The Thousand Acre Part-Time Farm
by Danny Klinefelter

The purpose of this article isn’t to argue whether the trend toward larger farms is good or bad. My point is that the stereotype of the 600-1200 acre midwest corn and soybean operation that the non-farm press and many policymakers see as the model of the full-time family is about 15 year out of date. In other words, it is a picture that doesn’t represent reality.

An article entitled “Small Farmer, BIG Stick” that appeared in the September 1, 2002 issue of Soybean Digest profiled Fred Yoder of Plain, Ohio - the new president of the National Corn Growers Association (NCGA). The article quoted Yoder as saying, “One of the most difficult factors for many 1,100 acre or less farmers to accept is that, unless they have livestock, they’re probably under-employed. Thirty years ago a thousand acres was enough to keep Dad, me and three hired men. But with new technology, equipment and products like Roundup Ready soybeans, I can farm 1,100 acres, run an independent seed dealership and still have time to be active in commodity groups like NCGA. Farmers have to understand that there’s not much chance to make a living on a 1,000-acre farm without supplemental income or non-commodity crops. You can count on one hand the number of farms in our area that don’t have an outside job or enterprise to go along with their farms.”

I think it is important to recognize that there are two forces addressed in his statement. One is the income issue, i.e. for the average farmer, increasing farm size and the need for off-farm employment are often driven by the need to earn enough to live on. But the second is that improvements in management and technology such as Roundup Ready, reduced tillage practices, and larger capacity machinery have significantly increased the amount of land one person can farm.

Even if farm income per acre was high enough to not require more acres to earn a living, it simply isn’t human nature to sit around if you have the time, talent and resources to do more. I don’t know any successful farmer who works only 40 hours a week. The only way to slow farm growth would be to limit farm size by law, restrict the development and adoption of new technology, and/or adopt a farm bill that penalizes larger farms and subsidizes smaller ones. It would also require creating import barriers to restrict competition from areas of the world that have lower costs and that would continue to become more efficient because they would not restrict technology adoption. In some ways it is the model that Europe is following.

It is important to recognize that even in a perfectly competitive market,
economic force would continue to encourage the growth in farm size. For any generic commodity, the return to the average producer is always being driven to breakeven by supply response and competition for resources, particularly land. Because all farmers are not equal, at the breakeven point some would be losing money and exiting the industry, while others would be making money and pursuing expansion. Improvements in technology simply accelerate the pace.

I think it is unfortunate, but most of what we read and hear about farm returns are limited to averages or producers at the ends of the spectrum. We don’t seem to recognize that in farming as in any other business there are incredible differences in management and performance across farms. While the citing of examples and statistics could go on forever, let’s just look at a few. I've used different time periods to show that this isn’t just a current phenomenon. As Paul Harvey has said, “In times like these it is good to remember that there have always been times like these.”

During the farm financial crisis of the mid-80's I worked in the Farm Credit System. One of the things that stuck me was that even during that period some farmers were very profitable. When I returned to the university, I was curious what some of the differences were between those who had done well and those who had struggled. Using 1982-1987 data, what I found was that the top 25 percent of producers in my sample performed about 5 percent better than the overall group average in terms of yields, cost per unit of production, returns per dollar invested in machinery and equipment, and average “net” prices received for the commodities they produced. The bottom 25 percent, on the other hand, were about 5 percent worse than the overall group on these same performance measures. Strangely enough, the debt/asset ratio for the top and bottom groups were about the same. It’s just that those in the upper quartile tended to be leveraged by design, i.e., they borrowed only to the extent that they could manage the increased risk and earn more on the borrowed money than it cost them. The lower quartile tended to be heavily in debt more by default, i.e. they had paid too much for land, bought machinery for tax avoidance reasons rather than because they needed new equipment, had large amounts of carryover debt and frequently borrowed for things that wouldn’t pay for themselves. While the differences may seem small, the annual change in earned net worth averaged a $50,000 increase for the top group and a $25,000 decrease for the bottom group. That meant that over the six year period, the top group’s earned net worth increased by $300,000 while the bottom group’s net worth declined by $150,000, a difference of nearly half a million dollars. In reality the differences were probably greater because the absolute lower end went broke and weren’t around through the entire period so they weren’t included in the population sampled.
Jim McGrann, who coordinates the Standardized Performance Analysis (SPA) program, originally developed by what is now the National Cattlemen’s Beef Association, maintains a database that includes information on over 400 commercial cow-calf operations covering the period 1991-2001. During that period the annual net income per cow has averaged $144.65 for the top 25 percent and a negative $233.24 for the bottom 25 percent. In analyzing the data, one of the things that stands out is that it isn’t just one thing that accounts for the difference, it is a combination of management factors.

A 1988-1992 study of Illinois Farm Business Farm Management Association participants found that the most profitable one-third of central Illinois crop farms netted an average of $97 more per acre than the least profitable one-third, even though they were on similar soil types and were raising the same crops.

A study by Aaron Beaton, Devin Dhuyvetter and Mary Albright looked at the same criteria for 10 farm types across different geographic regions of Kansas using crop enterprise budgets from the Kansas Farm Management Association database for the year 2000. Only crop enterprises with a minimum of 50 farms participating were analyzed. The difference between the average returns for most profitable one-third and the low profit one-third of farms in each region ranged from $66.22 for wheat in the north central region to $149.33 for alfalfa also in the north central region of the state. Across all 10 enterprises analyzed, the average return to management for the high profit farms was $96.66 per acre higher than for the low profit farms. They found that slightly over half (53%) of this difference was due to income (yields and prices) with the other 47% being the result of cost differences.

Erline Weness, a University of Minnesota extension specialist, conducted a study using which used Southwest Minnesota Farm Business Management Association data for 2001 to analyze how many acres it took to support an average family under different levels of management. The average family living expense for members of the association was $60,426 for the average family consisting of 3.5 persons. These expenses included food, medical and car insurance, charitable giving, utilities, household supplies, furnishings, clothing, housing, educational expenses, life insurance and income and social security taxes. They also included non-farm vehicle costs and non-farm capital investments. Using the overall group’s 5 year average net return per acre of $7.75 for corn (including government payments), he found it would take 7797 acres of corn to support the family. However, using the 5 year average net return per acre for the top 20 percent of $57.57, it would have taken only 1050 acres. Using the same approach for soybeans, he found it would take the producer with average management 4082 acres to support his family, while the
top managers could have accomplished it on 977 acres.

It amazes me when I hear people talk about large farms and then refer to farms with sales over $250,000. In the midwest, that volume can be achieved with less than a 1000 acres of corn and soybeans, or with a 100 dairy cows. Yet, in most cases a farm that size wouldn’t provide full employment for one family in terms of either the labor required or the ability to earn a living.

The one thing we can count on is change. No one, and for sure me, knows exactly what the future of farming will look like. But my hope is that those planning a career in agriculture, those shaping public opinion and those developing policies which affect that future are at least basing their opinions on what actually exists. As Satchel Paige once said, “It’s not what you don’t know that bothers me, it’s what you do know that just ain’t so.” Over time I’ve learned that every complex problem has at least one solution which is simple, obvious and wrong.

---

1 Danny Klinefelter is a professor and extension economist at Texas A&M University.