



# Searching for the best way to increase profits?

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Right now, many dairy producers are still looking for the best way to fill all of the quota that was allocated to them over the past two years in response to market growth. Producing more is fine as long as it brings in a profit, particularly under the current circumstances, with milk prices lower than they were just a few years ago.

Exchanging ideas with other producers can be an excellent source of inspiration, but it's hard to extrapolate from one experience. What works on one farm doesn't always have the same effect on another.

By studying the technical and financial results of 400 dairy farms from 2011 to 2015 in the Agri-Tel data bank (GCAQ data bank), I thought I might be able to root out the recipe for success. The findings of that analysis are presented here.

## Cost of concentrates: There's more to it than meets the eye

The first surprise is that the cost of concentrates only accounts for five per cent of the variation in production costs. Another surprise is that the cost of concentrates per hectolitre increases only slightly as milk production per cow increases. Of course, the cost is not the same on every farm, but there are low and high costs at all production levels. So high production doesn't justify unusually high concentrate costs, nor can low production be written off as a way to save on concentrates.

Does this mean the cost of concentrates is of little importance as an indicator? Absolutely not, but concentrate costs have to be interpreted in conjunction with total feed costs (\$/hl) and production per cow. Although the cost of concentrates increases slightly when production per cow rises, total feed costs may decrease because there will be fewer cows to feed and, therefore, less hay consumed. Fewer cows also means less work and less capital invested in farm buildings. This is why we don't see a strong cause-and-effect relationship between concentrate costs and production costs. In fact, the overall feed cost (forages + concentrates) has a greater impact on production costs, accounting for 19 per cent of the total variation.

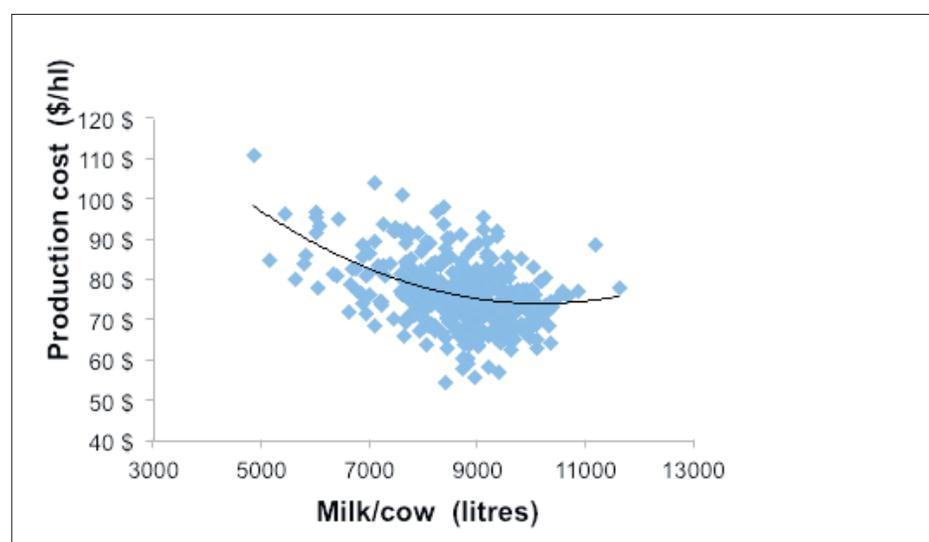
## The cost of production decreases when production per cow increases

Figure 1 presents the results of each of the farms that were part of the study sample (blue squares), and the curve shows the evolution of the relationship between production per cow and production cost per hectolitre.

## If these trends are not consistent with what we're seeing on our farms, then we'll have to consider doing things differently.

Unsurprisingly, the cost of production tends to decrease as production per cow increases, levelling off at about 9,500 L for the 400 farms in this study.

Figure 1: Production cost vs. milk/cow



Source: Agri-Tel, 2011-2015



It's important to work on one goal at a time, while keeping an eye on the operation's overall performance.

But the scattering of results above and below the trend curve indicates that the relationship is far from perfect. And because we see good and poor results at all levels of production,

increasing production per cow is not guaranteed to lead to lower production costs. We can say, however, that when the right steps are taken to increase milk production per cow, the outcome is profitable.

## What other factors make a difference?

Forage production costs alone account for 16 per cent of the variation in the production costs of the farms in the sample. Producing good-quality forage at a reasonable cost has as much influence on the cost of milk production as high production per cow does.

Work efficiency is also an important factor, accounting for nine per cent of the variation. The data analysis shows that there is no link between the number of cows per worker and the herd average. So if the cows produce more milk without requiring more time, that means more milk per worker.

Lastly, we know that in comparison

with our neighbours to the south or in Western Canada, Quebec producers invest quite a lot of money in farm buildings and equipment. And that's not even taking into account the price of farmland and the machinery used to farm it. Investing is a business requirement, but it's important to make the right choices. The analysis reveals a significant relationship between the cost of production and the return on assets, with the former accounting for 34 per cent of the variation in the latter. Investing wisely thus means putting less horsepower in the field and more kilograms in the barn!

## Conclusion

The trends observed on the 400 farms included in the analysis give us an indication of the aspects that have the greatest impact on milk production costs. The analysis confirms some things we already knew, but also dispels some of the myths. Moreover, the results provide food for thought: If these trends are not consistent with what we're seeing on our farms, then we'll have to consider doing things differently. The key lesson here is that we mustn't rely on a single indicator and forget about the rest, because we risk losing profit elsewhere. Finally, it's important to work on one goal at a time, while keeping an eye on the operation's overall performance.