

# Information Systems for Oklahoma Farmers

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

A common farm recordkeeping system may be described as the shoe box system. Under the shoe box system, all receipts, checks, invoices, and bank statements are simply collected and kept together until needed. At the end of the year or at selected intervals, the shoe box is delivered to a professional bookkeeper or accountant who summarizes the income data for tax reporting purposes. It is a simple system, but only meets minimal needs for tax filing. An accountant must make decisions about qualified deductions and interpretations that, if made on a timely basis, would more than likely reduce tax obligations.

What is wrong with this system? First, it indicates belief in 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 many times delegate record keeping to other professionals. Bankers prepare farmers' financial statements for credit purposes. An accountant prepares tax returns. But, when all financial management responsibilities are delegated or let slide, farmers fail to interpret their records. They are not alerted to potential cash flow, profitability, debt service, and solvency problems. 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 farmer have? The purpose of this fact sheet is to identify potential applications of a record system in farm or ranch business management and present 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 Enterprise Looseleaf Record Book) and commercially available computerized record systems (e.g., Quicken<sup>TM</sup>)

# 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 will aid the farm manager in evaluating

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http://osufacts.okstate.edu

liquidity, solvency, production, and economic efficiency, and profitability. Perceptive use of internal information combined with information about markets, policies, and other production and economic factors improves the farmer's decision-making abilities.

Good records should provide answers to questions such

- 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?

Unfortunately, very few farmers have sufficient records to answer such questions.

## **Forward Planning**

Every management decision a farmer makes is based on experience and knowledge of the farm. 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 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.

#### 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 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 inventories show gross and net returns from the farm business. Financial ratios and efficiency factors can be estimated and compared with other 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, 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 inventory 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, complicated farms adapt 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.

Abasic record system might include a transaction journal (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.

# **Hand-Kept Ledgers**

Farmers can get preformatted records books or ledgers to keep books by hand. For smaller or less complex businesses, the hand-kept record book may be the most practical and efficient system. 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: the Oklahoma Farm Family Account Book and the Oklahoma Looseleaf Enterprise Record Book. Other types of ledgers are often available from agricultural lenders, farm supply dealers, and farm management firms.

The Oklahoma Farm Family Account Book (Circular E-823) is used by more than 2,000 farmers each year. It is a

low-cost alternative which provides sufficient information for management of a small or part-time farm. Items which may be recorded in this book are: net worth statement, asset inventory, farm income and expenses by category (e.g. sale of purchased livestock, sale of poultry, rent and royalty income), social security records, accounts receivable and payable, crop and livestock production records, and family living expenses. Copies of this account book can be purchased from University Mailing Services, Publishing and Printing East, N. Monroe, Stillwater, OK 70478-0505.

The Oklahoma Looseleaf Enterprise Record Book is a looseleaf notebook that allows whole farm and enterprise accounting. Sections include: farm receipts; farm expenses; depreciation; inventory and real estate; credit and hired labor; financial statements; family living; and supplemental records, such as the value of farm products consumed at home, crop and livestock production, or monthly labor summary. Separate enterprise accounting allows cooperators to determine the relative profitability of crop, livestock, or horticulture enterprises. Copies can be purchased from the Department of Agricultural Economics, 515 Agricultural Hall, Stillwater, OK 74078-0505.

# **Computerized Records**

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

A number of user friendly commercial software products are now available which can be adapted to farm use. The software increases greatly the accessibility of information for management purposes. For instance, an annual or monthly cash flow statement based on actual income and expenses can be generated in a matter of seconds. Income and expenses can be sorted by enterprise so farm managers know where "profit centers" are on the farm. Whole farm or enterprise budgets can be prepared and compared to actual transactions so financial progress can be monitored at regular intervals. Graphs prepared with a few key strokes can show income and expense composition-where cash is coming from and where it is going-and are invaluable in getting a feel for the farm's financial situation. More information on using Quicken for farm financial recordkeeping, as well as a Texas A&M article reviewing features of selected commercial software packages is available from the Department of Agricultural Economics, Oklahoma State University, 515 Agricultural Hall, Stillwater, OK 74078-0505.

### **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 OSU Fact Sheets on topics such as tax planning and management, are available from your OSU County Extension Office or online at http:osuextra.com.

To supplement your recordkeeping system, you may want to consider purchasing computer software for projecting changes in your farm financial position. The Integrated Farm Financial Statements (IFFS) is a system of financial statements developed at OSU for computers capable of using Lotus 1-2-3. The financial statements can be used by the farm or ranch owner, manager, banker, or financial analyst to plan for the future, monitor the present, and/or analyze and evaluate the past performance of a farm or ranch.

IFFS consists of six basic components: a cash flow statement, a net worth statement, an income statement, a debt worksheet, enterprise budget files, and an additional information section for including financial data not well suited to division among enterprises, for instance, loan payments, utilities, and family living expenses. A series of computer menus and macros ties the components together, facilitates movement of data between components, and allows the user to save any or all of the components and print any or all statements.

# 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 recordkeeping system, develop the discipline to maintain it, and learn to effectively interpret and use your records. Records and accounting can be tedious, complex, and time consuming. However, they can also be financially rewarding when they provide 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.

# 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.

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