

Prices for Crop and Livestock Cost-Return Budgets

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The following prices and input costs have been assembled to facilitate forward planning for the farm business. Table 1 outlines the short-run (one year) planning prices used for the cost-return budgets in this Farm Management Guide series. Corn and grain sorghum feed price projections were based on the Kansas Agricultural Statistics price series and include a buy/sell markup of \$0.30 per bushel. They are projections for 2010.

Oil sunflower crop price projections are for prices at harvest (October) at Goodland for 2010. Soybean meal (48% protein) 2010 price projections are for Kansas City and include a markup of \$25.00 per ton.

Beef calf price projections are Dodge City prices for October, 2010, while feeder cattle projections are Dodge City prices for April 2010. Market cattle price projections are 2010 annual averages for western Kansas. Cull cow prices are 2010 annual averages for Kansas locations. Market hog projections are for the Western Corn Belt average carcass, multiplied by 0.74, in 2010 plus a premium of \$2.75/cwt.

Cull sow prices are for the U.S. in 2010 and are based off of projected market hog prices. Each of the non-livestock price projections, except for sunflowers, was based on the relevant futures closing prices on September 30, 2009 and then adjusted for historical basis over 2004-2009. Sunflower price projections were based on a regression model using soybean meal and soybean oil futures prices. Cattle and hog price projections were based on relevant futures prices observed on four Wednesdays in October 2009 used two ways, a) added to historical average (2006-2009) bases and b) used in historical (1992-2009) regressions of cash price on futures price. Cash price projections are an average of the two methods. Short-run sheep price projections are monthly average U.S. prices from October 2008 through September 2009 obtained from USDA. Long-run sheep prices are monthly average U.S. prices from October 2004 through September 2009.

Milk prices are for Kansas in 2010 and are based on average Class III futures market prices for 2010 contracts

Table 1. Prices for Short-Run Planning (2010)

Crop or Feed			Livestock		
Crop or Feed	Crop Price	Feed Price	Species	Weight (lbs)	Price
Wheat (bu)	a	-----	Steer calf (fall)	450	\$118.25
Grain sorghum (bu)	a	\$3.64	Steer calf (fall)	550	106.67
Grain sorghum (cwt)	a	6.51	Steer calf (spring)	550	117.00
Corn (bu)	a	3.96	Feeder steer (spring)	650	106.25
Soybeans (bu)	a	-----	Feeder steer (spring)	750	98.42
Sunflowers-oil (cwt)	\$16.32	-----	Feeder steer (spring)	850	93.43
Alfalfa hay (ton)	115.33	115.33	Market steer (annual)	1,225	86.71
Brome hay (ton)	84.33	84.33	Heifer calf (fall)	450	105.63
Prairie/fescue hay (ton)	74.33	74.33	Heifer calf (fall)	550	97.55
Cane hay (ton)	b	67.52	Feeder heifer (spring)	650	95.94
Corn silage (ton)	b	31.65	Feeder heifer (spring)	750	90.74
Sorghum silage (ton)	b	25.32	Market heifer (annual)	1,175	86.75
SBM, 48% (ton)	-----	304.09	Cull cow (annual)	1,050	47.51
Salt (cwt)	-----	6.40	Market hog (annual)	265	49.68
Mineral-vitamins (cwt)	-----	26.00	Cull sow (annual)	480	39.11
			Market lamb (annual)	120	94.75
			Feeder lamb (annual)	60	105.78
			Cull ewe (annual)	100	30.39
			Dairy replacement heifer (annual)	1,250	1,370.00
			Milk (annual gross price)	100	16.22

^a See Table 3 for location-specific prices.

^b Crop prices for corn silage, sorghum (cane) silage, and cane hay are based on location-specific grain prices in Table 3. \$/T corn silage = 8 × \$/bu corn price. \$/T sorghum silage = 0.8 × \$/T corn silage. \$/T cane hay = (8/3) × \$/T sorghum silage.

during the month of October 2009 adjusted for historical basis. The base cash price used is the Kansas mailbox price as reported by the Central Federal Milk Order No. 32.

Hay price projections in Table 1 are the May through July, 2009 average Kansas Agricultural Statistics prices for alfalfa and other hay. Brome hay is \$5 per ton above other hay and prairie hay is \$5 per ton below. Cane hay prices were determined from sorghum (cane) silage prices, which were based on corn silage prices, which were based on corn grain prices. Mineral and salt prices were based on recent price quotes.

Long-run planning prices are shown in Table 2 and are for years 2010-2014. Commodities that have futures-based counterparts in Table 1 used a weighted average of short-run price projections and historical cash prices to determine their long-run expected values. Similarly, for other com-

modities, the expected price for 2010-2014 was comprised of the 2010 projection in Table 1 (weighted by 0.2), along with an historical average price (weighted by 0.8).

Table 3 outlines the location-specific projections of harvest time crop prices (wheat: July; corn, grain sorghum, and soybeans: October). Short-run price projections are for harvest 2010, and based on September 30, 2009 deferred futures prices as well as historical basis over the 2004-2009 period. Long-run price projections are for the average harvest time prices for the 2010 to 2014 period. These long-run crop prices were based on a weighted average of short run price projections and historical cash prices.

Table 4 outlines the input costs used for the crop cost-return budgets in this handbook. Input costs were based on a survey of several input suppliers across Kansas.

Table 2. *Prices for Long-Run Planning (2010-2014)*

Item		
Crop or Feed	Crop Price	Feed Price
Wheat (bu)	a	-----
Grain sorghum (bu)	a	\$5.22
Grain sorghum (cwt)	a	5.83
Corn (bu)	a	3.26
Soybeans (bu)	a	-----
Sunflowers, oil (cwt)	14.31	-----
Alfalfa hay (ton)	100.13	100.13
Brome hay (ton)	72.79	72.79
Prairie/fescue hay (ton)	66.79	66.79
Cane hay (ton)	b	60.68
Corn silage (ton)	b	28.44
Sorghum silage (ton)	b	22.76
SBM, 48% (ton)	-----	267.69
Salt (cwt)	-----	6.40
Mineral (cwt)	-----	26.00
	Weight (lbs)	Livestock Price
Beef		
Steer calf (fall)	450	125.26
Steer calf (fall)	550	112.79
Steer calf (spring)	550	122.75
Feeder steer (spring)	650	111.62
Feeder steer (spring)	750	103.45
Feeder steer (spring)	850	98.19
Market steer (annual)	1,225	88.05
Heifer calf (fall)	450	112.21
Heifer calf (fall)	550	103.16
Feeder heifer (spring)	650	100.95
Feeder heifer (spring)	750	95.25
Market heifer (annual)	1,175	88.09
Cull cow (annual)	1,050	48.80
Swine		
Market hog (annual)	265	48.63
Cull sow (annual)	480	38.60
Sheep		
Market lamb (annual)	120	91.94
Feeder lamb (annual)	60	108.72
Cull ewe (annual)	100	34.56
Dairy		
Milk (annual gross price)	100	15.69
Replacement heifer (per head)	1	1,830.00

^a See Table 3 for location-specific prices

^b See footnote in Table 1 for procedures for projecting corn silage, sorghum silage, and cane hay prices.

Table 3. Location-Specific Crop Prices for Short-Run and Long-Run Planning by Kansas Farm Management Association Region

	2010 Harvest Price Projections, \$/bu (short-run)				2010-2014 Avg Harvest Price Projections, \$/bu (long-run)			
	Wheat	Corn	Milo	Soybeans	Wheat	Corn	Milo	Soybeans
Northwest & Southwest								
Scott City	\$4.68	\$3.87	\$3.45	\$8.32	\$5.05	\$3.19	\$2.77	\$7.28
North Central								
Beloit	4.81	3.55	3.43	8.27	5.18	2.87	2.75	7.23
South Central								
Hutchinson	4.86	3.71	3.51	8.45	5.23	3.03	2.83	7.40
Northeast								
Topeka	5.07	3.65	3.64	8.58	5.44	2.97	2.96	7.54
Southeast								
Emporia	4.81	3.66	3.87	8.86	5.18	2.98	3.19	7.81

Table 4. Input Costs for Forward Planning (MF Series)

<u>Seed Item</u>	<u>Cost</u>	<u>Unit</u>
Alfalfa	\$4.04	Lb.
Brome hay	0.80	Lb.
Canola (Roundup Ready)	3.60	Lb.
Corn	2.02	1,000 Seeds
Corn (Gaucho treated)	2.98	1,000 Seeds
Corn (Bt)	2.49	1,000 Seeds
Corn (Roundup Ready)	2.57	1,000 Seeds
Cotton (Roundup Ready)	0.74	1,000 Seeds
Dry Edible Beans	0.59	Lb.
Grain sorghum	1.38	Lb.
Grain sorghum (Concep treated)	1.80	Lb.
Grain sorghum (Gaucho treated)	2.87	Lb.
Grain sorghum (Concep/Gaucho treated)	3.20	Lb.
Fescue hay	0.90	Lb.
Forage sorghum	1.70	Lb.
Soybeans	0.61	Lb.
Soybeans (Roundup Ready)	0.93	Lb.
Soybeans (STS)	0.74	Lb.
Soybeans (Roundup Ready/STS)	0.95	Lb.
Sunflowers - Confectionary	1.20	1,000 Seeds
Sunflowers-Oil	1.26	1,000 Seeds
Wheat (certified) ^a	0.24	Lb.
<u>Input Item</u>	<u>Cost</u>	<u>Unit</u>
N (Anhydrous) – Actual Ingredient (based on 82-0-0)	\$0.24	Lb.
N (Dry) – Actual Ingredient (based on 46-0-0)	0.42	Lb.
N (Liquid) – Actual Ingredient (based on 28-0-0 and 32-0-0)	0.36	Lb.
P (Dry) – Actual Ingredient (based on 18-46-0 and 11-52-0)	0.33	Lb.
P (Liquid) – Actual Ingredient (based on 10-34-0)	0.54	Lb.
K – Actual Ingredient (based on 0-0-60)	0.59	Lb.
Lime (cost/lb includes application)	0.01	Lb.
Labor	\$13.00	Hour
Interest (operating)	7.5	%

^a Wheat seed in budget = (Certified price x 60 x 25% + (location-specific cash price + \$1.45) x 25% + (location-specific cash price + \$0.60) x 50%)/60. The \$1.45 is the cost per bushel for cleaning and treating seed and the \$0.60 is the cost per bushel of cleaning only.

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