Squeezing More Net Income from Your Dairy

By Donna M. Amaral-Phillips

College of Agriculture,
Food and Environment
Cooperative Extension Service

As of the time of writing this article in late April, milk prices are continuing to look more favorable, especially in comparison to those seen over the previous 2+ years. However, input costs, be it for feed, fertilizer, parts, milk hauling, and almost every other input, have increased tremendously. Even with higher milk prices, these higher input prices have definitely put a damper on having "some, if any" extra dollars to cover expenses for delayed repairs, payment of outstanding bills, or needed improvements or additions; thus, again adding to the challenges of managing a dairy business. Unfortunately, higher costs for feed and fertilizer look to continue for the foreseeable future. Cost containment along with maximizing income will again be the story for the day.

Soundly managed dairy businesses require that their managers continuously evaluate several aspects of the finance and cow management. Keeping feed costs in line, reducing feed losses, and managing cows such that income over feed costs are maximized, are a necessary and on-going business practice. One must take control and be the best business and cow manager possible in today's business climate. Taking time to review one's on-farm management practices of which you control can definitely pay financial and performance dividends.

1st Control Feed Shrink

Minimizing feed waste (referred to as feed shrink) of both forages and grains (individual grains, grain mixes, or/and commodities) directly impacts feed usage and cost as well as overall profitability of a dairy operation. Feed shrink reflects the amount of feed lost due to wind and rain, birds or rodents, spilt feed while loading, feed tracked on tractor tires, errors with TMR scales, feeding errors, and mismanaged practices during storage of silages.

Reduce Grain/Commodity Losses: Wind can increase feed shrink not only at delivery and storage, but as importantly when commodities are loaded into the TMR mixer. These wind-related losses can occur when commodities are stored in open-sided commodity sheds as well as feed bins and liquid delivery systems. Use of properly constructed windbreaks, for example "L" shaped commodity sheds positioned perpendicular to the prevailing winds, totally enclosed commodity sheds, or loading mixers in a location that minimizes drift from wind can help reduce feed shrink.

Reduce Forage Losses: Mismanagement of silage storage structures (bags, uprights, trenches, or piles) can represent the greatest amount of feed lost on today's dairy operations and the greatest opportunity for changes to positively impact profitability!!! Improperly stored forages, especially those stored in bunkers and trenches, can have storage losses 10 to 15% or more above the normal, expected storage losses. For example,dry matter losses can be substantial in bunkers and drive-over piles not harvested at the correct moisture, packed adequately, and covered with plastic that is weighed down adequately, i.e. with tires which touch. Filling silos above sidewalls increases their storage capacity, but if not packed adequately especially on the sides above the silo walls- which is nearly impossible, can result in much wasted feed due to spoilage. A study with uncovered bunker silos showed a 75% loss of dry matter of corn silage within the top 10 inches and 25% losses within the next 10 inches of surface area on top of the bunker compared to bunkers properly covered with plastic and tires. For a 30 by 100 ft bunker, approximately 50 tons of silage

would be lost. This amount of silage is equal to the amount needed to feed approximately 10 lactating cows for a year or $2250 worth of silage (valued at $45/ton silage). These losses are substantial and are not seen unless the difference between the amount of silage entering and fed out of a structure is measured. To make the best use of forage resources, proper management of forages during storage and at feedout is critical.

2nd Manage Cows to Maintain Cow Comfort

Don't forget that cows spend 12 hours daily resting so a soft, dry, and adequately sized bed is important. Fans and sprinklers/soakers need to be used when temperatures are greater than 65ºF in both holding pens and stalls and feed bunks in barns . Management practices to reduce heat stress need to be a priority for not only the milking herd, but also dry cows, springing heifers and calves.

3rd Manage Feed Delivery To and Within the Feedbunk

Don't limit feed intake: Cows eat and *need to eat* a tremendous amount of feed over the day. Cows eat numerous (often up to 10) meals daily when given the opportunity. Feed needs to be available in the feedbunk when these cows choose to eat. The inclination, especially with higher feed prices, is to cut down on the amount of feed left in the bunk at the next feeding time, often referred to as "feeding to a slick bunk". The problem comes as groups of cows (or individually fed cows, i.e. tie stall barn) do not eat the same amount of feed each day and the last thing you want is to limit intake, especially of early lactation cows. If limiting the amount of feed left over at the next feeding, the bunk needs to be monitored and cows fed earlier when bunks become empty or contain less refusal than normal.

Ensure consistent ration delivery: Ensure that diets delivered to cows are in the proportions the nutritionist recommended in the balanced ration and cows are eating the amounts on the ration printouts or more. Rations need to be mixed and ingredients provided in a consistent amount from feeding to feeding after accounting for moisture content (on a dry matter basis). Properly used and calibrated scales on TMR mixers (or scoops used in tie stall barns) are important components in providing a consistent amount of each nutrient to the rumen bacteria and then the cow herself. Remember that the rumen bacteria are responsible for providing the cow most of the nutrients she uses to make milk, grow, and reproduce. Proper mixing times and maintenance of knives and plows in TMR mixers are important in providing a consistent mix.

Process corn grain adequately prior to feeding in a TMR: Corn grain that is finely ground (400 microns) provides more energy to the bacteria than cracked corn or more coarsely ground corn. Thus, the reasoning for finely grinding corn used in TMR mixtures.

4th Look for Other Opportunities and Other Ways to Feed Your Cows

Continue to shop for the best buys. These best buys may be in the price of ingredients or nutrients, reduced costs associated with hauling (back hauls etc.), purchasing in bulk, or cash versus credit pricing. Be careful when buying commodities though – know what you are purchasing.

Consider the pros and cons of feeding multiple rations: Formulating and feeding more than one ration (or multiple rations, i.e., high, mid, and low) for a herd of cows often does result in feed cost savings. However, these feed savings do need to be greater than labor costs associated with feeding additional rations.

5th Don't Forget Feeding and Management Programs of Heifers and Dry Cows

Feeding programs are designed for heifers to grow and be the proper size and age at calving. However, cost savings may be in the form of the amount and composition of grain mix needed. For example, if one could reduce the amount of grain fed to a group of 50 bred heifers by 1 lb/head as well as saving $10/ton, a savings of over $250 per month could be realized. The same could be true of feeding programs for dry cows. Just remember that feeding and management programs for dry cows set the stage for their performance as lactating cows.