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NOTE to editor: This is one in a series of articles produced by University of Wisconsin-Extension agents and specialists to address farming through difficult times. More articles can be found on the Extension Responds website at:  
[www.uwex.edu/ces/ag/farmingindifficulttimes.html](http://www.uwex.edu/ces/ag/farmingindifficulttimes.html)

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## Managing through Difficult Times: Using Cost of Production in Management Decisions

Madison, Wis. – Income is down and input prices are high. Times like these are enough to cause stress in the most seasoned of farm managers. This is also when producers are asking what they can do to minimize costs and maximize income to improve margin. While it is impossible to cover every option in one article, many farm management experts agree that determining the Cost of Production (COP), at a minimum, for your farm's major production enterprise is the first step, according to University of Wisconsin-Extension specialists.

Knowing your COP offers several opportunities to control cost and open up narrow margins. Using this knowledge in management decision-making will put you in a position to stay in business in the short run while identifying longer-term opportunities for business success. Immediately, knowing your COP places you in the driver's seat in taking advantage of competitive and even alternative purchased inputs. It also forms the foundation for decisions about whether current and future commodity prices represent "good" prices and, they are *specific* to you and your business.

Determining your COP sets you up to compare both the total as well as individual cost categories to your past business performance as well as others in your industry. Doing so identifies where you're competitive, where you're not and allows you to ask the most important question of the day; "Why?" Once this most critical of all business questions is answered you are in prime position to act on both input and market price opportunities. Use this information to reduce cost, obtain a better price for what you sell, produce more/less or restructure debt.

Where do I get the numbers to do a COP? The same place you find the input figures to file a tax return; your farm records. While the most representative numbers come from a business financial analysis and specifically the “Income” or “Farm Earnings Statement” an alternative summary is the IRS Schedule F and Schedule 4797 forms. Keep in mind that each source has an associated intent; business management or tax management respectively. A Balance Sheet is the business statement source for determining the investment in fixed assets if you take the COP to that extent.

Where do you start? Options are available! If you or someone you hire are already performing an annual business analysis with your records you already have or can easily produce a “Whole Farm” COP for your major enterprise.

The COP can be based on several alternative units. For dairy, COP is often calculated on a per cow, per CWT sold, per hundred weight equivalent (per CWT EQ) or per dollar of income basis. Each of these methods has pros and cons.

An important reason for calculating the COP is to compare one’s economic competitiveness. The “per CWT sold” method can be used when estimating the price of milk that a producer might contract for. The costs calculated using the “per CWT sold” method cannot be compared to the milk price. They must be compared to the “Income per CWT sold.” The “Income per CWT sold” is calculated by dividing all non-milk income by the CWT sold and adding that value to the milk price.

The per dollar of income and “per CWT EQ” methods are similar to each other and are needed to compare the performance of one farm or year to another. The costs on a “per CWT EQ” basis can be compared directly to the U.S. average all milk price. Indexing by the U.S. average all milk price for all farms in a comparison allows fair comparisons to occur between farms that have widely different prices.

Regardless of which of the above units are used, the higher the percent of total farm income that is represented by milk sales, the more useful the COP information is. Especially when using the per cow or per CWT sold unit, the non-dairy income and expenses should be carefully sorted out anytime non-milk income represents more than 30% of the total farm income.

The COP for crops are often calculated on a per acre, per bushel or per ton basis. Since very few farms in Wisconsin only raise one crop and no livestock, it is necessary to sort out the costs and expenses associated with that crop to calculate the COP for the crop regardless of the unit that is used. If this is done on a dairy farm, then the sorting could be part of a process in which the entire farm operation is sorted into enterprises – one for each crop and at least one for dairy (large dairy farms sometimes sort dairy into enterprises for the milking and separately for raising replacements). The purpose of an enterprise is to determine whether that entire business activity is profitable or not. An enterprise can tell you if the enterprise is profitable but may not tell you what makes it profitable.

In contrast, a partial budget can tell you what parts of the enterprise contribute to or decrease profitability. A partial budget focuses more narrowly upon the financial impact of a specific business decision.

A partial budget comparison allows you to identify options like the lowest cost ration or the maximum Income Over Feed Cost (IOFC). Let's suppose that a group of cows are currently fed 20.9 lb of corn and 6.0 lb of soybean meal. With this diet, each cow in the group would have an average \$5.20 per day of income over feed supplement cost (IOFSC) using February 2009 feed and milk prices: \$9.40/cwt milk, \$3.54/bu corn and \$300/ton soybean meal. However, under the same price structure, this IOFSC could be as much as \$5.54 a day if the sources and proportions of supplemental feeds are fine-tuned. This \$0.34 additional IOFSC could be realized if the supplements are 17.6 lb of corn, 4.2 lb of soybean meal, and 5 lb of corn distiller grains (at \$140/ton). These results were found using the IOFSC tool available at the UW dairy management website. However, results will vary depending on the availability of feed supplements, your own feed costs and price received for milk.

Here's the bottom line. Choose the one that fits your needs as any COP figure is better than none! Fine tuning can always be done in the future if indicated. The important thing is to calculate and use your COP now!

So, choose your weapon! UW-Extension offers the "Wisconsin Dairy Enterprise Budget" (Excel), "COP per CWT Equivalent" (Excel and Word) both available at <http://cdp.wisc.edu/DecisionMakingTools.htm> , Corn and Soybean budgets (Excel) at <http://www.uwex.edu/ces/farmteam/budgets/fieldcrop.cfm> and the " IOFSC®" (on-line) at <http://www.uwex.edu/ces/dairymgt/> programs free of charge! Assistance with accessing, choosing or completing your COP using these tools is available by contacting your local UW-Extension agricultural agent.

Be sure to examine the many other decision-making aids available on each of these sites when you're visiting the programs mentioned above. And remember; "If you can measure it you *can* manage it!"

To access more information and/or tools to help analyze your situation, link to the Extension Responds web page at: [www.uwex.edu/ces/ag/farmingindifficulttimes.html](http://www.uwex.edu/ces/ag/farmingindifficulttimes.html)

For assistance in making these tough decisions, contact your UW-Extension county agent, your Farm Business and Production Management Instructor in the Technical College or the DATCP Farm Center at 1-800-942-2474.

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