

## Dairy Finances 101 for Crisis Situations by Larry Tranel, Dairy Field Specialist, ISU Extension, NE/SE Iowa

Let's assume a creditor is pressuring legal action due to an accounts payable or loan that you cannot find the cash to pay on time. Unfortunately, at times like these most dairy operations are simply trying to avoid losses and maintain a positive cash flow with no sight of profits. And, tight cash flow may be straining quality of life objectives.

At times like these, producers need to turn the financial and production data they have into information for making knowledgeable decisions and survival strategies. One goal of this is to give creditors more "insurance" or confidence in your management abilities. So, where do you start? Begin with a Net Worth (NW) Statement on January 1<sup>st</sup> (or when your tax year begins and ends) so you have a snapshot of your business at the beginning and ending of each accounting (tax) year. Constructing the NW Statement ten days later than the beginning or end of the accounting period could skew the information needed for inventory adjustments to the analyze profits. Table 1 depicts a sample NW Statement that gives information critical to your business.

**Table 1. The Net Worth Statement (or Balance Sheet)**

<b>Farm ASSETS (what you own)</b>		<b>Farm LIABILITIES (debt you owe)</b>		<b>**JAN 1, 2009</b>	
<b>Current</b>		<b>Current</b>			
Cash, Savings	\$7,500	Taxes Due	\$2,350		
Feed on hand	\$35,000	Accts Payable	\$22,000		
Acct. Receivables	<u>\$6,000</u>	Principal Due	<u>\$12,500</u>		
<b>Total Current</b>	<b>\$48,500</b>		<b>\$36,850</b>		
<b>Non-Current</b>		<b>Non-Current</b>			
Cows /Heifers	\$167,000	Dairy Bank	\$142,000		
Machinery/Eq.	\$103,000	Creamy Creditor	\$119,000		
Buildings/Land	<u>\$330,000</u>	Land Contract	<u>\$69,000</u>		
<b>Total Non-Current</b>	<b>\$600,000</b>		<b>\$330,000</b>		
<b>Total Assets</b>	<b>\$648,500</b>	<b>Total Liabilities</b>	<b>\$366,850</b>	<i>57% Debt/Asset</i>	
<b>Assets – Liabilities = Net Worth</b>		<b>\$648,500 - \$366,850 = \$281,650</b>			

Note:  $\$48,500 - \$36,850 = \$11,650$  of Working Capital

$\$48,500 / \$36,850 = 1.32$  Current Ratio

Your current assets (\$48,500) minus your current liabilities (\$36,850) gives your Working Capital (WC) \$11,650 in the above example. Current assets divided by current liabilities gives your Current Ratio (CR) of 1.32. Working Capital should be enough to cover family living and current debt payments with a current ratio of 1.5 or higher meaning that is the amount of assets in excess of liabilities that can be turned to cash within the next year. In the above example with WC at \$11,650 and CR at 1.32, a lender would have cause for concern in your ability to make payments in the short run. The NW Statement measures the distance between you and insolvency (Net Worth less than \$0) and thus is the first and most important step to asses where you are in your business at a particular point in time. This NW Statement also shows a 57% debt/asset ratio which could be a risk concern to a lender.

The second statement needed is the Net Farm Income from Operations (NFIFO) Statement. While the above NW Statement shows beginning and ending points, the NFIFO Statement shows how you got from beginning to end. It is extremely important that producers take their cash records but account for inventory and other changes that do not get "cashed out" during the year like gains in cattle inventories or depreciation for instance. It is truly a gain or loss, but is not turned into cash during the year. On the next page are the components of a NFIFO Statement that show cash and non-cash income and expense changes on the NW Statement with the equation. These adjustments to Net Cash Farm Income use ending minus beginning values with their respective + or – signs.

**Table 2. Net Farm Income from Operations (NFIFO) Statement**

= Cash Farm Income	(from Schedule F)
- <u>Cash Farm Expenses</u>	(from Schedule F)
= Net Cash Farm Income	<b>(+\$300 per cow)</b>
<b>+ Prepaid Expense Adjustment (End-Beg)</b>	
- Accounts Payable Adjustment	
+ Feed Inventory Adjustment	
+ Livestock Inventory Adjustment	
- <u>Depreciation</u>	
= NFIFO	
- Equity @ 6%	(opportunity cost of capital)
= Return to Unpaid Labor	

The reason net cash farm income needs to be adjusted for inventory is the example in Table 2 that shows a net cash farm income of \$300 per cow. This \$300 of income does not show this producer made any money because they may have lost more than that in feed or livestock inventory for example. Dairy producers are encouraged to break down the farm incomes and expenses on a per cow and per hundredweight of milk produced basis. Returns to Labor below family living expenses would be a cause for great concern to a lender as well because it could cause negative cash flow unless there were outside sources of income. This leads us to the third important statement—the Cash Flow Statement which shows all sources/uses of cash, monthly or yearly.

**Table 3. CASH FLOW STATEMENT**

Beginning Cash Balance	\$1,500
Non-farm Income	\$0
Income Taxes Paid	\$21,465
Principal Payments	\$20,000
Family Living Expenses	\$45,000
Capital Purchases	\$12,000
Capital Sales	\$0
New Monies (loans, savings, etc.)	\$0
Net Farm Cash Income	\$134,798
<b>Ending Cash Flow</b>	<b>\$36,333</b>

The example dairy has a \$36,333 ending cash flow which is about 7.59% excess. When the ending cash flow is under 10% there would be cause for concern that changes in prices paid or received may put you at risk. Producers may even have negative ending cash flows projected or in reality. In this situation,

decisions need to be made and workable solutions needed to assist timely cash flow and financial obligations as bills come due.

So, those are the “Big 3” Financial Statements. If your situation needs immediate cash flow analysis, a cash flow spreadsheet is available on request. And, there are many FINPACK associates across the state willing and able to assist you doing a FINLRB or FINAN analysis. Due to the extreme milk price and feed price situation we find ourselves in, there is no cost to these at this time. And, besides preparing financial records for your banker, show your production records—a few years worth of records that illustrate you are not only a good financial manager, but also a good herd and production manager.

ISU Extension also offers the **Dairy TRANS** financial analysis system. This spreadsheet based program uses tax (Schedule F) basis records with inventory changes from Beginning to End of year to analyze the dairy farm business, Cash income and expenses are on a divided by cow numbers and hundredweights of milk sold. Dairy TRANS also breaks down financial data based on labor FTE’s (full-time equivalent) number of acres and number of cows.

**A Sample Dairy TRANS Analysis input form is available that includes:**

- 1) A Beginning & Ending NW Statement
- 2) Schedule F for income and expenses
- 3) Cash Flow data which is not necessary for a profitability analysis except for capital purchases and sales but in today’s economic environment is most important.

After this exercise is done once, many report doing it in less than 30 minutes in subsequent years so it gives lots of very useful benchmark information for minimal time input to increase your financial health.

Overall, the “Big 3” Financial Statements are “critical” during critical times as they help us better understand the farm business and each parties role within the farm. For more information on Managing Dairy Farm Finances, please contact Larry Tranel, ISU Extension at 563-583-6496 or email at [tranel@iastate.edu](mailto:tranel@iastate.edu) .

