

FSA95

# Measuring Profitability: Understanding the Ins-and-Outs of a Farm Income Statement

Ryan Loy Assistant Professor -Agricultural Economics and Agribusiness

Evan Ware
Program Associate Agricultural Economics
and Agribusiness

Bruce Ahrendsen
Professor Agricultural Economics
and Agribusiness

# Arkansas Is Our Campus

Visit our website at: https://www.uaex.uada.edu

### Overview

## What is an Income Statement?

An income statement (also known as the Earnings or Profit and Loss Statement) is an integral part of on-farm financial record keeping. In short, the income statement can be used to reveal the overall success of a farm enterprise over a specific unit of time, usually one calendar year. The income statement is used to assess a farm's overall profitability and is an indicator of financial health. It summarizes all returns (income) and costs (expenses) associated with how a farm generates capital (cash). As such, the income statement provides a systematic way for farm managers to determine net farm income (or profit). Net farm income (NFI) refers to the farm-generated returns, given the capital (money, time and labor) invested in the enterprise. If positive, the farm generated a profit; if negative, the farm did not and may have to make production, marketing or financial adjustments in the future. The income statement can be used to evaluate profitability in a single

year while allowing for year-toyear comparisons to understand how efficiently the farm generates income over time.

This factsheet details the specific sections in all income statements and how to use them to measure financial health. A blank income statement is provided at the end, allowing readers to develop their own on-farm income statements.

# Developing an Income Statement

Before developing an income statement, it's important to familiarize yourself with the documents/records that serve as the foundation. Three documents form the basis for an income statement: 1) the beginning of-the-year balance sheet, 2) the end-of-the-year balance sheet, and 3) the most recent cash-basis Schedule F tax form (Form 1040 – Profit and Loss from Farming).

The beginning- and end-ofyear balance sheets highlight changes in assets and liabilities throughout the year that will eventually be included on an income statement through an accrual adjustment (more discussion on this in later sections). On the other hand, the Schedule F provides a summary of income and expenses from the calendar year that can be used to develop that year's income statement.

### **Section 1: Receipts**

The income statement's receipt (also known as revenue) section includes all the items for which one received receipts during the calendar year. These items include crop/livestock sales, government payments (including crop insurance proceeds) and custom work income. Be sure to record income only from the farm business during the calendar year. For example, include the sale of a grown crop but do not include items such as sold land or machinery. Capital assets (land or machinery) are not included because they are revenue earned outside of farm-generated income<sup>1</sup>. Table 1 is an example of a farm's receipts section. In this case, the farm generated \$110,000 in revenue from various sources.

Table 1. Income Statement Revenue.

CATEGORY	AMOUNT (\$)
REVENUE	
Crop Sales	50,000
Livestock Sales	30,000
Government Payments	10,000
Custom Work Income	20,000
Other Farm Revenue	-
GROSS FARM INCOME (Sum of revenue categories)	110,000

# Section 2: Expenses, Net Operating Income, and Net Farm Income (Before Adjustment)

The expense section of an income statement records all costs (both operating and fixed) for the calendar year (Table 2). Operating expenses vary with production (for example, seed expenses vary with the number of crop acres planted). On the other hand, fixed expenses do not vary with production and must be paid regardless of farm-level output (e.g., interest paid on an outstanding loan). It's important to note the paid-principal portion of outstanding debt is

not recorded as an expense. This is because the income statement should capture only the cost (e.g., interest) incurred to use the bank's money during the year — think of this as a "rent" charge for using borrowed money.

Like revenue, the purchase of land, machinery or other large capital purchases should not be included as expenses. Accrual adjustments — changes between the beginning and end-of-year balance sheets — will likely have to be made. Again, just like the revenue section, accrual adjustments are made to ensure costs are related to the year's production and to isolate them from the previous year's expenses.

Two critical pieces of information can be pulled from this section: net operating income (NOI) and net farm income before adjustment. NOI is any farm-generated revenue above operating expenses (\$110,000 (farm revenue) - \$56,700 (operating expenses) = \$53,300). This is a good measure of profitability, which doesn't account for fixed economic costs like depreciation. Net farm income (before adjustment) is revenue above both operating and fixed expenses (\$110,000 - \$56,700 - \$11,700 (fixed)

**Table 2. Income Statement Expenses.** 

OPERATING EXPENSES	
Seed and Plants	10,000
Fertilizers and Chemicals	5,000
Pesticides and Herbicides	10,000
Feed	11,000
Veterinary and Medicine	1,200
Fuel and Oil	3,000
Repairs and Maintenance	1,000
Labor Wages	10,000
Utilities	1,500
Insurance	4,000
Other Operating Expenses	-
NET OPERATING INCOME (Gross Farm Income — Operating Expenses)	53,300
FIXED EXPENSES	
Interest Expense	8,200
Depreciation	3,500
Other Fixed Expenses	-
NET FARM INCOME (Before Adjustment) (Net Operating Income — Fixed Expenses)	41,600

<sup>&</sup>lt;sup>1</sup>While capital sales are not included on the income statement, they do have an impact on the balance sheet and cash flow statement. For example, selling a tractor would increase capital (cash) reserves and/or reduce outstanding liabilities.

expenses) = \$41,600) and measures economic profit by accounting for "non-cash" expenses and overhead.

# Section 3: Accrual Adjustments and Net Farm Income

An accrual adjustment accounts for changes in inventory over the year. An accrual adjustment simply means to account for revenues when they are earned, rather than only recording it when cash is received or paid<sup>2</sup>. These inventory changes are derived from the beginning-of-the-year balance sheet and the end-of-the-year balance sheet. The idea is to compare the two balance sheets, isolate the changes related to this year's production, and remove non-cash current asset and liability changes that do not pertain to this year's production.

Table 3 is an example of an accrual adjustment section. The inventory items listed are some of the most common items that may need adjusting throughout the year. Let's say, for instance, the farm had an increase in crops and feed inventory (current asset) of \$2,500. This would be recorded as a revenue adjustment and added to the total adjustment value, since it's an increase in the current asset item throughout the year. But what if there was a reduction in a current asset (e.g., accounts receivable) over the year? This difference would also be recorded, but treated as a revenue reduction (see accounts receivable in Table 3)<sup>3</sup>. On the current liability side, an increase would be recorded as a negative value, and the negative value is added to the total adjustment, while a decline would be recorded as a positive value and added to the total adjustment.

Let's take accounts payable and assume an increase of \$500. In this case, the \$500 would be recorded as a negative in the accrual adjustments (see accounts payable in Table 3). This may seem backward, but we're essentially ensuring three things: 1) accounting for the value of inventory change throughout the year, 2) helping to offset production expenses incurred to build that inventory, and 3) removing the value of inventory that was previously produced but used this year. In the given example, total inventory adjustment amounts to \$1,000 = \$2,500 + (\$1,000) + (\$500).

The total adjustment value is added to net farm income before adjustment and total net farm income (NFI) is then determined. In this example, the NFI is \$42,600 (\$41,600 + 1,000). NFI is the amount of money the farm made after accounting for all expenses during the year, and is a key metric for measuring the financial performance of a farm enterprise.

**Table 3. Income Statement Accrual Adjustments.** 

ACCRUAL ADJUSTMENTS (FROM THE BALANCE SHEETS)	
Crops and Feed (Current Asset)	2,500
Market Livestock (Current Asset)	
Growing Crops (Current Asset)	
Accounts Receivable (Current Asset)	(1,000)
Prepaid Expenses (Current Asset)	
Accrued Interest (Current Liability)	
Accounts Payable (Current Liability)	(500)
Other Adjustments	-
TOTAL ADJUSTMENT (sum all inventory adjustments)	1,000
Net Farm Income (NFI (before adjustment) + Total Adjustment)	42,600

### References

Farm Financial Standards Council. (2025). *Financial Guidelines for Agriculture*. Retrieved March 3, 2025, from <a href="https://www.ffsc.org/guidelines.php">https://www.ffsc.org/guidelines.php</a>.

Padgham, J., Chase, C. L., Dietmann, P., & Goodrich, J. (2017). Fearless Farm Finances: Farm Financial Management Demystified. Midwest Organic and Sustainable Education Service (MOSES).

<sup>&</sup>lt;sup>2</sup>The logic behind making an accrual adjustment, such as changes in inventory, is to match the changes to the expenses that were incurred.

<sup>3</sup>If the farmer earned income in the previous year but received the payment this year, the \$1,000 accounts receivable on the beginning-of-year balance sheet represents prior-year income. When the farmer is paid by December 31, it reduces accounts receivable to zero on the end-of-year balance sheet and reflects a deduction since the income was already recognized in the previous year.

CATEGORY	AMOUNT (\$)
REVENUE	
Crop Sales	
Livestock Sales	
Government Payments	
Custom Work Income	
Other Farm Revenue	
GROSS FARM INCOME (Sum of revenue categories)	
OPERATING EXPENSES	
Seed and Plants	
Fertilizers and Chemicals	
Pesticides and Herbicides	
Feed	
Veterinary and Medicine	
Fuel and Oil	
Repairs and Maintenance	
Labor Wages	
Utilities	
Insurance	
Other Operating Expenses	
NET OPERATING INCOME (Gross Farm Income – Operating Expenses)	
FIXED EXPENSES	
Interest Expense	
Depreciation	
Other Fixed Expenses	
NET FARM INCOME (Before Adjustment) (Net Operating Income – Fixed Expenses)	
ACCRUAL ADJUSTMENTS	
Crops and Feed	
Market Livestock	
Accounts Receivable	
Prepaid Expenses	
Growing Crops	
Accounts Payable	
Accrued Interest	
TOTAL ADJUSTMENT (sum all inventory adjustments)	
Net Farm Income (NFI (before adjustment) + Total Adjustment)	

RYAN LOY, assistant professor of agricultural economics and agribusiness, and EVAN WARE, program associate of agricultural economics and agribusiness, are both with the University of Arkansas System Division of Agriculture Cooperative Extension, Little Rock. BRUCE AHRENDSEN, professor of agricultural economics and agribusiness is with the University of Arkansas System Division of Agriculture, Agricultural Experiment Station, Fayetteville. FSA95-PD-5-2025

Pursuant to 7 CFR § 15.3, the University of Arkansas System Division of Agriculture offers all its Extension and Research programs and services (including employment) without regard to race, color, sex, national origin, religion, age, disability, marital or veteran status, genetic information, sexual preference, pregnancy or any other legally protected status, and is an equal opportunity institution.