

# Strategies for Increasing On-Farm Profitability

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## ■ Take Home Messages

- Calculating cost of production is essential for any effective decision on a dairy operation.
- Make decisions based on data, not emotions.
- There are “controllable” and “uncontrollable” factors in dairy production. However, you can always control your reaction to the uncontrollable.
- Effective dairy managers make proactive decisions.
- Don’t put a Band-Aid on a bullet wound. Ignoring the most limiting factor or bottleneck while fixing every other problem will not bring your dairy to the next level.
- Maximizing quality and quantity of home-raised forages is the best way to control feed costs.

## ■ Introduction

Calculating cost of production is incredibly important for dairy producers and their advisors. Business and management decisions need to be based on data from an individual farm; what may work on your neighbor's farm may not be economical on yours. With margins becoming tighter it's even more important for maximum utilization of all assets including cows and crop acres.

Frequently, dairy producers make decisions based on emotions, not data, and are reacting to a situation rather than being proactive. Day to day responsibilities take precedent over careful planning and financial analysis. In order for dairies to be profitable and survive in this ever volatile, global market, they must implement profitable actions today based on accurate farm records.

## ■ **The Controllable Versus the Uncontrollable**

“Control the controllable” is a phrase often used in the dairy industry. Focusing on what you cannot control is not only futile but emotionally grating, especially during economic downturns. However, ignoring the uncontrollable can create missed opportunities for increasing profitability. The list of uncontrollable factors in the dairy industry is long but the more relative ones are feed, milk, heifer, and fuel costs. Others include weather, interest rates, global markets, people, and, governments. The key profitable actions are limiting the amount of uncontrollable factors (for example contracting prices) and focusing on controlling your reactions to the uncontrollable and making sound decisions.

## ■ **Making Decisions Based on Data**

Key data that every farm should know are 1. cost of production 2. breakeven numbers and 3. feed and animal inventories.

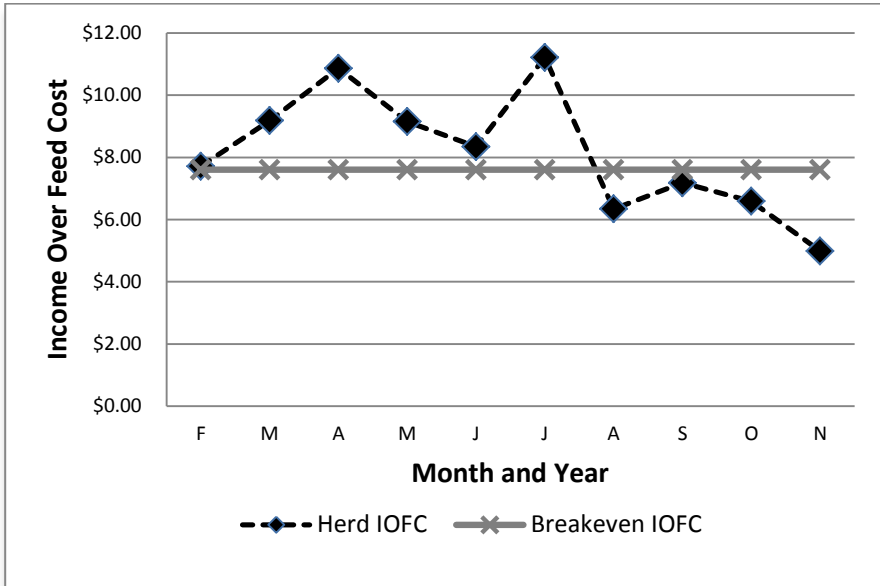
### **Cost of Production**

Cost of production per unit of milk or per animal is not only essential to make effective decisions but will highlight bottlenecks that may not be obvious from day to day interactions.

Example: A dairy operation calculated their total cost of production and it was very high. Looking further into their costs per cow, their fuel cost was extremely high compared to the average or even the “high” group. Discussion quickly turned to their very old, underground fuel tank that they thought may be leaking for some time. The cost of the fuel tank was estimated to be less than the lost fuel from one year.

### **Breakeven**

Calculating and monitoring a breakeven number incorporates a farm’s specific cost of production and the market values of milk and/or feed. Examples are breakeven milk price, margin, or income over feed cost (IOFC). A breakeven milk price is indicative of how competitive a dairy is within the current milk markets and efficiency of milk production (costs of production per unit of milk). Breakeven milk margin or IOFC will reflect efficacy of milk production. Current IOFC compared to the breakeven will indicate efficient feed utilization and or adequate milk production.



**Figure 1. A dairy herd’s current versus breakeven IOFC. Current herd IOFC above breakeven IOFC indicates a profit and below indicates a loss.**

**Feed and Animal Inventories**

Maintaining a current feed inventory can allow swift feed purchasing decisions and avoid lapses in available feed and inconsistent diets. This simple, yet often overlooked tool is critical for long term planning and proactive feeding decisions. On dairies with corn silage based diets, poor cropping conditions will often limit the amount of corn silage available to the entire herd. Diets can be modified to maintain the level of corn silage fed to the lactating cows and avoid dramatic decreases in milk production. Estimating the days available to each feed will allow decisions to be made immediately to reformulate diets, contract purchase feed, or adjust animal inventories.

**Table 1. Example feed inventory estimated on November 2<sup>nd</sup>, 2012 and calculated available days to feed with the current diet fed on a Pennsylvania dairy operation.**

	tons (US)	tons (metric)	Days to feed
Corn silage	825	748	471
Haylage	110	100	157
Ryelage	15	14	214

## Ineffective Monitoring or Benchmarking

Benchmarking can be an incredibly useful tool if carried out accurately. However, problems can hide in herd averages and severe problems can be overshadowed by an “interesting” problem.

Example: I was asked to join a dairy advisory team after consulting with the dairy producer one on one. His dairy advisory team met every other month and usually discussed topics such as low butterfat and reproduction. I shared with the team his cost of production and breakeven and highlighted the financial problem areas. The team continued to focus on the butterfat issues. The next meeting I brought a simplified table with the following information: income and milk production needed to breakeven, milk production to date, cow inventories, and a few key expenses. The team finally realized that the herd was not producing enough milk. The average production per cow was just below the goal but he wasn’t keeping enough cows in the milk herd so the total volume of milk leaving the farm did not bring enough income to the farm in order to pay his bills. A simple problem that was being missed by a group of highly educated dairy consultants because butterfat was the problem they decide they wanted to fix. Altering the butterfat content of the milk was an issue and could be indicative of other problems but it was not the bottleneck to this farm’s profitability problems. The team was trying to mend a bullet wound with a Band-Aid.

Monitoring average milk production through tools like DHI can be helpful but milk shipped should always be monitored.

**Table 2. Example of DHI and milk shipped differences and the effect on total income.**

	Milk kg/cow	Milk kg/year	Income per cow*	Total Income per Year
DHI	35.4	1,291,391	\$4,918	\$540,980
Shipped (98 cows in tank)	32.7	1,168,212	\$4,448	\$489,280
Difference		123,179	\$470	\$51,700

\*100 milk cows, 10 dry cows

## ■ Decreasing Purchased Feed Costs

On most dairy operations, feed is usually the biggest expense. Monitoring IOFC has become an essential part of dairies’ cost control measures. Decreasing purchased feed costs without sacrificing milk production can be hard to achieve if home-raised feeds are not optimal. Quality and/or quantity

issues will inevitably increase purchased feed costs from expensive energy or protein sources. Fixing last year's crop is not an option to solve today's high feed cost but must be addressed to solve long term problems. Alternative forages and multiple cropping or relay cropping strategies are becoming more popular especially with decreased land availability in certain areas.

## ■ References

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