Keys to Dairy Sustainability

Dr. Curt Lacy
Extension Economist-Livestock
University of Georgia

What is Sustainability?

What is "Sustainable Agriculture"?

According to USDA:

* "the term sustainable agriculture means an integrated system of plant and animal production practices having a site-specific application that will, over the long term:
  * satisfy human food and fiber needs
  * enhance environmental quality and the natural resource base upon which the agricultural economy depends
  * make the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls
  * sustain the economic viability of farm operations
  * enhance the quality of life for farmers and society as a whole."

1990 Farm Bill [Food, Agriculture, Conservation, and Trade Act of 1990 (FACTA), Public Law 101-624, Title XVI, Subtitle A, Section 1603 (Government Printing Office, Washington, DC, 1990) NAL Call # KF1692.A31 1990]

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Three Areas of Sustainability

1. Financial
2. Personal
3. Environmental

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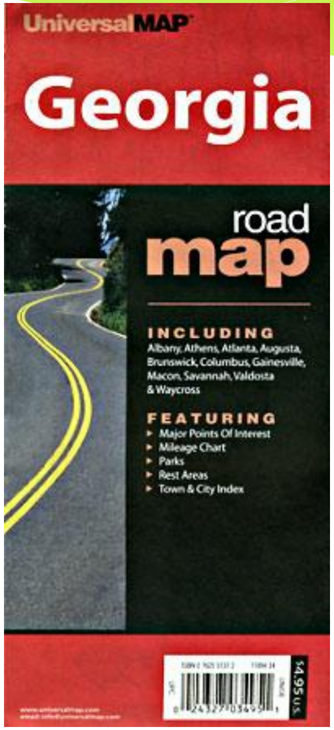
Keys to Having a Sustainable Business

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).

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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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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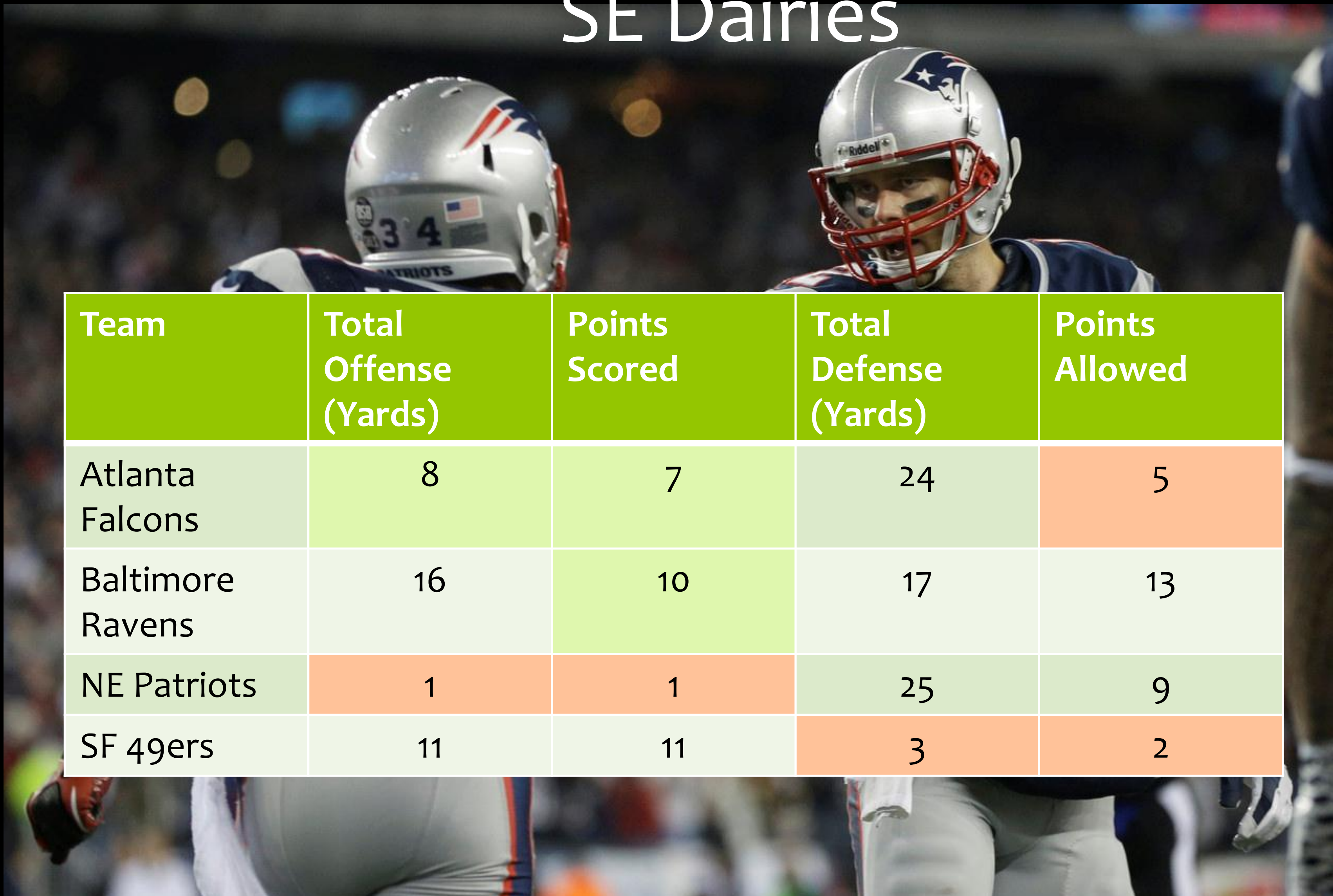
2012 NFL Division Winners vs. SE Dairies



Team	Total Offense (Yards)	Points Scored	Total Defense (Yards)	Points Allowed
Atlanta Falcons	8	7	24	5
Baltimore Ravens	16	10	17	13
NE Patriots	1	1	25	9
SF 49ers	11	11	3	2

Key Measures of Financial Sustainability

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

Profitability

Profitability - ROA

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

$$\text{NFIFO} = \text{Gross Farm Income} - \text{Gross Farm Expenses}$$

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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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Solvency – Debt/Asset Ratio

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

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Debt-Asset Performance

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

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Liquidity – Current Ratio

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

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Current Ratio Performance

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

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Liquidity – Working Capital Rule

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

$$^*\text{Working Capital} = \text{Total Current Assets} - \text{Total Current Liabilities}$$

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Working Capital Rule Performance

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

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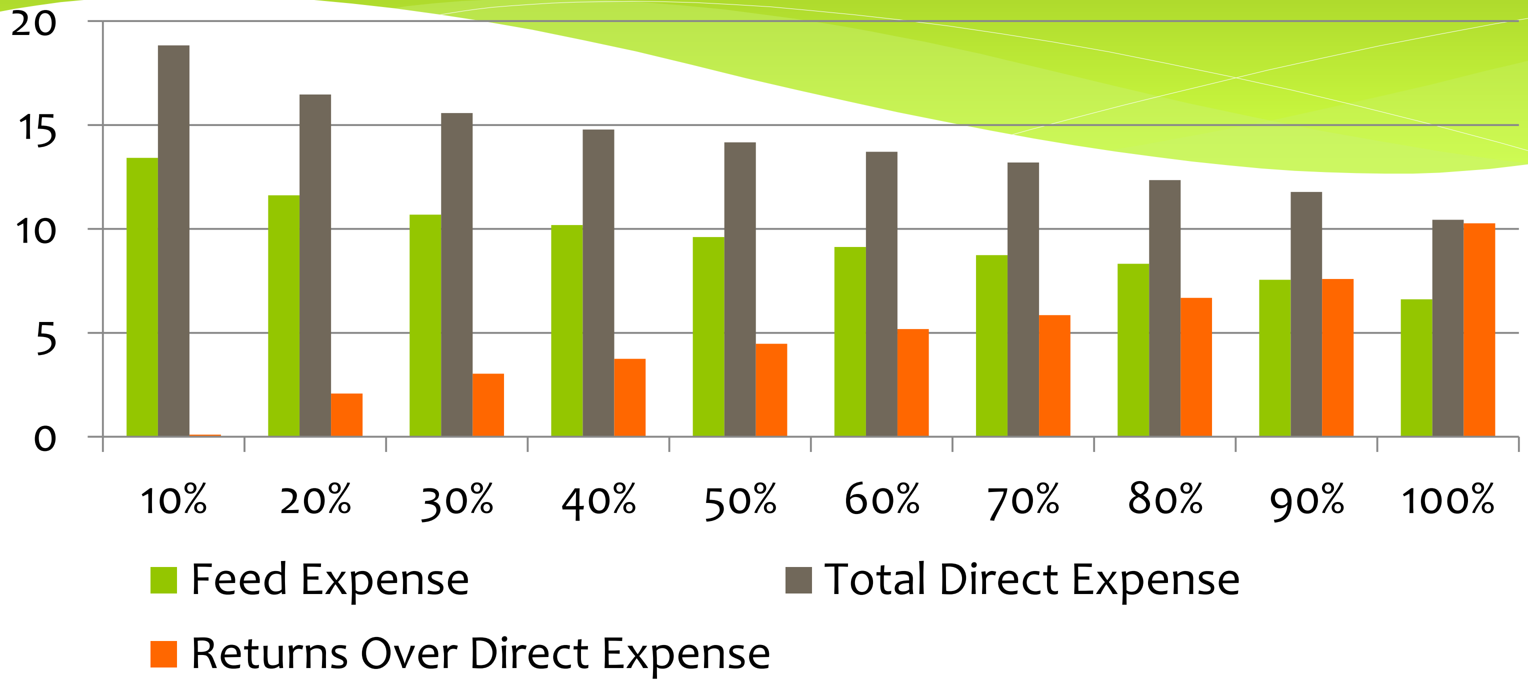
KPI Performance Summary

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

Review and Adjust

KPI for 537 U.S. Dairy Farms in 2011



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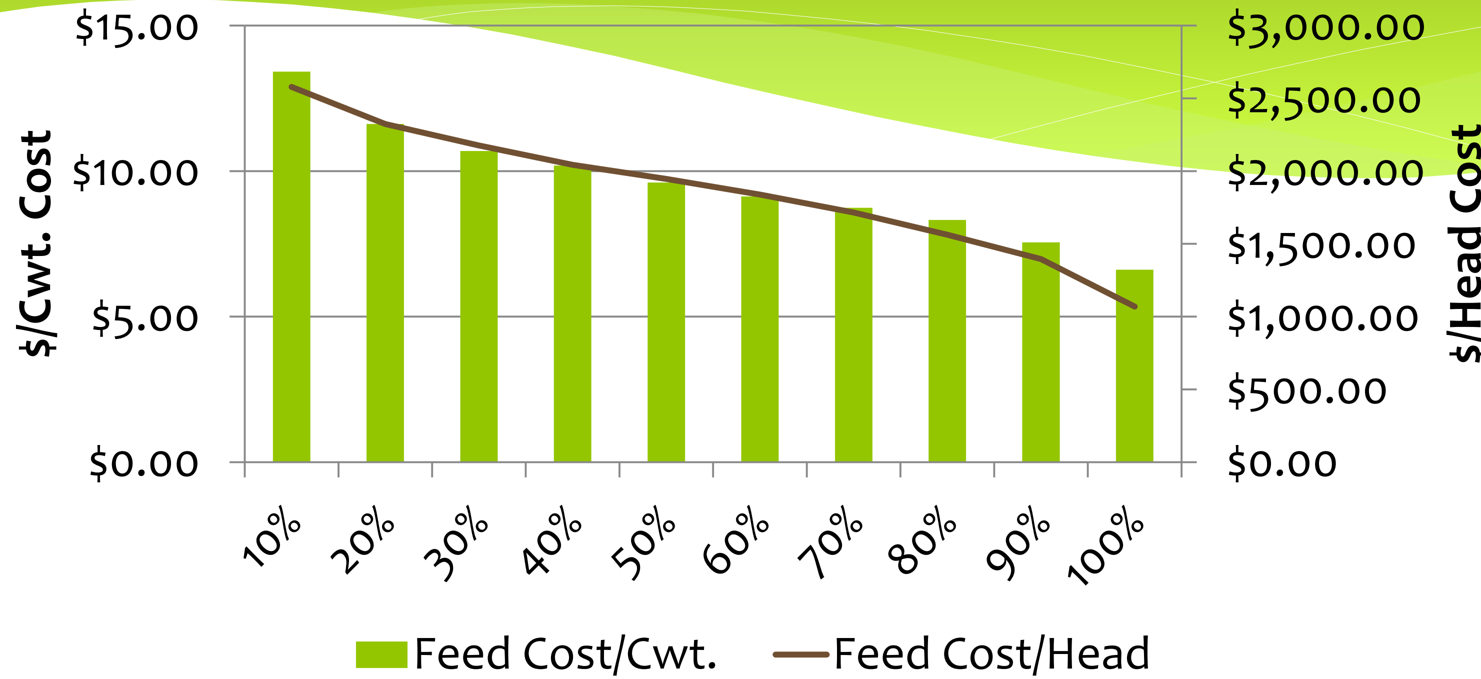
KPI for 537 U.S. Dairy Farms in 2011



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Tools to Help

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

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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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Dr. Curt Lacy

Extension Economist-Livestock

University of Georgia

clacy@uga.edu

229-386-3512