Your Farm Income Statement

Ag Decision Maker

File C3-25

ow much did your farm business earn last year? Was it profitabile? There are many ways to Lanswer 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. Blank forms for developing your own income statement are available in ISU Extension publication FM 1824/AgDM C3-56, Farm Financial Statements.

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 (Farm Income and Expenses) and 4797 (Supplement Schedule of Gains and Losses), 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. Grain under loan is part of your ending crop inventory and would be counted twice in the calculation of net income if it were included in cash receipts as well.
- Do not include sales of land, machinery, or other depreciable assets; loans received; or income from nonfarm sources in 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

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.

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.

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.

Home-used Production

The value of livestock, livestock products, or other farm products consumed by the family should be added into net income even though no cash was 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, since these also are income to the family.

Adjustments 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).

Other expenses may be incurred in one year but not paid until the following year or later, such as accrued interest,

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.

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.

The final expense item is depreciation, or 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 market value of these assets at the beginning of the year by a fixed rate, such as 10 percent. 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 publication FM 1791/AgDM C3-23, **Your Net Worth Statement**, provides more detail on how to complete a net worth statement. ISU Extension publication FM 1824/AgDM C3-56, **Farm Financial Statements** 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 statement for the year.

Summarizing the Statement

You have now accounted for cash farm income and cash expenses. 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.

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Net Farm Income from Operations

Subtract gross 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**.

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 and/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

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 publication *FM 1845/AgDM C3-55*, **Financial Performance Measures for Iowa Farms**, 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 often are 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.

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.

Net Farm Income Statement example

Name <u>Cyclone Farms</u> Year <u>01/01/08</u>

Income				
Cash Income		Income Adjustments	Ending	Beginning
Sales of livestock bought for resale		Crops held for sale or feed	228,166	123,420
Sales of raised livestock, grain, etc.	271,028	Market livestock	31,920	37,120
Cooperative distributions paid	4,000	Accounts receivable	7,966	5,445
Agricultural program payments	20,500	Unpaid co-op. distributions	0	0
Crop insurance proceeds		Breeding livestock	25,250	22,750
Custom hire income		Subtotal of Adjustments	293,302	188,735
Other cash income	587	b. Net adjustment (ending - beginning)	104,	567
Sales of breeding livestock	14,568	c. Value of Home Used Production		
a. Total Cash Income	\$310,683	d. Gross Farm Revenue (a + b + c)	\$415,	250

Expenses

Cash Expenses		Expense Adjustments	Beginning	Ending
Car and truck expenses		Investment in growing crops	13,028	22,923
Chemicals	41,560	Commercial feed on hand	41,460	31,230
Conservation expenses		Prepaid expenses	20,387	31,500
Custom hire	6,589	Supplies on hand	10,800	15,548
Employee benefits		f. Net adjustment (beginning - ending)	(15,5	526)
Feed purchased	79,150		Ending	Beginning
Fertilizer and lime	29,360	Accounts payable	23,523	1,126
Freight, trucking		Farm taxes due	0	0
Gasoline, fuel, oil	14,683	Accrued interest	17,720	13,360
Insurance	4,306	g. Net adjustment (ending - beginning)	26,	757
Interest paid	22,845	h. Depreciation	8,	703
Labor hired		i. Gross Farm Expenses (e + f + g + h)	\$375,	553
Pension and profit-share plans				
Rent or lease payments	63,560	j. Net Farm Income From Operations (d - i)	\$39,	697
Repairs, maintenance	18,225			
Seeds, plants	27,817	k. Sales of Farm Capital Assets		860
Storage, warehousing		I. Cost Value of Items Sold		0
Supplies purchased	19,850	m. Capital Gains or Losses (k - I)		860
Taxes (farm)	956			
Utilities	935			
Vet. fees, medicine, breeding	21,560			
Other cash expenses	863			
Livestock purchased	3,360			
e. Total Cash Expenses	\$355,619	n. Net Farm Income (j + m)	\$40,	557

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Net Farm Income Statement

Name	Year

Income			
Cash Income	Income Adjustments	Ending	Beginning
Sales of livestock bought for resale	Crops held for sale or feed		
Sales of raised livestock, grain, etc.	Market livestock		
Cooperative distributions paid	Accounts receivable		
Agricultural program payments	Unpaid co-op. distributions		
Crop insurance proceeds	Breeding livestock		
Custom hire income	Subtotal of Adjustments		
Other cash income	b. Net adjustment (ending - beginning)		
Sales of breeding livestock	c. Value of Home Used Production		
a. Total Cash Income	d. Gross Farm Revenue (a + b + c)		

Expenses

Cash Expenses	Expense Adjustments	Beginning	Ending
Car and truck expenses	Investment in growing crops		
Chemicals	Commercial feed on hand		
Conservation expenses	Prepaid expenses		
Custom hire	Supplies on hand		
Employee benefits	f. Net adjustment (beginning - ending)		
Feed purchased		Ending	Beginning
Fertilizer and lime	Accounts payable		
Freight, trucking	Farm taxes due		
Gasoline, fuel, oil	Accrued interest		
Insurance	g. Net adjustment (ending - beginning)		
Interest paid	h. Depreciation		
Labor hired	i. Gross Farm Expenses (e + f + g + h)		
Pension and profit-share plans			
Rent or lease payments	j. Net Farm Income From Operations (d - i)		
Repairs, maintenance			
Seeds, plants	k. Sales of Farm Capital Assets		
Storage, warehousing	I. Cost Value of Items Sold		
Supplies purchased	m. Capital Gains or Losses (k - I)		
Taxes (farm)			
Utilities			
Vet. fees, medicine, breeding			
Other cash expenses			
Livestock purchased			
e. Total Cash Expenses	n. Net Farm Income (j + m)		

Statement of Cash Flows example

Name Cyclone Farms	Year 01/01	//08
	Cash In	Cash Out
Cash farm income and expenses (operating)		
Total cash income (line a, net farm income statement)	310,683	XXX
Total cash expenses (line e, net farm income statement)	XXX	355,619
Capital assets (investing)		
Sales of capital assets (line k, net farm income statement)	860	XXX
Cost of purchases and trades (sched. J, K, L)	XXX	17,366
Loans (financing) New loans received	170,245	XXX
Principal paid on loans	XXX	110,806
Nonfarm (withdrawals)		
Nonfarm income (wages, rents, interest, etc.)	27,825	XXX
Nonfarm expenditures (family living, income tax, retirement accts, etc.)	XXX	39,293
Cash on hand (farm cash, checking, savings)		
Beginning of year (farm net worth statement)	19,617	XXX
End of year (farm net worth statement)	XXX	6,146
Total of cash in and cash out*	\$529,230	\$529,230

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

Statement of Owner Equity example

Name_ Cyclone Farms	Year 01/01	/08
	Cost Value	Market Value
a. Farm net worth, beginning of year	256,820	477,049
(Line e, beginning net worth statement)		
b. Change in market value of capital assets (net of depreciation)	xxx	(1,645)
(Line g, ending net worth statement, market value <u>27,444</u> minus cost value _	29,089)	
c. Net farm income	40,557	40,557
(Line n, net farm income statement)	same value for c	ost and market
d. Net nonfarm withdrawals	(11,468)	(11,468)
nonfarm income (statement of cash flows)27,825	same value for c	ost and market
minus nonfarm expenditures (statement of cash flows)39,293	1	
minus home used production (line c. net farm income statement)	<u> </u>	
Sum of lines a, b, c, and d (should be approximately equal to line e)	285,909	504,493
e. Farm net worth, end of year	\$285,909	\$504,493
(Line e, ending net worth statement)		

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 e, net farm income statement)	XXX	
Capital assets (investing)		
Sales of capital assets (line k, net farm income statement)		XXX
Cost of purchases and trades (sched. J, K, L)	XXX	
Loans (financing)		
New loans received		xxx
Principal paid on loans	XXX	
Nonform (withdrawale)		
Nonfarm (withdrawals) Nonfarm income (wages, rents, interest, etc.)		xxx
Nonfarm expenditures (family living, income tax, retirement accts, etc.)	XXX	, , , ,
Cash on hand (farm cash, checking, savings) Beginning of year (farm net worth statement)		1001
End of year (farm net worth statement)	XXX	XXX
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		equal.
*If all cash transactions are included correctly, the totals for the two columns		equal.
*If all cash transactions are included correctly, the totals for the two columns Statement of Owner Equity	will be approximately	
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*If all cash transactions are included correctly, the totals for the two columns Statement of Owner Equity Name	Year	Market Val
a. Farm net worth, beginning of year (Line e, beginning net worth statement) b. Change in market value of capital assets (net of depreciation) (Line g, ending net worth statement, market value minus cost c. Net farm income (Line n, net farm income statement) d. Net nonfarm withdrawals nonfarm income (statement of cash flows) minus nonfarm expenditures (statement of cash flows) minus home used production (line c. net farm income statement)	Year	Market Val
*If all cash transactions are included correctly, the totals for the two columns Statement of Owner Equity Name	Year	Market Val

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William Edwards, extension economist (515) 294-6161, wedwards@iastate.edu

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