Key Management Areas Impacting Profitability

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Key Points

- Variability
- Milk Production
- Cost Control
- People
- Investment Balance
- Continuous Improvement
- Decision Making
- Prepared for Opportunities

Variability

- Have been on cycles for some time
- Previous poor years
  - 1997
  - 2000
  - 2002-2003
  - 2006
  - 2009
  - 2012?
Management Implications

- What is done during good years?
- What is done during poor years?
- How is the business positioned?
- Self insurance vs risk management plans
  - Working Capital
  - Debt Level

6 Year Trend Numbers

- 107 farms participating in Dairy Farm Business Summary for six years.
- 2006 – 2011
- Capture two 3-year cycles
- Top 20% of farms by ROA w/o appreciation vs remaining 80% of farms

Same Farms, 2006-2011

<table>
<thead>
<tr>
<th>Working Capital as Percent of Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 20%</td>
</tr>
<tr>
<td>Remaining 80%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Debt Per Cow, End of Year</th>
<th>2006</th>
<th>2011</th>
<th>Change</th>
<th>Percent Change in 2006</th>
<th>Percent Difference in 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 20%</td>
<td>$2,473</td>
<td>$2,698</td>
<td>$225.00</td>
<td>9.1%</td>
<td>-18% -17%</td>
</tr>
<tr>
<td>80%</td>
<td>$3,010</td>
<td>$3,256</td>
<td>$246.00</td>
<td>8.2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Net Worth, Beginning of 2006 to End of 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 20%</td>
</tr>
<tr>
<td>80%</td>
</tr>
</tbody>
</table>

Milk Production

- What is the trend?
- How fast is it changing?
- Never comfortable
  - Component level
  - Feed conversion
- Forage Quality
- Cow Comfort
- Others?
**Milk Production**

- Top Farms – average 5% higher milk production per cow over the 6 years
- Dairy Profit Monitor Data – 70 Farms July 2012 - Range
  - Components per cow per day: 3.32 – 6.38
  - Feed conversion: Lbs. of FCM per lb. of dry matter: 1.20 – 1.77

**Cost Control**

- Know numbers
- Question everything
- Will it work on this farm?
- How will you know?
- When will you know?
- Slippage
**Ration/Feeding Program Evaluation**

- Discussion group topic
- Information collected for September 2012
  - Group production and DMI information (# cows, milk, components, DIM, % heifers) for all lactating groups in herd
  - Rations, forage analyses, costs of purchased ingredients
  - Forages and homegrown feeds given standardized costs
    - $1.21/pt DM haylage; $1.23/pt DM corn silage (+ 10% for BMR); $200/ton HMSC; $185/ton grass hay; $1.75/ton straw

**Approach**

- All information used to calculate an aggregated single value for each farm for each metrics
  - Performance and efficiency/cost metrics
- All rations run through CNCPS
  - Elizabeth Martens and TO
  - Selected parameters extracted and used to calculate an aggregated single value for each farm
  - Most cases captured key data reasonably well
- Herds employed a variety of overall feeding strategies without apparent relationship to IOFC
  - 1 to 4 different rations for lactating herd
  - 0 to 5% targeted refusal
**Energy-corrected Milk Yield versus IOFC**

- Graph showing energy-corrected milk yield in lbs/day versus income over feed cost ($/cow per day).
- Data points range from $9.66 to $6.68.

**Feed Efficiency versus IOFC**

- Graph showing feed efficiency, lb of ECM/lb of DMI versus income over feed cost ($/cow per day).
- Data points range from $1.35 to $1.75.

**Cost per lb of DM versus IOFC**

- Graph showing cost per lb of feed DM versus income over feed cost ($/cow per day).
- Data points range from $0.10 to $0.18.

**Statistical analysis**

- Multiple linear regression analysis conducted using SAS.
- Outcome variable – IOFC.
- Input variables:
  - ECM yield, feed efficiency, cost per lb of DM.
- All three input variables were statistically significant and remained in final model.
- Model accounted for 85% of variation in IOFC.
**People**

- **Labor Efficiency**
  - What milk is being produced per worker
  - Cost per worker
  - Cost per cwt

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### MILK SOLD PER WORKER AND NET FARM INCOME
194 New York Dairy Farms, 2011

<table>
<thead>
<tr>
<th>Pounds of Milk Sold Per Worker</th>
<th>No. of Farms</th>
<th>No. of Cows</th>
<th>Pounds Milk Per Cow</th>
<th>Net Farm Income (without appreciation)</th>
<th>Labor &amp; Management Income Per Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 500,000</td>
<td>22</td>
<td>107</td>
<td>20,515</td>
<td>$68,951</td>
<td>$12,887</td>
</tr>
<tr>
<td>500,000 to 699,999</td>
<td>31</td>
<td>125</td>
<td>19,152</td>
<td>94,106</td>
<td>24,972</td>
</tr>
<tr>
<td>700,000 to 899,999</td>
<td>27</td>
<td>288</td>
<td>23,007</td>
<td>257,453</td>
<td>88,241</td>
</tr>
<tr>
<td>900,000 to 1,099,999</td>
<td>48</td>
<td>611</td>
<td>23,834</td>
<td>613,725</td>
<td>217,514</td>
</tr>
<tr>
<td>1,100,000 &amp; over</td>
<td>62</td>
<td>931</td>
<td>25,804</td>
<td>1,199,265</td>
<td>393,360</td>
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### People

- **Labor Effectiveness**
  - How good a job are people doing?
  - How are they impacting output?
  - How are they impacting costs?

- **Impact on Slippage**
- **How to manage**
People

- Not just employee’s
- Service providers
  - Part of the team
  - Ask for input
  - Evaluate advice

The Owners/Operators

- Interacting with others that are positive
- Surrounding themselves with others trying to accomplish similar things
- Setting the culture of the business
- Continuous professional development

Investment

- Balance
- Capacity
- Growth in earnings

Asset Turnover and Profitability

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Number of Farms</th>
<th>Number of Cows</th>
<th>Farm Capital (average for year)</th>
<th>Labor &amp; Management Income Per Worker</th>
<th>Net Farm Income (without appreciation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 to 69</td>
<td>48</td>
<td>745</td>
<td>$3,898</td>
<td>$345,159</td>
<td>$339,585</td>
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<tr>
<td>50 to 59</td>
<td>41</td>
<td>408</td>
<td>$11,377</td>
<td>$306,642</td>
<td>$163,943</td>
</tr>
<tr>
<td>Less than 50</td>
<td>52</td>
<td>200</td>
<td>$12,399</td>
<td>$514,680</td>
<td>$43,064</td>
</tr>
</tbody>
</table>

Top 20% of Farms vs Remaining 80% of Farms

Selected Measures, Six Year Comparison

Same 107 Farms, 2006 - 2011

Dairy Farm Business Summary, New York State
Same Farms, 2006-2011

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</thead>
<tbody>
<tr>
<td>Top 20%</td>
<td>671</td>
<td>911</td>
<td>240.91</td>
<td>35.9%</td>
<td>48%</td>
<td>77%</td>
</tr>
<tr>
<td>50%</td>
<td>493</td>
<td>516</td>
<td>23.11</td>
<td>13.9%</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tillable Acres per Cow</th>
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<tbody>
<tr>
<td></td>
<td>1.78</td>
<td>1.87</td>
<td>1.95</td>
<td>1.91</td>
<td>1.79</td>
<td>1.84</td>
</tr>
<tr>
<td>Corn Grain Acres per Cow</td>
<td>1.96</td>
<td>1.99</td>
<td>2.06</td>
<td>2.04</td>
<td>2.08</td>
<td>2.08</td>
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</tbody>
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Continuous Improvement

- Never complacent
- What to improve next
- Set goals
- Asking questions
  - What is new that we should be doing?
  - What is holding us back?
  - What are the next opportunities?

Decision Making

- How are decisions made?
- How fast is change made?
- Type 1 error vs Type 2 error
- What is done when a mistake was made?

Prepared for Opportunities

- Earnings
- Bank relationships
- People
- Working capital
- Ability to make a decision
Questions

Thank You!