

Planning for change

A look at 2007 farm analysis data clearly shows how quickly producers' income and expenses can change. These increased levels of income and expense exponentially increase the risk producers must manage.

The combination of good yields and higher markets has created a lot of opportunity for producers. However, to stay abreast of the changing conditions, producers will need to sharpen their pencils and "balance" long-term decisions such as capital purchases and expansion against "new" market levels and increasing expenses.

To make management decisions, it's critical you review your own records and compare them to averages and trends. The "key production figures" will provide a benchmark against which to compare your farm.

Key production figures summary: The 2007 corn yield averages were above the relatively good yields recorded in 2006 on farms that are part of the Iowa and Illinois Farm Business Association membership. The average corn yield on the 3,700 combined farms was 180.50 bushels per acre in 2007. Corn yields were 10 bushels per acre higher in 2007 compared to 2006. Soybean yields averaged 53 bushels per acre, 0.5 bushels lower than in 2006.

A closer look at Illinois

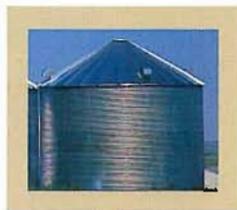
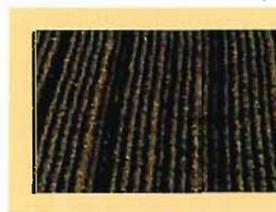
While other states will vary, the numbers from Illinois may provide a representative view of the Corn Belt in general. A sample of pure grain farms in Illinois shows the economic cost (see tables lower right) per bushel of corn produced was \$2.85 with an average yield of 190 bushels per acre. The economic cost per bushel of soybeans was \$8.14 with an average yield of 51 bushels per acre. This compares with average production costs per bushel of \$2.80 and \$7.09 for corn and soybeans, respectively, in 2006.

Even with the high yields, this was the third highest cost per bushel to grow corn since 1998. The 2007 cost to grow soybeans was above the last five-year and ten-year average and the highest cost per bushel since 1988.

The variation in yields and costs the past few years



Editor's note: Kent Vickre and Chuck Cagley write a tax and finance column for each issue of Pioneer GrowingPoint® magazine. Vickre is state coordinator of the Iowa Farm Business Association. Cagley is state coordinator of Illinois Farm Business Farm Management. They address issues that influence agribusiness success.



Grain prices are higher, but so are input costs.

makes it important to analyze these costs over more than one year. The 2003-07 five-year average to produce corn and soybeans on these farms is \$2.66 per bushel for corn and \$7.34 per bushel for soybeans.

More corn, more costs

Per acre fertilizer, chemical and seed costs were higher in 2007 compared to the year before and significantly higher than five years earlier. Crop costs on the farms averaged \$144.87 per acre in 2007, compared to \$125.26 in 2006. Fertilizer increased 20 percent, pesticides increased 5 percent and seed increased 18 percent. Part of this increase can be attributed to more corn acreage and fewer soybean acres: Costs for corn are higher than for soybeans.

Compared to 2003, fertilizer costs have increased 70 percent, pesticides have decreased 1 percent and seed has increased 53 percent. Fuel and oil costs averaged \$21.03 in 2007 compared to \$18.37 in 2006 and \$10.47 in 2003. These costs are expected to continue to increase in 2008.

Spending for machinery and equipment was considerably higher than the year before. Expenditures increased 38 percent in 2007 compared to 2006, averaging \$62,951 per farm, or \$62 per tillable acre. Machinery purchases in 2006 and 2005 averaged \$45 per tillable acre.

Total economic costs per acre to produce corn and soybeans in 2007

increased compared to 2006 in both Illinois and Iowa. The main factors for the increase in per acre costs was due to higher fertilizer, seed, machinery, insurance and nonland interest costs. Costs per bushel increased due to higher costs per acre.

Livestock difficulties

Returns above feed costs for dairy and feeder cattle enterprises were higher than the year before. However, returns for hog and beef enterprises were lower. Except for dairy, returns to all five agricultural enterprises in 2007 were below the five-year average.

All livestock enterprises experienced significantly higher feed costs in 2007. Higher feed costs were the main factor in the lower overall hog operation returns. Mainly due to the higher feed costs, returns for farrow-to-finish hog producers were estimated at about \$7 to \$8 per hundredweight below the breakeven level in 2007.

Dairy producers experienced higher returns due to higher milk prices. Returns above feed per cow were \$2,360 in 2007 compared to \$1,501 in 2006. Meanwhile, 2007 prices for replacement cattle were slightly below the year before.

Slaughter cattle prices were about \$18 per hundredweight lower than prices paid for replacement cattle. Returns above feed per animal decreased for beef enterprises due to higher feed costs. Returns were the

lowest for any year during the last five years.

Looking ahead to 2008

Current grain prices for fall delivery of the 2008 crop are still relatively high. With average or above average yields, farm earnings for 2008 should be good. However, costs continue to increase: some costs, such as fertilizer, are increasing significantly.

With any significant drop in grain prices and/or yields, incomes could be substantially lower than current projections. Higher grain prices have led to increased cash rents, which will cut into many operator returns. High feed costs will continue to challenge livestock operations. Producers need to plan accordingly for 2008 and monitor actual cash flows against projections. It's more important than ever to use available risk management tools due to the larger investment requirements for growing a crop.

Good records are key

The data used in this article comes from the farm business/management associations from Iowa and Illinois. Without their cooperation, information as comprehensive and accurate as this would not be available for educational purposes. Illinois and Iowa Farm Business/Farm Management Associations provide on-farm counsel with computerized record keeping, farm financial management, business entity planning and income tax management. 

CORN

Key production figures¹

All figures are in dollars per acre except average yield.

	2007		2006		2005		2004		2003		2002	
	IA	IL										
Soil fertility	78	89	70	80	56	77	55	66	49	56	45	54
Pesticides	27	39	28	39	29	42	30	38	32	35	33	33
Seed	54	54	47	46	44	43	39	39	37	36	35	34
Drying & storage	9	15	12	11	10	8	14	10	8	9	3	13
Machine repair, fuel & hire	52	49	45	42	45	39	39	37	35	32	28	32
Economic machinery depreciation ²	29	23	27	21	26	20	24	19	23	18	18	18
Total economic cost ³	501	542	451	488	419	458	404	425	381	395	317	388
Average yield, bu/acre	171	190	167	174	175	150	187	184	161	174	142	145

SOYBEANS

Key production figures¹

	2007		2006		2005		2004		2003		2002	
	IA	IL										
Soil fertility	9	28	8	25	7	24	6	21	5	20	5	19
Pesticides	24	25	19	25	23	31	19	28	24	29	21	30
Seed	32	37	29	33	29	29	24	27	23	27	23	24
Drying & storage	2	5	3	3	1	5	1	6	1	5	1	4
Machine repair, fuel & hire	50	43	42	37	42	34	37	32	32	28	28	28
Economic machinery depreciation ²	28	20	26	18	25	17	23	17	22	16	18	17
Total economic cost ³	386	416	338	375	332	351	308	333	293	317	242	318
Average yield, bu/acre	55	51	54	53	54	52	50	54	35	38	46	48

¹ 2007 "projected" data is as of April 1, 2008. Final 2007 comparative data available at: www.iowafarmbusiness.org and www.fbim.org.

² Iowa Economic depreciation is calculated at 10 percent per year with 10 percent salvage. Illinois changed to economic depreciation in 2003, with most machinery calculated at 10 years, 125 percent declining balance. 2002 was tax depreciation.

³ Total cost includes non-cash "average" equity charge on asset values and "average" unpaid labor and management charge.