



Non-Land Costs for Corn Increased in 2013

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Summaries of farms enrolled in Illinois Farm Business Farm Management (FBFM) indicate that 2013 non-land costs for producing corn were \$615 per acre in central Illinois for high-productivity farmland. The \$615 per acre cost in 2013 was \$34 per acre higher than in 2012. Since 2006, non-land costs for producing corn more than doubled from \$302 per acre in 2006 to \$615 per acre in 2013. Non-land costs may decrease in 2014 due to fertilizer price declines. However, non-land costs in the high \$500 and low \$600 range likely will occur for the foreseeable future.

Cost Increases in 2013

Non-land costs are broken into cost items in Table 1, with major categories being direct costs (costs directly related to corn production), power costs (costs primarily related to machinery), and overhead costs (costs not attributable to production or related to machinery). In the major categories, direct costs increased \$27 per acre from \$405 per acre in 2012 to \$432 per acre in 2013. Direct costs accounted for 70% of non-land costs. Power costs increased by \$10 per acre from \$117 per acre in 2012 to \$127 per acre in 2013. Power costs accounted for 21% of non-land costs. Overhead costs decreased \$3 per acre from \$59 per acre in 2012 to \$56 per acre in 2013. Overhead costs accounted for 9% of non-land costs.

Cost items having the largest increases were:

1. Pesticide costs increased from \$49 per acre in 2012 to \$66 per acre in 2013, an increase of \$17 per acre. Pesticide costs relate to herbicide, insecticide, and fungicide applications. Heavier disease and pest problems in 2013 likely led to the cost increase.
2. Machinery depreciation increased from \$55 per acre in 2012 to \$63 per acre in 2013, an increase of \$8 per acre. Machinery purchases continued to be above average in 2013, leading to higher machinery depreciation.
3. Drying costs increased from \$16 per acre in 2012 to \$24 per acre in 2013, an increase of \$8 per acre. In 2012, there was a drought, leading to low yields and dry harvested grain. Yields closer to normal occurred in 2013, leading to a drying charge that was closer to average.
4. Seed costs increased from \$108 per acre in 2012 to \$114 per acre in 2014, an increase of \$6 per acre. Between 2006 and 2012, seed costs averaged a yearly increase of \$11 per acre.

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Several cost items exhibited decreases. Fertilizer costs decreased \$7 per acre from \$200 per acre in 2012 to \$193 in 2013. Decreasing fertilizer price played a role in this decrease. Other items with decreases were hired labor, building repair and rent, and building depreciation.

Table 1. Non-land Costs for Producing Corn on Central Illinois, High-Productivity Farmland 2006 to 2013.

	Year							
	2006	2007	2008	2009	2010	2011	2012	2013
	\$ per acre							
Fertilizers	82	90	124	185	122	159	200	193
Pesticides	40	40	46	52	44	50	49	66
Seed	45	55	67	90	95	96	108	114
Drying	11	9	19	38	22	19	16	24
Storage	8	8	11	14	13	8	7	8
Crop insurance	11	20	27	25	18	30	25	27
Total direct costs	\$197	\$222	\$294	\$404	\$314	\$362	\$405	\$432
Machine hire/lease	6	8	8	9	8	8	10	11
Utilities	3	4	4	4	4	4	5	5
Machine repair	13	16	17	18	17	17	22	22
Fuel and oil	14	18	22	13	17	18	23	24
Light vehicle	2	2	2	1	2	1	2	2
Mach. depreciation	20	23	29	35	38	39	55	63
Total power costs	\$58	\$71	\$82	\$80	\$86	\$87	\$117	\$127
Hired labor	8	9	11	12	13	14	14	16
Building repair and rent	3	4	5	5	4	5	8	6
Building depreciation	4	4	5	5	6	6	9	5
Insurance	9	9	10	7	8	8	9	10
Misc	6	6	7	7	8	8	8	8
Interest (non-land)	17	18	14	14	13	13	11	11
Total overhead costs	\$47	\$48	\$52	\$50	\$52	\$54	\$59	\$56
Total non-land costs	\$302	\$341	\$428	\$534	\$452	\$503	\$581	\$615

¹Results for 2006 through 2013 are summarized from grain farms enrolled in Illinois Farm Business Farm Management.

Cost Increases since 2006 and Prospects for 2014

Non-land costs more than doubled since 2006 from \$302 per acre in 2006 to \$615 per acre in 2013. Four items accounted for 80% of the cost increase from 2006 to 2013:

1. Fertilizer costs increased from \$82 per acre in 2006 to \$193 per acre in 2013, an increase of \$111 per acre. Fertilizer accounted for 35% of the non-land cost increase between 2006 and 2013. Fertilizer costs may decrease in 2014 due to lower fertilizer prices. Given current prices, it is possible for fertilizer costs to decrease by \$30 to \$40 per acre in 2014.
2. Seed costs increased from \$45 per acre in 2006 to \$114 per acre in 2013, an increase of \$69 per acre. Seed costs accounted for 22% of the non-land cost increase from 2006 to 2013. Seed costs are not likely to decrease in 2014.
3. Machinery depreciation costs increased from \$20 per acre in 2006 to \$63 per acre in 2013, an increase of \$43 per acre. Machinery depreciation accounted for 14% of the non-land cost increase from 2006 to 2013. Depreciation will decrease only after several years of lower than average machinery purchases. Therefore, machinery depreciation is not likely to decrease in the next several years.

4. Pesticide costs increased from \$40 per acre in 2006 to \$66 per acre in 2013, an increase of \$26 per acre. Pesticides accounted for 8% of the non-land cost increase from 2006 to 2013. Pesticide costs will vary from year to year depending on pest pressures. However, overall decreases in pesticide costs are not expected, particular as weeds and insects continue to build resistance to currently used technologies.

Commentary

Increases in non-land costs place break-even prices at higher levels. Take the \$615 of non-land costs and add to it a \$300 per acre cash rent, a fairly common cash rent for farmland of this productivity. This gives total costs of \$915 per acre. This farmland can be reasonably expected to average 200 bushels of corn per acre, yielding a break-even price \$4.58 per bushel ($\$615 / 200$). Prices in the low \$4 range would not cover total costs given that farmland is cash rented when yields are close to average.

At this point, fertilizer costs are projected to decrease in 2014. All other costs likely will stay the same or increase. Given this, non-land costs in the high \$500 per acre and low \$600 range likely will continue for 2014 and the foreseeable future.

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