

Cash Flow Analysis: The Next Step in Dairy Production Medicine

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Abstract

Veterinarians marketing dairy production medicine strive to offer programs that represent an investment in their producers' financial future. Programs based on nutritional consultation, milking equipment evaluation, and records analysis share a goal of improving cow performance.

A major component of these consulting programs involves recommending how our clients spend their money. Veterinarians with a primary interest in nutrition and herd averages propose feed changes; those having a primary interest in milking systems propose equipment updates, etc. Recognizing that most dairy producers operate with limited capital resources, establishing spending priorities may be the greatest benefit of a complete production medicine program.

Spending priorities can't be established without the assistance of some financial analysis. Partial budgets may have some benefit in projecting the impact of future interventions, but cash flow analyses are more useful for measuring the true results of our intervention. After several years of producing cash flow analyses for dairy producers, a simplified system has been established that will allow all interested production medicine practitioners to include this service in their consulting programs.

As the phrase "Production Medicine" implies, the focus of preventive medicine programs has centered on improving production. Assuming that the purpose of improving production is to improve our producers' profitability, we must move past production as the sole measurement of our success. Reviewing 1990 financial records for 657 Northeast herds utilizing Agrifax book-keeping services, 1/2 of the herds producing greater than 22,000 pounds per cow did not generate sufficient profit to repay debt.

We can be quite certain that whomever offers nutritional advice to these negative cash flow, high producing herds boasts far and wide of their "successful" program. The appropriate measure of our consulting programs is not rolling herd average. It is the impact on farm cash flow. Improving milk production is of little benefit if the increase in input costs outweighs the increase in milk income. Even if the costs of a consultant's recommendations can be cash flowed by the highest producing herds, that can't be used as justification to impose the same feeding program on herds that aren't successful in increasing production.

As producers more readily implement the recommendations of their veterinarian, we must remember the credo that we should first "do no harm." If our advice affects how producers spend money, we must extend this maxim to include not doing any economic harm. Too often, production medicine consultants identify investments that would improve the dairy facility without any consideration to the producers ability to make the payments on the new investment.

Consider using a partial budget to demonstrate to a producer that the improved heifers graduating from a new barn could easily pay for the facility. This partial budget could put the farmer out of business if he can't make the new payments before he reaps the rewards from an improved heifer program.

Another foolish assumption assigned to these partial budgets is that a new facility will encourage the operator to suddenly start doing a good job in an area he has historically done a poor job. What if he still does a poor job in the new barn? How does he make the payments now?

The third common error associated with consultants' recommendations is a lack of priority ranking. So often we insist an investment should be made because it will give a return to the farmer. So what? Putting money in a savings account returning 3% will give a return, but it isn't necessarily a good idea. We need to always consider not only will our advice give a return, but will it give the best return. Just because we've learned to identify shortcomings in milking equipment, it doesn't mean that upgrading these problems is always the best investment on every farm.

If we are going to attend to the productive health of our dairies, without doing any harm, we must always consider the financial health of these dairies. No capital expenditure should be made without evaluating the effect this expense will have on cash flow, and without ranking this investment against other priorities.

Unlike partial budgets, which generally are based more on assumptions than fact and don't include all farm expenses, cash flow analysis reflects all of the prior year's expenses associated with the dairy farm. Cash

flow analysis put simply is a listing of all expenses (Table 1.) compared to income. By working with the entire budget, we avoid the possibility that an expense area might be overlooked. By using the herd's actual numbers, we avoid the inaccuracy associated with assuming a herd's expenses related to a specific enterprise are the same as an average dairy.

Table 1. Typical Dairy Farm Cash Flow Worksheet

Labor
Wages
Housing
Insurance
Benefits
Workers Compensation
Misc. Labor
Subtotal
Feed
Purchased Cow Feed
Purchased Heifer Feed
Field Machinery Repair
Land Rent
Seed
Fertilizer/Chemicals
Fuel and Oil
Machinery Hired
Misc. Feed 1
Misc. Feed 2
Subtotal
Other
Supplies
Breeding
Veterinary/Medicine
Taxes
Insurance
Utilities
Marketing
Bedding
Bdg & Equip Repair
Hooftrimming
Prof. Fees
Misc. 1
Misc. 2
Subtotal
Purchased Replacements
Cash Expenses - Total
Family Living
Cattle Sales(income)
Before Debt Expenses
Debt Repayment
Leases
Break-Even Cash Flow Required

The first step in making a cash flow analysis is to establish that the numbers provided truly reflect the expenses incurred for the time period considered. To evaluate the efficiency of feeding cows, we have to know how much feed was used. The checking account may show considerably more or less feed, depending on when feed was paid for. If a farmer prepays next year's feed bill in December, to lower this year's tax liability, this year's feed efficiency will look quite poor, while next year will look quite attractive. In our financial analysis, we need to move that prepaid expense into next year's analysis.

Improving the accuracy of financial records is a key reason why consultants need to be more involved with cash flow analyses. Just as we often found DHI data to be sadly inaccurate prior to our involvement, most dairies' financial records are far from complete. I would never form an opinion, or make suggestions, from financial records until I have personally reviewed their accuracy.

Our next step involves standardizing records from herd to herd. Large dairies comparing labor efficiency are badly misled if one dairy only includes wages as a labor expense, and his neighbor includes payroll taxes, Workman's Compensation Insurance, health insurance, and rent and utilities on the tenant house.

Conducting item by item reviews of financial records to improve their standardization has consumed a great deal of my consulting time in the past. To reduce the magnitude of this hurdle, while simplifying the task of recordkeeping on the farm, we have introduced bookkeeping software to producers. Dr. Roger Saltman, Dairy Solutions, Cazenovia, New York, has created a template for an inexpensive commercial bookkeeping program. By adopting this program, producers automatically record expenses in our standard format simply by writing a check. At the same time, they experience a first year payback in reduced bookkeeping fees.

Armed with accurate financial records, we compare each farm to our average. This comparison identifies areas of management strength, and areas offering opportunity for improvement. These opportunity areas help us focus our management at the areas where we'll get the greatest return. The management area of greatest opportunity becomes our highest priority when ranking future spending possibilities.

Adding the effect of family living, cattle sales, and scheduled debt repayment reveals the mailbox milk price required for the dairy to meet all obligations. Comparing this price to the projected price of milk in the area gives an estimate of the future viability of the dairy.

When suggesting new investments for the dairy, we add the payment for this investment to the above analysis, and look at the new cash flow. Using very conservative estimates of the benefit of our investment,

and the actual scheduled payments, we can estimate the farm's ability to pay for this recommendation. A year later, reevaluating the dairy will reveal the true impact of the new investment. If production medicine consultants start looking at the actual impact of their advice, I believe there will be a dramatic decrease in costly recommendations.

Using cash flow analysis, one would hope that our producers would show a lower cost of production each year. Changes in rolling herd average are a fraudulent method of evaluating ration balancing programs. The only true evaluation of the effect of new rations is the year end profitability of the dairy.

When major changes are planned for a dairy, cash flow projections illustrating the benefits for a dairy are useful tools when explaining these projects to lenders.

Most dairy farms in the northeast U.S. are engaged in other enterprises in addition to milking cows. These dairy farms include a beef enterprise, field crops enterprise, and replacement rearing enterprise, in addition to milking cows. Traditionally, farmers in our region

viewed all these enterprises as necessary components of a dairy farm. This view has caused thousands of producers to lose their homes, that might otherwise have been profitable.

Very few of these producers were inefficient in all of these businesses. If they had used financial analyses to identify the enterprise(s) they were successful at, and the enterprises(s) that were doing poorly, they could have avoided letting the poor enterprise pull the whole farm business down. By concentrating management on the poor enterprise, or getting out of it altogether, many of those producers would still be on their farms today.

In summary, production medicine practitioners should use cash flow analysis to:

- 1) Identify management opportunities.
- 2) Establish capital expenditure priorities.
- 3) Project the effect of planned management changes.
- 4) Evaluate intervention.
- 5) Project the future viability of the dairy.
- 6) Evaluate the dairy farm as several business enterprises.

