

Developing and Improving Your Farm Records

Keeping Farm Records

Records are important to the financial health of your farm. Good records do not ensure your farm will be successful; however, success is unlikely without them. Farm records are like report cards students receive in school. With a farm report card, you can tell how well you are managing your operation compared with other producers in your "class". You also can see the strengths and weaknesses of your farm operation.

Besides use as a management tool, farm records are essential for preparing income tax reports. Also, most banks require extensive records from farmers to formulate credit ratings. Finally, records are important in establishing eligibility for participation in government programs, determining the proper level of insurance coverage, and negotiating lease arrangements.

There are three basic types of farm records: (1) resource inventories, (2) production accounts of livestock and crop operations, and (3) income and expense records. As a farmer, you use resources such as land, labor, machinery, breeding stock, management and financial capital. You must assign value to these resources and maintain current inventories so that you know the foundation from which you operate. From this resource base, you produce food and fiber. The production accounts of livestock and crops show how this resource base is combined with other inputs to yield physical output. Consequently, production records, such as the relationship of feed to weight gain, cow to number of calves, fertilizer to crop yield, or land to total production, are most critical to your farm's profits.

Because farmers interact in a market economy, the cost of the feed and revenue from the market hog, or the cost of the fertilizer and the price of grain, are equally important. These income and expense records are related to each other and translate production accounts into dollars and cents (Figure 1).

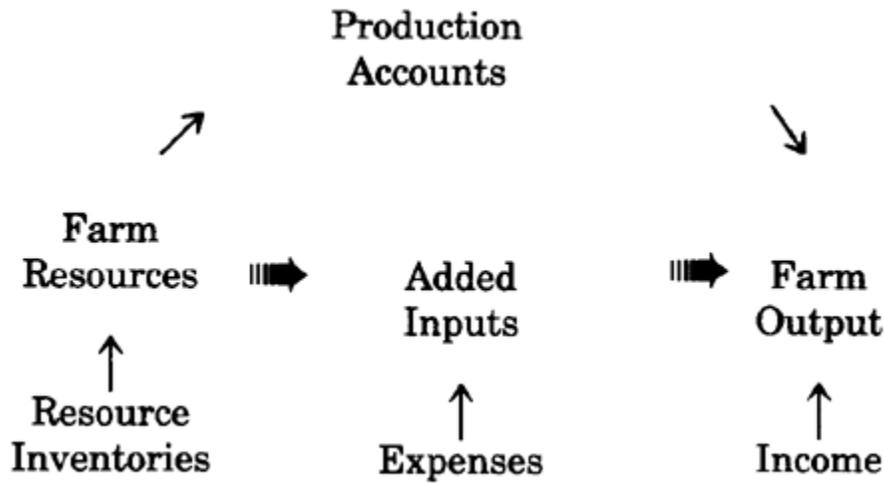


Figure 1. Types of Farm Records

Resource Inventories

You must count and assign value to your resources to inventory your farm. These resources include both assets and liabilities. Assets are all items you own; liabilities indicate what you owe. Resources can be counted and assigned a value more often, but most farmers find an end-of-year valuation most useful.

Resource inventories are not a "flow" concept, but a "stock" measurement. The general ledger, described later in this fact sheet, enables you to measure the flow of revenue and expenses over 1 year. In comparison, the inventory evaluation enables you to count and measure your resources at a particular point in time. It is only valid for that point in time, since resources always change (for example, a cow dies and assets are reduced).

Assets. Counting assets is relatively easy. With a notebook and paper, walk around your farm and survey your assets. Record the number of milk cows, acres of tilled land, acres of forest, tractors, bushels of stored corn and so forth. Valuing assets, however, is more difficult. Assets such as grain or hay will probably be valued at the net market price for which they could be sold. Should tractors and breeding stock be valued the same way? They could be, or they could be valued at their original cost minus depreciation. Similarly, land could be valued at its market price (if developed for residential houses) or at its agricultural value. (The advantages and disadvantages of these valuation decisions are discussed more fully in Fact Sheet 540 "Assessing and Improving Your Farm Solvency".) However you decide to value a resource, you should be consistent from year to year.

Liabilities. Liabilities are easier than assets to count and value. A listing of debts to banks and other creditors usually is sufficient. The only difficulty is adjusting for accrued interest. For example, if your annual land payment is due in August and you take inventory of your resources on December 31, then an adjustment must be made concerning the amount of interest that has accrued since the last payment.

Why inventory? There are many uses for the resource inventory. The most direct application is completing a balance sheet to determine your net worth. (For more information on balance sheets, see Fact Sheet 540 "Assessing and Improving Your Farm Solvency".) A resource inventory also is useful for computing noncash expenses, such as depreciation. Depreciation is an accounting method. It spreads the expense of capital items, such as machinery and buildings, over their useful life. In the resource inventory section of most farm recordkeeping books, sheets are provided to list all farm equipment. On this sheet, you can record the date of purchase, description, cost, annual depreciation, book value and market value. The total value of an item is useful for completing a balance sheet. Annual depreciation is used on the income statement.

Resources on the farm often are used as collateral for a loan. Most creditors lend on a cash-flow basis when an investment can service itself. However, many lenders still require that assets be pledged to cover losses should the borrower default. A resource inventory provides a helpful summary of those assets to be used as collateral.

Finally, with an up-to-date inventory of your farm's resources, you can consider options for growth and diversification more carefully and efficiently. Given a certain mix of buildings and land, for example, should you consider expanding the farm enterprise from just crops to include livestock? Are you making maximum use of land, buildings and equipment? The farm business can be reviewed periodically by considering these types of questions.

Production Accounts

Production accounts are used to measure the performance of crop and livestock enterprises on the farm. Some production information can be derived from income and expense records, for example, where total bushels sold or pounds of fertilizer purchased might be noted. This information, while useful, usually is not specific or complete enough. More detailed production accounts can and should be kept, usually classified as crop, livestock or labor records.

Often included under crop records are farm maps. Farm maps are used to describe soil conditions, cropping patterns, field layouts and building locations. Other written crop records show crop rotations, varieties, yields, fertilizer rates and pesticide applications. This information can be summarized and will indicate the efficiency of production.

Livestock and poultry records usually include subsections for mortality, breeding, performance and feed information. Mortality records list the number of livestock and track disease problems. Breeding records ensure that only superior individuals or groups of individuals are used to parent offspring with desired characteristics.

Performance records for livestock are divided between birth and production information. Birth records indicate date of birth, important dates in the animal's life, parental evaluation and weaning information. Production records refer more directly to herd size, rate of gain, and hundredweight sold and purchased.

Finally, feed records are important in evaluating overall production efficiency. Feed normally constitutes at least 50 percent of the total cost of raising an animal for meat. The type of feed ration, its formulation and the rate of feeding should be monitored closely.

Another major category of production recordkeeping is labor. Labor records are important particularly when labor shortages are a problem. By knowing the amount and timing of labor required per operation of an enterprise, you can better plan what enterprises are feasible when faced with labor constraints on the farm.

Income and Expense Records

A transactions journal and general ledger are useful for recording income and expense records. In the transactions journal, you record financial transactions as they happen. In the general ledger, you begin organizing your farm records into a meaningful format. Important uses of the transactions journal and general ledger are to provide information for the income statement and cash flow statement. With the income statement, you can calculate farm profit. (For more information on income statements, see Fact Sheet 539 "Assessing and Improving Farm Profitability'.) The cash-flow statement is a summary of the timing and flow of dollars in and out of the farm business. It helps you meet cash obligations. (For more information on cash-flow statements, see Fact Sheet 541 "Assessing and Improving Your Farm Cash-Flow".) Remember that information recorded in the transactions journal and general ledger should be

complete and accurate.

Transactions Journal. For most farmers, a simple yet suitable transactions journal is the farm checkbook. It helps you keep track of the majority of income and expense transactions needed for a complete set of records. When entries are made in the farm checkbook (when checks are written or deposits are made), sufficient information should be recorded. The date of the transaction, check receipt number, amount of check or deposit, and the payee or income source are commonly included. Although most transactions are listed, items not typically included in farm checkbooks are petty cash expenses and noncash expenses such as depreciation. Other items that might not be included are income deposits in farm savings accounts. Do not overlook these transactions.

An adequate description of the transaction, including its purpose, is often overlooked. If a check were paid to a farm supply store, a description should be included, mentioning, for example, that 30 bushels of seed corn were purchased for a particular field. If the items purchased are too numerous to write in the checkbook description, then the receipt can be crossreferenced. Cross-referencing receipts is a good business practice. When a purchase is made with a check, the check number should be written on the store receipt and then filed.

General Ledger. With the information from the transactions journal, the farmer organizes cash receipts and expenses in the general ledger by date and category. Generally, a ledger will encompass 1 calendar year. If you operate under a different fiscal year than the calendar year, the general ledger should reflect that period.

Most general ledgers have two sections: (1) farm cash receipts and (2) farm cash disbursements (Figures 2 and 3). Information is recorded monthly. General ledgers usually have columns for all major revenue sources, such as wheat, milk and beef sales. General ledgers usually denote more columns than Figure 3 does for other expenses, such as repairs and maintenance, interest expense, cash rent and so forth.

Figure 2. Abbreviated monthly record of farm cash receipts

Date	Transaction Description	Total Amount	Corn	Soybeans	Swine
Oct. 15	5,000 bushels to Al's Elevator	\$12,500	\$12,500		
Oct. 31	700 bushels to Al's Elevator	\$4,550		\$4,550	
Total		\$17,050	\$12,500	\$4,550	

Figure 3. Abbreviated monthly record of farm cash disbursements

Date	Transaction Description	Total Amount	Labor Hired	Lime and fertilizer	Seed and plants
Jan. 5	Bill M. Strip Tobacco	\$120	\$120		
Jan. 11	SS supply fertilizer - corn	\$9,500		\$9,500	
Total		\$9,620	\$120	\$9,500	

As can be seen in Figure 2, on October 15, 5,000 bushels of corn were sold to Al's Elevator for \$12,500. The amount of the sale was entered under the total amount column and the corn sales column. On October 31, 700 bushels of soybeans were sold for \$4,550 and entered under the appropriate columns in the general ledger. If these were the only two sources of revenue in October, then total revenue would be \$17,050.

As can be seen in Figure 3, on January 5, Bill M. was paid \$120 for stripping tobacco. This amount was entered under the total amount column and the labor hired column. On January 11, SS Supply was paid \$9,500 for fertilizer to be applied to corn. If these were the only two expenses in January, then total expenses would be \$9,620. If you write adequate descriptions in the general ledger next to the dollar amounts, you can derive production accounts. For example, the number of pounds of hog produced (related to total hog revenue) divided by the number of pounds of feed fed (related to total feed expense) is a useful measure of efficiency.

Accounting Methods

If you operate on a cash basis, the general ledger is a nearly complete source of information for an income statement and the Federal income tax Schedule F form. Adding noncash items such as depreciation would make these two statements complete. When you use the cash basis accounting method, you record events when cash is received or spent. For instance, corn harvested in October 1989, but sold in March 1990, would be entered under the 1990 income tax year. Even though corn was produced in 1989, money was not received until 1990.

The accrual method of accounting is an alternative to the cash method of accounting. With the accrual method, you indicate events as they happen, not when money is received or disbursed. In the earlier example, the corn revenue would be included in the 1989 statements (when it was produced). The accrual method of accounting lends itself to more useful farm management analysis because corn revenue and expenses, for example, are recorded in the same time period. To employ the accrual method, resources must be inventoried regularly. If you prepare a balance sheet at the end of each year, then you can derive an accrual income statement each year as well. A beginning and ending balance sheet based on the period of time described in a cash income statement becomes an income statement based on the accrual method.

Improving Farm Records

Accurate records are essential for evaluating your farm's performance: accurate analysis requires accurate data. Too often farmers rely on publications which describe an "average" farm instead of personal records that describe their farm. To make the best financial decisions concerning your farm, use data collected from your farm.

You can make your recordkeeping job easier. Consider using forms and accounting systems designed especially for the farm. A good source for recordkeeping books is your local Extension agent or agricultural lender. Also, software packages for farm recordkeeping can be purchased for your personal computer.

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