



Your Net Worth Statement

Would you like to know more about the current financial situation of your farming operation? A simple listing of the property you own and the debts you owe can provide valuable insights. Such a listing is called a **net worth statement**, or sometimes a financial statement or balance sheet.

The net worth statement is based on the relationship:

assets = liabilities + net worth or
assets – liabilities = net worth

Most farm businesses are made up of a combination of land, livestock, crops, and machinery acquired with debt (liabilities) or contributed by the operator (net worth or owner's equity). The net worth statement is like a **photograph** of these assets and liabilities on a given date.

Comparing net worth statements made at the end of each year, over several years, can help you measure the progress of your farm business. The net worth statement also helps you judge the ability of your farm operation to pay off current debts and take on additional ones.

Developing the Statement

A net worth statement may include only the farm business, or it may include household and personal assets and debts as well. For business analysis purposes, only information pertaining to the farming operation is

needed. Information about nonfarm assets and liabilities can be added in a separate section and used for analyzing debt repayment capacity. For a farm partnership, include only items owned or owed by the partnership, not by the partners individually.

Most families make out a net worth statement as of December 31 or January 1 because this is the end of their accounting year. However, it is possible to develop a statement at any date and as often as needed. Blank forms for completing a net worth statement can be found in ISU Extension publication FM 1824, *Farm Financial Statements*.

Valuing Assets

A typical format for a net worth statement is shown at the end of this publication. Assets are generally listed on the left-hand side and liabilities on the right-hand side. Both assets and liabilities are divided into current and fixed items.

Current assets include cash, bank accounts, crops, livestock, and supplies that will normally be sold or used within a year.

List the current balances for all your savings and checking accounts used for farm receipts and expenses. If you obtain your current checking account balance from your bank, remember to subtract the value of any checks that are still outstanding.

The key to correctly listing current assets is to accurately estimate both the number and value of items on hand. ISU Extension publication FM 1490, *Suggested Closing Inventory Prices*, is helpful for valuing current assets.

For market livestock, begin with an up-to-date inventory of the number of head and estimated weight for each class of livestock. Value them at current market prices, minus potential marketing and transportation costs. Check with local markets or use local prices available from newspapers, radio, or other sources of marketing information.

v Value young livestock at feeder animal prices.

v Value heavier livestock at their estimated weight times the current slaughter market price.

v Use an average of feeder and market livestock prices for animals at intermediate weights.

For grain and feed, including hay, silage, straw, and supplements:

v Begin with accurate estimates of bushels, tons, bales, etc., on hand.

v Include grain under warehouse receipt at an elevator. Also include grain delivered under a deferred pricing (price later) contract if the price has not yet been established or payment received.

v Value crops at current market price, or their contracted price, minus marketing costs. Check with local markets or use local prices available through newspapers, radio, or other sources.

v Include grain under a USDA marketing loan. Value it at the current market price or the loan rate, whichever is higher, because you have the option of repaying the loan at a lower rate if the price is below the loan rate. Include the marketing loan as a current liability.

v Value grain that has been hedged by selling a futures contract by subtracting the current basis (current price of the futures contract minus the local cash price) from the price at which the contract was sold (see Example 1).

v Value commercial feed at its purchase cost.

Other current assets include:

v Supplies on hand, such as seed corn, chemicals, medications, and fuel.

v Prepaid expenses, such as payment made for feed to be delivered in the coming year. Show this as an asset only if you have already paid for it or if you show the obligation to pay for it as a liability.

v Money invested in a future crop such as for fall-applied fertilizer. Growing crops generally should be given a value equal to the costs of production already incurred.

v Accounts receivable, such as the payment a neighbor might owe you for custom combining, or government payments to be received for past production.

Fixed assets are those used in farm production, but not intended to be sold or converted directly into marketable products during the year (except for breeding livestock to be culled).

For breeding and dairy livestock:

v Begin with an accurate count of each species and type of livestock.

v Cows or ewes should be valued according to a conservative dairy or breeding value. For sows which are replaced more rapidly, an estimated slaughter value is suggested.

v Avoid making large year-to-year changes in values placed on breeding stock, which can cause large paper increases or decreases in net worth. Establishing a base value for each class of breeding stock and using it each year is recommended.

For machinery, equipment, and vehicles:

v Your tax depreciation schedule should provide a complete inventory.

v Use the depreciated or remaining value (cost minus total depreciation allowed, including depreciation for the past year), under the **cost value** column.

Example 1. Valuing Grain

10,000 bushels of corn were hedged on December 1 for \$2.89 per bushel. Current market value is \$2.25 per bushel, and the current futures price is \$2.59 per bushel.

The current basis is $(\$2.59 - \$2.25) = \$0.34$ per bushel.

The localized price that could be realized is $(\$2.89 - \$0.34) = \$2.55$ per bushel.

10,000 bushels @ \$2.55 = \$25,500.

v Once a total remaining value has been determined, it can be adjusted in following years by this formula:

Value of machinery (or equipment or vehicles) at the beginning of the year

+ net cost of machinery added
(purchases or cash difference on a trade, minus the value of machinery sold or junked)

– depreciation expense for the year

= machinery value at the end of the year (see Example 2).

Example 2. Machinery Depreciation Adjustment

Value, beginning of year -----	\$95,834
+ Net purchases -----	+3,630
– Depreciation (estimated at 10%) -----	–9,583
= Value, end of year -----	\$89,881

v Use a conservative **market value** under the market value column, or adjust the previous year's value for purchases, sales, and depreciation. Use the same depreciation expense value that you show on your net income statement.

Do not include machinery, equipment, or breeding livestock that you are leasing, unless they are shown on your tax depreciation schedule.

For perennial or long-term crops such as alfalfa, orchard crops, or some vegetables, sum up all the costs incurred for establishing the crop and depreciate that amount over its productive life.

Other fixed assets include land, buildings, and other improvements. They often have the largest dollar value of any assets on the net worth statement. On some statements, fixed assets are divided into intermediate and long-term assets.

List the cost basis of farm real estate under the **cost value** column:

v Your original basis is the price you paid for the farm.

v If you received the property through gift, you retain the giver's basis.

v If you inherited the property, the basis is the value used for calculating federal estate taxes.

v Adjust the original basis by adding the cost of improvements made and subtracting the depreciation taken on improvements.

List owned farm real estate at a conservative current value in the **market value** column.

v List the value of improvements separately from real estate. Use the remaining value for depreciable improvements.

v Reduce market value land prices to allow for broker's commission and other selling costs that might have to be paid if the farm were sold.

Shares in other farming entities, such as a sow cooperative, also should be shown under fixed assets.

Personal assets, such as family bank accounts, retirement accounts, stocks and bonds, household goods, vehicles, housing, or other real estate, can be listed separately at the bottom of the assets side of the statement.

Listing Liabilities

Liabilities are generally listed on the right-hand side of the net worth statement and include all debts and obligations to pay which the farm business or family has on the date of the statement. Liabilities are usually listed according to the length of time before they become due. You may want to list the creditor's name and the purpose of each liability, as well as the amount, on a separate page.

Current liabilities are those due within the next 12 months.

v Include debts such as operating notes, feeder livestock notes, or the outstanding balance on a credit line with a bank or other lender.

v Accounts payable, such as an unpaid open account with a feed mill or attorney, also should be shown, as well as unpaid wages, custom charges, and farm property taxes due.

v Contractual obligations, such as a cash rent leasing agreement or a machinery operating lease, are generally not shown. However, if they are included in liabilities, the value of the rights that you have as a result of the contract also should be shown as an asset. These are generally given the same value as the liability.

v List principal payments due on fixed liabilities within the next 12 months (see Example 3).

Example 3. Installment Loans

A \$40,000 loan for machinery is payable in four annual installments of \$10,000 each, plus interest at 10 percent on the unpaid balance. Show the \$10,000 due this year as a **current liability** and the remaining \$30,000 as a fixed liability.

v Calculate the amount of unpaid interest accrued on all liabilities as of the date of the statement. Multiply the outstanding principal of each debt by its respective interest rate, then multiply by the fraction of a year that has passed since the last payment, or since the loan was received if no payments have been made yet (see Example 4).

Example 4. Interest Accrued as of January 1

a. Operating note, borrowed April 1:

$$\$75,000 \times 8\% \times \frac{9}{12} \text{ yr.} = \$4,500$$

b. Machinery loan, \$40,000 since August 1:

$$\$40,000 \times 10\% \times \frac{5}{12} \text{ yr.} = \$1,667$$

c. Land contract, \$126,000 outstanding, last payment made March 1:

$$\$126,000 \times 8\% \times \frac{10}{12} \text{ yr.} = \$8,400$$

Total interest accrued = \$14,567

Fixed liabilities include debts payable more than one year in the future.

v Loans for breeding stock, machinery, land, or farm improvement usually fall into the fixed category.

v A mortgage or contract on real estate is usually a fixed liability, too.

v Show the unpaid balance minus the principal due in the coming year (it has already been shown as a current liability).

Personal liabilities can be shown at the bottom of the liabilities column.

These include consumer debts, credit card balances, home mortgages, and bills to pay.

Net Worth

The difference between total farm assets and total farm liabilities is the net worth, or equity, at the time the statement is made. It is the current value of your own investment in the farming operation. Adding net worth to total liabilities (which is the share of assets contributed by creditors) gives you a figure equal to total assets and serves as a check on your arithmetic.

The cost value net worth shows the value of your own investment excluding changes in the market values of machinery or real estate, while market value net worth does include these changes.

Farm and personal net worth can be added together to find the total family net worth.

Analyzing the Statement

Once you have completed your net worth statement, take time to look it over and understand what it can tell you. To begin, look at each major liability listed and see if a corresponding item can be found under the asset side. The corresponding item will usually be listed under the same section (current or fixed). If a corresponding asset cannot be found, you may have forgotten to list something. Or the asset originally acquired with borrowed money may have already been sold or used up before paying the corresponding liability. This is a danger sign. It means that you must generate funds to pay this debt elsewhere in the farm business.

Another danger sign is a liability that appears closer to the top of the statement than its corresponding asset. An example is a machinery item bought on a one-year note. It is usually difficult to pay for an asset over a period of time considerably shorter than its useful life.

Sometimes the value of a particular liability is greater than the value of its corresponding asset. This may mean that the debt is not adequately secured, or it may occur simply because rapid depreciation methods have been used.

Financial Ratios

Several ratios can be computed from the net worth statement, and used to help analyze the financial security of your business. More information on these ratios, including benchmark values, can be found in publication FM 1845, *Financial Performance Measures for Iowa Farms*.

Debt-to-asset ratio (or percent debt) is equal to total liabilities divided by the market value of total assets. It indicates the portion of total capital supplied by creditors. A successful farm business will have a decreasing ratio over time, except in years when major assets, such as land, are purchased with borrowed capital. A low debt-to-asset ratio usually leads to less year-to-year variability in net farm income.

A **personal** debt-to-asset ratio also can be calculated, using total farm and personal asset and liability values.

A **current ratio** can be calculated by dividing total current assets by total current liabilities. This is a measure of liquidity, or the ability to pay bills and debts as they come due.

A farm business with good overall risk-bearing ability can still have liquidity problems. This may be caused by a low income year resulting in carry-over operating debt, or too rapid investment of cash into intermediate and long-term assets, such as machinery or land.

Many lenders consider a current ratio of 2.0 or greater to show good short-term risk-bearing ability, while a ratio close to 1.0 or lower indicates potential cash flow problems. However, this is affected by the type of farm, volume of production, and financial structure. For example, farms with regular livestock sales, such as dairy, often require lower current ratios than crop farms that have production only late in the year.

Some lenders prefer to look at the difference between current assets and current liabilities rather than their ratio. This difference is called **working capital**, and indicates the potential cash available for meeting daily operating costs, consumption expenditures, and other items not listed under liabilities.

In many cases, current liabilities will be paid from income generated from sales of farm products that have not yet been produced and do not appear as current assets. A more accurate analysis of repayment capacity can be made by developing a cash flow budget, as explained in *Twelve Steps to Cash Flow Budgeting*, ISU Extension publication FM 1792.

Year-to-year Comparisons

The financial progress of the farm business can be measured by comparing a current net worth statement with earlier ones.

The **change in cost value net worth** from one year to the next shows the growth (or loss) due to net income earned from the farm business, and consumption. The following formula summarizes the relation among cost value net worth, income, and consumption expenditures:

net farm income (accrual)

+ nonfarm income, gifts, or inheritances invested in the farm business

– farm income used for living expenses, income tax payments, and other consumption

= change in cost value farm net worth.

The **change in market value net worth** is found by subtracting the market net worth shown on last year's financial statement from that shown on this year's. It measures the change in the market value of your equity share of the farm business. It also depends on net income and consumption, but includes changes in the market value of land or machinery as well.

A decrease in net worth from one year to the next may result from low net farm income or high consumption expenditures. It also may result from large changes in inventory prices of current and fixed assets. For this reason, it is useful to compare similar items on the balance sheet from one year to the next. Changes in their values may be due to changes in volume, changes in unit prices, or both.

Many different forms and formats exist for developing a net worth statement. However, all of them contain the same basic information. Completing an annual net worth statement is one of the simplest means available for analyzing the risk-bearing liability and financial progress of your farm business.

Example 5. Net Worth Statement Analysis

1. Current ratio

Total current farm assets divided by total current farm liabilities

2. Working capital

Total current farm assets minus total current farm liabilities

3. Debt-to-asset ratio

Total farm liabilities divided by total farm assets (market value)

4. Change in cost value net worth

This year's cost net worth minus last year's cost net worth

5. Change in market value net worth

This year's market net worth minus last year's market net worth

Net Worth Statement

Name Cyclone Farm

Date January 1

Farm Assets	Cost Value	Market Value	Farm Liabilities	Market Value
Checking and savings accounts	6,146	6,146	Accounts payable (Sched. N)	23,523
			Farm taxes due (Sched. O)	
Crops held for sale or feed (Sched. A)	228,166	228,166	Current notes and credit lines (Sched. P)	203,200
Investment in growing crops (Sched. B)	22,923	22,923	Accrued interest - short (Sched. P)	6,520
Commercial feed on hand (Sched. C)	31,230	31,230	- fixed (Sched. Q)	11,200
Prepaid expenses (Sched. D)	31,500	31,500		
Market livestock (Sched. E)	31,920	31,920	Due in 12 months - fixed (Sched. Q)	15,487
Supplies on hand (Sched. F)	15,548	15,548		
Accounts receivable (Sched. G)	5,966	5,966	Other current liabilities	
Other current assets	2,000	2,000		
Total Current Assets	\$ 375,399	\$ 375,399	Total Current Liabilities	\$ 259,930
Unpaid coop. distributions (Sched. H)			Notes and contracts, remainder (Sched. Q)	
Breeding livestock (Sched. I)	25,250	25,250	Machinery	61,139
Machinery and equipment (Sched. J)	79,916	110,500	Land	73,587
Buildings/improvements (Sched. K)	60,000	100,000		
Farmland (Sched. L)	140,000	288,000		
Farm securities, certificates (Sched. M)				
Other fixed assets			Other fixed liabilities	
Total Fixed Assets	\$ 305,166	\$ 523,750	Total Fixed Liabilities	\$ 134,726
a. Total Farm Assets	\$ 680,565	\$ 899,149	b. Total Farm Liabilities	\$ 394,656
c. Farm Net Worth (a - b)	\$ 285,909	\$ 504,493	$\frac{\text{Current Assets (market)}}{\text{Current Liabilities}} = 1.44 \text{ Current ratio}$	
d. Farm Net Worth Last Year	\$ 256,820	\$ 477,049	$\frac{\text{Total Liabilities}}{\text{Total Assets (market)}} = 44\% \text{ Debt-to-asset ratio}$	
e. Change (c - d)	\$ 29,089	\$ 27,444		

Personal Assets

Personal Liabilities

Bank accounts, stocks, bonds	\$ 38,065	Credit cards, charge accounts, other loans	\$ 1,568
Automobiles, boats, etc.	14,000	Automobile loans	
Household goods, clothing	10,000	Other loans, taxes due	
Real estate	75,000	Real estate, other long-term loans	
f. Total Personal Assets	\$ 137,065	g. Total Personal Liabilities	\$ 1,568
h. Total Personal Net Worth (f - g)	\$ 135,497	$\frac{\text{Total Personal Liabilities}}{\text{Total Personal Assets}} = 1\% \text{ Debt-to-asset ratio}$	
i. Total Net Worth, Market Value (c + h)	\$ 639,990		

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