Impact of Fuel, Fertilizer and Crop Patterns on a Typical Oklahoma Cooperative

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Case Study Cooperative

- 2.8 M bushels wheat (95,00 acres)
- $427,500 grain margin
- $199,500 storage income
- $627,000 grain department income

Case Study: Fertilizer

- 6000 tons NH3 - $28/ton margin
- 1375 tons dry - $28/ton margin
- 2200 tons liquid - $18/ton margin
- $246,100 fertilizer margin
- $350,000 application income
Case Study: Fuel

- 342,000 gallons unleaded: $.12 margin
- 665,000 gallons diesel: $.12 margin
- 371,000 gallons propane: $.28 margin
- Total fuel margin: $224,720

Case Study: Income

- Grain Department: $627,000
- Fertilizer: 596,100
- Fuel: $224,720

Total $1,454,070

Case Study: Expense

- Labor: $850,000
- Insurance: $150,000
- Depreciation: $150,000
- Interest: $77,000
- Truck: $80,000
- Utilities: $50,000
- Total Expense: $1.4M
Case Study: Net Savings

- Net Savings: $54,000
- Total Working Capital: $861,000

Scenario

- Grain acres down 10%
- Fertilizer price up 25%
- Fuel price up 25%
- Utilities up 25%
- 50% of wheat shifts to no-till
- (cooperative doubles application acres)
- Insurance up 10%
- Labor costs up 10%

Income

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
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</thead>
<tbody>
<tr>
<td>Grain: $627,00</td>
<td>Grain: $564,300</td>
</tr>
<tr>
<td>Fertilizer $596,100</td>
<td>Fertilizer: $673,600</td>
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<tr>
<td>Fuel: $224,720</td>
<td>Fuel: $196,220</td>
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<tr>
<td>Total: $1,454,070</td>
<td>Total: $1,434,120</td>
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</tbody>
</table>
### Expenses

<table>
<thead>
<tr>
<th>Item</th>
<th>Before</th>
<th>After</th>
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</thead>
<tbody>
<tr>
<td>Labor</td>
<td>$850,000</td>
<td>$935,000</td>
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<tr>
<td>Insurance</td>
<td>$150,000</td>
<td>$165,000</td>
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<tr>
<td>Interest</td>
<td>$77,000</td>
<td>$80,095</td>
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<tr>
<td>Truck</td>
<td>$80,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Utilities</td>
<td>$50,000</td>
<td>$62,500</td>
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<tr>
<td>Total</td>
<td>$1,400,000</td>
<td>$1,542,495</td>
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</table>

### Net Savings/Working Capital

<table>
<thead>
<tr>
<th>Category</th>
<th>Before</th>
<th>After</th>
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</thead>
<tbody>
<tr>
<td>Net Savings</td>
<td>$54,000</td>
<td>($108,475)</td>
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<td>WC</td>
<td>$861,000</td>
<td>$901,193</td>
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</tbody>
</table>

### Impacts: Income

- Grain Income Down: 10%
- Fertilizer & App income up: 13%
- Fuel income down: 13%
- Total income: similar
Impacts: Expense

- Utilities: up 25%
- Truck: up 25%
- Interest: up 5%
- Labor up: 10%
- Insurance up: 10%
- Total Expense up: 10%

Conclusions

- Grain department decreases
- Fertilizer volume and income decreases
- Application income increase
- Fuel margin decrease
- Cooperative might maintain gross margin
- Fuel, energy and Fertilizer impacts=$50,000 increase in expense
- Labor and Insurance =$100,000

Implications

- Be alert to opportunities for application income with shifting crop practices
- Controlling costs will continue to be critical
- Largest expense areas are the most difficult to control