

# Income Statement — A Financial Management Tool

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An income statement is a financial statement that measures the success of a business for a period of time in terms of net income or loss. The most common period of time for a farm business is a calendar year. Other names for this important accounting statement include profit and loss statement, operating statement, and income and expense statement.

The income statement shows the income earned during the accounting year and the expenses that are properly assignable to that year. The difference between the two is net income or net loss. The items included in an income statement of a farm business can be classified into seven major headings:

- Farm Cash Receipts
- Change in Inventory Value of Crops, Livestock, and Accrued Income
- Farm Cash Operating Expenses
- Change in Inventory Value of Accrued Expense
- Depreciation Expenses
- Gain or Loss on Sale of Capital Assets

## Farm Cash Receipts

The principal source of farm income is from the sale of livestock, grain, and other farm products. Other income is from agricultural program payments, custom work, and patronage dividends.

## Changes in Inventory Value of Crop, Livestock, and Accrued Income

Changes in crop, livestock, and accrued income inventory values must be considered to determine gross revenue and value of farm production. Livestock and crop inventories represent products purchased, such as feeder livestock or raised crops, such as wheat, that have not yet been sold. Accrued income represents income not yet received for products sold during the accounting period, or deferred crop insurance and agricultural program payments.

If the crop, livestock, and accrued income inventory value is greater at the end of the period, the increase in value is added to cash farm receipts. If the inventory value is less at the end of the period, the decrease in value is subtracted from the cash farm receipts. If the total inventory value at the beginning of the period is equal to the value at the end of the period, then inventories have no effect on income.

Crop, livestock, and accrued income inventories are not required for federal tax returns computed on the “cash” basis. Consequently, Schedule 1040F is **not** a true income statement for taxpayers computing taxes on the cash basis.

To determine the true profitability for a period, the gross receipts as shown on Schedule 1040F must be adjusted by changes in the crop, livestock, and accrued income inventories. In addition, the Schedule 1040F gross receipts may need to be adjusted because income tax regulations require the cost of livestock and other products purchased for resale to be accounted for in the year the livestock and other products are sold.

## Farm Cash Operating Expenses

Expenditures with benefits that usually expire within a year are operating expenses. Hired labor, feed, seed, fertilizer, chemicals, and insurance are examples of farm cash operating expenses.

## Changes in Inventory Value of Accrued Expense, Production Supply Expense, and Accrued Interest Expense

Changes in the inventory values of accrued expense must be considered to determine total farm expense. Accrued expense represents expenses — such as taxes and machine hire — that are owed, but not yet paid. In addition, accrued expense represents expense for items such as supplies and chemicals received and used, but not yet paid for. The inventory change in accrued interest expense must be added, or subtracted, from cash interest paid to obtain the total accrued interest expense for the accounting period.

## Depreciation Expense

Investments that last more than a year are called capital expenditures. Depreciation is the method used to charge-off capital expenditures in each annual accounting period for the life of the capital asset. Depreciation represents the annual loss in value of capital assets. This loss is from gradual wear and obsolescence.

## Gain or Loss on Sale of Farm Capital Assets

Revenue received from the sale of farm capital assets such as real estate, buildings, and equipment needs to be considered in the determination of net farm income. The gain or loss on the sale of farm capital assets is equal to the sale revenue minus the book value, or remaining basis value (undepreciated original cost), of the capital asset.

## Gain or Loss Due to Sale of Breeding Livestock and Value of Raised Breeding Livestock

Market values of purchased and raised breeding livestock are recorded on a market value balance sheet, but the inventory values are **not** used directly in the computation of net farm income. Young breeding stock not yet transferred to the breeding herd can be recorded on the balance sheet as market livestock, and thus shown as a current asset. In this case, sales of young breeding stock would be treated the same as market livestock on the income statement.

For the income statement, purchased breeding livestock are treated as a capital asset and the cost depreciated. The **base value method** can be used in valuing raised breeding livestock. That is, a base value is established for each category of raised animals in the breeding herd. The cash costs of raising the breeding livestock will have been included in the cash expenses in the current, or previous, income statements.

The gain or loss due to the sale of breeding livestock, as well as the base values placed on raised breeding livestock, can be separated into four categories:

- Sale of Purchased Breeding Livestock
- Sale of Raised Breeding Livestock
- Quantity Change of Raised Breeding Livestock
- Value Change in Raised Breeding Livestock

**(1) Sale of Purchased Breeding Livestock:** Gain or loss on the sale of purchased breeding livestock is calculated as the sale price minus the undepreciated balance or remaining basis at the time of sale. This gain or loss is included in the gross revenue section of the income statement.

**(2) Sale of Raised Breeding Livestock:** Gain or loss on the sale of raised breeding livestock is calculated as the sale price minus the base value at the time of sale. This gain or

loss is included in the gross revenue section of the income statement.

**(3) Quantity Change of Raised Breeding Livestock:** Calves and young breeding livestock may be transferred into the breeding herd each year. At the same time, some breeding livestock may have been culled and thus sold, while some animals may have died. Thus, the total base value of raised breeding livestock may have increased or decreased from the beginning to the end of the period. This gain or loss in the total base value, due **only** to a change in animal numbers, must be computed and included in the gross revenue section of the income statement.

**(4) Value Change in Raised Breeding Livestock:** If the base values for various raised breeding livestock are changed for the balance sheet on a given date, the gain or loss connected with that change would be included as an adjustment to the income statement.

## Analysis of the Income Statement

The income statement represents a progress report of the business. The net income or loss as shown on an income statement shows the profitability of the business for a specific period of time. A comparison of income statements for a business over time shows the growth or decline in profitability. Net farm income averages for farms of similar size and type are sometimes available for comparison. Comparison of net farm income from one farm business to the average of other farm businesses similar in size and type can be used to evaluate the efficiency of the business.

Table 1 presents an example of an income statement. Financial efficiency ratios, see MF-270, *Financial Ratios Used in Financial Management*, can be used to evaluate the relationship between accrual expenses and income. These ratios are a good indicator of a farm's ability to control costs.

**Table 1 Income Statement (Farm Business Only)**

<b>Farm Business Receipts:</b>		
Crop Cash Sales .....	(1A)	\$ 269,868
Ending Crop Inventory .....	(1B)	<u>186,620</u>
Beginning Crop Inventory .....	(1C)	<u>156,323</u>
Accrual Gross Revenue from Crops .....	(1)	\$ 300,165
(Line 1A + Line 1B - Line 1C)		
Livestock and Milk Cash Sales .....	(2A)	\$ 171,748
Ending Livestock Inventory .....	(2B)	<u>138,628</u>
Beginning Livestock Inventory .....	(2C)	<u>137,429</u>
Accrual Gross Revenue from Livestock and Milk.....	(2)	\$ 172,947
(Line 2A + Line 2B - Line 2C)		
Gain/Loss on Sale of Breeding Livestock Sales .....	(3)	\$ 0
Agricultural Program Payments .....	(4)	<u>22,102</u>
Crop Insurance Proceeds .....	(5)	<u>16,136</u>
Other Farm Income .....	(6)	<u>31,219</u>
GROSS REVENUE (Add Lines 1 through 6).....	(7)	\$ 542,569
Livestock Purchases.....	(8)	\$ 73,081
Cost of Purchased Feed/Grain .....	(9)	<u>39,061</u>
VALUE OF FARM PRODUCTION (Line 7 - Line 8 - Line 9).....	(10)	\$ 430,427
<b>Farm Business Expenses:</b>		
Labor Hired .....	(11)	\$ 15,078
Repairs.....	(12)	<u>32,801</u>
Seed.....	(13)	<u>35,156</u>
Fertilizer .....	(14)	<u>53,471</u>
Machine Hire .....	(15)	<u>13,470</u>
Veterinarian Expense.....	(16)	<u>4,328</u>
Marketing.....	(17)	<u>5,897</u>
Fuel and Utilities .....	(18)	<u>33,027</u>
Property Tax .....	(19)	<u>6,376</u>
General Farm Insurance .....	(20)	<u>6,024</u>
Cash Rent.....	(21)	<u>23,801</u>
Herbicide and Insecticide .....	(22)	<u>25,666</u>
Miscellaneous .....	(23)	<u>17,792</u>
TOTAL CASH OPERATING EXPENSES.....	(24)	\$ 272,887
(Add Lines 11 through 23)		
Expense Inventory Adjustment .....	(25)	\$ -5,957
Depreciation .....	(26)	<u>33,595</u>
TOTAL OPERATING EXPENSES (Line 24 + Line 25 + Line 26) .	(27)	\$ 300,525
Interest .....	(28)	\$ 20,908
TOTAL EXPENSES (Line 27 + Line 28).....	(29)	\$ 321,433
NET FARM INCOME FROM OPERATIONS (Line 10 - Line 29)(30)		\$ 108,994
Gain/Loss on Sale of Capital Assets .....	(31)	\$ 0
NET FARM INCOME (Line 30 + Line 31).....	(32)	\$ 108,994

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