CHAPTER 1

OVERVIEW OF FARM MANAGEMENT

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Introduction

Tax management is an integral part of farm management. For some production decisions such as whether to plant corn or soybeans this year, tax considerations have little or no impact. But tax considerations may have a major effect on the timing of income and deductions. (See Chapter 5 in this

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guide for an in-depth discussion of timing.) As a result, tax considerations can be a major factor in determining how some farm transactions, such as acquisition of new equipment, are structured.

For example, a producer may take advantage of the like-kind exchange provisions to trade in an old machine and acquire a replacement without recognizing gain for tax purposes. If the trade-in allowance exceeds the adjusted basis of the old machine (i.e., its initial cost minus the depreciation allowed or allowable), the gain realized on the trade is deferred in a qualified exchange.

Recognition of a loss is also postponed in a like-kind exchange. Therefore, if the adjusted basis of the old machine is more than the proposed trade-in allowance, the producer will generally have a lower tax and a higher after-tax income by selling the old machine and purchasing its replacement in separate transactions (rather than trading it in), because taking this path allows recognition of the loss.

Farm managers can make two types of mistakes with respect to taxes:

1. They can ignore the tax consequences of their decisions entirely, so that after-tax income is lost by not taking advantage of tax-reduction opportunities.
2. They can focus so much on reducing taxes that after-tax income is reduced. Producers must be aware of taxes and tax laws, but they should not let tax considerations overly influence their decisions.

This chapter reviews basic farm-management concepts and how they may be affected by tax considerations. It also illustrates how managing taxes can increase a farmer’s after-tax income.

**Budgeting**

Budgeting is an analytical technique used to evaluate certain changes in the farm operation or to project farm income and cash flow. Budgeting can be done by hand or by computer. The three main types of budgets are partial budgets, total farm budgets, and cash-flow budgets. All of these budgets are based on estimates of future performance. Farmers should draw upon their own experiences and be as realistic as possible in this planning process. Tax considerations can be a part of any of these budgets, reflecting changes in the farmer’s tax situation that would occur as a result of the alternatives being considered. (A number of tools are available at [http://www.extension.iastate.edu/agdm/wdfinancial.html#analysis](http://www.extension.iastate.edu/agdm/wdfinancial.html#analysis)).

**Partial Budgets**

Partial budgets are used to make decisions involving only part of the farm business. Typically, the changes in receipts and costs of Alternative A are compared with the changes in receipts and costs of Alternative B, and the alternative with the higher net income is selected.

**Example 1.1 Corn vs. Soybeans**

A farmer is comparing production of an acre of corn vs. an acre of soybeans. The variable input costs (seed, fertilizer, chemicals, fuel, etc.) are about $340 per acre for corn and $180 per acre for soybeans. Each acre of corn is expected to produce about $670 of revenue, compared to $470 for soybeans. The per-acre return to the operator is $330 ($670 – $340) for corn and $290 ($470 – $180) for soybeans. A producer in this situation will tend to increase the acres planted in corn.

The expenses considered in Example 1.1 are ordinary current expenses, and the income for both crops is ordinary income. The tax treatment of expenses or receipts does not vary by crop. Thus, as noted in the introduction to this chapter, taxes have no effect on this decision.

In contrast, Example 1.2 looks at the tax impact of an equipment lease versus a purchase. An analysis tool to help with this comparison is accessible at [http://www.farmdoc.illinois.edu/fasttools](http://www.farmdoc.illinois.edu/fasttools).

**Example 1.2 Lease vs. Purchase of Machinery**

A farmer can lease a $100,000 tractor for 5 years for a tax-deductible lease payment of $23,017 per year. Alternatively, the farmer could buy the tractor with a 30% down payment, signing a 5-year loan
with a 6% interest rate with two payments due per year totaling $16,412. The interest and depreciation are tax deductible.

If farmer Anne’s marginal income and self-employment tax rate is 42%, the after-tax net present value of the outflows (discussed later in the chapter) is $1,166 less with the lease than the purchase. In contrast, if farmer Ben’s marginal income and self-employment tax is 15%, the after-tax net present value of the purchase is $1,214 less than the lease. Anne would generally prefer the lease, while Ben would generally prefer the purchase.

Cross Reference
For a discussion of whether a transaction is a lease or a purchase, see Chapter 4 of this guide.

Total Farm Budget

Total farm budgets are typically prepared for decisions having a major impact on the farm. Receipts, expenses, returns, and taxes should be budgeted for the current and the alternative situations. If farm income changes substantially, the associated change in taxes may determine which plan is best. Go to http://www.extension.iastate.edu/agdm/wdfinancial.html#analysis for a discussion of budgeting procedures.

Cash-Flow Budget

Partial and total farm budgets address the question, “Will it pay?” Without a positive answer to that question, a producer should not proceed. However, the answer to the “Can I pay for it?” question must also be positive. The cash flow associated with an investment is critical when loans are used to implement a decision. A tax-deductible expense does not necessarily generate the funds needed to make scheduled loan payments.

Example 1.3 Tax Savings and Loan Repayments

Cecile paid $100,000 for a piece of farm equipment and will deduct $10,710, $19,130, and $15,030 of depreciation for years 1, 2, and 3 respectively. If Cecile makes a 30% down payment and finances the $70,000 balance over 5 years at 6%, the loan is amortized with two payments per year totaling $16,412. If her marginal tax rate (including federal income and self-employment taxes and state income tax) is 35%, the tax savings from the depreciation deductions for the first 3 years will average $5,235 per year and therefore will not generate enough tax savings to make the loan payments.

Decision-Making Considerations

Farmers must evaluate alternatives to make management decisions. Marginal analysis is commonly used in evaluating alternatives. For example, how many pounds of nitrogen should be applied per acre to a specific field of corn? Do the savings on inputs from variable-rate application cover the added costs of variable-rate application?

Many alternatives considered by farmers involve investments that have costs and returns spread over a number of years. The costs and returns may occur at different points in time, and the lives of the investments are likely to be different. This difference in timing adds complexity to comparing the alternatives, because a dollar to be received 10 years from today is not worth the same amount as a dollar received today. Discounting the costs and returns of each alternative to their present value allows an appropriate comparison of the alternatives.

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Marginal Analysis

“Marginal cost equals marginal revenue” may bring back memories of Economics 101, but the message is an important one. Additional units of an input should be used as long as the additional cost is less than the additional revenue produced. Profit is maximized when marginal costs equal marginal revenue. If the producer’s actions affect the prices of the product or costs of an input, the terms marginal value product and marginal input costs are typically used, but the underlying concept is unchanged.

The table in Figure 1.1 illustrates a classic example of marginal analysis with nitrogen applications on corn. If nitrogen application is increased from 200 to 240 pounds per acre at a marginal cost of $12, corn production increases by 7.2 (157.0 – 140.8) bushels per acre, which adds $28.80 of revenue for a $16.80 ($28.80 – $12) increase in profit. However, increasing the nitrogen application from 320 to 360 pounds, at a cost of $12, results in only $11.60 of additional income. Revenue from the last unit of nitrogen is less than the value of corn produced. Therefore, the last unit of nitrogen should not be applied.

Figure 1.1 Level of Nitrogen Fertilizer Application

<table>
<thead>
<tr>
<th>Pounds of Nitrogen per Acre</th>
<th>Marginal Cost of Fertilizer</th>
<th>Bushels of Corn per Acre</th>
<th>Additional Bushels of Corn per Acre</th>
<th>Marginal Revenue from Corn</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>$60</td>
<td>149.8</td>
<td>149.8</td>
<td>$599.20</td>
</tr>
<tr>
<td>240</td>
<td>$12</td>
<td>157.0</td>
<td>7.2</td>
<td>$28.80</td>
</tr>
<tr>
<td>280</td>
<td>$12</td>
<td>163.4</td>
<td>6.4</td>
<td>$25.60</td>
</tr>
<tr>
<td>320</td>
<td>$12</td>
<td>167.2</td>
<td>3.8</td>
<td>$15.20</td>
</tr>
<tr>
<td>360</td>
<td>$12</td>
<td>170.1</td>
<td>2.9</td>
<td>$11.60</td>
</tr>
</tbody>
</table>

Time Value of Money

Farmers often postpone sales of raised commodities or use deferred-payment contracts to delay receipts into the year following the year of production. These techniques may be used to control the farmer’s marginal tax rate.

Cross Reference

See Chapter 5 of this guide for a discussion of managing the timing of income and deductions.

A secondary effect of such strategies is deferring the payment of income and self-employment taxes, which allows the farmer to use the deferred taxes interest-free for a year. As shown in Figure 1.2, the present value of $1,000 payment deferred for a year with an 8% discount is $925.90, a savings of $74.10 ($1,000 – $925.90). If the deferral period is increased to 4 years, the net present value of $1,000 with a 6% discount rate is $792.10, a savings of almost $208. If the discount rate is 8%, the present value of a 4-year deferral is $735.

Figure 1.2 Time Value of Money

<table>
<thead>
<tr>
<th>Year</th>
<th>Discount Rate</th>
<th>Present Value of $1,000</th>
<th>Amount of $1,000 at Compound Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>4%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>1</td>
<td>961.50</td>
<td>943.47</td>
<td>925.90</td>
</tr>
<tr>
<td>2</td>
<td>924.60</td>
<td>890.00</td>
<td>857.30</td>
</tr>
<tr>
<td>3</td>
<td>889.00</td>
<td>839.60</td>
<td>772.20</td>
</tr>
<tr>
<td>4</td>
<td>854.80</td>
<td>792.10</td>
<td>735.00</td>
</tr>
<tr>
<td>5</td>
<td>821.90</td>
<td>747.30</td>
<td>680.60</td>
</tr>
<tr>
<td>10</td>
<td>765.60</td>
<td>558.40</td>
<td>463.20</td>
</tr>
<tr>
<td>20</td>
<td>456.40</td>
<td>311.80</td>
<td>214.50</td>
</tr>
</tbody>
</table>
Compound interest increases the return on some investments.

## Farm Financial Statements

Pencil and paper (the most commonly used record-keeping system in farm operations) document the farm’s income and expenses, but they do not provide useful tools for analyzing the farm’s operations.

The main reason most farmers keep records is for tax reporting—an after-the-fact method that does not provide any meaningful data by itself. Just tracking the figures needed to prepare a tax return typically does not allow analysis and decision-making throughout the year to handle the financial issues that transpire during the year. It also does not guarantee that all of the farm’s income and expenses are captured because there is no checks-and-balances system.

Lenders and agricultural consultants often are concerned that a farmer lacks adequate records to monitor and analyze the farming business’s financial health. Lack of financial data makes it difficult to determine the farm’s actual cost of producing the end product, to ascertain the farmer’s ability to service proper debt loads, and even to develop plans if the operation has major financial problems.

One result of the financial crisis of the 1980s was the formation of the Farm Financial Standards Task Force—a committee of farmers, lenders, educators, and others. This committee’s efforts led to a set of guidelines for complete farm financial statements and guidance for analyzing them in a consistent manner. The recommended set of financial statements includes balance sheets, income statements, and cash flow statements for each farming operation. In addition, the committee provided 16 financial ratios (discussed later in this chapter) as a base guideline to measure the data and provide useful decision-making information for farmers.

### Balance Sheet Shows Stability

A balance sheet has two parts that must equal each other or “balance” each other. This financial report provides indications about the farm’s ability to support its ongoing operations, which helps determine how stable the farming operation is.

#### How the Balance Sheet Works

The following equation divides the balance sheet into its two parts, The totals of each of the two parts must be equal.

\[
\text{Assets} = \text{Liabilities} + \text{Owner’s Equity}
\]

The balance sheet is presented as a snapshot of the operation’s financial position at a single point in time, but it carries over from year to year as the farmer buys and sells assets or pays down debt. Figure 1.3 shows the organization of a balance sheet. The two main sections, Assets and Liabilities, are organized by timeframes. For assets, the gauge is liquidity, or how easily the asset can be converted to cash. For liabilities, the measure is the length of the loan, from the shortest to the longest.
Figure 1.3 Balance Sheet
Balance Sheet for Family Dairy Farm
As of December 31, 201X

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>LIABILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets</strong></td>
<td><strong>Current Liabilities</strong></td>
</tr>
<tr>
<td>Cash in bank; farm checking account</td>
<td>Accounts payable (examples: suppliers and vendors)</td>
</tr>
<tr>
<td>5,316</td>
<td>4,321</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>Payroll taxes payable*</td>
</tr>
<tr>
<td>2,544</td>
<td>1,325</td>
</tr>
<tr>
<td>Inventory (used only for some operations)</td>
<td>FICA tax payable</td>
</tr>
<tr>
<td></td>
<td>222</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td><strong>Federal withholding payable</strong></td>
</tr>
<tr>
<td>7,860</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>* owed to taxing authorities on behalf of employees</td>
</tr>
<tr>
<td><strong>Fixed Assets (at cost)</strong></td>
<td>Notes payable (examples: &lt;1 year bank loan; current portion of long-term debt)</td>
</tr>
<tr>
<td></td>
<td>30,500</td>
</tr>
<tr>
<td>Land</td>
<td>Credit accounts (examples: farm plan, credit cards, etc.)</td>
</tr>
<tr>
<td>285,000</td>
<td>3,025</td>
</tr>
<tr>
<td>Buildings and improvements</td>
<td><strong>Total Current Liabilities</strong></td>
</tr>
<tr>
<td>368,000</td>
<td>39,544</td>
</tr>
<tr>
<td>Less accumulated depreciation on B &amp; I</td>
<td><strong>Long-Term Liabilities (&gt; 1yr)</strong></td>
</tr>
<tr>
<td>– 48,000</td>
<td>Mortgage loan</td>
</tr>
<tr>
<td></td>
<td>189,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>Equipment loan</td>
</tr>
<tr>
<td>163,000</td>
<td>242,000</td>
</tr>
<tr>
<td>Less accumulated depreciation on equipment</td>
<td><strong>Total Long-Term Liabilities</strong></td>
</tr>
<tr>
<td>– 32,000</td>
<td>431,000</td>
</tr>
<tr>
<td>Vehicles</td>
<td><strong>Owners’ Equity (also called Capital or Shareholders’ Equity)</strong></td>
</tr>
<tr>
<td>41,000</td>
<td><strong>Owners' contributions</strong></td>
</tr>
<tr>
<td></td>
<td>4,500</td>
</tr>
<tr>
<td>Less accumulated depreciation on vehicles</td>
<td>Owners’ distributions</td>
</tr>
<tr>
<td>– 17,000</td>
<td>– 8,600</td>
</tr>
<tr>
<td>Cattle</td>
<td>Owners’ equity/capital (retained earnings)</td>
</tr>
<tr>
<td>81,000</td>
<td>366,105</td>
</tr>
<tr>
<td>Less accumulated depreciation on cattle</td>
<td><strong>Total Owners’ Equity</strong></td>
</tr>
<tr>
<td>– 22,000</td>
<td>362,005</td>
</tr>
<tr>
<td><strong>Total Fixed Assets (at cost)</strong></td>
<td><strong>Total Liabilities and Owners’ Equity</strong></td>
</tr>
<tr>
<td>819,000</td>
<td>832,549</td>
</tr>
<tr>
<td><strong>Noncurrent/Other Assets</strong></td>
<td><strong>Owners’ contributions</strong></td>
</tr>
<tr>
<td>Cooperative stock (examples: milk plant, chemical provider, etc.)</td>
<td>5,689</td>
</tr>
<tr>
<td>5,689</td>
<td><strong>Owners’ distributions</strong></td>
</tr>
<tr>
<td></td>
<td>– 8,600</td>
</tr>
<tr>
<td><strong>Total Other Assets</strong></td>
<td>Owners’ equity/capital (retained earnings)</td>
</tr>
<tr>
<td>5,689</td>
<td>366,105</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>Total Owners’ Equity</strong></td>
</tr>
<tr>
<td>832,549</td>
<td>832,549</td>
</tr>
</tbody>
</table>

**Assets**
The items that help you operate the business and produce the farm’s income. They consist of cash (your checking account), inventories, fixed assets (land, equipment, etc.) and more. As you can see in Figure 1.3, assets are reported on the left side of the balance sheet and are classified as current, fixed, and noncurrent/other assets.

**Current Assets**
Current assets have a life of less than one year and are liquid, meaning they can be converted to cash relatively easily. The most typical current assets are the farm checking and savings accounts, inventories (for market-based balance sheets), and prepaid expenses.

**Fixed Assets**
Fixed assets are considered noncurrent assets, but they are shown as a separate category on the balance sheet from other noncurrent assets. Fixed assets are the tangible capital assets that farmers use to produce their end product or commodity. They include machine sheds, barns, tractors, fencing, tiling, cattle, land, and other assets. The amounts reported for these assets are their original costs reduced by accumulated depreciation (the sum of the depreciation deductions taken each year since an asset was acquired).
Noncurrent/Other Assets

Noncurrent assets are those with lives extending beyond one year that are not considered easily convertible to cash. This category also includes other assets and is sort of a catch-all account for the asset side of the balance sheet.

Cooperative stock is the asset most often considered a noncurrent or other asset for farmers. Cooperative stock has both cash and noncash portions. The noncurrent/other asset portion of the stock is the noncash portion that is kept or retained by the cooperative. Therefore, receipt of cooperative stock impacts the balance sheet as well as the income statement (discussed later).

Liabilities and Owners’ Equity

Liabilities and the owners’ equity are reported on the right side of the balance sheet, and their total must equal the assets reported on the left side of the balance sheet. The most basic thought process in reporting transactions on the balance sheet is this: If the asset side is increased (for example, by purchasing a tractor), then the liabilities/owners’ equity side must also increase (for example, by taking out a loan for the tractor). Note that if the tractor is not financed, there is no increase in total assets. Instead, there is a reduction of one class of assets and a corresponding increase in fixed assets.

The liabilities portion of the balance sheet is sorted into current liabilities and long-term liabilities. Long-term for the liabilities section is the same as noncurrent assets, defined as liabilities with due dates extending beyond one year.

Current liabilities are those that are due within one year. They include accounts payable (amounts due to suppliers, vendors, or agencies, such as the feed mill or repair shop) and the portion of long-term debt that is due in the current year (such as the principal and interest payment due on an operating note).

Another way to understand the liabilities section is to think about what liabilities truly are: the debts incurred to support or fund your assets to carry on the farming operations.

Owners’ equity is just one name for the equity section of the balance sheet. It is also called net worth, shareholders’ equity, or net assets, depending on the structure of your business and purpose for which you are creating the balance sheet. Owners’ equity is calculated by subtracting total liabilities from total assets (assets minus liabilities equal owners’ equity). It consists of the initial amount of money and property invested into the business plus the annual net profits (net earnings) of the business. If at the end of the business’s accounting year, you decide to retain the profits within the business, they are transferred from the income statement (described next) onto the balance sheet into the owners’ equity account as retained earnings. These funds can be held for future expansion, investment, debt servicing, or other uses.

Income Statement Shows Consumption

In a business setting, consumption is an expense incurred during the fiscal year for goods and services used to satisfy the needs of the business. To consume, you must have sales or income. One way to think about the income statement versus the balance is to think of a building and the daily operations happening inside. The building is emblematic of the balance sheet: It is the stable asset that allows the operations to continue. The daily operations happening inside the building (repairing equipment, for example) are the continual consumption phase.

The income statement has several different names that vary according to the structure of the entity and the resulting activity. It is also known as the profit and loss statement, statement of income, statement of operations, or statement of earnings. Figure 1.4 is an example of an income statement for a sole proprietorship.
## Figure 1.4 Income Statement
### Income Statement for Family Dairy Farm
For the Year Ended December 31, 201X

### Farm Income (also called Revenue/Sales)
- Milk income: 332,000
- Grain/crop income: 112,000
- Agricultural program payments (MILC, CCC, USDA, etc.): 18,000
- Cattle: 39,000
- Cooperative distributions: 3,500
  (includes both cash and non-cash portions of coop distributions)
- Other income (examples: refunds, credits): 1,800

### Cost of Goods Sold
- Cost of sales (purchased resale livestock): – 18,000

### Gross Farm Income
488,300

### Expenses
- Advertising and marketing: 4,730
- Bank charges: 365
- Chemicals: 25,400
- Contract labor/Custom hire: 6,675
- Depreciation expense: 71,000
- Dues and subscriptions: 5,705
- Feed: 42,000
- Fertilizers/Lime: 19,000
- Freight/Trucking/Hauling: 5,200
- Gasoline, fuel, oil: 9,500
- Insurance
  - Property: 4,750
  - Liability: 3,100
- Interest expense: 18,750
- Payroll taxes
  - FICA (employer share only): 4,131
- Permits and licenses: 2,800
- Professional fees (legal and accounting): 750
- Rent: 9,800
- Repairs and maintenance: 21,600
- Seeds: 11,400
- Taxes
  - Real estate: 7,500
- Telephone (including cell): 1,350
- Utilities: 16,500
- Vehicle expenses: 7,500
- Veterinarian, breeding, medicine: 13,000
- Wages and salaries: 54,000

### Total Expenses
366,506

### Net Farm Operations Income (before taxes)
121,794

### Other Income and Expenses
- Gain (loss) on sale of assets: 3,485
  (including purchased cattle, raised cattle, equipment, etc.)
- Interest income: 122

### Net Income
125,401

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The income statement is a picture of farm production (revenue/sales/income) over the year, reduced by what the production costs (expenses), to yield the net income.

Most farmers do a good job of tracking their income and expenses because this information can be retrieved from the farm checking account, operating line of credit, and long-term loans. However, they may not be accurately measuring the farm’s economic performance or reporting their income or expenses correctly because they aren’t using a checks-and-balances system.

A checks-and-balances system reconciles or balances accounts on a monthly basis to be sure each item is captured. Accounting software programs are often the most efficient means to achieve the checks and balances required to assure that the records are kept accurately. Further, preparing this information only for tax purposes does not offer any guidance in the decision-making process for the farm as a whole.

Most farm income statements are organized to match the operation’s entity structure for tax purposes and are created for book purposes. Book purposes means that records are based on actual purchase and sales prices. Other types of income statements are created for management purposes. Different income statements, based on the fair market value of your operation, are used for lending purposes.

The following section describes the entries for the sole proprietorship income statement shown in Figure 1.4. The modifications required for other entity types are also discussed briefly.

Income

- Include total income received from the sales of both raised livestock and livestock purchased for resale. Also include the total cash receipts from the sales of breeding livestock.
- Do not include proceeds from outstanding loans in cash income (even if you report CCC loans as income for tax purposes).
- Both the cash and noncash portions of cooperative stock received are included in income. When amounts are moved to the balance sheet, the cash portion is included in your farm checking account (a current asset), and the noncash portion is included as a noncurrent/other asset.
- Report gross sales of cattle, milk, and other commodities, and enter the corresponding expenses. Even though the effect on income is the same if amounts are netted, entering both the income and expenses aids in determining the correct financial picture.
- Do not include sales of land, machinery, or other depreciable assets, loans received, or income from nonfarm sources in your gross farm income. Doing so overstates your farm operating income. These items are reported in the “Other income and expenses” section of the income statement.

Expenses

- Depreciation is a noncash expense that reduces the balance-sheet value of an asset over its life. Several accounting methods can be used to write off an asset’s depreciable cost over its useful life. Depreciation frees up cash flow by reducing the company’s reported income without a cash expenditure. Depreciation is discussed in Chapter 4 of this guide.
- Insurance costs for the owner’s life and disability insurance are not tax deductible in most situations. Therefore, these costs should be paid from the personal checking account, taken as a distribution from the business, or added to the owner(s) Form W-2 income, depending on the entity structure.
- Do not include the death of purchased livestock as an expense; these costs are captured through the fixed assets section of the balance sheet. You must note these deaths, however, to be certain they are captured correctly.
- The owner’s federal and state income taxes and self-employment taxes are personal expenses and should not be reported as a farm expense. If the entity structure is a corporation, the employer share of social security and Medicare taxes is reported as an expense.
OVERVIEW OF FARM MANAGEMENT

• Interest paid on all farm loans, land contracts, and farm-related charge cards is an expense on the income statement, but principal payments are not. The principal payments impact the balance sheet by decreasing the liability for the balance of the loan.

• Do not include the purchase of capital assets with a useful life longer than one year (such as machinery replacements) as a farm expense. The cost of these assets is accounted for on the balance sheet under fixed assets. It is expensed out via depreciation over the assets’ designated useful lives. Land purchases do not depreciate but are included on the balance sheet as fixed assets.

• Family living costs (personal expenses such as college tuition and cable television) are shown as draws from the equity section if a sole proprietor farmer does not maintain separate business and personal checking accounts. However, the farming operation should have a separate account so that business and personal expenses are paid from different accounts.

Points to Remember

• You are creating your records for analysis. To achieve an accurate end result, you must enter accurate information.

• Schedule F (Form 1040), Profit or Loss From Farming, is not an income statement because it shows only part of your income for the year. For example, a dairy farmer includes only milk, crop, and feeder livestock sales are included on Schedule F (Form 1040). Sales of cull cows held longer than 24 months and of machinery, as well as various other transactions, are shown on different forms and schedules, including Form 4797, Sales of Business Assets, Schedule D (Form 1040), Capital Gains and Losses, and Form 6252, Installment Sales.

Statement of Cash Flows

The balance sheet and income statement provide valuable insights into your business, but one more statement—a statement of cash flows—is necessary to accurately determine if a farm is fiscally fit. The accounting events and transactions reported on the income statement do not necessarily coincide with the actual receipt and disbursement of cash: The income statement measures profitability, not cash flow.

A cash-flow statement is used to predict future cash flow, which helps with budgeting, expansion plans, debt pay-down decisions, and much more. For lenders, the cash flow reflects a farm’s financial health and suggests areas to strategize with farmers.

The cash-flow statement is derived from the income statement. Its preparation starts with net income or earnings and then adds and subtracts changes in assets and liabilities from the beginning and ending balance sheets for the accounting period being analyzed. Cash flow leaves little room for manipulation by the owners or operations. Unless it is altered by outright fraud, this statement gives a true picture of cash ins and outs for the farm—either the farm has cash or it does not.

Figure 1.5 shows a cash-flow statement with a section for each of the three means by which cash enters and exits a business—core operations, investing, and financing. It makes adjustments to net income by adding or subtracting the differences in income, expense, and credit transactions that occur from one accounting period to the next. Not all transactions involve actual cash changing hands; therefore many items need to be analyzed for the proper treatment.
Figure 1.5 Cash-Flow Statement

Cash-Flow Statement for Family Dairy Farm
For Year Ended December 31, 201X

Cash Flow From Operations
Net Income 125,401

Additions to Cash
Depreciation 71,000
Decrease in Accounts Receivable 1,000

Subtractions from Cash
Decrease in Accounts Payable – 13,000

Net Cash from Operations 184,401

Cash Flow From Investing
Equipment – 76,000

Cash Flow From Financing
Notes Payable – 43,000

Cash Flow for Year Ended December 31, 201X 65,401

Operations
The first section of the statement reflects how much cash is generated from the farm’s products or services—the normal operations of the business, meaning the inflows and outflows of cash based on the day-to-day business dealings. Generally, changes between the beginning and ending balances in accounts receivable, depreciation, inventory, and accounts payable are reflected in cash from operations.

Depreciation is not a cash expense. It is deducted as an expense on the income statement and it adds to accumulated depreciation on the balance sheet. But because cash didn’t change hands, the depreciation taken as an expense in the current accounting period is added back to cash flows. The only time an asset is accounted for in cash flows is when the asset is sold.

A decrease in accounts receivable implies that cash has been collected from customers who are paying amounts due on invoices. This difference is added to cash because the farm business has received cash. Accounts payable has the opposite effect. A decrease in accounts payable implies that cash has been taken out of the business to pay down bills. Thus, this difference is subtracted from cash.

Investing
The investing section typically consists of the purchase or sale of assets, such as changes in equipment, buildings, or investments (securities). Cash changes in this section are reductions when assets are purchased. When a farm sells an asset, the cash increases this section.

Financing
This section shows changes in debt or loans. It measures the flow of cash between the business and its owners and creditors. When principal is paid down on a loan, cash decreases because it is used to pay the liability. When additional funds are borrowed, cash increases.

The cash-flow statement in Figure 1.5 shows that the cash flow for the year 201X was $65,401. The positive cash flow is from the cash earned from operating the farm, which is a good sign. It means that the core operations of the farm are generating profits, which allows the farm to invest in expansion, future
advancements or equipment, or pay down debt. Lenders will also be pleased because there is cash available to service debt.

Although all cash-flow statements do not show a positive cash position, a negative cash flow should not automatically be deemed to be a poor outcome without further analysis. Sometimes a negative cash flow is a result of a farm’s decision to expand, which can take a considerable sum of cash and be good for the future of the operations. Analyzing cash flow and changes from one accounting period to the next gives the farmer, lender, and other decision-makers a better idea of how the business is performing and how it is being managed, as well as whether it may be on a successful path.

**Points to Remember**

- Cash flow is purely the cash coming in and the cash being spent.
- Cash flow does not include any amounts for future incoming or outgoing cash (credit transactions). It is like a checkbook register.
- Cash is not the same as net income. Net income is shown on the income and balance sheet, and includes both cash sales and sales made on credit.
- If all cash flows are accurately recorded, the total sources of cash equal the total uses of cash. If a significant difference exists, the records should be carefully reviewed for errors and omissions.

**Conclusion**

Each financial statement is just one piece of the financial puzzle. It is imperative to understand the interrelation among the reports to analyze the farm’s financial position. To benefit even more from these financial statements, you can create a detailed analysis that provides additional information to gauge your performance.