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FERTILIZER PRICES IN 2008, 2009, AND 2010

Fertilizer costs for corn in 2010 likely will average \$100 per acre for corn on high-productivity farmland in Illinois. These costs will be below 2009 costs. These fertilizer costs are based on fertilizer prices reported in a new report listing average fertilizer prices in Illinois.

Illinois Production Cost Report

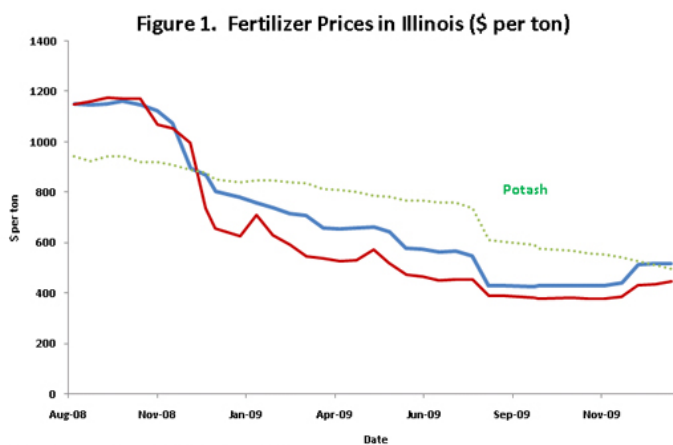
Last year, the Agricultural Marketing Service – an agency of the U.S. Department of Agriculture – began releasing a report entitled *Illinois Production Cost Report*. This report lists average, Illinois prices at distributors for the following crop production inputs: anhydrous ammonia, urea, liquid nitrogen, diammonium phosphate (DAP), potash, lime, and diesel fuel. AMS began publishing the report in September 2008 and the report has been published bi-monthly. The report is available at: http://www.ams.usda.gov/mnreports/gx_gr210.txt.

Fertilizer prices

Based on the January 21, 2010 report, prices for fertilizers are:

- Anhydrous ammonia – \$517 per ton,
- Urea – \$421 per ton,
- Liquid Nitrogen (28%) – \$245 per ton,
- DAP – \$447 per ton, and
- Potash – \$495 per ton.

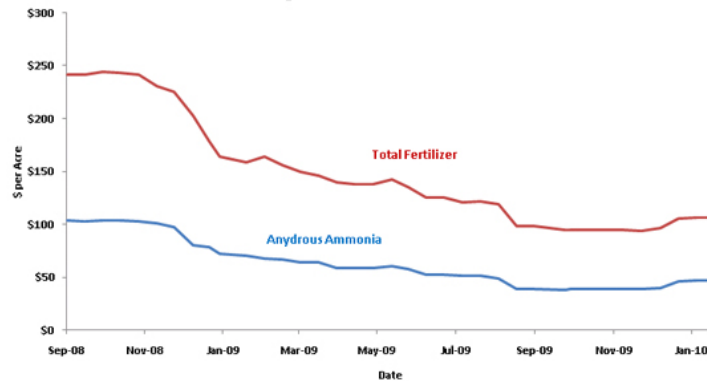
January 2010 prices are considerably below fall 2008 prices, but anhydrous ammonia and DAP prices have risen from the fall 2009 prices. Anhydrous ammonia high price of \$1161 per ton occurred in October 2008 (see Figure 1). From this high, ammonia prices fell to \$428 per ton in September 2009. From the \$428 per ton low, anhydrous ammonia prices rose to the \$519 in January 7, 2010, falling to \$517 in January 21st. DAP highest price of \$1,174 occurred in October 2008 and the low of \$378 occurred in November 2010. Since November 2010, DAP prices rose to \$446 per ton in January 2010. Potash's highest price was \$942 in October 2009. Since the October 2009 high, potash prices have generally fallen, reaching their low of \$495 per ton in January 2010. (See Appendix Table 1 for anhydrous ammonia, DAP, and potash prices over the entire period)



Variability in Fertilizer Costs

Changes in fertilizer prices from September 2008 through January 2010 have large impacts on fertilizer costs. To illustrate, per acre fertilizer costs were calculated using application rates typical of corn raised on high-productivity farmland in Illinois: 180 pounds of anhydrous ammonia, 170 pounds of DAP, and 85 pounds of potash. Given these application rates, anhydrous ammonia costs per acre were at a high of \$104 per acre if ammonia was purchased in the fall of 2008 (see Figure 2). Given March 2008 purchase, ammonia costs were \$140 per acre. January 2010 prices result in a \$47 per acre anhydrous ammonia costs.

Figure 2. Per Acre Fertilizer Costs for Corn Given Different Timing of Fertilizer Purchases.



Total fertilizer costs including anhydrous ammonia, DAP, and potash were over \$240 per acre given all fertilizers were purchase in fall 2008 (see Figure 2). Pricing during spring 2009 resulted in total fertilizer costs in the \$140 per acre range. January 2010 prices result in fertilizer costs around \$105 per acre. Difference in fall 2008 and spring 2009 prices indicate that there will be sizable differences in fertilizer costs across farms, simply depending on the timing of fertilizer prices. Timing differences could make over a \$100 difference in fertilizer costs, even given the same application rates over farms.

Spring 2010 Fertilizer Price Outlook

Changes in energy prices, along with futures prices on energy prices, do not point to increasing fertilizer prices during the spring of 2010. However, there are a number of factors that suggest that there are risks of higher spring prices. Due to wet weather, little fertilizer was applied during fall 2009. This could lead to more fertilizer applications in the spring, potentially leading to supply and manufacturing bottlenecks. These bottlenecks then could lead to higher prices so as to ration fertilizer applications. This possibility, along with general energy price uncertainty, leads to the sizable risks of rising fertilizer prices.

Summary

A new report released by AMS reports average fertilizer prices in Illinois, thereby allowing farmers and others to more closely monitor fertilizer in Illinois. Prices suggest that 2010 costs for corn likely will be around \$100 per acre, considerably below 2009 costs. Fertilizer costs in 2009 will vary across farms simply due to the timing of fertilizer purchases. Current Prices suggest that 2010 costs for corn likely will be around \$100 per acre, considerably below 2009 costs. While below 2009 levels, 2010 costs will be historically high. Between 2000 and 2007, fertilizer costs for corn averaged \$68 per acre in central Illinois on high-productivity farmland.

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Appendix Table 1. Fertilizer Prices in Illinois.

Date	Anhydrous ammonia	DAP	Potash
	\$ per Ton		
9/4/2008	1,151	1,147	941
9/18/2008	1,148	1,160	923
10/2/2008	1,151	1,174	941
10/15/2008	1,161	1,170	942
10/30/2008	1,148	1,170	920
11/13/2008	1,123	1,068	921
11/26/2008	1,073	1,052	910
12/11/2008	894	997	890
12/24/2008	867	737	876
1/1/2009	803	658	851
1/22/2009	782	627	840
2/5/2009	756	710	848
2/19/2009	739	628	848
3/5/2009	715	591	841
3/19/2009	708	547	837
4/2/2009	657	537	815
4/16/2009	656	526	808
4/30/2009	660	531	800
5/15/2009	664	573	786
5/28/2009	642	521	781
6/11/2009	578	474	767
6/25/2009	576	467	769
7/9/2009	562	450	761
7/23/2009	568	454	759
8/6/2009	549	456	738
8/20/2009	428	391	611
9/3/2009	430	390	602
9/27/2009	428	381	592
10/1/2009	431	379	575
10/29/2009	431	381	571
11/12/2009	431	379	556
11/25/2009	431	378	553
12/10/2009	442	385	544
12/24/2009	514	432	526
1/7/2010	519	436	511
1/21/2010	517	447	495

Source: Agricultural Market Service, U.S.D.A. *Illinois Production Cost Report*. Available at www.ams.usda.gov/mnreports/gx_gr210.bt.