Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

"Managing Dairy Farm Finances" in the 2009 Dairy Financial Situation

Larry Tranel, Dairy Field Specialist

NE/SE Iowa

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Let's acknowledge up front:

1) Times are Tough—Negative Profits is Norm
2) You are not alone—Industry and Economy
3) Milk Prices are Low—Feed Costs are High
4) Survival Strategies (Cash Flow) more important than Long Term (Profitability)?
5) Lenders are Worried….Need to Know how they think….

So…what can we do about it?

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Managing Dairy Farm Finances

1. Acknowledge Weaknesses:::Focus on Strengths
2. Turn Data into Information and Information into Knowledge to make ***INFORMED*** decisions.
3. Adjust CASH (tax) Records with ACCRUAL Inventory (Balance Sheet) to accurately analyze your farm business. NFIFO (next slide)
4. Know Your Cost of Production and your *relative* Per Person, Per Acre and Per Cow Efficiencies.

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Net Farm Income from Operations (NFIFO)

= Cash Farm Income
- Cash Farm Expenses
= Net Cash Farm Income **(+300/cow)**

+ Prepaid Expense Adjustment (End-Beg)
- Accounts Payable Adjustment
+ Feed Inventory Adjustment
+ Livestock Inventory Adjustment
- Depreciation
= NFIFO **Goal: Opportunity Cost of Labor and Capital**

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Managing Dairy Farm Finances

1. Profitability: cover costs—accumulate wealth
2. Reduce Risk: *avoid losses*—reduction in wealth
3. Liquidity: + cash flow in financial obligations
4. Psychological Income: quality of life objectives

Profit = (Price – Cost) x Volume

$5,000 = ($13.50-13.00) x 10,000 cwts.

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

1. Net Worth Statement – Snapshot B4 & After; ***Distance b/w You and Insolvency (still picture)
2. Net Farm Income Statement—How did you get from Beg to Year-End in the farm business? (farm video)
3. Cash Flow Statement—all sources and uses of cash both farm and non-farm. (farm and home video)
4. Lenders put more stock in cash flowability than your profitability)

Equity is good but "Cash is King" in times like these

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Farm ASSETS (what you own)			Farm LIABILITIES (debt you owe)			**JAN 1, 2009
Current			**Current**			
Cash, Savings	$7,500		Taxes Due	$2,350		
Feed on hand	$35,000		Accts Payable	$22,000		
Acct. Receivables	$6,000		Principal Due	$12,500		
Total Current		**$48,500**			**$36,850**	*$11,650 WC 1.32 CR*
Non-Current			**Non-Current**			
Cows /Heifers	$167,000		Dairy Bank	$142,000		
Machinery/Eq.	$103,000		Creamy Creditor	$119,000		
Buildings/Land	$330,000		Land Contract	$69,000		
Total Non-Current		**$600,000**			**$330,000**	
Total Assets		**$648,500**	**Total Liabilities**		**$366,850**	*57% D/Asset*

Assets – Liabilities = Net Worth

$648,500 - $366,850 = $281,650

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

…When Cash is King (tight)….

….Liquidity measures the ability of the business to meet financial obligations as they come due…

Current Ratio = Total Current Farm Assets / Total Current Farm Liabilities

Goal: 1.5 to 2

$84,000 / $28,000 = 3.00

Working Capital=Current Assets–Current Liabilities

Goal: Family Living and Term Debt Principal

$84,000 - $28,000 = $56,000

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Managing Dairy Farm Finances

Solvency measures the amount of borrowed capital relative to owner's equity. Principal payments are a necessary investment, not an expense into the farm business.

The banker needs their money back (with interest) so solvency is as important as liquidity in long run. Can principal be delayed?

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Solvency Measures

$500,000 Assets; $275,000 Debt

1. Debt/Asset Ratio = Total Farm Liabilities / Total Farm Assets — 55%
   Goal: < 40%

2. Equity/Asset Ratio = Total Farm Equity / Total Farm Assets — 45%
   Goal: > 60%

3. Debt/Equity Ratio = Total Farm Liabilities / Total Farm Equity — 85%
   Goal: < 67%

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Managing Dairy Farm Finances

Financial Efficiency

…measures the intensity a business uses its assets to generate gross revenue and effectiveness of production, pricing, financing and marketing….

…how well does the business do business…. is the business leaving money on the table?

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Profitability and Financial Efficiency:

Profit = (Price – Cost) x Volume

1. **Operating Profit Margin:** $\frac{\text{NFIFO + Int. Pd – Unpaid Labor}}{\text{Gross Revenue}}$

   Goal > 25%

2. **Asset Turnover Ratio:** $\frac{\text{Gross Revenue}}{\text{Ave. Total Farm Assets}}$

   Goal: > 33%

Gross enough to pay for all assets in 3 years

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Profitability and Financial Efficiency:

3. Return on Assets = NFIFO + Interest Pd – Unpaid Labor / Average Total Farm Assets

Goal: > Interest % you are paying bank

4. Return on Equity = NFIFO – Unpaid Labor / Average Total Farm Equity **Goal: > Opp**

Operating Profit Margin * Asset Turnover Ratio = Rate of Return on Assets

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

What should a dairy producer know?

1. Differences between Profit and Cash Flow
2. Production efficiencies (per cow, per labor FTE and per acre) and financial benchmarks.
3. Know how to keep the records needed to calculate the measures.
4. Interpret the measures to make informed decisions! Business and Cash Flow Plans for creditors

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

CASH FLOW STATEMENT

Beginning Cash Balance		$0	
Non-farm Income		$0	
Income Taxes Paid		$20,000	
Principal Payments		$20,000	
Family Living Expenses		$45,000	
Capital Purchases		$12,000	
Capital Sales (exclude cull cows sales)		$0	
New Monies (from loans, savings, ect.)		$0	
Net Farm Cash Income		$134,798	
Ending Cash Flow	7.92%	$37,798	>10%

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

DAIRY TRANS Profit Performance Rating	Yours	Goal	Average
Adjusted Gross Return per FTE Labor	$219,407	$135,000	$75,000
Return to All Labor per FTE Labor	$55,644	$40,000	$20,000
Number of Cows per FTE Labor	66	64	40
Cwts. of Milk Sold per FTE Labor	10,278	10,000	6,500
Pounds of Milk Sold per Cow	15,668	22,000	18,000
Total Debt per Cow	$512	$2,500	$4,000
Productive Crop Acres per Cow	1.3	2.5	3.5
Capital Cost per Cow $6,534 Invested/cow	$395	$500	$850
All Labor Costs per Cow	$553	$500	$800
Fixed Cost per Cow (depreciation, interest, repair, taxes, insurance)	$668	$700	$1,200
Net Farm Income per Crop Acre	$690	$600	$125
Pounds of Milk Produced per Crop Acre	11,952	8,000	5,000
Adjusted Gross Cash Income per Crop Acre	$2,551	$1,000	$600
Machinery FMV per Crop Acre	$781	$500	$650
Fuel, Gas and Oil Cost per Crop Acre	$55	$30	$35
Repair Cost per Crop Acre	$139	$30	$45
Fert/Lime/Chem/Seed Cost per Crop Acre	$59	$65	$85

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

The "Sweet 16" of Financial Ratios as determined by the National Farm Financial Standards Tas

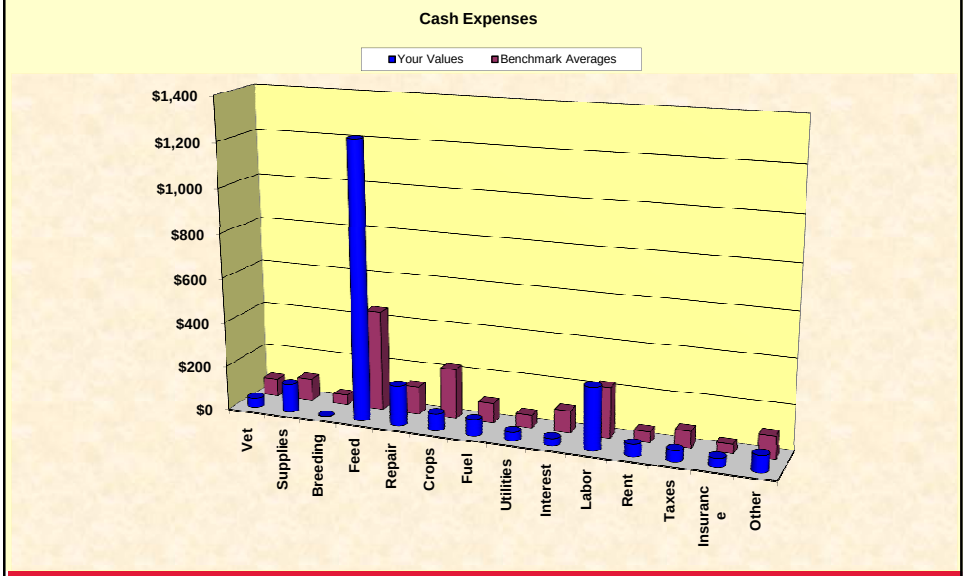
**Net Farm Income From Operations (NFIFO)			$148,347	$50,000	$20,000
**Rate of Return on Assets	6.8%	Paid..*	9.21%	12.0%	5.0%
**Rate of Return on Equity	[1-5 Profit Ratios]		9.40%	15.0%	5.0%
**Operating Profit Margin			19.88%	25.0%	15.0%
**Asset Turnover Ratio	2.2	years	46%	45%	30%
**Operating Expense Ratio	[4 Efficiency Ratios]		71%	50%	60%
**Depreciation Expense Ratio			1%	10%	15%
**Interest Expense Ratio			1%	10%	15%
**Net Farm Income Ratio	100%		27%	35%	25%
**Current Ratio	[2 Liquidity Ratios]		117503.00	1.75	1.25
**Working Capital	[Goal=Family Living+Principal;Ave=half]		$106,751	$65,000	$32,500
**Debt/Asset Ratio..[Solvency]...Begin...	8%	....End	6%	40%	50%
**Equity/Asset Ratio....Begin...	92%	....End	94%	60%	50%
**Debt/Equity Ratio....Begin...	9%	....End	7%	67%	80%

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Farm Cash Expenses	Yours	/Cwt.Eq.	/Cow	/Cow
Veterinary, Medicine	$6,932	$0.24	$42	$80
Dairy Supplies	$20,974	$0.74	$128	$100
Breeding Fees	$382	$0.01	$2	$45
Feed Purchased	$203,474	$7.13	$1,241	$450
Repairs	$29,784	$1.04	$182	$125
Seed, Chem, Fert	$12,735	$0.45	$78	$225
Fuel, Gas, and Oil	$11,832	$0.41	$72	$90
Utilities	$6,394	$0.22	$39	$60
Interest Paid	$5,716	$0.20	$35	$100
Labor Hired	$45,751	$1.60	$279	$225
Rent, Lease and Hire	$8,750	$0.31	$53	$50
Property Taxes	$8,104	$0.28	$49	$75
Farm Insurance	$6,787	$0.24	$41	$40
Other Cash Expense	$12,565	$0.44	$77	$100
Total Cash Expense	$380,180	$13.32	$2,318	$1,765
Net Cash Income	$134,798	$5.90	$822	$1,520
Inventory Change	$13,549	$0.47	$83	
* Net Farm Income	$148,347	$6.37	$905	$800
- Equity@ 5.0%	$54,989	$1.93	$335	$300
= Return to Labor	$93,358	$4.45	$569	$500

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam



IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

	Goal w/Rep	Goal w/o Rep	YOURS
Total Feed and Crop Production Costs	$290,056	$240,856	$263,820
164 Total Feed Costs Per Cow	$1,843	$1,440	$1,609
Milk Income over Feed Costs Per Cow	$1,424	$1,851	$1,404
Milk Income over Feed Costs Per Cwt.	$8.54	$11.39	$8.96
Total Feed Costs Per Cwt. Milk Sold	$8.37	$6.37	$10.27

Price of Corn/bushel	$3.40	1.24 Corn Index	Milk Price	$19.22
Price of Dry Hay/ton	$145.00	1.45 Hay Index	Milk Index	1.42
		1.34 Average		

Milk Income over Feed Costs is based on a goal of milk being sold at $13.50 per cwt.

Numbers are only as good as the percentage estimates used.

The dairy here has **$263,820** of feed costs out of **$500,160** total costs. **Feed is: 52.75%**

GOAL is: < 50%

Notes to Users on the Corn and Hay Price Index:

The base corn price index is $2.75 per bushel and the base dry hay price index is $100 per dry ton.
The milk price index is based on a milk price of $13.50 per cwt.

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

So, we shared:

1) **Profitability Issues**
2) **Liquidity/Cash Flow Issues**
3) **Solvency Issues**
4) **Production & Financial Performance Measures**
5) **Benchmark Data**
6) **Lender Concerns**
7) **What You Need to Know**
   Now, What Do You Need to Do?

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Here's my advice:

1) **Put together a Jan 1, 2008 and 09 Balance Sheet**

2) **Do a 2008 Dairy TRANS Analysis using 08 Schedule F to give you a base year showing how you did in a good year.**

3) **Project a CASH FLOW for 2009 with 6 months of data and how 2009 might end up using futures milk prices.**

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

Here's my advice: (cont.)

4) Or do a FINPACK (FINAN) financial projection for 2009.

5) Get together with Extension Dairy Team member for Dairy TRANS analysis or a FINPACK associate for the FINAN program. There is no cost at this time.

6) Besides preparing financial records for your banker, show your production records …show 3-5 years worth of records that illustrate you are not only good financial manager, but also a good herd & production managers.

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

A Sample Dairy TRANS Analysis is included:

1) **A Beg & End Balance Sheet is needed**
2) **Schedule F has income and expenses**
3) **Cash Flow data for the most part is not necessary for a profitability analysis except for capital purchases and sales.**
4) **After done once, many report doing in less than 30 minutes in subsequent years so lots of info for minimal time input.**

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

If you have questions, please give us a call.

1. **Services at this point are free/confidential.**
2. **The financial analysis gives lenders comfort that you have a handle on your business.**
3. **Remember that your options get fewer as problems get worse so get help sooner rather than later and keep your heads up.**

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.

Visit the ISU Extension Dairy Team at: www.extension.iastate.edu/dairyteam

For more information contact the ISU Dairy Team:

NW—Chris Mondak, cmondak@iastate.edu
Ron Hook, rhook@iastate.edu

NE—Dale Thoreson, dthores@iastate.edu
Larry Tranel, tranel@iastate.edu

Campus—Leo Timms, ltimms@iastate.edu
Lee Kilmer, lhkilmer@iastate.edu

IOWA STATE UNIVERSITY
University Extension
Healthy People. Environments. Economies.