# Module 1 – Classifying Inventory

Maintaining inventory records is one of the most important parts of a farmer's job. An inventory is a record of all of the assets and liabilities possessed by the farm or business at a given time. Usually these are taken at the beginning and end of the year. Assets are money or items owned by the business, such as cash, animal feed, or machinery. Liabilities are money or bills that are owed at the time the inventory is taken, such as on a mortgage, a feed bill, or money you might owe workers.

After items are classified as assets or liabilities, we can further sort them into being current or noncurrent assets or liabilities. Current items are ones that have a lifespan of one year or less. For example, animal feed will either be consumed by an animal or be unusable in less than a year's time. Noncurrent items are ones that have a lifespan of more than one year. Farm equipment, breeding animals, and long term loans would all be classified as noncurrent.

Combining these, there are four categories we can classify inventory items into: current assets, current liabilities, noncurrent assets, and noncurrent liabilities. Placing items in the correct category is important for making calculations important to understanding the finances of your farm.

## Activity 1 – Classify the Inventory

B&B Farms has completed their beginning of the year inventory and are trying to organize their inventory by categorizing their items. Using the list below, place each item and its value in the correct box. After you have categorized your items, calculate your total value for each box.

Cash on hand - $4,590
Farm Equipment - $18,285
Feed Bill - $211
Breeding Gilts - $3,600
Barn - $6,245
Mortgage - $23,072
Feed - $350
Operating Loan - $3,000

| **Current Assets** | **Current Liabilities** |
| --- | --- |
| | |
| **Noncurrent Assets** | **Noncurrent Liabilities** |
| | |

## Activity 1 Answer Key

| Current Assets | Current Liabilities |
|---|---|
| **Cash on Hand - $4,590**<br>**Feed - $350**<br><br>**Total Current Assets: $4,940** | **Feed Bill - $211**<br>**Operating Loan - $3,000**<br><br>**Total Current Liabilities: $3,211** |
| **Noncurrent Assets** | **Noncurrent Liabilities** |
| **Barn - $6,245**<br>**Breeding Gilts - $3,600**<br>**Equipment - $18,285**<br><br>**Total Noncurrent Assets: $28,130** | **Mortgage - $23,072**<br><br>**Total Noncurrent Liabilities: $23,072** |

# Module 2 – Financial Ratios

Financial ratios can tell you much about how a farm business is functioning and about its strengths and weaknesses. Being able to calculate and interpret these ratios is an important skill for farm and agribusiness managers to help farmers make important business decisions about running their farm. These ratios are determined from the inventory calculations you made in Module 1.

Most are measures of either liquidity or solvency. Liquidity is a person's ability to repay their short term debt, their current liabilities. Solvency is a person's ability to repay their long term debt.

Here are some common financial ratios and how you can interpret them when evaluating a farm business:

**Working Capital:** (Current Assets minus Current Liabilities). Should be a positive number related to liquidity. A positive number indicates a farm should be able to pay off its short term liabilities.

**Net Worth:** (Total Assets minus Total Liabilities). Should be a positive number related to solvency. A positive number indicates a farm owns more assets than it does liabilities and would be able to pay off all its debt if necessary.

**Current Ratio:** (Current Assets divided by Current Liabilities). A number greater than 1 indicates a farm should have enough current assets to pay off its short term liabilities.

**Leverage Ratio/Debt to Equity Ratio:** (Total Liabilities divided by Net Worth). Shares how much of the business is owned by the bank versus the owner. The higher the number, the more leveraged in debt a business is so this number should be less than 1 to be considered solvent.

**Debt to Total Asset Ratio:** (Total Liabilities divided by Total Assets). Shares how much of the business is owned by the bank versus the owner. A ratio of .62 would indicate 62% of the business is owned by the bank, making the farm highly leveraged. Any number greater than .30 is considered high and could lead to a farm having difficulties borrowing more money.

# Activity 2 – Calculating Ratios

Using the information from the previous page and the calculations you made in Activity 1, complete the table below. Calculate the necessary ratio, determine if it is a measure of liquidity or solvency, and if the number is a good indicator for the farm business or a bad one.

| Ratio | Calculation | Liquidity or Solvency? | Is this number good or bad? |
|---|---|---|---|
| Working Capital | | | |
| Net Worth | | | |
| Current Ratio | | | |
| Leverage Ratio | | | |
| Debt to Total Asset | | | |

# Activity 2 – Answer Key

| Ratio | Calculation | Liquidity or Solvency? | Is this number good or bad? |
|---|---|---|---|
| Working Capital | $1,729 | Liquidity | Good |
| Net Worth | $6,787 | Solvency | Good |
| Current Ratio | 1.54 | Liquidity | Good |
| Leverage Ratio | 3.87 | Solvency | Bad |
| Debt to Total Asset | 0.79 | Solvency | Good |