



Information Systems for Oklahoma Farmers

The Oklahoma Cooperative Extension Service Bringing the University to You!

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

Damona Doye

Regents Professor and Extension Specialist

If you can't pencil a profit, you aren't likely to plow one.

A common farm recordkeeping system used to be the shoe box system. Under the shoe box system, all receipts, checks, invoices, and bank statements were simply collected and kept together until needed. At the end of the year or at selected intervals, the shoe box was delivered to a professional bookkeeper or accountant who summarized the income data for tax reporting purposes. It met minimal needs for tax filing, but an accountant had to make decisions about qualified deductions and interpretations that, if made on a timely basis, could reduce tax obligations. This system contributed to a common misconception that we only keep records so we can calculate taxes owed. Not so! A successful farm business needs records for many other purposes, including day-to-day decision making and forward planning.

Farmers sometimes delegate record keeping to other professionals. Bankers prepare a balance sheet for credit purposes. An accountant prepares tax returns. But, when many financial management responsibilities are delegated or let slide, alerts to potential cash flow, profitability, debt service and solvency problems are missed. The shoe box system leaves the farmer in the dark during the year as to the farm's financial performance.

What alternatives does the Oklahoma producer have? This fact sheet identifies potential applications of records in business management and presents different recordkeeping options. Some of the most common uses for good records are measuring operating and financial performance, supporting loan applications, arranging insurance coverage, estate planning and valuation, analyzing farm investments, measuring individual enterprise profitability, monitoring production inventories, and developing sound marketing plans. Alternative recordkeeping systems available in Oklahoma include hand-kept ledgers (e.g. Oklahoma Farm Family Account Book or Oklahoma Farm and Ranch Account Book) and commercially available software (e.g., Quicken™).

The Need for Farm Accounting Systems

Flows of information concerning the past, present, and expected performance of a farm business and its operating environment are essential for the farm manager. Information is provided through an accounting system. An effective accounting system helps the farm manager in evaluating liquidity, solvency, production, and economic efficiency, and profitability. Perceptive use of internal information combined with information about markets, policies, and other production

Oklahoma Cooperative Extension Fact Sheets
are also available on our website at:
osufacts.okstate.edu

and economic factors improves the farmer's decision-making abilities.

Good records provide answers to questions such as:

- Do present crop-livestock operations provide the income to generate a profit and cash flow to service debts and pay family living expenses?
- What were production costs?
- What prices and yields are needed in order to break even?
- What will expenses and income be for the coming year?
- If an alternative enterprise is added, how will it affect cash flow and profitability?

With the adoption of software tools, records can be easily summarized in meaningful ways to answer such questions.

Forward Planning

Every management decision a farmer makes is based on experience and knowledge of the farm and the economic environment. Data available from records can be a basis for the planning procedure. Farm accounts provide data on crop and livestock yields, amounts of inputs used in producing output, prices paid, and costs and returns for individual enterprises. Records can be summarized to indicate receipts and expenses on a monthly, quarterly, or annual basis. Records provide data unique to the individual business. The data can be used in developing both short run and long run plans for the farm. Farm planning typically requires that farm records be supplemented with data on expected prices, input requirements, and production levels for new or changed systems.

Implementing the Farm Plan

Today's farms require large amounts of capital investment in land, buildings, equipment, and operating inputs. Farm records in the form of cash flows, income statements and balance sheets document past performance and are essential for securing financing for the farm operation. Data on production levels and costs document an individual's "track record" for prospective lenders or landlords. Data from farm records can also be used to determine the division of partnership returns, or the amount tenant and landlord with crop-share or livestock-share rental arrangements should be paid.

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, and Title IX of the Education Amendments of 1972 (Higher Education Act), the Americans with Disabilities Act of 1990, and other federal and state laws and regulations, does not discriminate on the basis of race, color, national origin, genetic information, sex, age, sexual orientation, gender identity, religion, disability, or status as a veteran, in any of its policies, practices or procedures. This provision includes, but is not limited to admissions, employment, financial aid, and educational services. The Director of Equal Opportunity, 408 Whitehurst, OSU, Stillwater, OK 74078-1035; Phone 405-744-5371; email: geo@okstate.edu has been designated to handle inquiries regarding non-discrimination policies; Director of Equal Opportunity. Any person (student, faculty, or staff) who believes that discriminatory practices have been engaged in based on gender may discuss his or her concerns and file informal or formal complaints of possible violations of Title IX with OSU's Title IX Coordinator 405-744-9154.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President for Agricultural Programs and has been prepared and distributed at a cost of 20 cents per copy. Revised 0916 GH.

Control of the Operation

Once farm plans are developed and implemented, managers monitor the actual outcome and make adjustments in the plan as needed using farm and ranch records. The farm operator may set physical and financial standards of performance—a 90 percent calf crop or six percent return on assets. Accounts can be developed to record data to use in comparing actual outcomes with performance standards. For instance, managers may prepare projected cash flows on a month-by-month basis for the coming year and compare the actual cash receipts and expenses to projections. When significant differences between actual and projected incomes occur, the farm operator can determine why the discrepancy occurred and perhaps take corrective measures before a cash flow problem becomes serious or existing financial problems are compounded. Farm accounts can be used to indicate the extent to which farms are achieving their financial goals and identify factors contributing to or preventing success.

Filing Reports

Farm revenue and expense data are required for calculating state and federal income tax obligations, filing estate taxes, and completing other reports requested by both private and governmental agencies. Similar data are required for estimates of social security payments for the operator's income and hired labor wages. An inventory of assets, historic costs, and fair market value of the assets are important for estate tax filing. The data required to complete these reports are typically much less detailed than is needed for efficient management of the farm business.

Kinds of Records

Three kinds of data are recorded in farm accounting systems: **production, inventory, and finance**. All three types of records are needed in analyzing farm financial performance. Production records provide needed data on yields, feed, labor, and land used by various enterprises. Financial records together with changes in inventories show gross and net returns from the farm business. Financial ratios and efficiency factors can be estimated and compared with prior years to determine business progress. With these comparisons, the whole farm plan can be modified to increase projected returns.

Production records provide physical data for measuring production efficiency, for instance, rate of gain for stockers on wheat pasture, crop yields for different varieties of wheat, or percent lamb crop for a flock of sheep. Production records list materials and resources used by various enterprises or different methods of handling an enterprise. Physical records and their accuracy are important in farm and ranch planning, inventories, and calculation of farm income. Physical records normally include crop records, chemical use, farm maps, livestock feed records, production and mortality records for each livestock class, labor records for specialized farms, dairy herd improvement records, and others of special importance to the farm manager.

The farm **inventory** includes a listing of all physical assets at a specified date, including the values of all assets or property and the value of all debts or liabilities. A beginning and ending inventory for the accounting year are needed for accurate calculations of net farm income. Taking an inven-

tory involves two processes: examining physical assets and assigning values to the assets.

Financial accounts are used to determine what a business is worth, what it has earned during a given period of time, and to provide the farmer or rancher with information to use in decision-making. Three essential statements— income, balance sheet or net worth, and cash flow—should be included in financial accounts. Farm financial accounts may include personal transactions, monetary value of transactions with persons or businesses off the farm (product sales, input purchases, etc.), balance owed to or receivable from outside entities, and so on. The forms of accounting range from simple records on a cash basis (for instance, checkbook deposits and withdrawals) to the more complicated double-entry system. Generally, only operators of large, commercial farms with multiple employees and the need for payroll, invoicing and accounts payable and receivable adopt double-entry accounting.

Record Keeping Alternatives

What accounts should a farmer keep? The answer depends on the cost—time, effort, and cash—of obtaining a system and maintaining it, and the value of the resulting data to the operator. Farm record systems vary in the amount of information collected, the method of recording data, and the structure of final reports. Every farm manager must determine how much information is needed for management purposes and what system will best provide the desired information. In selecting a record keeping system, choose the method appropriate to the size and complexity of the farm or ranch business.

A basic record system might include a transaction record (a listing of receipts and expenses), balance sheet, income statement, cash flow statement, listing of accounts payable and receivable, depreciation schedule, enterprise reports, inventory reports, family living expense records, income tax reports, and employee records. The components that make up a complete farm record system may vary from farm to farm. To be useful, the account must provide data the farm manager will consider in making decisions. The data must be accurate, complete, and timely. A general rule: keep only those accounts with an expected return greater than the cost of keeping the records.

Computerized Records

With the advent of less expensive and more sophisticated computers, computerized recordkeeping systems are very affordable. Computerized recordkeeping systems are an alternative to hand-kept systems and are especially useful for manipulating data. Although a computer may not reduce the amount of time spent keeping records, computerized records make time more productive for farmers with a large volume of transactions and certainly enhance the value of records for decision support.

A number of user-friendly commercial software products are now available that can be adapted for farm use. One such software program that is appropriate for farms and ranches requiring only cash records is Quicken. Quicken is user-friendly, widely available, and inexpensive. More information on using Quicken for farm financial recordkeeping is available from the

OSU Department of Agricultural Economics at <http://www.agecon.okstate.edu/quicken/>. Producers who need a payroll system plus the ability to invoice and maintain accounts payable and receivable may want to use QuickBooks, which is a small business double-entry accounting system, or a comparable package. Family living and farm cash flow features and investment tracking are lacking in QuickBooks. Extension Current Reports CR-266, *Quicken or QuickBooks - What's the Best Choice for Agricultural Producers?* highlights features of the commercial packages. Many commercial software tools also are available for production records.

Hand-Kept Ledgers

Farmers can get pre-formatted record books or ledgers to keep books by hand. For smaller or less complex businesses, a hand-kept record book may be the most sufficient. The record book is simply updated periodically as checks are written and receipts are deposited. Two alternatives are offered by the OSU Cooperative Extension Service:

- *Oklahoma Farm and Ranch Account Book*, found online at: <http://agecon.okstate.edu/farmbook/>. Pertinent pages can be selected.
- Extension Circular E-823, *The Oklahoma Farm Family Account Book*, found online at: osufacts.okstate.edu

Other types of ledgers are often available from agricultural lenders, farm supply dealers, and farm management firms.

The Oklahoma Farm and Ranch Account Book is designed to be a comprehensive, easy to use, manual record-keeping system that allows whole farm and enterprise accounting. Sections include farm receipts and expenses, assets and liabilities, credit and hired labor, production records, financial statements, and family living. A customized book can be built and printed for individual needs at agecon.okstate.edu/farmbook.

The Oklahoma Farm Family Account Book is designed for families to keep a record of financial transactions of the farm and provide the necessary information for reporting taxes on a cash basis. Summarization and analysis pages are also offered to adequately measure the progress of the farm business. This Extension publication is available online at osufacts.okstate.edu.

Decision Aids

As stated earlier, a good farm information system does not stop with record keeping. You should use the information

collected in forward planning, implementing farm plans, controlling the operation, and filing reports. Many Extension Fact Sheets on topics such as tax planning and management are available from your OSU county Extension office or online at osufacts.okstate.edu. Additional information on various farm management topics and programs can be found at the OSU Agricultural Economics Extension website agecon.okstate.edu/extension/farm.asp.

Summary

Being a good producer is no longer good enough. To be successful, a farmer must also be a good financial manager. Accurate and efficient production, marketing, and financial management decisions require extensive information. **Decision making will be easier if you adapt a complete record-keeping system, develop the discipline to maintain it, and learn to effectively interpret and use your records.** With software, recordkeeping can be much less tedious, complex and time consuming. It can also be financially rewarding when it provides essential data for monitoring farm financial progress. Recordkeeping alternatives available to Oklahoma farmers include simple or sophisticated hand-kept record books as well as commercial software packages. For example, educational materials have been developed to demonstrate ways to use Quicken™ for farm financial recordkeeping. Do not hesitate to call on agricultural extension educators and agricultural economics specialists for help in choosing a system or learning to use financial and production records. The long-run success of your business may very well depend on your efforts to improve your management skills.

References

agecon.okstate.edu/farmbook
agecon.okstate.edu/quicken
CR-2133 Crop and Forage Recordkeeping
CR-3279 Cow-Calf Production Record Software
CR-324 Quicken for Farm and Ranch Financial Records
AGEC-242 From Cash Records to Cost of Production
AGEC-266 Quicken or QuickBooks - What's the Best Choice for Agricultural Producers?
AGEC-751 Cash Flow Plan
AGEC-752 Developing a Balance Sheet
AGEC-753 Developing an Income Statement
E-823 The Oklahoma Farm Family Account Book