

Income Statement

Financial statements are essential tools for managing farm businesses. Often, an accountant or bookkeeper will produce statements from the financial records of the business. Although the manager or owner may not be the person who develops the statements, they should understand the information that the statements provide about the financial condition of the business and be familiar with actions they can take to improve poor financial performance.

To ensure that you get a full picture of the farm's financial situation, use this publication in combination with the other financial analysis tools found in the Farm Financial Analysis Series. This series includes [P3709 *Managing Farm Finances in Turbulent Times*](#), [P3713 *Balance Sheet*](#), [P3710 *Cash Flow Statement*](#), and [P3712 *Ratios to Measure Farm Financial Health*](#).

A farm income statement is a summary of revenue and expenses for an accounting period. It is sometimes called a "profit-and-loss" statement and provides a measure of the profitability of the farm. The income statement measures the difference between revenue and expenses. The result from an income statement is referred to as net farm income. A positive net farm income indicates a profit, while a negative net farm income indicates a loss.

Creating an Income Statement

The income statement has two sections: revenue and expenses. Other considerations, such as accrual adjustments, capital adjustments, and depreciation, are included depending on which method of determining net income you use.

Cash accounting and accrual accounting are two common methods used to develop income statements. Cash accounting is easier to calculate and only includes revenue and expenses that involved cash transactions during the time examined. However, this method doesn't always give a complete overview of the farm's current financial situation. Accrual accounting is more complicated and includes revenues and expenses as they are incurred, not when the actual money is exchanged. However, the accrual method does allow for more accurate financial analysis.

A third option is accrual adjusted accounting, which is a blend of cash and accrual methods. The accrual adjusted

method involves using revenue and expenses along with changes in inventories, accounts receivable, and prepaid expenses. Figure 1 is an example of an income statement using this method. This publication describes how to construct an income statement using the accrual adjusted method.

Revenue

The revenue section of the income statement includes all revenue that has been produced during the accounting period. **Total crop revenue** includes all sales of crops and any changes in crop inventory and crop accounts receivables. Crop sales is the value of any crop sold during the accounting period. This number should match what was recorded in the cash flow statement. The changes in crop inventory and crop accounts receivable are found by the difference in the ending balance sheet values and the beginning balance sheet values.

An increase in crop inventory could result from an increase in the market value of the crops or an increase in the amount of inventory on hand. Both would represent an increase in revenue on the income statement. Accounts receivable includes items or services that the farm has provided but not yet received payment for. An increase in accounts receivable from beginning to ending values would increase revenue on the income statement.

Total market livestock revenue is similar to crop revenue in that it includes market livestock sales, changes in market livestock inventories, and accounts receivable. The sales value comes from the cash flow statement, and the change in inventory and accounts receivable come from the balance sheet. Market livestock are separated from breeding livestock.

Total breeding livestock revenue includes any sales of raised breeding livestock. Include any change in the value of the raised breeding livestock. Also include the value of any purchased breeding livestock that were sold. Adjust the sales of purchased breeding livestock for any gain or loss to the net book value.

The revenue section should also include any other operating revenues. This includes crop insurance proceeds or ag program payments, such as those for the Agricultural Risk Coverage (ARC) and the Price Loss Coverage (PLC) programs. **Other operating revenue** could include any

cash rent payments received, payments for custom work, or dividends from farm cooperatives. These should match the payments received on the cash flow statement.

Expenses

Expenses include operating expenses, feed purchases, feeder livestock purchases, changes in current assets and accrued expenses, depreciation expenses, and amortization of finance leases.

Operating expenses are expenses that were made in the operation of the farm. This can include the purchase of market livestock, cash rent, chemicals, purchased feed, fertilizers, fuel, labor, repair, maintenance, supplies, and more. Purchases of capital assets, such as machinery and equipment, are not included as these costs are accounted for in depreciation.

The **depreciation** used in the income statement is

economic depreciation as recommended by the Farm Financial Standards Council and differs from the depreciation used for tax purposes. Accelerated tax depreciation methods overstate the cost of assets in the early years of ownership. Economic depreciation is found by subtracting the salvage value of the equipment from the purchase price and dividing by the estimated useful life.

Changes in current assets are changes from beginning to ending values of assets, not including crop or livestock inventories. For more information on current assets, see Extension Publication [3713 Balance Sheet](#).

Income

Income from operations is found by subtracting total operating expenses from gross revenues. This is a measure of the returns to normal farm operations. Therefore, it is useful when comparing financial situations

Figure 1. Income Statement Example.

Revenues

Crop Sales	509,518
Increase (Decrease) in Crop Inventories	11,125
Increase (Decrease) in Crop Accounts Receivable	10,500
Total Crop Revenue	531,143
Market Livestock Sales	118,128
Increase (Decrease) in Market Livestock Inventories	3,150
Increase (Decrease) in Livestock Accounts Receivable	0
Total Market Livestock Revenue	121,278
Raised Breeding Livestock Sales	21,000
Increase (Decrease) in Base Value of Raised Breeding Livestock	13,000
Purchased Breeding Livestock Sales	7,915
Less: Net Book Value of Purchased Breeding Livestock Sales	(10,040)
Total Breeding Livestock Revenue	31,875
Crop Insurance Proceeds	0
Ag Program Payments	46,336
Other Operating Revenue	5,050
Increase (Decrease) in Other Receivables	0
Total Other Operating Revenues	51,386
Gross Revenues	735,682

Expenses

Operating Expenses	466,329
Feed Purchases	31,783
Feeder Livestock Purchase	0
(Increase) Decrease in Current Assets	(20,469)
Increase (Decrease) in Accrued Expenses	2,015
Depreciation Expense	67,204
Amortization of Finance Leases	13,506
Total Operating Expenses	560,368
Income from Operations	175,314

Other Revenue (Expenses)

Interest Income	0
Interest Expense on current debt	(3,648)
Interest Expense on non-current debt	(32,594)
Total Gain (Loss) on Sale of Farm Assets	0
Other Miscellaneous Income (Expense)	0
Total Other Revenue (Expense)	(39,309)
Income before Income Tax (Net Farm Income)	136,005

Income Tax Expense

Income Taxes	14,769
Increase (Decrease) in Accrued Income Taxes	(1,064)
Increase (Decrease) in Deferred Taxes	34,917
Total Income Tax Expense	48,622
Net Income	87,383

Table 1. Profitability Measures.

Measure of Profitability	Formula	Calculations from Income Statement
Rate of Return on Farm Assets (ROA)	(Income from operations – Owner withdrawal for unpaid labor and management) / Average total farm assets	$(175,314 - 55,740^a) / 4,077,326^b$ = 2.93%
Rate of Return on Farm Equity (ROE)	(Income from operations – Farm interest expense – Owner withdrawal for unpaid labor & management) / Average total farm equity	$(175,314 - 39,309 - 55,740^a) / 2,552,593^c$ = 3.14%
Operating Profit Margin Ratio	(Income from operations – Owner withdrawal for unpaid labor and management) / Gross revenues	$(175,314 - 55,740^a) / 735,682$ = 16.25%
EBITDA (earnings before interest, income taxes, depreciation, and amortization)	Income from operations + depreciation + amortization expense	$175,314 + 67,204 + 13,506$ = \$ 256,024

^aThe owner withdrawal for unpaid labor and management is found on Statement of Owner Equity. In this case the value is \$55,740.

^bThe average total farm assets value is calculated by taking the average of the beginning and ending values for total farm assets which can be found on the Balance Sheet. In this case the average total farm asset value was \$4,077,326.

^cThe average total farm equity value is calculated by taking the average of the beginning and ending values for total farm equity which can be found on the Balance Sheet. In this case the average total farm equity value was \$2,552,593.

across time. Income from operations does not include capital purchases/sales or income taxes. However, capital purchases/sales are included as other revenue (expenses), as these events usually do not occur every year. Other revenue/expenses also include items such as interest income or expense. Adding these other revenue/expenses to income from operations gives income before income tax, or net farm income. **Net farm income** is the profitability of the farm.

The **income tax expense** section includes income taxes paid, change in accrued income taxes, and change in deferred taxes. Subtracting the total income tax expense from net farm income gives the net income. **Net income** is the money that is available to use for paying farm owners, living expenses, and personal income tax. This money can also be used to reinvest in the farm operation through the purchase of capital assets or land.

How Can an Income Statement Help You?

An income statement is a good starting point for analyzing a farm's profitability because ultimately it will show whether a profit or loss was achieved in the previous year. If a profit was earned, the income statement can help you allocate funds to pay family living expenses and other cash withdrawals, pay income and social security taxes, increase farm cash reserves, purchase needed farm assets, or reduce farm liabilities by paying loan principal balances or other accounts payable.

Income Statement Analysis

The income statement allows you to evaluate the profitability of the farm. Using information from the

income statement, several ratios can be used to further understand the farm's current financial situation. Table 1 lists these ratios and examples of how they are calculated.

Rate of return on farm assets (ROA) is computed by dividing the return to farm assets (income from operations minus owner withdrawals for unpaid labor and management) by the average farm asset value for the year. This ratio expresses the return per dollar of farm assets. A ratio above 0.05 indicates the farm is in a strong financial situation.

Rate of return on farm equity (ROE) is computed by dividing the return to farm equity (income from operations minus farm interest expense minus owner withdrawals for unpaid labor and management) by farm average equity. This ratio measures the return on the owner's share of the capital invested. An ROE ratio above 0.10 is considered strong, while an ROE ratio below 0.05 is considered weak.

The **operating profit margin ratio** is computed by dividing return on farm assets by gross revenue. This measure expresses operating profit as the return per dollar of gross revenue. An operating profit margin ratio above 0.25 indicates the farm is in a strong position, while an operating profit margin below 0.10 indicates a weak position.

Earnings before interest, taxes, depreciation, and amortization (EBITDA) is computed by adding income from operations, depreciation, and amortization expense. Compare this figure to the farm's total interest payments or principal-and-interest payments to measure potential repayment capacity.

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