

How much did your farm business earn last year?

Was it profitable? There are many ways to answer these questions.

A farm income statement (sometimes called a profit and loss statement) is a summary of income and expenses that occurred during a specified accounting period, usually the calendar year for farmers. It is a measure of input and output in dollar values. It offers a capsule view of the value of what your farm produced for the time period covered and what it cost to produce it.

Most farm families do a good job of keeping records of income and expenses for the purpose of filing income tax returns. Values from the tax return, however, may not accurately measure the economic performance of the farm. Consequently, you need to have a clear understanding of the purpose of an income statement, the information needed to prepare the statement, and the way in which it is summarized.

Net farm income, as calculated by the **accrual** or inventory method, represents the economic return to your contributions to the farm business: labor, management, and net worth in land and other farm assets. **Cash net farm income** also can be calculated. It shows how much cash was available for purchasing capital assets, debt reduction, family living, and income taxes.

Preparing the Statement

The income statement is divided into two parts: income and expenses. Each of these is further divided into a section for cash entries and a section for noncash (accrual) adjustments.

An example income statement is shown at the end of this publication, along with a blank form. Blank forms for developing your own income statement are also available in ISU Extension and Outreach publication FM 1824, AgDM C3-56: [Farm Financial Statements](https://store.extension.iastate.edu/Product/1827), <https://store.extension.iastate.edu/Product/1827>.

Most of the information needed to prepare an income statement can be found in common farm business records. These include a farm account book or program, Internal Revenue Service (IRS) forms 1040F Profit or Loss From Farming and 4797 Sales of Business Property, and your beginning and ending net worth statements for the year. If you use the IRS forms, you will need to organize the information a bit differently to make allowances for capital gains treatment of breeding stock sales and the income from feeder livestock or other items purchased for resale.

Cash Income

Cash income is derived from sales of livestock, livestock products, crops, government payments, tax credits and refunds, crop insurance proceeds, and other miscellaneous income sources.

- Include total receipts from sales of both raised livestock and market livestock purchased for resale. Remember not to subtract the original cost of feeder livestock purchased in the previous year, even though you do this for income tax purposes. Also include total cash receipts from sales of breeding livestock before adjustments for capital gains treatment of income are made. These are termed “gross sales price” on IRS Form 4797.
- Do not include proceeds from outstanding USDA marketing loans in cash income even if you report these as income for tax purposes.
- Do not include noncash income such as profits or losses on futures contracts and options. However, do include cash withdrawn from hedging accounts.
- Do not include sales of land, machinery, or other depreciable assets; loans received; or income from nonfarm sources of income.

Adjustments to Income

Not all farm income is accounted for by cash sales. Changes in inventory values can either increase or decrease the net farm income for the year.

Changes in the values of inventories of feed and grain, market livestock, and breeding livestock can result from increases or decreases in the quantity of these items on hand or changes in their unit values (see Example 1). Adjusting for inventory changes ensures that the value of farm products is counted in the year they are produced rather than the year they are sold. Subtract beginning of the year values from end of the year values to find the net adjustment.

Example 1

The beginning inventory of feeder pigs consists of 420 head valued at \$75 each, or \$31,500. Ending inventory is 450 head valued at \$50 each, or \$22,500. Inventory value decreased by \$9,000 even though the number of pigs on hand increased by 30 head. The decline in value per head more than offset the increase in numbers, and could have been due to lower market prices and/or lighter weight of the pigs.

Changes in the market values of land, buildings, machinery, and equipment (except for depreciation) are not included in the income statement unless they are actually sold. Accounts receivable and unpaid patronage dividends are included, however, because they reflect income that has been earned but not yet received.

Cash Expenses

All cash expenses involved in the operation of the farm business during the business year should be entered into the expense section of the income statement. These can come from Part II of IRS Schedule F. Under livestock purchases include the value of breeding livestock as well as market animals.

- Do not include death loss of livestock as an expense. This will be reflected automatically by a lower ending livestock inventory value.

- Income tax and Social Security tax payments are considered personal expenses and should not be included in the farm income statement, unless the statement is for a farm corporation.
- Interest paid on all farm loans or contracts is a cash expense, but principal payments are not.
- Do not include the purchase of capital assets such as machinery and equipment. Their cost is accounted for through depreciation. Land purchases also are excluded.
- You may wish to exclude wages paid to family members because these also are income to the family.
- Include cash deposits made to hedging accounts.

Adjustment to Expenses

Some cash expenses paid in one year may be for items not actually used until the following year. These include feed and supply inventories, prepaid expenses, and investments in growing crops. Subtract the ending value of these from the beginning value to find the net adjustment (see Example 2).

Example 2

Beginning inventory of fertilizer was zero. Closing inventory is worth \$11,000. Fertilizer purchases during the year were \$16,000, all paid for. The change in inventory is a positive \$11,000. Even though \$16,000 is shown for cash expense, only \$5,000 ($\$16,000 - \$11,000$) is charged to the farm operation during the year covered. The \$11,000 of fertilizer still unused will be the beginning inventory value for the following year, and will be included in that year's expenses.

Other expenses may be incurred in one year but not paid until the following year or later, such as farm taxes due, and other accounts payable. Record accounts payable so that products or services that have been purchased but not paid for are counted. However, do not include any items that already appear under cash expenses. Subtract the beginning total of these items from the ending totals to find the net adjustment. Note that interest expense due is not included until later, after net farm income from operations is calculated.

Depreciation is the amount by which machinery, equipment, buildings, and other capital assets decline in value due to use and obsolescence. The depreciation deduction allowed on your income tax return can be used, but you may want to calculate your own estimate based on more realistic depreciation rates. One simple procedure is to multiply the value of these assets at the end of the year by a fixed rate, such as 10%. This way you can group similar items, such as machinery, rather than maintain separate records for each item.

If you include breeding livestock under beginning and ending inventories, do not include any depreciation expense for them.

The beginning and ending net worth statements for the farm are a good source of information about inventory values and accounts payable and receivable: ISU Extension and Outreach publication FM 1791, AgDM C3-20: [Your Net Worth Statement](https://store.extension.iastate.edu/Product/1814), <https://store.extension.iastate.edu/Product/1814>, provides more detail on how to complete a net worth statement.

ISU Extension and Outreach publication FM 1824, AgDM C3-56: [Farm Financial Statements](https://store.extension.iastate.edu/Product/1827), <https://store.extension.iastate.edu/Product/1827>, contains schedules for listing adjustment items for both income and expenses. Use the same values that are shown on your beginning and ending net worth statements for completing adjustments to your net income for the year.

Summarizing the Statement

You have now accounted for cash farm income and cash expenses (excluding interest). You also have accounted for depreciation and changes in inventory values of farm products, accounts payable, and prepaid expenses. You are now ready to summarize two measures of farm income.

Net Farm Income from Operations

Subtract total farm expenses from gross farm revenue. The difference is the net income generated from the ordinary production and marketing activities of the farm, or **net farm income from operations**.

Interest Expense

Interest is considered to be the cost of financing the farm business rather than operating it. Net interest expense is equal to cash interest expense adjusted for beginning and ending accrued interest.

Capital Gains and Losses

Some years income is received from the sale of capital assets such as land, machinery, and equipment. The sale price may be either more or less than the cost value (or basis) of the asset.

For depreciable items the cost value is the original value minus the depreciation taken. For land it is the original value plus the cost of any nondepreciable improvements made. The difference between the sale value and the cost value is a capital gain or loss. For purposes of the farm income statement, capital gain would also include the value of “recaptured depreciation” from the farm tax return. Information for calculating capital gains and losses can come from the depreciation schedule or IRS Form 4797.

Sales of breeding livestock can be handled two ways: (1) record sales and purchases as cash income and expenses, and adjust for changes in inventory, or (2) record capital gains or losses when animals are sold and include depreciation as an expense. Either method can be used, but do not mix them.

Net Farm Income

Subtract interest expense, then add capital gains or subtract capital losses from net farm income from operations to calculate net farm income. This represents the income earned by the farm operator’s own capital, labor, and management ability. It also represents the value of everything the farm produced during the year, minus the cost of producing it.

Further Analysis

Net farm income is an important measure of the profitability of your farm business. Even more can be learned by comparing your results with

those for other similar farms. ISU Extension and Outreach publication FM 1845, AgDM C3-55: [Financial Performance Measures for Iowa Farms](https://store.extension.iastate.edu/Product/1837), <https://store.extension.iastate.edu/Product/1837>, contains information about typical income levels generated by Iowa farms. It also illustrates other important measures and ratios that can help you evaluate the profitability, liquidity, and solvency of your own business over time.

Other Financial Statements

Two other financial statements are often used to summarize the results of a farm business. While they are not as common as the net income statement and the net worth statement, they do provide useful financial information.

Statement of Cash Flows

A statement of cash flows summarizes all the cash receipts and cash expenditures that were received or paid out during the accounting year. It is sometimes called a flow of funds statement. Unlike the net income statement, it does not measure the profitability of the business. It merely shows the sources and uses of cash. The statement of cash flows is divided into five sections:

- cash income and cash expenses
- purchases and sales of capital assets
- new loans received and principal repaid
- nonfarm income and expenses (sole proprietor)
- beginning and ending cash on hand

If all cash flows are accurately recorded, the total sources of cash will be equal to the total uses of cash. If a significant difference exists, the records should be carefully reviewed for errors and omissions.

An example of a statement of cash flows is found at the end of this publication, along with a blank form.

Statement of Owner Equity

The statement of owner equity ties together net farm income and the change in net worth. Net worth will increase or decrease during the accounting year based on three factors:

- net farm income (accrual)
- net nonfarm withdrawals (nonfarm income minus nonfarm expenditures)
- adjustments to the market value of capital assets (affects market value net worth only)

If these factors are recorded accurately and added to the beginning net worth of the farm, the result will equal the ending net worth.

An example of a statement of owner equity is found at the end of this publication, along with a blank form.

Further resources on financial information can be found on the [Ag Decision Maker website](http://www.extension.iastate.edu/agdm/wdfinancial.html), www.extension.iastate.edu/agdm/wdfinancial.html.

- Decision Tool C3-26, [Cash to Accrual Net Farm Income Worksheet](http://www.extension.iastate.edu/agdm/wholefarm/xls/c3-26accrualnfi.xlsx), www.extension.iastate.edu/agdm/wholefarm/xls/c3-26accrualnfi.xlsx
- Decision Tool C3-56, [Comprehensive Financial Statements](http://www.extension.iastate.edu/agdm/wholefarm/xls/c3-56comprfinstatements.xlsx), www.extension.iastate.edu/agdm/wholefarm/xls/c3-56comprfinstatements.xlsx

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Net Farm Income Statement Example

Name **Cyclone Farm**Year **2019**

Income				
Cash Income (numbers in () refer to IRS Schedule F)		Income Adjustments	Beginning	Ending
Sales of livestock bought for resale (1a)	\$423,735	Hedging accounts balance	\$41,500	\$47,909
Sales of raised livestock, grain, etc. (2)	451,028	Crops held for sale or feed	538,150	489,105
Cooperative distributions paid (3a)	4,280	Market livestock	296,160	329,403
Agricultural program payments (4a)		Accounts receivable	15,445	
Crop insurance proceeds (6a)		Unpaid cooperative distributions	24,581	28,861
Custom hire income (7)	8,740	Breeding livestock	201,000	222,600
Other income (8), cash only	2,563	Other current assets		
Sales of breeding livestock	5,680	Subtotal of income adjustments	\$1,116,836	\$1,117,878
Hedging accounts withdrawals	3,000	b. Net income adjustment (ending – beginning)		\$1,042
a. Total Cash Income	\$899,026	c. Gross Farm Revenue (a + b)		\$900,068
Expenses				
Cash Expenses (numbers in () refer to IRS Schedule F)		Expense Adjustments (paid in advance)	Beginning	Ending
Car and truck expenses (10)		Investment in growing crops	\$13,040	\$8,680
Chemicals (11)	\$18,456	Commercial feed on hand	10,000	10,940
Conservation expenses (12)		Prepaid expenses	20,387	0
Custom hire (13)	9,589	Supplies on hand	14,500	2,000
Employee benefits (15)		Subtotal of adjustments	\$57,927	\$21,620
Feed purchased (16)	179,150	e. Net adjustment (beginning – ending)		\$36,307
Fertilizer and lime (17)	75,890	Expense Adjustments (due)	Beginning	Ending
Freight, trucking (18)	15,690	Farm accounts payable	\$4,589	\$1,859
Gasoline, fuel, oil (19)	11,899	Farm taxes due	4,400	4,750
Insurance (20)	18,913	Subtotal of adjustments (expenses due)	\$8,989	\$6,609
Interest paid (21a + 21b)	25,442	f. Net adjustment (ending – beginning)		(\$2,380)
Labor hired (22)	13,654	g. Depreciation		\$53,150
Pension and profit-share plans (23)		h. Total Operating Expenses (d + e + f + g)		\$808,152
Rent or lease payments (24a + 24b)	125,600	(excluding interest)		
Repairs, maintenance (25)	13,136	i. Net Farm Income from Operations (c – h)		\$91,916
Seeds, plants (26)	56,800	Interest Adjustments	Beginning	Ending
Storage, warehousing (27)		Accrued interest	23,725	22,484
Supplies purchased (28)	4,890	j. Net interest expense		\$24,201
Taxes (farm) (29)	8,800	(cash – beginning + ending)		
Utilities (30)	4,629	Total Farm Expenses (h + j)		\$832,353
Vet. fees, medicine, breeding (31)	6,891	k. Sales of farmland		\$100,000
Other expenses (32), cash only	4,588	l. Cost value of land sold		\$80,000
Livestock purchased	132,500	m. Capital gains or losses (k – l)		\$20,000
Hedging accounts deposits	20,000			
d. Total Cash Expenses	\$746,517	n. Net Farm Income (accrual) (i – j + m)		\$87,715
Net Farm Income (cash) (a – d)	\$152,509	Value of Farm Production (c – purchases of feed & livestock)		\$588,418

Statement of Cash Flows Example

Name **Cyclone Farm**Year **2019**

	Cash In	Cash Out
Cash farm income and expenses (operating)		
Total cash income (line a, net farm income statement)	\$899,026	xxx
Total cash expenses (line d, net farm income statement)	xxx	\$746,517
Capital assets (investing)		
Sales of capital assets	\$106,500	xxx
Cost of purchases and trades	xxx	\$102,000
Loans (financing)		
New loans received	\$446,580	xxx
Principal paid on loans	xxx	\$524,070
Nonfarm (withdrawals)		
Nonfarm income invested in the farm business		xxx
Cash withdrawn from the farm for family living, taxes, savings, etc.	xxx	\$69,000
Cash on hand (balance in farm checking and savings accounts, excluding hedging accounts)		
Beginning of year	\$6,146	xxx
End of year	xxx	\$16,665
Total of cash in and cash out*	\$1,458,252	\$1,458,252

*If all cash transactions are included correctly, the totals for the two columns will be approximately equal.

Statement of Owner Equity Example

Name **Cyclone Farm**Year **2019**

	Cost Value	Market Value
a. Farm net worth, beginning of year (Line g, beginning net worth statement)	\$1,665,962	\$1,820,062
b. Change in market value of capital assets (net of depreciation) (Line i, ending net worth statement, market value <u>\$166,865</u> minus cost value <u>\$18,715</u>)	xxx	\$148,150
c. Net farm income (accrual) (Line n, net farm income statement)	\$87,715	\$87,715
	<i>same value for cost and market</i>	
d. Net nonfarm withdrawals: (nonfarm income invested – cash withdrawn) (see statement of cash flows)	(\$69,000)	(\$69,000)
	<i>same value for cost and market</i>	
e. Calculated change in net worth (b + c + d)	\$18,715	\$166,865
f. Farm net worth, end of year (Line g, ending net worth statement)	\$1,684,677	\$1,986,927
g. Actual change in net worth (f – a) (line e should approximately equal line g)	\$18,715	\$166,865
h. Percent of net farm income retained in the business this year ((c + d) / c)	xxx	21%
i. Percent of change in market value net worth from retained earnings this year (g, cost value / g, market value)	xxx	11%

Net Farm Income Statement

Name _____ Year _____

Income			
Cash Income (numbers in () refer to IRS Schedule F)	Income Adjustments	Beginning	Ending
Sales of livestock bought for resale (1a)	Hedging accounts balance		
Sales of raised livestock, grain, etc. (2)	Crops held for sale or feed		
Cooperative distributions paid (3a)	Market livestock		
Agricultural program payments (4a)	Accounts receivable		
Crop insurance proceeds (6a)	Unpaid cooperative distributions		
Custom hire income (7)	Breeding livestock		
Other income (8), cash only	Other current assets		
Sales of breeding livestock	Subtotal of income adjustments		
Hedging accounts withdrawals	b. Net income adjustment (ending – beginning)		
a. Total Cash Income	c. Gross Farm Revenue (a + b)		

Expenses			
Cash Expenses (numbers in () refer to IRS Schedule F)	Expense Adjustments (paid in advance)	Beginning	Ending
Car and truck expenses (10)	Investment in growing crops		
Chemicals (11)	Commercial feed on hand		
Conservation expenses (12)	Prepaid expenses		
Custom hire (13)	Supplies on hand		
Employee benefits (15)	Subtotal of adjustments		
Feed purchased (16)	e. Net adjustment (beginning – ending)		
Fertilizer and lime (17)	Expense Adjustments (due)	Beginning	Ending
Freight, trucking (18)	Farm accounts payable		
Gasoline, fuel, oil (19)	Farm taxes due		
Insurance (20)	Subtotal of adjustments (expenses due)		
Interest paid (21a + 21b)	f. Net adjustment (ending – beginning)		
Labor hired (22)	g. Depreciation (Schedule J + L + M)		
Pension and profit-share plans (23)	h. Total Operating Expenses (d + e + f + g)		
Rent or lease payments (24a + 24b)	(excluding interest)		
Repairs, maintenance (25)	i. Net Farm Income from Operations (c – h)		
Seeds, plants (26)	Interest Adjustments	Beginning	Ending
Storage, warehousing (27)	Accrued interest		
Supplies purchased (28)	j. Net interest expense		
Taxes (farm) (29)	(cash – beginning + ending)		
Utilities (30)	Total Farm Expenses (h + j)		
Vet. fees, medicine, breeding (31)	k. Sales of farmland		
Other expenses (32), cash only	l. Cost value of land sold		
Livestock purchased	m. Capital gains or losses (k – l)		
Hedging accounts deposits			
d. Total Cash Expenses	n. Net Farm Income (accrual) (i – j + m)		

Net Farm Income (cash) (a – d)	Value of Farm Production (c – purchases of feed & livestock)
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Statement of Cash Flows

Name _____ Year _____

	Cash In	Cash Out
Cash farm income and expenses (operating)		
Total cash income (line a, net farm income statement)		xxx
Total cash expenses (line d, net farm income statement)	xxx	
Capital assets (investing)		
Sales of capital assets		xxx
Cost of purchases and trades	xxx	
Loans (financing)		
New loans received		xxx
Principal paid on loans	xxx	
Nonfarm (withdrawals)		
Nonfarm income invested in the farm business		xxx
Cash withdrawn from the farm for family living, taxes, savings, etc.	xxx	
Cash on hand (balance in farm checking and savings accounts, excluding hedging accounts)		
Beginning of year		xxx
End of year	xxx	
Total of cash in and cash out*		

*If all cash transactions are included correctly, the totals for the two columns will be approximately equal.

Statement of Owner Equity

Name _____ Year _____

	Cost Value	Market Value
a. Farm net worth, beginning of year (Line g, beginning net worth statement)		
b. Change in market value of capital assets (net of depreciation) (Line i, ending net worth statement, market value _____ minus cost value _____)	xxx	
c. Net farm income (accrual) (Line n, net farm income statement)		<i>same value for cost and market</i>
d. Net nonfarm withdrawals: (nonfarm income invested – cash withdrawn) (see statement of cash flows)		<i>same value for cost and market</i>
e. Calculated change in net worth (b + c + d)		
f. Farm net worth, end of year (Line g, ending net worth statement)		
g. Actual change in net worth (f – a) (line e should approximately equal line g)		
h. Percent of net farm income retained in the business this year ((c + d) / c)	xxx	%
i. Percent of change in market value net worth from retained earnings this year (g, cost value / g, market value)	xxx	%