Farm & Rural Communities

What Makes a Small Farm Successful?

Farms and farm families remain powerful symbols in American culture. While the economies of most places in the U.S. are not dependent on farming, the issue of survival of family farms continues to evoke strong response from the public, particularly during periods when the farm sector is in distress. For much of the public, the term family farm is synonymous with small farm.

Analysis by USDA's Economic Research Service (ERS) indicates that despite recent public attention to difficulties faced by small-scale family farmers, some operations are successfully negotiating current market conditions. Although definitions of success may vary, these farmers have developed or adopted practices that keep their small farms economically viable. Their experiences may suggest strategies for success in small-scale farming that are transferable to other operations.

The U.S. farm sector consists of a highly diverse set of businesses and farm households, and "small" means different things to different people. A variety of small-farm definitions has been used by USDA over the years, including those based on small acreage, low sales volume, and the ability of a farm to support a single family. However, the extent of acreage does not necessarily correlate with sales volume. A berry farm of only a few acres, for example, can generate a very large volume of sales; conversely, cattle operations may have a low volume of sales but encompass many acres of pasture.

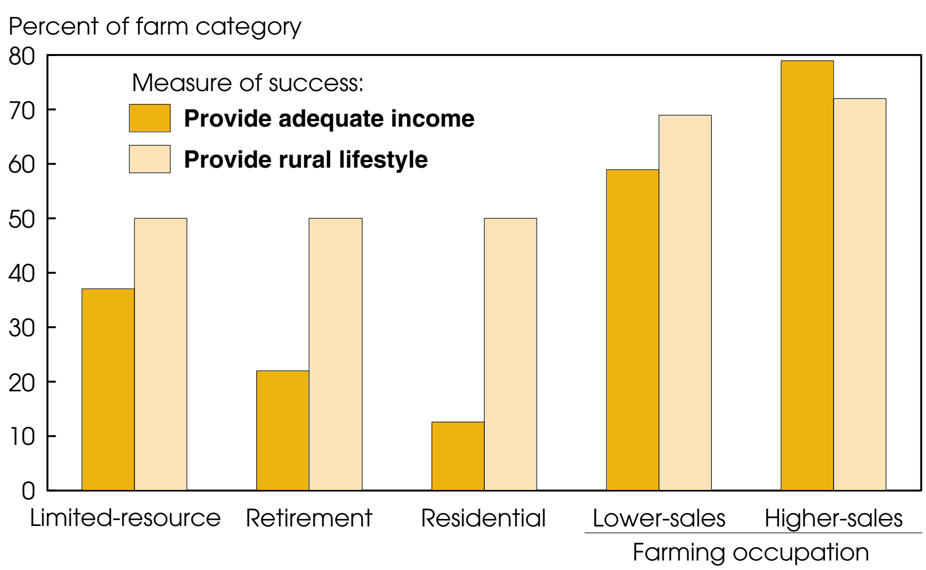
Small farms are currently defined, based on an ERS-developed typology (see article, page 11), as operations with sales less than $250,000. While this considerably expands the traditional sales-class definition of small farms, operations with sales under $250,000 are small compared with other businesses in the general economy.

Despite frequently documented constraints facing farmers with operations of this size, small farms continue to be an important component in the U.S. agricultural sector. Distributed across all regions of the country, small farms make up 94 percent of all U.S. farms and constitute one of the biggest single groups of U.S. business owners. Although large farms produce large volumes of agricultural products, small farms still contribute a substantial portion (38 percent) of the value of U.S. farm production and control the majority (73 percent) of farm assets.

ERS typology—small family farms

Limited-resource
Retirement
Residential/lifestyle
Farm operator occupation
  Lower-sales
  Higher-sales

Farmers Attach Different Levels of Importance to Measures of Success



Source: Agricultural Resource Management Study.
Economic Research Service, USDA

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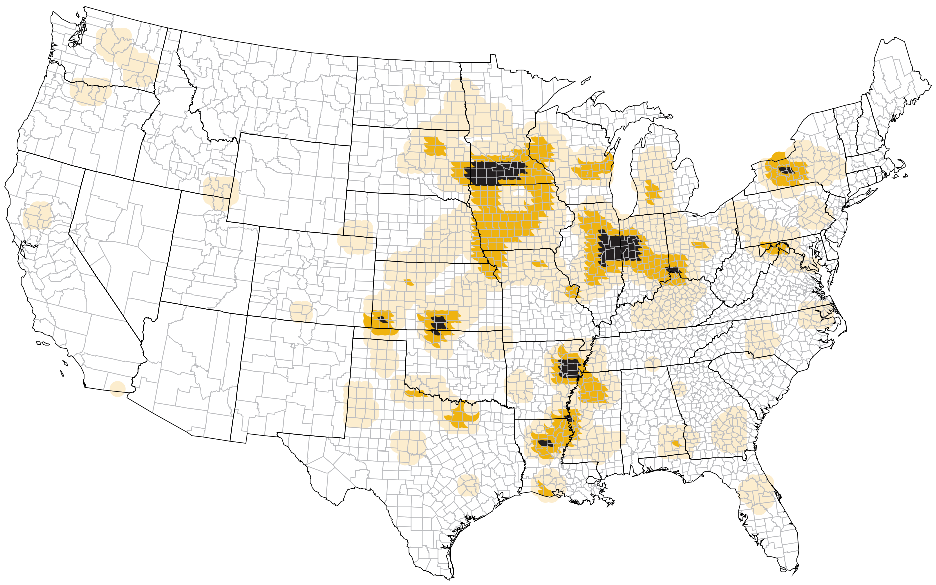
Successful Small Farms Are Located Throughout the U.S.



Probability of finding successful farms

Highest

Medium

Lowest

Includes only small farms where operator's primary occupation is farming, and areas with adequate sample size. Probability based on estimates from the ERS model of successful small farms using data from the Agricultural Resource Management Study.

Economic Research Service, USDA

Many small-scale farm operations raise cattle, but a sub-group of small farms, particularly higher-sales small farms, are more likely to produce cash grains. The majority of wheat, corn, rice, and other feed grains produced in the U.S. comes from these operations. Small-scale farm operators also hold much of the farmland of the U.S. and are key participants in certain environmentally based government programs, such as the Conservation Reserve Program (CRP) and the Wetlands Reserve Program (WRP).

Farms may meet the ERS small-farm definition (sales under $250,000) for a variety of reasons. For some, the farm may serve primarily as a residence, rather than as a source of income. Some operators may be deliberately scaling down their farm businesses as they retire. For others, the farm may provide a significant portion of household income and/or a significant source of employment. Some remain small because they have limited resources.

Defining Successful Farms

In defining success, ERS analysts recognized that not all farmers have the same goals—for their farm businesses, themselves, or their households. One family may concentrate on expanding its farm operation by leveraging the business, while another may consider the farm lifestyle as adequate compensation for low farm income. Among small-scale farm operators and their households, each typology group has stories of farm families operating successful farm businesses based on their own definitions of success.

In USDA's Agricultural Resource Management Study (ARMS), farmers were asked to weigh the importance of selected measures of "success." These include:

- operation provides adequate income without having to work off farm,
- operation provides a rural lifestyle,
- operation would be able to survive adverse market or weather conditions,
- gross sales are increasing,
- equity or assets are increasing,
- acres operated is increasing,
- operation can be passed on to the next generation.

For those operating limited resource, retirement, and residential/lifestyle farms, it was more important that the farm provide a rural lifestyle than an adequate income. On farms that are larger and where farming is a primary occupation, importance shifts to the farms' ability to provide adequate income for the family.

Given these various measures and definitions of success, however, most economists would say that successful operations are those that are performing well based on production, managerial, and financial measures. Good performance in this context means that the business has low costs of production and earns an attractive family income. By focusing on an "attractive family income," the concept of good performance can go beyond simply adequate returns to the farm as a business to include the relationship between the farm's success as a business and the well-being of the operator's household.

Even at sales of $250,000 or more, a farm would have to be highly efficient for the business alone to provide adequate income for a family. In 1997, average farm household income stood at $52,347, just above the $49,692 average for all U.S. households. In fact, average farm household income has been on a par with the average U.S. household for many years, but not without off-farm income. Like most U.S. households, farm households have multiple income sources, and even households of larger farms have substantial off-farm income on average. Most small farms have sales much lower than $250,000, so not surprisingly, a larger share of average household income on small farms comes from off-farm sources than is the case for larger farms.

In analyzing farming practices that support successful small farms, ERS focused on the two groups of small-scale farms for which farming is the operator's primary occupation ("higher-sales" and "lower-sales" farms). Since farm earnings make up a larger proportion of total household income for primary-occupation farms than for other small-scale farm types, economic measures of success were particularly applicable to them.

Farm-level data collected by USDA through the ARMS allowed identification of top-performing farm businesses in the selected categories using standard measures of income—or profitability—and cost structure. A ranking or distribution from high to low returns or from low to high costs provided the basis for designating high-performing farms.

The analysis is national in scope, but based on data for only a single year—1996—which might affect characterizations and comparisons of specific areas and/or farm production types for which 1996 was not a representative year.

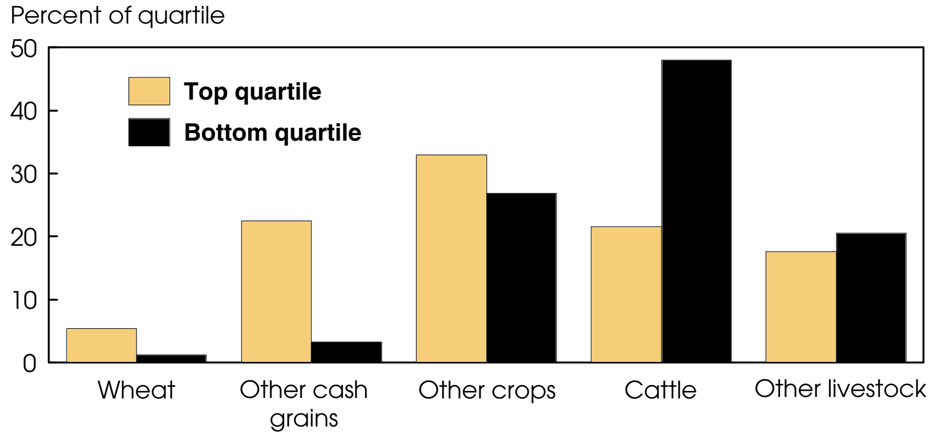
Characteristics of Successful Farms

Top performers (successful farms) were defined as farms in the top 25 percent of each selected category of small farms, based on either returns to assets or operating expense ratios. Using either standard, top performers in each small-farm category were found in all major commodity groups and in all regions, although top performers from different farm categories tended to be concentrated in production of particular commodities.

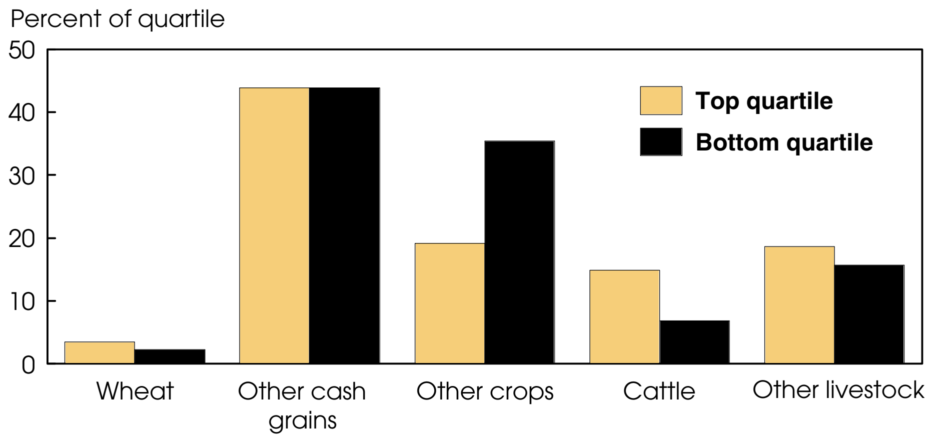
While many small farmers tend to emphasize cattle as their principal commodity, farmers in the top 25 percent of the distribution by returns to assets were clustered in the production of "other cash grains"—corn, soybeans, and grains other than wheat—and "other crops"—vegetables, fruit, other field crops (those not classified separately), and nursery or greenhouse specialties. In the higher-sales group, farmers most commonly specialized in "other cash grains," not cattle. Top-performing higher-sales farms were found in greater proportion in this specialty than in other specialties, including other crops, cattle, other livestock, and wheat. Because this analysis is for one year, recent financial circumstances of farms in the Plains, especially the Northern Plains, may influence whether grain farms continue to dominate "successful" farm categories.

Crops Are Leading Enterprises for Top-Performing Small Farms

Farming occupation, lower-sales



Farming occupation, higher-sales



Lower-sales = Farms with operator whose primary occupation is farming and with sales under $100,000. Higher-sales = Farms with operator whose primary occupation is farming and with sales of $100,000-$250,000. Quartiles of farms ranked by returns to assets and operating expense ratios. "Other cash grains" include commodities such as corn, oats, and barley.
Source: Agricultural Resource Management Study.

Economic Research Service, USDA

Top-performing small farms are characterized by successful application of three critical management strategies: using production strategies that control costs, actively marketing products, and adopting effective financial strategies. Controlling costs—variable, fixed, or economic costs (which provide a return to the unpaid labor, machinery, equipment and other assets used in production)—is a main feature of top-performing farms. Controlling inputs leads to lower costs per unit of output and thus to higher profits per unit of output. Keeping fixed costs (such as mortgage payments or equipment costs) low by renting land or machinery permits flexibility when market conditions vary.

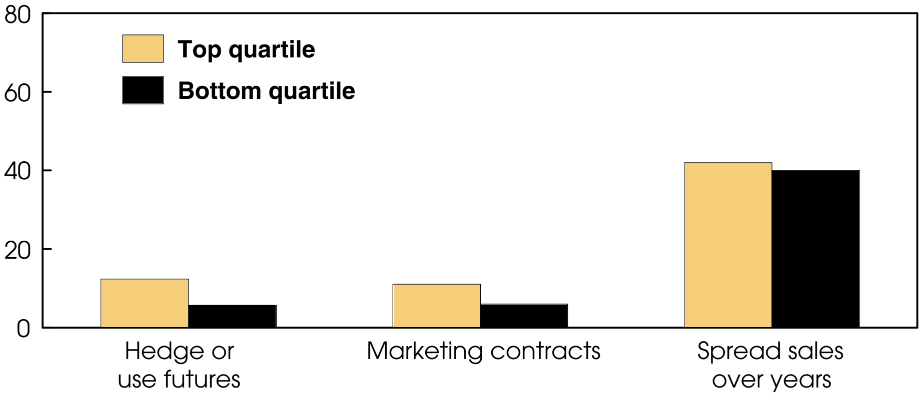
Production strategies differ between operators of top-performing small farms and operators of other small farms in the study groups. Besides controlling traditional production costs, producers in the top 25 percent of the lower-sales group reported greater use of forward pricing of inputs, diversification into additional crop or livestock enterprises, and renting land—particularly share renting—than did other farmers in that group. Higher-sales farmers had similar characteristics. All these strategies help farmers manage production risk. In both the higher-sales and lower-sales groups, farmers in the top 25 percent are also more likely to allocate some of their labor to off-farm work.

Farm & Rural Communities

Top-Performing Small Farms Rely More on Marketing Practices

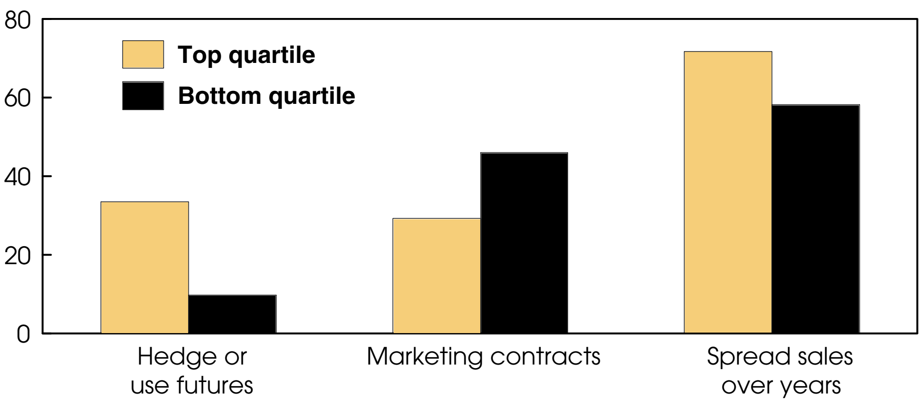
Farming occupation, lower-sales

Percent of quartile



Farming occupation, higher-sales

Percent of quartile



Farmers may use more than one strategy.
Lower-sales = Farms with operator whose primary occupation is farming and with sales under $100,000. Higher-sales = Farms with operator whose primary occupation is farming and with sales of $100,000-$250,000. Quartiles of farms ranked by returns to assets and operating expense ratios.
Source: Agricultural Resource Management Study.

Economic Research Service, USDA

Top performers also *actively engage in marketing their products*. Active marketing of crop and livestock commmodities/ products generally gathers additional margins—which increases profits—through better timing of sales to receive higher prices. Top-performing farms in both study groups were more likely than other farms in those categories to use marketing strategies like hedging or futures/options contracts, forward contracting of sales through use of marketing contracts, and spreading sales over the year. Forward contracting of sales through marketing contracts was not as useful for successful higher-sales farms, probably because they concentrated in corn, soybeans, and grains—crops not typically grown under contract.

Financial strategies enable top performers to respond to changes in the market. Data for the ERS study reflect relatively low-intensity financial practices such as maintaining cash and credit reserves that help operators meet unexpected cash flow difficulties and take advantage of unexpected business opportunities. Crop insurance was included as a financial strategy in the study because its purpose is income maintenance and assuring the farm's ability to meet cash flow obligations. Successful higher-sales farms were more likely than other higher-sales farms to maintain cash or credit reserves and to have purchased additional buy-up insurance that supplements basic catastrophic policies. In the lower-sales group, top-performing farms showed little difference in financial strategies from other farms in that group, except that they were slightly more likely to use crop insurance—both catastrophic and additional buy-up insurance.

Learning from Successful Farms

The diversity of the small-scale farm sector and the complexity of business, household, and market connections for small-scale farms make it imperative to understand which management practices are behind successful small farms. Tried-and-true strategies such as controlling costs and increasing efficiency and productivity are still important. But the current economic environment demands more.

Successful farming requires management strategies that reach beyond production to planning and control of the marketing and financial aspects of the business. Organization and planning along these lines may require new skills, but they will also provide greater opportunities for farmers. Analysis from this study indicates the value of an increased emphasis on returns to management, rather than to capital, for success under current business conditions.

Diversity of farm operations increases as new environmental regulations, energy policies, and technologies lead to changes in the ways farmers produce. Alliances, joint ventures, contracting, and other production arrangements change the way farmers can organize resources and the returns they can expect. Farmers also respond to price signals by diversifying product mix to include not only food and fiber but also agricultural products for fuels, medicines, and industrial uses.

Identifying practices that have helped farms of widely varied structures and product mixes to succeed can be helpful as policymakers, educators, farmers, and others face decisions about strategies and policies to lower costs and conserve production and financial resources for the full range of small-scale farm types. AO

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