

University of Nebraska-Lincoln

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Tightening Your Belt; Refocusing on Profitability

This article by Tina Barrett, executive director of Farm Business Inc., is the first in a series by UNL experts focusing on farm profitability despite low commodity prices. Watch for more Belt Tightening articles this fall and winter to aid in your farm management.

The relative prosperity of the past few years have allowed many crop farmers to lose their focus on controlling costs. Not long ago a producer asked me: "Why should I worry about cost of production with prices like this?" For many producers, the answer has come screaming back to reality with the rapid drop in commodity prices. Sometimes it really takes looking at the numbers to understand just where we've come from and where we're headed. The following numbers reflect a group of Nebraska farmers and ranchers I work with through the Nebraska Farm Business, Inc.

A Look Back

The last year we recorded average marketing prices less than \$4.00 per bushel for corn was 2009. In that year, we recorded an average net income of \$180,197 (average farm size was about 1,100 acres) which was considerably over the 10-year average. If that's the case, why are we worried about returning to \$3.75 as an average price? Income only tells us half the story in profitability. The other half tends to be the boring side. Everyone enjoys talking about how to grow more and sell it for more, but cutting costs isn't fun. Since 2014 isn't quite finished yet, the last actual data we have for cost of production is 2013. We don't expect to see dramatic cost differences between 2013 and 2014 or even 2015.

If we compare the costs per acre in 2009 and 2013 for irrigated corn, we find a total increase of \$231.36. At an average yield of 210 bu/ac, that's an increase of \$1.10 per bushel in cost of production. With an average of 1,100 acres, that a total increase in costs of \$254,496. That takes the profit of \$180,197 to a significantly negative number. *Table 1* shows a partial breakdown of the expense comparison.

Table 1. Difference in costs per acre to produce irrigated corn in 2009 and 2013, based on producers				
in Nebraska Farm Business, Inc.				
	2009	2013	Difference	Percent of
				Total
				Difference
Seed	\$68.05	\$89.49	\$21.44	9.3%
Fertilizer	\$143.87	\$163.80	\$19.93	8.6%
Chemicals	\$50.75	\$56.16	\$5.41	2.3%
Crop Insurance	\$23.36	\$40.36	\$17.00	7.3%
Operating	\$74.52	\$112.50	\$37.98	16.4%
Power/Machine				
Costs*				
Land Rent	\$171.74	\$274.74	\$103.00	44.5%
Other Direct Costs	\$84.14	\$106.91	\$22.77	9.8%
Overhead Expenses	\$71.84	\$75.67	\$3.83	1.8%
Total Expenses	\$688.27	\$919.63	\$231.36	100%

Fertilizer (\$143.87)
Chemicals (\$50.75)
Crop Insurance (\$23.36)
Operating Power/Machine Costs (\$74.52)
Land Rent (\$171.74)
Other Direct Costs (\$84.14)
Overhead Expenses (\$71.84)

Seed (\$68.05)

Figure 1. 2009 Per-Acre Cost of Production for Irrigated Corn

Figure 2. 2013 Per-Acre Cost of Production for Irrigated Corn



CropWatch.unl.edu Nov. 6, 2014

Figure 3. Increases in Per-Acre Production Cost for Irrigated Corn from 2009 to 2013. Total increase in production cost from 2009 to 2013 is \$231.36 per acre.

Breaking Down the Expenses

Crop Insurance



Some costs, like crop insurance, will have a natural decline due to their tie to commodity prices. It's going to be cheaper to buy the same coverage in 2015 than it was in 2014 (assuming the spring price will be less than \$4.62). Does that mean you should stay with your same coverage? Crop insurance is often sold based on which option has the highest government subsidy, or which coverage level has the best odds of paying out. Many have bet on prices falling and have taken high coverage to capture that potential. Rarely do I see producers buying crop insurance based on their individual risk level or the impact to cost per acre. In all fairness, many farm producers don't have the detailed cost of production calculated and few of those who do share that detailed information with their crop insurance agents.

Instead of being happy with the drop in your crop insurance bill for 2015, consider comparing your individual costs with the projected revenue from each level of insurance to get the lowest cost that will cover your needs. Matching your crop insurance coverage to your costs will ensure you have insurance to guarantee that if disaster strikes in 2015, you will still be able to farm in 2016. If you step back and think about crop insurance the way we do health insurance, it looks different. We buy health insurance with the hope of never needing it. We look for the lowest cost plan that will cover expenses in case of an emergency. If we think of crop insurance truly as a risk management plan, the cost can be lowered.

Seed, Fertilizer and Chemicals

In talking with producers these input costs are often to blame for the significant increase in costs, but together they make up only 20% of the increase. Controlling these costs is hard since they have a direct tie to the production per acre. Spending more to increase yield can be beneficial, but it also can make you slip backward. These inputs need to be evaluated with a fresh look for 2015. Costs that made sense when corn was worth \$7.00 per bushel don't always make sense when it's worth \$3.00 per bushel.

For example, consider the application of extra fertilizer costing \$20 per acre. The extra fertilizer should give you a yield boost of 5 bushels per acre. If corn is worth \$7 per bushel, those extra 5 bushels are worth \$35 per acre and the fertilizer has made you a net increase of \$15 per acre. If corn is worth \$3.5 per acre, those 5 bushels are worth \$17.50 and the extra fertilizer has cost you \$2.50 per acre. Also, the 5 bushel yield increase is under ideal conditions; if you only get a 4 bushel yield increase from the added fertilizer, the cost is \$6.00 per acre.

Pulling these inputs back may mean pulling your yields back, but by concentrating on increasing your net return (after expenses) per acre rather than your gross return (income only) per acre you will be more profitable in the end.

Machinery Costs

Aside from land costs, the machinery costs per acre saw the most significant increase from 2009 to 2013. If we go back another five years to 2004, the average machinery cost was just \$51.46 or \$61.04 less than 2013. I blame the income tax law as much as advancing technology for the skyrocketing costs in this area. The nationwide recession starting in 2008 and 2009 caused Congress to dramatically increase the ability to write off capital purchases in the first year as a way to stimulate business spending. The fact that this recession hit at the same time as climbing corn prices was a huge benefit for those producing corn and soybeans who didn't want to pay taxes on the profits they were earning.

Buying new equipment is a fun way to reduce taxes, upgrade old equipment that was just getting by, and implement new technologies such as auto steer and GPS mapping. The problem is this cost is going to be very hard to reduce. Depreciation isn't a one year cost. The cost for machinery bought in 2013 will continue through 2020. Unlike fertilizer expense, the choice to upgrade equipment is often one that has consequences for many years. If the purchases were made with cash, that means the working capital has been reduced going into tough times. If the equipment is financed, payments must be made for the next five to seven years. Decisions on whether the operation could afford those payments were made with very different income calculations. Making those payments when there may be no profit per acre will make for tough choices. Selling extra equipment or downgrading to cheaper options causes tax consequences in a time with limited available cash.

Whatever happens with past purchases, new purchases need to be evaluated for more than their income tax benefit. Reining in machinery costs will be vital to success as it alone makes up almost 20% of all costs. Also, intermediate debt over the same five-year period has grown 26% on average. This increase in equipment debt may affect one's ability to make payments on time.

Land Costs

Of course the largest increase and the one with the most conversation surrounding it is land costs. On average in 2009, cash rent was \$171.74 per acre and in 2013, it was \$274.74. If there

is one cost that where we could see a significant difference between 2013 and 2014, it could be cash rent with another increase of \$15 to \$25 per acre.

One important thing to remember about land rent is there is nothing the same or average about it. The range of cash rents included in the average varied by over \$400 per acre. There are still some very low cash rents out there, but there are also those extreme rents talked about in the coffee shop. Not all rents need to come down, but there are some that do need to change.

The most frequent question I get from both landlords and tenants pertains to what cash rents should be. There is no perfect answer. Ideally, both parties need to make a profit for the relationship to be successful. There's no doubt that producer income is going to be down from the past few years. And, there's no doubt that landlord costs are higher due to rapidly increasing real estate taxes and are still climbing into 2014 and 2015. Without a willingness to share the private financial information of your cost of production, how can you have an open conversation about what the cash rent should be?

Eventually, land rents will have to come down. It is not sustainable to spend \$400 per acre on land rent when you are only grossing \$700 per acre. The question is how long will it take and who will still be farming when it reaches a reasonable level. Landlords will have to be willing to consider dropping rental rates or live with putting their tenants out of business and tenants will have to consider making the tough choice to not renew leases that are not at a sustainable rate for the chance to still make a profit and feed their families in the future.

Cost Control is the New Craze

So if everyone is talking about the need to control costs, how do you do it? The reality is working off averages only gets you so far. The truth about any average is that it truly is an average. It is a mathematical function that shows the middle, but no farm is average, including yours. No two farms that I work with are exactly the same. Even brothers who share major costs and equipment have different costs of production based on the little things they do differently.

So the first step in controlling costs is to KNOW your cost. Financial expert, Dave Ramsey says "A budget is telling your money where to go instead of wondering where it went." If you don't know where your money is going until it is gone, how can you begin to control it? In the farm financial world we create cash flows instead of budgets, but the reality is a good cash flow should tell your money where it should go. A cash flow that you create, give to the bank, and shove in a drawer is not a good cash flow. A good cash flow is one that is always at your fingertips, updated regularly, and changes with all the unexpected events throughout the production cycle. It should also coordinate with a projected cost of production figure for your crops, one that is updated regularly, not only with costs but also based on sales contracts.

If you can't create or maintain this kind of cash flow, it is worth hiring someone who can. This doesn't mean you need a full time CFO in your business, but it may mean you need a financial consultant that knows and understands your business and can act as your CFO so you can act as the CEO of your business. This person is someone whose abilities reach beyond balancing the checkbook and filing bills to truly helping you make management decisions throughout the year. It shouldn't be your lender or someone selling you inputs, but rather someone whose only interest is your best interest. I have had the opportunity to act in this role over the past four or five years for several operations and I know each year that the work we do together throughout the year is more valuable than just the year-end work we used to do. It truly does change cost of production into cost control.

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