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**Non-Land Costs for Corn and Soybeans Projected to Increase in 2008**

Crop costs for corn and soybeans continue to increase. For corn, non-land costs will be over \$40 per acre higher in 2008 as compared to 2007. Non-land costs for soybeans are projected to be on average \$16 to \$18 per acre higher in 2008. Between 2003 and 2008, non-land costs have increased over \$120 per acre for corn and over \$60 per acre for soybeans. These increases have led to higher break-even levels. In 2008, break-even revenues on many Illinois farms will be over \$3.00 per bushel for corn and over \$8.00 per bushel for soybeans.

This report summarizes projected cost increases. More detailed breakdowns of cost are provided in “Revenue and Costs for Corn, Soybeans, Wheat, and Double-Crop Soybeans” available in the management section of *farmdoc* ([www.farmdoc.uiuc.edu](http://www.farmdoc.uiuc.edu)).

**Non-Land Costs in Northern Illinois**

Non-land costs for corn in northern Illinois are projected to be \$380 per acre in 2008, a \$42 increase over 2007 levels (see Table 1). Of the \$42 increase, \$38 are associated with direct costs (fertilizer, pesticides, seed, drying, storage, and crop insurance). Fertilizer and seed are the categories with the largest increases. Fertilizer is projected to increase from \$81 per acre in 2007 up to \$110 in 2008, an increase of \$29 per acre. Seed costs are projected to increase from \$51 per acre in 2007 up to \$59 per acre in 2008, an increase of \$8 per acre.

Non-land costs for soybeans in Northern Illinois are projected to increase from \$210 in 2007 up to \$228 in 2008, an increase of \$18 per acre. Similar to corn, much of the increase is associated with direct costs. Direct costs are projected to increase from \$100 per acre up to \$113 per acre. Of the \$13 increase in direct costs, \$10 is associated with fertilizer cost increases.

Cost increases began to occur in 2003. For corn, per acre non-land costs increased \$29 per acre between 2003 and 2004, \$18 between 2004 and 2005, \$26 between 2005 and 2006, \$21 between 2006 and 2007 (see Table 1). Per acre costs for corn are projected to increase \$42 between 2007 and 2008. For northern Illinois, per acre corn costs have increased by \$136 per acre between 2003 and 2008.

Cost increases for soybeans have been less than for corn, increasing by \$67 per acre between 2003 and 2008 (see Table 2). Per acre non-land costs increased \$18 per acre between 2003 and 2004, \$9 between 2004 and 2005, \$15 between 2005 and 2006, \$7 between 2006 and 2007 (see Table 1). Per acre costs for soybeans are projected to increase \$18 between 2007 and 2008.

Periods of increasing costs often are associated with revenue-cost squeezes and lowering farm incomes. Fortunately, corn and soybean prices increased during the later part of 2006, leading to higher revenues. Had commodity prices not increased, the economic outlook for grain farming would be much different today.

**Table 1. Per Acre Corn and Soybean Costs in Northern Illinois Grain Farms Enrolled in Illinois FBFM, 2000 -2006 Actual, 2007 - 2008 Projected.**

Year	Per Acre Corn Costs				Per Acre Soybean Costs			
	Direct <sup>1</sup>	Power <sup>3</sup>	Other <sup>3</sup>	Total Non-Land <sup>4</sup>	Direct <sup>1</sup>	Power <sup>3</sup>	Other <sup>3</sup>	Total Non-Land <sup>4</sup>
	\$ per acre				\$ per acre			
2000	130	77	48	255	77	68	48	193
2001	142	66	47	255	78	56	40	174
2002	141	64	42	247	80	55	36	171
2003	150	54	40	244	82	45	34	161
2004	171	60	42	273	91	51	37	179
2005	183	62	46	291	95	53	40	188
2006	192	71	54	317	96	60	47	203
2007P	210	73	55	338	100	62	48	210
2008F	248	75	57	380	113	64	51	228

<sup>1</sup> Includes fertilizer, pesticides, seed, drying, storage, and crop insurance

<sup>2</sup> Includes machine hire, utilities, machinery repair, fuel and oil, light vehicle, and machinery depreciation.

<sup>3</sup> Includes hired labor, building repair and rent, building depreciation, insurance, misc, and non-land interest

<sup>4</sup> Equals the total of direct, power, and other costs.

Source: Illinois Farm Business Farm Management. More detailed cost breakdowns are shown in "Revenue and Costs for Corn, Soybeans, Wheat, and Double-Crop Soybeans". The publication is filed in "Per Acre Crop Costs" in the management section of *farmdoc* ([www.farmdoc.uiuc.edu](http://www.farmdoc.uiuc.edu)). The direct link is: [http://www.farmdoc.uiuc.edu/manage/corn\\_soybean\\_wheat\\_returns\\_costs.pdf](http://www.farmdoc.uiuc.edu/manage/corn_soybean_wheat_returns_costs.pdf)

### Non-Land Costs in other Illinois Regions

Per acre costs are projected to be of similar magnitudes across much of Illinois. Per acre corn costs in 2008 are projected to be \$364 in central Illinois for farms with high-productivity farmland, \$366 per acre in central Illinois for farms with low productivity farmland, and \$370 for southern Illinois (see Table 2). Per acre soybean costs are projected to be \$215 in central Illinois for high productivity farmland, \$215 in central Illinois for low productivity farmland, and \$224 per acre in southern Illinois. All areas of Illinois are projected to face large increases in per acre cost increases in 2008.

### Break-Even Levels to Cover Costs

In northern Illinois, total non-land costs are projected to be \$380 per acre. Corn yields are projected at 178 bushels per acre. This leads to a break-even revenue to cover non-land costs of \$2.13 per bushel ( $\$2.13 = \$380 \text{ non-land costs} / 178 \text{ bushels}$ ).

Cost increases have led to generally increasing break-even revenues. In 2003, the break-even revenue to cover non-land costs was \$1.40 per bushel (see Table 3). Break-even revenues were \$1.48 in 2004, \$2.01 in 2005, \$1.73 in 2006, and \$1.82 in 2007. Except for 2005, there is an increasing trend in break-even revenues. The 2005 break-even of \$2.01 is higher than in 2004 and 2006 break-evens because the 2005 yield of 145 bushels is relatively low yield for northern Illinois. In general, break-even revenues to cover non-land costs have increased from about \$1.40 range in 2003-2004 up to around \$2.00 in 2008, an increase of approximately \$.60 per bushel.

**Table 2. Per Acre Non-Land Costs on Grain Farms Enrolled in Illinois FBFM, 2000 - 2006 Actual, 2007 - 2008 Projected.**

Year	Central Illinois (High Productivity Land)		Central Illinois (Low Productivity Land)		Southern Illinois	
	Corn	Soybeans	Corn	Soybeans	Corn	Soybeans
	\$ per acre		\$ per acre		\$ per acre	
2000	250	184	246	176	242	178
2001	251	176	254	174	255	179
2002	245	172	244	167	237	166
2003	241	161	243	159	229	158
2004	260	171	259	171	250	169
2005	287	187	289	188	284	184
2006	302	190	301	193	305	202
2007P	323	198	324	199	327	208
2008F	364	215	366	215	370	224

Source: Illinois Farm Business Farm Management. More detailed cost breakdowns are shown in "Revenue and Costs for Corn, Soybeans, Wheat, and Double-Crop Soybeans". The publication is filed in "Per Acre Crop Costs" in the management section of *farmdoc* ([www.farmdoc.uiuc.edu](http://www.farmdoc.uiuc.edu)). The direct link is: [http://www.farmdoc.uiuc.edu/manage/corn\\_soybean\\_wheat\\_returns\\_costs.pdf](http://www.farmdoc.uiuc.edu/manage/corn_soybean_wheat_returns_costs.pdf)

**Table 3. Break-Even Revenues for Corn and Soybeans in Northern Illinois.**

Year	Corn			Soybeans		
	Non-land Costs <sup>1</sup>	Yield <sup>2</sup>	Per Bushel Break-even Revenue <sup>3</sup>	Non-land Costs <sup>1</sup>	Yield <sup>2</sup>	Per Bushel Break-even Revenue <sup>3</sup>
	\$/acre	Bu./acre	\$/bu	\$/acre	Bu./acre	\$/bu
2000	255	156	1.63	193	46	4.20
2001	255	159	1.60	174	48	3.63
2002	247	154	1.60	171	47	3.64
2003	244	174	1.40	161	35	4.60
2004	273	185	1.48	179	52	3.44
2005	291	145	2.01	188	49	3.84
2006	317	183	1.73	203	53	3.83
2007P	338	186	1.82	210	53	3.96
2008F	380	178	2.13	228	51	4.47

<sup>1</sup> Non-land costs are for northern Illinois grain farms enrolled in Illinois Farm Business Farm Management (FBFM).

<sup>2</sup> Yields are for northern Illinois grain farms enrolled in Illinois FBFM.

<sup>3</sup> Equals non-land costs divided by yield.

Source: Illinois Farm Business Farm Management. More detailed cost breakdowns are shown in "Revenue and Costs for Corn, Soybeans, Wheat, and Double-Crop Soybeans". The publication is filed in "Per Acre Crop Costs" in the management section of *farmdoc* ([www.farmdoc.uiuc.edu](http://www.farmdoc.uiuc.edu)). The direct link is: [http://www.farmdoc.uiuc.edu/manage/corn\\_soybean\\_wheat\\_returns\\_costs.pdf](http://www.farmdoc.uiuc.edu/manage/corn_soybean_wheat_returns_costs.pdf)

Break-even revenues for soybeans have not increased as much as for corn because soybean costs have not increased as much. Break-even revenues to cover non-land costs for soybeans in northern Illinois are \$4.60 in 2003, \$3.44 in 2004, \$3.84 in 2005, \$3.83 in 2006, \$3.96 in 2007, and \$4.47 in 2008. Break-even revenues have varied from year to year because of yield changes.

The above break-even levels do not consider land costs. Land costs will increase break-even revenues. On cash rented farms, break-even revenues could be above \$3.00 per bushel for corn. Take northern Illinois for example. Non-land costs for corn are \$380 per acre and yields are projected at 178 bushels per acre. If the cash rent is \$175 per acre, costs total \$555 per acre. Break-even revenues equal \$3.12 per bushel ( $3.12 = \$555 \text{ costs} / 178 \text{ expected yield}$ ). Higher cash rents will obviously result in higher break-evens. If the cash rent is \$225 per acre, the break-even revenue is \$3.40 per bushel.

For soybeans, non-land costs in 2008 are projected at \$228 per acre for northern Illinois. Yields are projected at 51 bushels per acre. On land that is cash rented for \$175 per acre, the break-even revenue to cover costs is \$7.90 per bushel ( $7.90 = (\$228 \text{ non-land costs} + \$175 \text{ cash rent}) / 51 \text{ bushels}$ ). At a \$225 cash rent, the break-even revenue is \$8.88 per bushel

## Summary

Non-land costs are projected to increase in 2008 and will average around \$370 per acre for corn and around \$220 per acre for soybeans. After considering land costs, costs for corn on many farms in northern and central Illinois will be in the mid to high \$500 per acre range. Some farms, with either higher than average non-land costs or high cash rents, could have costs over \$600 per acre. After considering land costs, total costs for soybeans on many farms will be close to \$400 per acre. Some farms, with either above-average costs or higher cash rents, will have total costs in the mid \$400 per acre range.

Given these costs, break-even revenues will be above \$3.00 for corn and above \$8.00 for soybean for many farms. These break-even revenue levels point to the need for corn and soybean prices to continue to be higher than historical averages. Currently, futures markets indicate relatively high prices for 2008 production. A return to commodity prices nearer historical levels, \$2.40 for corn and \$6.00 for soybeans, would likely cause low and negative incomes on many farms.

## Acknowledgements

Data used in this study comes from local Farm Business Farm Management (FBFM) Associations across the State of Illinois. Without their cooperation, information as comprehensive and accurate as this would not be available for educational purposes. FBFM, which consists of 5,500 plus farmers and 60 professional field staff, is a not-for-profit organization available to all farm operators in Illinois. FBFM field staff provides on-farm counsel with computerized recordkeeping, farm financial management, business entity planning and income tax management. For more information, please contact the State FBFM Office located at the University of Illinois Department of Agricultural and Consumer Economics at 217-333-5511 or visit the FBFM website at [www.fbfm.org](http://www.fbfm.org).

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