NON-LAND COSTS HIGHER IN 2011

Non-land costs to produce corn in central Illinois will rise in 2011, approaching $500 per acre. These costs will be higher than in 2010, but likely below 2009 levels. Non-land production costs likely will continue to increase into the 2012 production year.

Historic Non-Land Costs

Non-land production costs for 2011 are projected at $492 per acre in central Illinois for high-productivity farmland. Non-land costs include direct (fertilizer, seed, pesticides, drying, storage, crop insurance), power, and overhead costs. Not included is a land charge. For a cash rent situation, cash rent would have to be added to non-land costs to arrive at total costs per acre. Adding a $230 per acre cash rent to the $492 per acre non-land costs arrives at total costs of $722 per acre.

Between 2002 and 2009, non-land costs increased from $245 per acre up to $533 per acre, an increase of $288 per acre (see Figure 1). Then costs decreased to $439 per acre in 2010, a decrease of $94 from 2009 cost levels. The $94 decrease between 2009 and 2010 were caused by two factors:

1. Fertilizer costs declined from $185 in 2009 down to $110 in 2010, a decrease of $75 per acre. Fertilizer costs declined because fertilizer prices declined. In November 2008, when much of the fall applied nitrogen was being purchased, anhydrous ammonia prices averaged above $1,000 per acre. From this level, ammonia prices declined to the mid $400 range in fall of 2009.

2. Drying costs declined from $38 in 2009 down to $9 in 2010. Drying costs were high in 2009 because of above average moisture levels of grain coming off harvested fields.

From the 2010 cost levels, cost levels are projected to increase into 2011 because of increasing fertilizer prices.
Fertilizer Prices

Fertilizer prices have increased since summer 2010 (see Figure 2). Average fertilizer prices in Illinois are reported on the first and third weeks of the month by the Agricultural Marketing Service (AMS) in a report entitled *Illinois Production Cost Report* (see [http://www.ams.usda.gov/mnreports/gx_gr210.txt](http://www.ams.usda.gov/mnreports/gx_gr210.txt)). In its August 19th, 2010 report, AMS reported the average anhydrous ammonia price in Illinois as $550 per ton. Since August, anhydrous ammonia prices have increased and were reported at $777 per ton in January 6, 2011 report. During this same time frame, diammonium phosphate (DAP) prices increased by $163 per ton, reaching $672 per ton on January 6, 2010. Potash prices increased $74 per ton, reaching $565 per ton on January 6th.

![Figure 2. Fertilizer Prices in Illinois, August 2008 to January 2011.](image)

In recent years, fertilizer prices have exhibited a positive correlation with corn prices. Theoretically, this relationship could exist because higher corn prices signals higher corn and wheat acres, leading to higher demands for fertilizer. Whatever the cause, corn and fertilizer prices are not likely to decrease through spring 2011.

Longer-Run Cost Outlook

In part, corn production costs have increased due to increases in prices of raw materials used to produce agricultural inputs, such as oil and energy. For example, crude oil prices have increased from around $50 a barrel in April 2009 up to $90 per barrel in January 2011.

![Figure 3. Crude Oil Prices ($ per barrel) at Cushing, Oklahoma.](image)
Energy and metal prices have increased for a variety of factors. The overall expansion in the global economy puts upward pressures on commodity prices. In addition, the costs of imports increase as the value of the U.S. dollar decreases relative to currencies in other countries. Since a large portion of energy and metal inputs are imported, U.S. currency devaluations cause production cost increases.

Like corn and soybean prices, there is considerable variability in energy and metal prices. However, the underlying factors of continuing global economic expansion and U.S. dollar devaluations likely will continue into the near future. Some commentators suggest that crude oil prices could exceed $100 per barrel in 2011 and 2012. Hence, it is reasonable to expect corn production costs to continue to increase into 2012.

Summary

Given current corn prices, corn production looks to be profitable in 2011 even with higher production costs. While profitable, rising production costs have increased the break-even price necessary to cover costs. Given current costs, average cash rents, and normal corn yields, current break-even prices for corn are in the $3.80 to $4.00 per bushel range. Continued cost increases will raise break-even levels in 2012. These high break-even prices suggest the need for continued prices above $4.00 per bushel in order for profitability to continue.

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