

What Can You Afford to Pay for a Dairy Farm?

The spike in land prices in the early-mid 2000's has sparked considerable interest in just how much can dairy producers or others pay for land.

In 2006, some farms returning to farm use have surpassed prices of \$5,000 per acre in Iowa, Wisconsin and Illinois. Can a dairy producer afford to pay that much for land? A better question may be not whether they can, but whether they should.

If a dairy producer can cash flow the land purchase long term; has a good profitable farm; and has access to reasonable interest rates from saved or borrowed money in the 6.5% range, then it may be possible to pay greater than \$5,000 per acre land. And, if they can bank on annual appreciation rates of 3% or greater, then maybe they not only can pay that much, but maybe they should as well.

Is the recent year's uptrend in land prices sustainable? At the 10-14% annual increase in rates probably not. Is a more continual 3% annual uptrend sustainable? It's possible. History over the past 55 years has proven it possible. Are recent land price spikes ready for a correction? It's possible. But, as land goes up and down in a market environment there are so many other variables that it is difficult to predict the future.

The annual appreciation in land values, in addition to interest rates and net return to land are all very important factors necessary in determining if a dairy farm purchase is right for an investment. Cash flow and equity positions are also very important factors as bankers will agree. But, just because cash flow and equity make it possible, profitability may say otherwise. In order to make a determination based on so many variables, consider the following Dairy Farm Value Calculator described in next column.

ISU Extension Fact Sheet LT-06-06
by Larry Tranel, Dairy Field Specialist, Iowa State University Extension, NE and SE Iowa

Iowa State University and U.S. Department of Agriculture Cooperating.
Extension programs are available to all without regard to race, color, national origin, religion, sex or disability.

Dairy Farm Value Calculator Using Rental or Actual Income Approach

In order to determine the value of a dairy farm, it is necessary to determine the incomes and expenses associated with the farm. Using the rental or actual income approach, one can determine an estimated net income (income minus expenses) from the fixed assets on the farm. Once this is determined, a farm value can be estimated using the net income divided by the interest rate (or cost of capital rate).

To begin with, one would take a house on the farm in question, for example, and determine its annual value if rented or its opportunity value to the owner of buying a house in town or elsewhere. The same is true for tie or free stall barns, silos, outbuildings and land. Each asset has a certain rental or other income value to a potential buyer (some assets could be a liability, i.e. an old silo to be torn down). Thus, the prospective owner would try to value the annual income from each of the prospective assets.

Once annual incomes from fixed assets are determined, the next step is to determine the fixed expenses against those assets. For example, the DIRT 5 of depreciation, interest, repairs, taxes and insurance would be the main ones. However, interest or equity charges should not be included at this point. Labor and management should be included as it takes time to manage the farm's fixed property, whether you run the farm or rent it out.

Once fixed expenses are subtracted from fixed incomes yielding a net return, this net return can then be divided by the prospective interest or cost of capital rate. This equation yields a value of the farm and if divided by number of acres, can yield a value per acre as well.

However, to get a picture of what can be truly be paid if we are banking on a certain annual appreciation of the asset, then the interest rate minus the annual expected appreciation rate divided into the net return, would give the value that can be paid after appreciation is accounted for (if it cash flows and is equity wise).

Please note that risk is often the biggest variable and is inherent with a dairy farm purchase. That risk includes liability, real estate value declines, weather damage and changes in net returns and interest rates. Plan carefully to manage risk.