Farm and Business Planning

David Bilderback
Area Specialist – Farm Management
Financial Planning?

Financial planning is the process of:

- setting goals,
- developing a plan to achieve them, and
- putting the plan into action.
Set SMART Goals

- Needs – Essentials
- Wants – Non-essentials
Term Goals

- **SHORT-TERM GOALS**
  - Within three months

- **INTERMEDIATE-TERM GOALS**
  - Three months to a year

- **LONG-TERM GOALS**
  - More than a year
Setting **SMART** Goals

- **S**pecific
- **M**easurable
- **A**ttainable
- **R**ealistic
- **T**ime-bound
1. Set SMART Goals
2. Analyze Information
3. Create A Plan
4. Implement The Plan
5. Monitor And Modify The Plan
Business Structure

- Management Structure
- Financial Structure
- Legal Structure
Management Structure

- Definition
  - How decisions are made and who makes them
  - How responsibilities are allocated among individuals

- Types of Management Structure
  - Hierarchical, top-down
    - Decision making authority retained at the top
  - Decentralized
    - Shared decision making

- Importance of multi-generational enterprises
Management Structure

Source: Texas A&M Extension
Map out daily work Task

- Look at daily work task for every employee
  - Find downtime
  - Overlap
  - Unnecessary movement (Time)
Personnel Management

- Functions of Management
  - Planning
  - Organizing
  - Staffing
  - Directing
  - Controlling

- Motivating Employees
  - Written Job Descriptions
  - Train and reward employees
  - Small bonuses, gifts, or lunch
Wage Rates

A Comparison of U.S. Wage Rates
1988 – 2018

2018 Wage Rate
All Farm
$14.17/hour

Field and Livestock Workers
$13.25/hour

USDA-NASS, November 2018
Financial Structure

- **Definition**
  - How ongoing business operations are financed
  - How income is distributed

- **Issues**
  - Opportunity for investment by new owners or others – Transfer/Succession
  - Sharing of business income
Legal Structure

- **Definition**
  - Legal relationships between and among the current and future owners and between current or future owners and third parties, such as lenders and vendors

- **Components**
  - Legal entities under which current and future owners operate the business
  - Legal agreements governing the transfer of ownership, management, and control of farm business
Legal Entities

- Sole Proprietor
- General Partnership
- Limited Partnership
- Corporation
  - S-Corporation
- Limited Liability Company
Measuring Your Business
What are your goals for the record keeping system?

- Keep what is needed for tax purposes
- Be prepared for the unexpected
- Plan ahead
- Communication
- Business analysis
  - Be able to accurately identify share of income and expenses
  - Determine costs of production per unit
  - Know where profit (and/or loss) centers are in the operation
Records

Production
- Sales Records
- Inventories
- Time data
- Labor hours
- Input usage

Financial
- Income and Expenses
- Accounts receivable
- Accounts payable
- Balance Sheet
- Income Statement
- Enterprise budget
- Cash Flow Statement
Financial Records

- Shoe box system, computer programs, record keeping services
- Preparation of tax forms
  - Limited amount of information for management decisions and planning
- Determining cost of production, estimating breakeven prices, develop marketing plans, measure the profitability of enterprises
Financial Records

- First, decide the information needed from a record keeping system.

- The more information expected, the more details needed.

- Keep only those detailed records that will be utilized.
Financial Statements

- Balance Sheet
  - Statement of financial condition at a specific time

- Income Statement
  - Summary of income and expenses that occurred during a specified accounting period (usually calendar year)

- Cash Flow Statement
  - How cash has entered and left during the year
Balance Sheet

Assets – Liabilities = Equity
**Balance Sheet**

- **Current – Next Year**
  - Assets
  - Liabilities
- **Intermediate – 1-10 Years**
  - Assets
  - Liabilities
- **Long Term – 10+ Years**
  - Assets
  - Liabilities
- **Net Worth**

<table>
<thead>
<tr>
<th>Current Assets</th>
<th>Current Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate Assets</td>
<td>Intermediate Liabilities</td>
</tr>
<tr>
<td>Long Term Assets</td>
<td>Long Term Liabilities</td>
</tr>
<tr>
<td>Total Assets</td>
<td>Total Liabilities</td>
</tr>
</tbody>
</table>

Net Worth
## Current Assets

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and checking</td>
<td>35,000</td>
</tr>
<tr>
<td>Prepaid expenses and supplies</td>
<td>-</td>
</tr>
<tr>
<td>Growing crops</td>
<td>-</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>65,000</td>
</tr>
<tr>
<td>Hedging accounts</td>
<td>-</td>
</tr>
<tr>
<td>Other current assets</td>
<td>-</td>
</tr>
</tbody>
</table>

### Crops (Schd G)

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Value/Unit</th>
<th>Unit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hay</td>
<td>85</td>
<td>100.00/ton</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Market Livestock (Schd H)</th>
<th>Value/Unit</th>
<th>Unit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef Calves</td>
<td>65</td>
<td>125.00/cwt.</td>
</tr>
</tbody>
</table>

| Total Current Assets        | 145,063 |

## Current Liabilities

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued interest</td>
<td>-</td>
</tr>
<tr>
<td>Accounts payable and other accrued expenses</td>
<td>2,500</td>
</tr>
</tbody>
</table>

### Current Loans (Schd U)

<table>
<thead>
<tr>
<th>Rate</th>
<th>Due</th>
<th>Principal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Int</td>
<td>P &amp; I</td>
<td>Principal</td>
</tr>
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Principal due within 12 months on term liabilities: 119,957

| Total Current Liabilities | 122,457 |
Liquidity

- Current Ratio
  - Total Current Farm Assets / Total Current Farm Liabilities
  - Measures extent to which current farm assets would pay off current farm liabilities

- Working Capital
  - Total Current Farm Assets - Total Current Farm Liabilities
  - Tells the operating capital available in the short term

Vulnerable 1.1 1.5 Strong
Current

**Current Ratio**

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<td>Current loans (Schd U)</td>
<td>Int</td>
</tr>
<tr>
<td>Rate</td>
<td>Due</td>
</tr>
<tr>
<td>Principal due within 12 months or term liabilities</td>
<td>115,957</td>
</tr>
<tr>
<td>Total Current Liabilities</td>
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**Working Capital = $22,606**

**Current percent Debt = 84%**
<table>
<thead>
<tr>
<th><strong>Intermediate Assets</strong></th>
<th>Market Value</th>
<th><strong>Intermediate Liabilities (Schd V)</strong></th>
<th>Int Rate</th>
<th>Principal Balance</th>
<th>P &amp; I Due</th>
<th>Principal Due</th>
<th>Intermed Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breeding livestock</td>
<td>85,000</td>
<td>Loan</td>
<td>5.00</td>
<td>25,000</td>
<td>9,192</td>
<td>8,030</td>
<td>16,970</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>160,000</td>
<td>Individual-Tractor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titled vehicles</td>
<td>35,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other intermediate assets</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Intermediate Assets</strong></td>
<td><strong>280,000</strong></td>
<td><strong>Total Intermediate Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>16,970</strong></td>
</tr>
</tbody>
</table>

Intermediate percent Debt = 6%
## Long-Term

<table>
<thead>
<tr>
<th>Long Term Assets</th>
<th>Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land (Schd M) Acres farm</td>
<td>700,000</td>
</tr>
<tr>
<td>Buildings and improvements</td>
<td>2,500,000</td>
</tr>
<tr>
<td>Other long term assets</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Long Term Assets</strong></td>
<td><strong>3,200,000</strong></td>
</tr>
</tbody>
</table>

| Long Term Liabilities (Schd W) | Int Loan  | Principal Loan Balance P & I Due Principal Due Lg Term Balance |
|--------------------------------|-----------|-----------------|-----------------|----------------|-----------------|-----------------|
| Individual-broiler hous        | 5.00      | 1,800,000      | 200,836         | 111,927        | 1,688,073       |

**Total Long Term Liabilities**

**Long Term percent Debt = 53%**
## Net Worth

<table>
<thead>
<tr>
<th></th>
<th>Total Farm Assets</th>
<th>Total Farm Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets</td>
<td>3,625,063</td>
<td>1,827,500</td>
</tr>
<tr>
<td>Personal Assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Personal Liabilities</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
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<th>Net Worth</th>
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<td>Total Assets</td>
<td>3,625,063</td>
<td>1,797,563</td>
</tr>
<tr>
<td>Net Worth</td>
<td>1,797,563</td>
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</tr>
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</table>
Solvency

- Farm Debt-to-Asset Ratio
  - Total Farm Liabilities / Total Farm Assets
  - Compares total farm debt to total farm assets
  - Higher ratio indicates greater financial risk and lower borrowing capacity
  - Less than 40% is a good goal

Vulnerable | 50% | 30% | Strong

Less Than 40% of the
Solvency

- Farm Equity-to-Asset Ratio
  - Farm Net Worth / Total Farm Assets
  - Owners share of business
  - Equity greater than 60% of Assets

Vulnerable 30% 60% Strong

Greater Than 60% of the
Solvency

- Farm Debt-to-Equity Ratio
  - Total Farm Liabilities / Farm Net Worth
  - Compares lender’s share to owner’s share
  - You do not want debt to be great than 150% of Equity

Vulnerable 150% 43% Strong

Less Than 150% of the
Happy Joe Solvency

Debt-to-Asset Ratio
- Vulnerable: 50%
- 30%
- Strong

Equity-to-Asset Ratio
- Vulnerable: 30%
- 60%
- Strong

Debt-to-Equity Ratio
- Vulnerable: 150%
- 43%
- Strong
Key to happiness!

Greater Than 60% of the > Less Than 40% of the
Income Statement

- Summary of income and expenses that occurred during a specified accounting period (usually calendar year)
  - Net Income
    - Gross cash income – total cash expenses + inventory changes - depreciation and other capital adjustments
    - Represents returns to owner’s labor, management, and equity

\[ \text{Gross cash income} - \text{total cash expenses} + \text{inventory changes} - \text{depreciation and other capital adjustments} = \text{Net Income} \]
Profitability

- Rate of Return on Assets
  - \(\frac{(\text{Net Income} + \text{Interest} - \text{Value of operator’s labor and management})}{\text{Average Assets}}\)
  - \(\text{Average interest rate being earned on all (owner and lender) investments}\)

Vulnerable 4% 8% Strong
Profitability

- Operating Profit Margin
  - Return on Assets / Value of Production
  - Shows operating efficiency of business
    - If expenses are low relative to value of farm production, operating profit margin will be good
    - Low profit margin caused by low product prices, high expenses, or inefficient production

Vulnerable 15% 25% Strong
Financial Efficiency

- **Asset-turnover Rate**
  - Value of production (Gross Revenue) / Average farm assets
  - Measures efficiency in using capital
  - High level of production with a low level of capital investment gives high asset-turnover rate
  - Reverse gives low asset-turnover rate

Vulnerable 30% 45% Strong
Financial Efficiency

- Operating Expense Ratio
  - (Total operating expense – Interest) / Gross = Income
  - Proportion of farm income used to pay operating expenses, not including principal and interest

Vulnerable 80% 60% Strong
Financial Efficiency

- Interest Expense Ratio
  - interest / Gross income
  - Shows how much of gross income is used to pay for borrowed capital

Vulnerable 10% 5% Strong
Financial Efficiency

- Net Income Ratio
  - Net Income / Gross Income
  - Compares profit to gross income
  - Left after all farm expenses, except for unpaid labor and management, are paid

Vulnerable 10% 20% Strong
Enterprise Budgets

- Make all budgets on a specific unit (or space)
- Income / expenses identified by enterprise
- Requires detailed production records
- Identify strengths and weaknesses
- Difficult to assign some expenses to enterprise
David Bilderback
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Thank You!