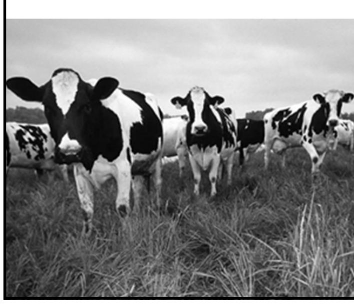
Dairy Financial Health Check-up: Key Measurements and Prescriptions

Dr. Curt Lacy
Extension Economist-Livestock
University of Georgia

Three Areas of Sustainability

1. Financial
2. Personal
3. Environmental



SOUTHEAST SUSTAINABLE DAIRY FARMS PROJECT

Dr. Curt Lacy
University of Georgia
clacy@uga.edu
229-386-3512

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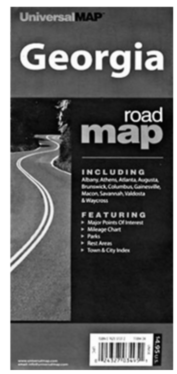
Keys to Having a Sustainable Business

1. Determine where you want to go.
2. Decide how to get there.
3. Monitor your progress and make necessary adjustments.
4. Repeat as necessary.



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Practically Speaking

1. Mission Statement – What are we doing here?
2. Goals – SMART (Specific, Measurable, Attainable, Relevant, Timely).

Dr. Curt Lacy
University of Georgia
clacy@uga.edu
229-386-3512

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SMART Goals

* **S**pecific – Precisely state what you want to do.
* **M**easurable – Assign an observable value to your goal. *You can't manage it if you can't measure it.*
* **A**ttainable – Aim high, but be realistic.
* **R**elevant – if achieved will it matter?
* **T**imely – set a measurement time.

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Examples of Good SMART Goals

* "Be milking ____ cows in ______ years."
* "Reduce purchased feed or grain cost to ______% of expenses by ___________."
* "Have the farm paid-off (debt-free) in ___ years."
* "Take _______ hours off each week/month/year beginning in _________."
* "Watch the kids play _____games this year."

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Practically Speaking

1. Mission Statement – What are we doing here?
2. Goals – SMART (Specific, Measurable, Attainable, Relevant, Timely).
3. Develop plans to achieve these goals.
4. Evaluate your progress in meeting these goals.
5. Review and adjust as necessary.

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Today's Objective

1. Present some Key Performance Indicators (KPI) for financial sustainability.
2. Help you set realistic goals.
3. Give you information about a way you can monitor your progress to that end.

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Dr. Curt Lacy
University of Georgia
clacy@uga.edu
229-386-3512

Three Keys to Financial Sustainability

1. Profitability
2. Liquidity
3. Solvency

Three Keys to Financial Sustainability

1. Profitability - indicates that value exceeds cost and is vital for long-term viability of any business.
2. Liquidity – indicates that the business can pay its bills as they come due.
3. Solvency – indicates the relative value business versus what is owed.

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Dr. Curt Lacy
University of Georgia
clacy@uga.edu
229-386-3512

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Financial Instruments You Will Need

* Farm production records
* Balance Sheets (AKA Financial Statement) for beginning and ending of the year
* Statement of Cash Flows (where did the money come from and where did it go)

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Example Farm

Dr. Curt Lacy
University of Georgia
clacy@uga.edu
229-386-3512

Key Measures of Financial Sustainability

Key Measures

Profitability
- Return on Assets (ROA)
- Return on Equity (ROE)
- Operating Profit Margin

Solvency
- Debt to Asset Ratio
- Equity to Asset Ratio
- Debt to Equity Ratio

Liquidity
- Current Ratio
- Working Capital
- Working Capital Rule

Check-up time

Dr. Curt Lacy
University of Georgia
clacy@uga.edu
229-386-3512

Profitability - NFI

$$\text{NFI} = \frac{\text{Cash Receipts} \pm \text{Inventory Change - Expenses - Depreciation}}{\text{Number of Operators or Families}}$$

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Profitability - NFI

Accounts Receivable
\- Accounts Payable
\+ Feed & Hay
\+ Value of growing crops
\+ Value of Market Livestock
\+ Prepaid Expenses
= Inventory

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Dr. Curt Lacy
University of Georgia
clacy@uga.edu
229-386-3512

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Profitability - NFI

Decision-aid

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Profitability - ROA

$$\text{ROA} = \frac{\text{NFI} + \text{Farm Interest Exp. - Operator Mgmt. Fee}}{\text{Average Total Farm Assets}}$$

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Dr. Curt Lacy
University of Georgia
clacy@uga.edu
229-386-3512

Profitability - NFI

Decision-aid

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ROA Performance

Measure	Strong	Stable	Weak
ROA – Mostly Owned	5%+	1-5%	1% or less
ROA – Mostly Rented	12%+	3-12%	3% or less

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229-386-3512

Solvency

Relative Financial Strength

Solvency – Debt/Asset Ratio

$$\text{Debt - Asset Ratio} = \frac{\text{Total Farm Liabilities}}{\text{Total Farm Assets}}$$

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Dr. Curt Lacy
University of Georgia
clacy@uga.edu
229-386-3512

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Debt-Asset Performance

Measure	Strong	Stable	Weak
Debt-Asset	40% or less	40-65%	65%+

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Dr. Curt Lacy
University of Georgia
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229-386-3512

Liquidity

Can you pay your bills?

Liquidity – Current Ratio

$$\text{Current Ratio} = \frac{\text{Total Current Assets}}{\text{Total Farm Liabilitie s}}$$

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University of Georgia
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Current Ratio Performance

Measure	Strong	Stable	Weak
Current Ratio	150%+	100-150%	100% or less

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Dr. Curt Lacy
University of Georgia
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229-386-3512

Liquidity – Working Capital Rule

$$\text{Working Capital Rule} = \frac{\text{Working Capital}^*}{\text{Total Expenses}}$$

* Working Capital = Total Current Assets - Total Current Liabilities

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Profitability - NFI

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Dr. Curt Lacy
University of Georgia
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229-386-3512

Working Capital Rule Performance

Measure	Strong	Stable	Weak
Working Capital Rule	50%+	20-50%	20% or less

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KPI Performance Summary

Measure	Strong	Stable	Weak
ROA – Owned	5%+	1-5%	1% or less
ROA – Rented	12%+	3-12%	3% or less
Debt/Asset	40% or less	40-65%	65%+
Current Ratio	150%+	100-150%	100% or less
Working Capital Rule	50%+	20-50%	20% or less

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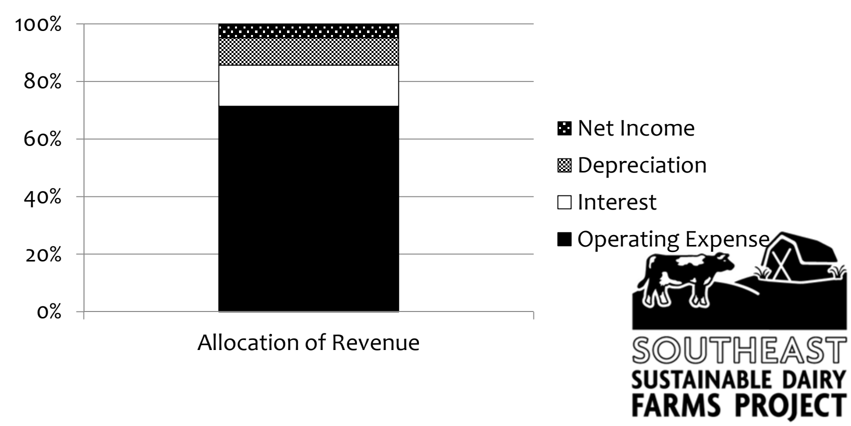
Operating Efficiency

Where does the money go?

Operating Efficiency



Dr. Curt Lacy
University of Georgia
clacy@uga.edu
229-386-3512

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Operating Efficiency

$$\text{Operating Expense Ratio} = \frac{\text{Total Cash Farm Expense} - \text{Interest} - \text{Depreciation}}{\text{Gross Farm Income}}$$

$$\text{Depreciation Expense Ratio} = \frac{\text{Depreciation}}{\text{Gross Farm Income}}$$

$$\text{Interest Expense Ratio} = \frac{\text{Farm Interest}}{\text{Gross Farm Income}}$$

$$\text{Net Farm Income Ratio} = \frac{\text{Net Farm Income}}{\text{Gross Farm Income}}$$

Operating Efficiency Ratios Summary

Measure	Strong	Stable	Weak
Operating Expense	60% or less	60-80%	80%+
Depreciation	5% or less	5-15%	15%+
Interest	5% or less	5-10%	10%+
Net Farm Income	20%+	10-20%	10% or less

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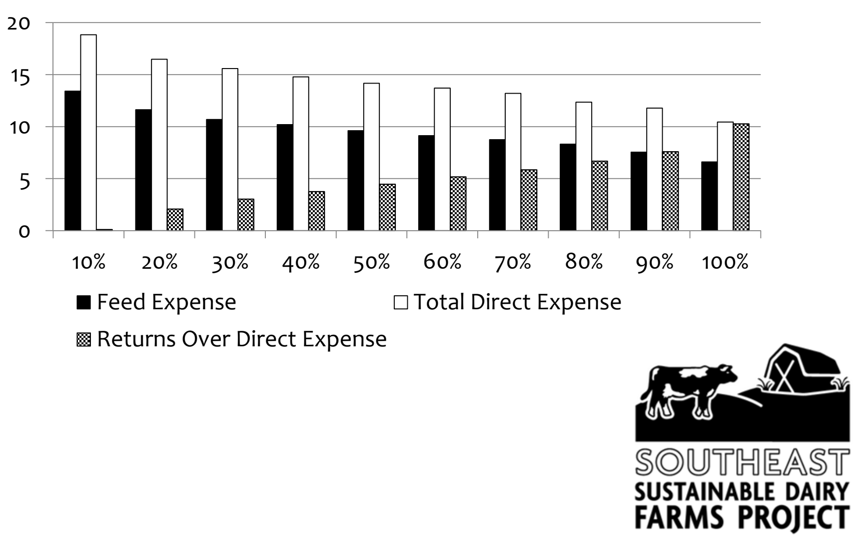
Review and Adjust

KPI for 537 U.S. Dairy Farms in 2011



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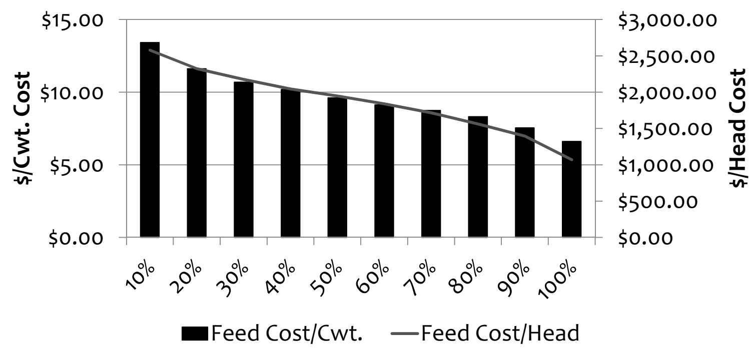
KPI for 537 U.S. Dairy Farms in 2011



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Tools to Help

* UGA-UF Benchmarking program
* AgPlan – www.agplan.umn.edu

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Dr. Curt Lacy
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Summary

1. Financial measures are just as (more?) important as production measures.
2. To be meaningful, measures must be associated with a goal.
3. The key components to financial sustainability are:
   1. Profitability
   2. Liquidity
   3. Solvency
4. If you must choose one measure use ROA
5. Consider enrolling in the UGA-UF Benchmarking program to monitor your progress.

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