

Texas Agricultural Extension Service People Helping People —

Accounting Systems for Farms and Ranches

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The use of computers in agriculture is a relatively new but fast-growing reality. One of the most common ideas about how computers could be used in agriculture is in accounting. Basically there are three reasons why a farmer would want to use a computerized accounting system. The first is to generate the required information to file timely income tax returns. For many producers, this is the only reason they have an interest in accounting, even though they probably already have a CPA doing it.

The second reason for computerized accounting is to generate the reports required by the agricultural lender. Because of current economic conditions, lenders are requiring more accurate financial statements. The competition for money is too tight and the risks in agriculture too great to allow anyone without sufficient records to borrow the funds it takes to put in a crop or to buy a herd of cattle. This purpose also is wisely handled by CPA's and accountants.

The third, most justifiable, reason is to obtain management information. Farmers and ranchers are often faced with timely management decisions such as whether or not to accept an offered price for their commodity. Most professional accountants have not structured their businesses to determine your cost of production as of today.

Types of Reports

Accounting systems currently available are very good at generating the basic reports associated with any business endeavor. Some of the reports and the functions they serve are:

Balance Sheet

A balance sheet represents a snapshot of a business at any point in time. Its primary function is to list, in detailed form, everything a business owns, everything

it owes, and everything the owner has invested in it. That is, it lists the assets, liabilities and the owner's equity. The balance sheet does not provide information about the profitability of a business, but can provide some clues to problems the business may be facing. A series of balance sheets (i.e., yearly statements) can give an indication as to the growth, or lack of growth, being experienced by the business.

Income Statement

An income statement shows the profitability of a business over a period of time. Its primary function is to report the income of the business, the expenses of doing that business, and the profit which was gained in the process. This statement is usually generated on a yearly basis, but it can be generated on any production cycle.

Cash Flow

Cash flow, sometimes called the statement of sources and uses of funds, or funds summary, outlines on a period-by-period basis the income received, where it came from, the expenses paid, and to whom they were paid. This report is essential in setting up a line of credit at a lending institution and in determining liquidity requirements.

Checkbook Summary

A checkbook summary is a summary of all the transactions entered into the accounting system which had an effect on any checking accounts of the business.

Trial Balance

In most accounting systems, any transaction which affects one account must be offset by an equal and opposite transaction in another account. Generally these transactions are referred to as "debits" and "credits." The trial balance report displays, for the given reporting period, the total debits and credits which affect each account in the business, and what

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the ending balance will be in the accounts once the general ledger is posted. This report gives the user the opportunity to find errors in his data entry prior to actually posting the general ledger.

Transaction List

A transaction list is a listing of all the transactions which have been entered for any particular reporting period.

General Ledger

A general ledger displays, in detail, how every account in the business is affected by transactions during the reporting period, and shows the ending balance in each account. This report is found in most commercial accounting systems and serves as an audit trail if it becomes necessary to determine the source of account balances.

Types of Accounting Systems

Most accounting systems fall into one of two basic categories—single entry or double entry. If the accounting system is used only to generate income tax information, there is no need to go beyond the single entry system. The single entry system is not capable of maintaining balance sheets and general ledgers, but it can easily provide the tax information normally found on an income statement. The single entry system can be likened to some traditional farm record keeping systems in which the user enters income and expenses and can further divide these expenses and income into types of expenses or sources of income. Normally, all single entry transactions involve debits or credits to the checking account, but allow allocations to other accounts.

Double entry systems are more universal and come in many shapes, sizes and features. All double entry systems require the entry of a debit and a credit account. This enables the system to maintain the balance sheet which can be displayed at any time and found to be in "balance." In such systems, values can be transferred between any two accounts in the system, not just the checking account. This feature makes it possible to move assets from fixed to current, to move liabilities from intermediate to current, to write off depreciation or accumulate appreciation, and to account for many non-cash transactions. These actions affect the balance sheet, not the checking account.

Some double entry accounting systems have the ability to accumulate expenses incurred in producing a commodity in an inventory account, later sell the commodity by posting the sales account, and then transfer the expenses to a cost-of-sales account. This "cost accounting" enables producers to generate enterprise reports to determine the profitability of producing any particular commodity. This feature

ties together the income statement and the balance sheet so any profits earned become part of the owner's equity, or retained earnings, and appear on the income statement and the balance sheet without additional data entry.

Some double entry systems have the ability to do both cash and accrual basis accounting. This is important for farmers who want management information, because their taxable income is reported on a calendar-year basis, but their crops actually overlap calendar years. An income statement produced at the end of a calendar year and used for income tax purposes reports income from the crop harvested during that year, but the expenses pertain to both the crop harvested and the crop which will be harvested next year. While this is better than no information at all, the farmer does not really know how profitable his crop was unless its sales are compared with its own expenses. A system which allows the user to enter accrued expense balances as previous year's expenses when he opens the beginning balances for the calendar year is very valuable for farmers interested in management information.

Selecting A System

The first step in selecting an accounting system is to define the purpose of the system. This is normally the hardest task, considering all the factors surrounding each individual's situation. Some precautions to consider follow.

Once the purpose has been defined, visit several computer stores to find the systems which will serve the purpose in mind. In all likelihood, there will be many systems which seem to serve the purpose, so obtain a "hands-on" demonstration. Enter some transactions into the system to determine how easy it is to use and understand. Are the input routines self explanatory or do you have to constantly refer to a manual for directions on how to enter different information? Are the reports generated by the system suitable and do they provide readable information? Is is possible to enter erroneous information such as fictitious account numbers, unbalanced transactions, words when it wants numbers, etc.? What about ease of correcting entries? Does the system print out a trial balance for you to examine before posting to the general ledger? These are just a few of the questions you should be asking. There are many more which will occur to you as you use the system.

The last criteria in selecting a system is the price. A cheap system which does not meet your needs is a bigger waste of money than a more expensive system which does more than you need. You may not use all of a system's capabilities immediately, but in the future you might want to and you will already have the capability.

Additional Features

While shopping for an accounting system, you will probably find other features which are part of the system, or which can be attached. These may or may not be useful to you, depending on your situation. Some of the features which can be attached include a check writer program, a payroll program, an accounts payable program, and an accounts receivable program. These options are generally oriented toward businesses with large numbers of employees or customers. Most computerized agricultural accounting users would not have a use for these options.

Options which do have some value in agriculture include the ability to designate the location affected by a certain transaction. With this option you can specify that a certain income or expense was related to production in a particular pasture or field. This enables you to produce an income statement or enterprise report for each field, farm, pasture, or whatever location of your operation you wish to examine. The ability to maintain not only dollar values, but also physical inventories of assets is another available option. As an example, you can buy 500 stocker steers and sell a portion of them later. By entering the 500 head bought, and the number sold, the general ledger should show how many head you still have and their value.

Miscellaneous Considerations

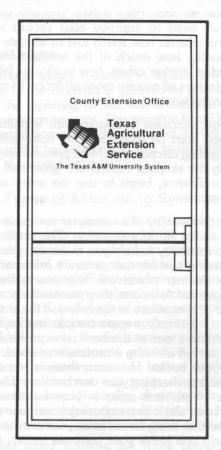
Accounting systems are not the answer to all your financial problems. Doing your own accounting on your own computer will not necessarily save you time, especially when you are first getting started. You must be willing to devote time to understanding the system and trying it out. Experience is the best teacher with computers and that experience can only be gained through time and by making mistakes.

If you buy a double entry accounting system, you must acquire a knowledge of basic accounting principles. The hardest part of learning to use such a system is understanding which accounts to debit and which to credit. Actual data entry into the computer is almost incidental once that decision has been made.

To use an accounting system properly, you probably will need to improve your record keeping. Keeping tabs on how much fuel to allocate to each commodity, how much of the sorghum harvested was fed to stocker calves, how to allocate labor, and other factors all require more attention to make the accounting system work for you.

If you purchase a system with a multitude of features, start by using only the basic features to avoid getting discouraged. Most systems can be used so only the simplest reports are generated. As you gain confidence, begin to use the more advanced features.

The profitability of a computer system is not tied to its ability to do accounting. The profitability is tied to its ability to help you make decisions. If the accounting system can generate information in a timely manner which will help you make critical management decisions, then pursue the accounting aspect of computers to the fullest. If the accounting system will simply prepare tax information and help you obtain a loan at the bank, you probably would be better off allowing a professional accountant to keep your books. However, there is some benefit derived from keeping your own books and becoming aware of problem areas in your business. If you have been slack in monitoring your business, and you feel that being forced to do your own accounting will help you know your business better, then the purchase of a computerized accounting system can probably be justified.



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