



## Planning the long-term recovery of your farm

### *5. What is the long-term profit potential of my farm?*

Profitability is the key to long-term success. When disaster strikes, it is important to assess both the short-term effect on profits and the long-term effect on the potential of the farm. Profitability varies from year to year because of normal weather and price fluctuations, and it is affected by fundamental changes in the farm economy. Over the long haul, a farm must generate enough revenue to cover all expenses and leave a large enough return for the farm family to make it all worthwhile. As for the cash-flow situation discussed in the previous article, an assessment of the farm's historical performance is the best place to start, followed by projections for the future based on this.

Cash flow can be a misleading measure of farm performance and health. For example, a farmer may produce a crop but not sell it until the following year; a nursery operation may incur the cost of growing additional stock for sale later; a livestock farmer may raise more breeding stock to expand the herd.



These activities create value but not cash. On the expense side, bills may be unpaid, leading to an understatement of farm expenses.

Sometimes a disaster forces a major change in the farming operation or creates new opportunities. For example, low profit margins may not justify rebuilding or replacing a damaged building, or an insurance payment to cover a disaster loss might be better used in a new farm enterprise. In all of these cases, it is necessary to go beyond cash flow and look

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at a more accurate measure of farm earnings. That measure is an earnings statement that captures the full value of what a farm produces during a year and includes all of the expenses incurred to produce it.

On the revenue side, we need to recognize that during the course of a year a farm may generate more products than are actually sold. It may also generate less. So, when calculating earnings, we must adjust the cash sales of farm products for such noncash items as changes in inventories of livestock, crops, and feed and in accounts receivable. Similarly, on the expense side, not all expenses may be paid for and not all purchases may be for this year's farming operations. An accurate statement of farm expenses must include an adjustment to cash purchases for any unpaid bills and prepaid expenses.

Most of these noncash adjustments can be calculated from information used to prepare a net worth statement (see Article 3 in this series, "Am I still solvent, and what equity do I still have in the farm?"). This is why a net worth statement should be prepared on the first day of each financial year as a matter of routine. These noncash adjustments to cash transactions are called "accrual adjustments" because they allow you to generate revenue and expenses that are comparable to those that could be obtained under full-blown accrual accounting procedures, but with less effort.

To measure farm earnings accurately, you should include a depreciation expense or charge for the investment in farm assets, such

as machinery, equipment, buildings, and real-estate improvements. These farm assets last more than one year, cost a lot of money, and are replaced infrequently, so it makes sense to spread the cost over their useful lives. These annual depreciation charges reflect the wear and tear resulting from the past year's use and the obsolescence caused by the passage of time. By including these charges, we guard against "living off depreciation" and running into financial problems down the road when major items must be replaced. The depreciation figure you use for income tax purposes may not be an accurate estimate because the current tax rules allow you to write off a large amount of new investment during the year of purchase. The following formula may give a more appropriate figure. Include the value of any trade-in in the purchase price.

$$\text{Annual depreciation charge} = \frac{(\text{purchase price} - \text{estimated salvage value})}{\text{estimated useful life in years}}$$

A third consideration in measuring earnings is the value of the time and effort you and other family members spent on farm activities and the value of the money (equity capital) you have invested in the farm. The value of these contributions depends on their alternative uses ("opportunity costs" in economics language), and if you do not consider these contributions, you may be overestimating what the farm truly earned. One approach is to value your time and that of other family members according to what it would cost to hire someone to do the same work. Similarly, charge the farm for the equity you have

invested, at either the interest rate at which you are borrowing money or the interest rate you would earn if you invested your own money elsewhere.

The following worksheet may be useful in estimating the earnings performance for your farm. The "bottom line" is "Returns to management and risk." This is one measure of profit, but be aware that it is often a negative number for many types of farms, given the typically low profits in agriculture.

The following three articles discuss how to evaluate your farm's financial performance more fully and how to address any problems revealed by this analysis.

### RESOURCES

Additional computer tools and information on Farm Income Statements are available from the Iowa State University "Ag Decision Maker" Web site at:

<http://>

[www.extension.iastate.edu/agdm/decisionaids.html](http://www.extension.iastate.edu/agdm/decisionaids.html)

Click on "Finance"

Scroll down to the "Financial" heading

- Click on Farm Income Statement for a spreadsheet to calculate farm income.

- Download an accompanying fact sheet from <http://www.extension.iastate.edu/agdm/wholefarm/pdf/c3-25.pdf> to learn more about how to calculate farm income

- Download a spreadsheet to assist in analyzing your farm income statement from

<http://>

[www.extension.iastate.edu/agdm/wholefarm/xls/c3-6analincomestatement.xls](http://www.extension.iastate.edu/agdm/wholefarm/xls/c3-6analincomestatement.xls)

## Farm Earnings Worksheet

Item	\$
<b>Income</b>	
Cash receipts from the sale of crops, market livestock, and livestock products	
Change in crop and livestock inventories (+or -)	
Change in accounts receivable (+or -)	
<b>Gross Revenue</b>	
<b>Expenses</b>	
Cash expenses for seed, feed, fertilizer, fuel, supplies, interest, utilities, services, etc.	
Change in accounts payable (+or -)	
Change in prepaid expenses (+or -)	
Change in accrued expenses (+or -)	
Change in inventories of feed & supplies (+or -)	
Change in investments in growing crops (+or -)	
Depreciation	
<b>Total Expenses</b>	
<b>Net Income</b> ( <i>Gross Revenue - Total Expenses</i> )	
-Value of unpaid operator and family labor	
-Interest charge on equity capital	
<b>=Returns to management and risk</b>	

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