Dairy Business Analysis Project 1997: Regional Characteristics and Financial Performance

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<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russ Giesy</td>
<td>Marvin Hoekema</td>
</tr>
<tr>
<td>Mary Sowerby</td>
<td>Pat Miller</td>
</tr>
<tr>
<td>David Solger</td>
<td>Bob Tervola</td>
</tr>
<tr>
<td>Travis Seawright</td>
<td>Patrick Joyce</td>
</tr>
<tr>
<td>Chris Vann</td>
<td>Michael DeLorenzo</td>
</tr>
</tbody>
</table>

Florida Dairy Check-Off
Overview

- **Financial performance**: revenues, expenses, and net farm income.
- **Expense composition**: where the money was spent.
- **Asset composition**: where the money was invested.
- **Regional constraints and recommendations**.
## 1997 Revenues and Expenses by Group

<table>
<thead>
<tr>
<th>Category ($ per cwt.)</th>
<th>Central</th>
<th>All Dairies</th>
<th>Upper 25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td>17.74</td>
<td>18.31</td>
<td>19.77</td>
</tr>
<tr>
<td>Personnel</td>
<td>2.70</td>
<td>2.45</td>
<td>2.34</td>
</tr>
<tr>
<td>Purchased feed</td>
<td>9.62</td>
<td>8.37</td>
<td>8.40</td>
</tr>
<tr>
<td>Crops</td>
<td>0.15</td>
<td>0.33</td>
<td>0.55</td>
</tr>
<tr>
<td>Machinery</td>
<td>0.79</td>
<td>0.86</td>
<td>0.83</td>
</tr>
<tr>
<td>Livestock</td>
<td>1.84</td>
<td>2.44</td>
<td>2.13</td>
</tr>
<tr>
<td>Marketing</td>
<td>0.99</td>
<td>1.06</td>
<td>0.96</td>
</tr>
<tr>
<td>Real Estate</td>
<td>0.46</td>
<td>0.50</td>
<td>0.56</td>
</tr>
<tr>
<td>Other</td>
<td>1.35</td>
<td>1.39</td>
<td>1.24</td>
</tr>
<tr>
<td>Depreciation</td>
<td>0.63</td>
<td>0.63</td>
<td>0.63</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>18.53</td>
<td>18.02</td>
<td>17.63</td>
</tr>
<tr>
<td>Net farm income</td>
<td>(0.79)</td>
<td>0.29</td>
<td>2.15</td>
</tr>
<tr>
<td>Category</td>
<td>Central</td>
<td>All dairies</td>
<td>Upper 25%</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------</td>
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<td>-----------</td>
</tr>
<tr>
<td>Number of cows</td>
<td>1,529</td>
<td>1,502</td>
<td>1,428</td>
</tr>
<tr>
<td>Number of heifers</td>
<td>1,000</td>
<td>883</td>
<td>928</td>
</tr>
<tr>
<td>Milk sold per cow (pounds)</td>
<td>19,141</td>
<td>17,014</td>
<td>17,053</td>
</tr>
<tr>
<td>Cull rate</td>
<td>38%</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>Assets per cow</td>
<td>$4,318</td>
<td>$4,178</td>
<td>$3,872</td>
</tr>
<tr>
<td>Rate of return on assets</td>
<td>(1%)</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>Operating profit margin</td>
<td>(3%)</td>
<td>2%</td>
<td>11%</td>
</tr>
<tr>
<td>Asset turnover ratio</td>
<td>0.89</td>
<td>0.84</td>
<td>0.94</td>
</tr>
</tbody>
</table>
Revenues, Expenses, and Net Farm Income by Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Total Revenues</th>
<th>Total Expenses</th>
<th>Net Farm Income per cwt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>18.00</td>
<td>17.00</td>
<td>1.00</td>
</tr>
<tr>
<td>All Dairies</td>
<td>19.00</td>
<td>18.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Upper 25%</td>
<td>20.00</td>
<td>19.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note: Yearly average per cwt. milk sold.
Expense Categories by Region

- Feed
- Pers
- Lvstk
- Other
- Mktg
- Mach
- Dep
- RE
- Crops

$ per cwt. milk sold

West
North
Central
South
Expense Categories by Groups

- Feed
- Pers
- Lvstk
- Other
- Mktg
- Mach
- Dep
- RE
- Crops

Central
All Dairies
Upper 25%
Expense Categories by Groups

- Feed
- Pers
- Lvstk
- Other
- Mktg
- Mach
- Dep
- RE
- Crops

$ per cwt. milk sold

West
All Dairies
Upper 25%
Expense Composition-Central Region

- Purchased Feed: 15%
- Livestock: 10%
- Milk Marketing: 7%
- Machinery: 53%
- Depreciation: 4%
- Real Estate: 3%
- Personnel: 2%
- Other: 1%
- Crops: 1%
Observations-Central Region

- Revenues were *lowest* among regions, mostly driven by decrease in heifer/calf inventories.

- Total expenses were *2nd highest* among regions, $0.90 per cwt. milk sold above Top 25% group.

- Purchased feed expense was *highest* among regions, possibly driven by 19,141 pounds milk sold per cow, 2,088 pounds above Top 25% group.

- **Translation**: More money was spent for purchased feed, *on a per cwt. basis*, than any other region.
Critical Success Question

*Does high production per cow and feed expense produce profits?*
Asset Composition - Central Region

- Livestock: 39%
- Real Estate/Buildings: 36%
- Machinery/Equipment: 12%
- Other: 13%
Asset Composition - DBAP Dairies

- Livestock: 39%
- Real Estate/Buildings:
- Machinery/Equipment: 15%
- Other: 12%
- Total: 100%
Asset Composition - Top 25%

- Livestock: 41%
- Real Estate/Buildings: 27%
- Machinery/Equipment: 17%
- Other: 15%
Observations-Central Region Assets

- Above average asset turnover ratio (0.89) was driven by high pounds milk sold per cow (19,141).
- Assets per cow ($4,318) were $446 or 12% higher than the Top 25% group.
- Both livestock and real estate dominated assets.
The asset mix for this region constrained asset efficiency, which should have been higher with high pounds milk sold per cow.
Challenges-Central Region

• Profit margin of (3%) needs to be improved. This was particularly important since this region had 2nd largest herd size (1,000 cows) and highest milk sold per cow (19,141).

• For the above reasons, the Central region, on average, lost the most total money of all regions.

• Purchased feed expense of $9.62 per cwt. milk sold was too high.
Recommendations-Central Region

• Take a *serious, hard* look at ration expenses. You’re losing too much money to ignore feed efficiency per cwt.

• Be wary of inventory decreases in heifers and other productive assets. This affects profitability even though no cash leaves the business.