.6%	6.1%	5.7%	5.5%	5.4%
\$0.40	9.5%	8.7%	8.3%	8.0%	7.7%
\$0.45	12.4%	11.4%	10.8%	10.4%	10.1%

SOM=2.0; STN=10; Wheat price=\$3.60

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## Modifying KSU nitrogen recommendations based upon prices...

### Nitrogen Recommendations for Corn

Yield goal, bu/ac	60	90	120	150	180
KSU N rec, lbs/ac	46	94	142	190	238
<b>N price</b>	<b>Price adjusted N rec, lbs/ac</b>				
\$0.25	44	92	139	186	233
\$0.30	43	89	135	181	228
\$0.35	41	86	131	177	222
\$0.40	39	83	127	172	216
\$0.45	37	80	124	167	210
<b>N price</b>	<b>Price adjusted N rec reduction</b>				
\$0.25	3.3%	2.5%	2.2%	2.0%	1.9%
\$0.30	7.5%	5.5%	4.9%	4.5%	4.4%
\$0.35	11.7%	8.6%	7.6%	7.1%	6.8%
\$0.40	15.9%	11.6%	10.3%	9.6%	9.2%
\$0.45	20.0%	14.7%	13.0%	12.1%	11.6%

SOM=2.0; STN=10; Corn price=\$2.35

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## Modifying KSU nitrogen recommendations based upon prices...

### Nitrogen Recommendations for Grain Sorghum

Yield goal, bu/ac	50	75	100	125	150
KSU N rec, lbs/ac	30	70	110	150	190
N price	Price adjusted N rec, lbs/ac				
\$0.25	30	69	109	149	189
\$0.30	28	67	106	145	184
\$0.35	26	65	103	141	179
\$0.40	25	62	99	137	174
\$0.45	23	60	96	133	169

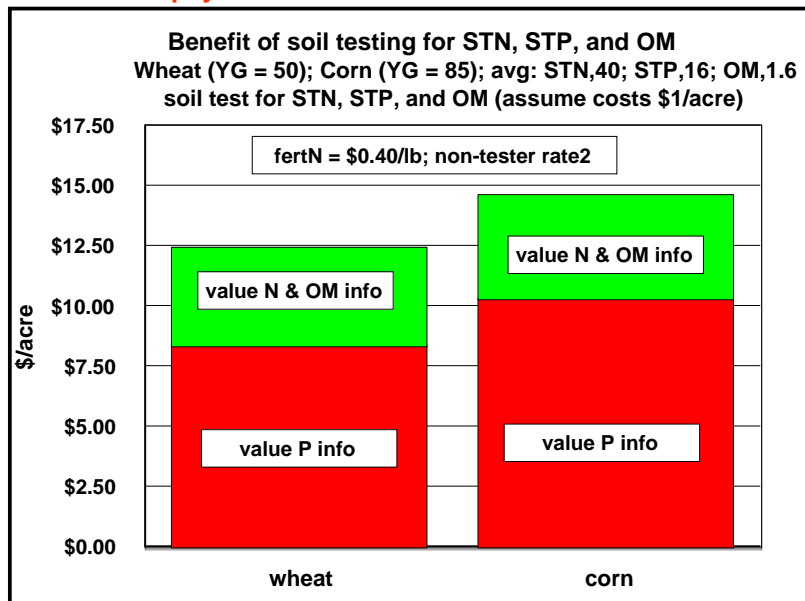
  

N price	Price adjusted N rec reduction				
\$0.25	1.2%	0.8%	0.7%	0.6%	0.6%
\$0.30	6.7%	4.3%	3.7%	3.4%	3.2%
\$0.35	12.2%	7.8%	6.6%	6.1%	5.8%
\$0.40	17.7%	11.4%	9.6%	8.8%	8.4%
\$0.45	23.1%	14.9%	12.6%	11.6%	11.0%

SOM=2.0; STN=10; Sorghum price=\$2.35

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## Soil test – it pays!



P information more valuable than N information

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## Impact of high costs on leases ...

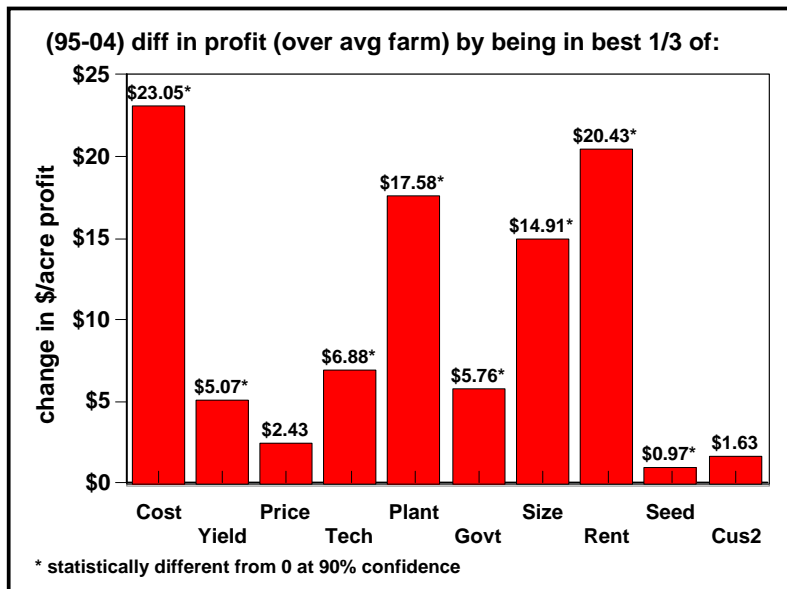
*KSU-Lease.xls* is a tool that can be used to analyze the impact of current costs have on equitable crop share leases as well as their cash-rent equivalents

The impact high costs have on leases will depend on each specific situation due to how producers change (or not change) production practices in response to these high prices

→ producers should “run their own numbers”

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Some producers will be able to absorb increased cost much easier than others...



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### Summary ...

- High input prices will have significant impact on crop returns in 2006
  - Irrigated crops impacted more than dryland crops
  - Feedgrains impacted more than soybeans
  - How producers “manage” for this will depend on their unique situations
- High diesel fuel prices will impact returns, but they have relatively minor impact on equitable crop share percentages
- Crop share tenants will not be impacted nearly as much as those cash renting (assuming fertilizer and irrigation pumping expenses are being shared)

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### Summary ...

- Producers cash renting may want to negotiate with landowners to see if they will help “share the pain” (likewise for crop share tenants not sharing fertilizer or irrigation pumping costs)
- Producers need to “do their homework” to make sure they understand the numbers before talking to their landowner(s)
- Tenants need to think long-term when negotiating with landowners
  - Impact of losing or giving up land?
  - Have “good times” been shared?

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**Modifying Fertilizer Recs to Reflect Price**  
December 2, 2005 by Karlens et al.

**Impact of Energy Prices on KS Farm Costs**  
December 2, 2005 by Dhuyvetter et al.

**Livestock and Hay Charts**  
December 2, 2005 by Jim Mintert

**Updated Cattle Databases**  
December 2, 2005 by Jim Mintert

**Updated Crop Basis Tool**  
December 1, 2005 by Kevin Dhuyvetter

**Monthly M3 and Diesel Price Forecasts**  
November 30, 2005 by Kevin Dhuyvetter

**In The Cattle Markets**  
November 28, 2005 by Jim Mintert/LMIC

**The U.S. Ethanol Industry**  
November 25, 2005 by Dhuyvetter et al.

**Livestock Farm Management Update**  
November 18, 2005 by Rod Jones

**Crop Basis Maps**  
November 18, 2005, by Kevin Dhuyvetter

**Livestock Risk Protection**  
November 17, 2005 by Dhuyvetter and Mintert

**Grain Outlook**  
November 17, 2005 by Mike Woolvetton

**Cost Comparison of Silage Storage Alternatives**  
November 8, 2005 by Dhuyvetter et al.

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