

Farm & Rural Communities

Farm Numbers Largest Growing Fastest

Declining farm numbers, increasing farm size, and concentration of production have captured the attention of the media, the general public, and policymakers for decades. While the number of farms peaked in 1935, then began declining, average farm size grew as consolidation occurred. A smaller share of farms accounts for a growing proportion of agricultural production, but the proportion of the smallest farms (sales less than \$10,000) is also growing.

Estimates of the number of farms and total farm acreage are available back to the 1850 Census of Agriculture, and the distribution of farms by acreage class is available back to 1880. But farm acreage measures land use, with no indication of the value of what is produced. The level of sales of farm products is arguably a better measure of farm size, since it unambiguously

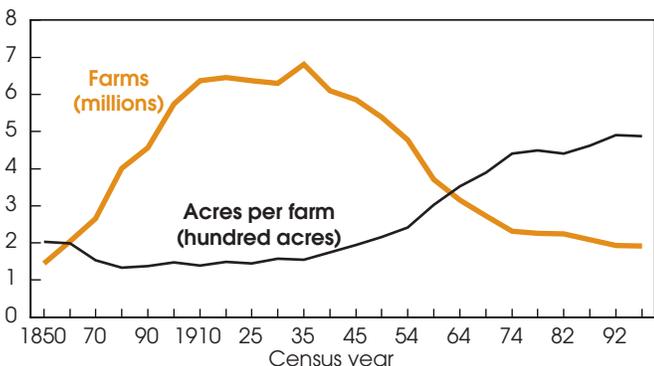
measures economic activity in dollars. Sales class as well as acreage should be considered when analyzing trends in farm size.

Changes in the distribution of farms by sales class in the last four agricultural Censuses (1982, 1987, 1992, and 1997) can be compared across time by using the producer price index for farm products to adjust for price changes. Unfortunately, constant-dollar sales class cannot be prepared before 1982, as Census records for individual farms are incomplete before then.

Counts of farms by constant-dollar sales class—available from 1982 onward—are consistent with conclusions about farm size based on acreage classes. Acreage and sales-class data show a trend toward large farm operations with at least 500 acres or with annual sales of at least \$250,000 in farm products.

Longrun Trends: Numbers by Acreage Class

Fall in Farm Numbers Has Slowed Since the 1970s



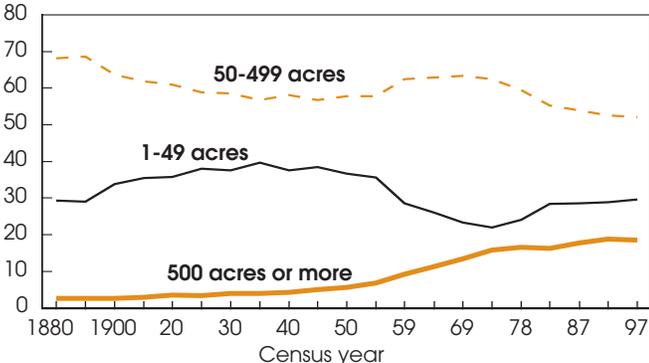
Source: Compiled by ERS from Census of Agriculture data. Economic Research Service, USDA

After peaking at nearly 7 million in 1935, the number of farms dropped dramatically and the decline has continued.

- Most of the decline occurred during the 1940s, 1950s, and 1960s. This drop in farm numbers continues, but at a slower pace.
- By 1997, 1.9 million farms remained.
- Because the amount of farmland decreased to a lesser extent than the number of farms, average acres per farm is larger.

Largest and Smallest Farms Are Increasing as Share of U.S. Farms

Percent of farms



Source: Compiled by ERS from Census of Agriculture data. Economic Research Service, USDA

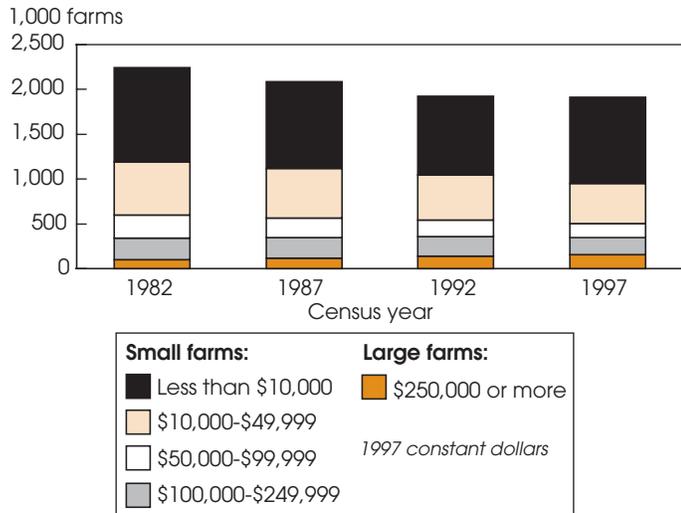
Farms with fewer than 50 acres and farms with more than 500 acres have both increased their share of total farms since 1974, but mid-sized farms' share has declined. These changes reflect different trends by acreage class.

- The number of farms with at least 500 acres increased steadily from 1880 through the 1960s, before stabilizing at 350,000-370,000 farms.
- Farms with 1-49 acres declined from a maximum of 2.7 million in 1935 to about half a million in 1974, but since 1974 the count has ranged from 540,000 to 640,000.
- The number of farms with 50-499 acres declined continuously from 3.9 million in 1935 to about 1 million farms in 1997. Nevertheless, mid-sized farms still accounted for about half (52 percent) of all farms in 1997.

Farm & Rural Communities

Counting Farms by Sales Class

Number of Farms With Sales of \$250,000 or More Increased Between Each Census Since 1982



Between 1982 and 1997, large farms (those with sales of at least \$250,000) steadily increased their numbers.

- Large farms grew from 104,000 in 1982 to 157,000 by 1997.
- The share of large farms also grew, from 5 to 8 percent of all farms.
- Most farms in the large farm group had sales of \$250,000-\$499,999, but the number grew more rapidly among those with sales of \$500,000 or more.
- The number of farms in all other sales classes declined in each inter-Census period, with the exception of farms in the subgroup selling less than \$10,000 in farm products annually.
- Farms in the under-\$10,000 sales class declined in number from 1982 to 1992 but rose by 9 percent from 1992 to 1997—and account for half of all U.S. farms.

Source: Compiled by ERS from Census of Agriculture data. Economic Research Service, USDA

Number of Large Farms Has Increased Consistently

	Census year				Change		
	1982	1987	1992	1997	1982 to 1987	1987 to 1992	1992 to 1997
<i>Number of farms</i>							
Total farms	2,240,976	2,087,759	1,925,300	1,911,859	-6.8	-7.8	-0.7
Sales less than \$10,000 (very small)	1,051,510	966,743	879,842	962,966	-8.1	-9.0	9.4
Point farms	253,147	235,562	212,580	277,248	-6.9	-9.8	30.4
Other farms	798,363	731,181	667,262	685,718	-8.4	-8.7	2.8
<i>Percent change</i>							
Sales of \$10,000 to \$249,999 (other small farms)	1,085,320	1,002,999	905,500	792,322	-7.6	-9.7	-12.5
\$10,000-\$49,999	592,328	557,006	502,229	444,745	-6.0	-9.8	-11.4
\$50,000-\$99,999	253,069	217,479	186,937	158,160	-14.1	-14.0	-15.4
\$100,000-\$249,999	239,923	228,514	216,334	189,417	-4.8	-5.3	-12.4
Sales of \$250,000 or more (large farms)	104,146	118,014	139,958	156,571	13.3	18.6	11.9
\$250,000-\$499,999	70,173	76,764	86,968	87,777	9.4	13.3	0.9
\$500,000-\$999,999	22,914	27,151	34,911	42,860	18.5	28.6	22.8
\$1 million-\$2.49 million	8,090	10,250	13,139	19,069	26.7	28.2	45.1
\$2.5 million-\$4.9 million	1,724	2,213	2,919	4,066	28.4	31.9	39.3
\$5 million or more	1,245	1,636	2,021	2,799	31.4	23.5	38.5

1997 constant dollars
 Source: Compiled by ERS from Census of Agriculture data.
 Economic Research Service, USDA

Most of the 1992-97 increase in farms with sales less than \$10,000 occurred among “point farms”—those with sales under \$1,000 that might normally have annual sales high enough to meet the \$1,000 threshold for being considered a farm. Because of this increase in the last inter-Census period, farms with sales of less than \$10,000 now account for half of all U.S. farms.

The increase in point farms is due mainly to a change in how some farms were classified. In 1992, operations that placed all of their cropland in the Conservation Reserve Program (CRP) or Wetlands Reserve Program (WRP) were excluded from the Census farm tabulations if they did not otherwise meet the farm definition based upon sales, livestock, inventories, planted crops, or other criteria.

The farm count in 1997 was expanded to include operations that had placed all their cropland in the CRP or WRP. In the 1997 Census, CRP/WRP operations were counted as point farms. There were 66,716 of these CRP/WRP establishments in 1992. When these farms are added to the 1992 count of point farms in order to be consistent with the 1997 Census, the 1992-97 change in number of point farms shifts from a gain of 30 percent to a loss of 1 percent. In addition, the 9-percent increase in number of farms with sales less than \$10,000 becomes 2 percent.

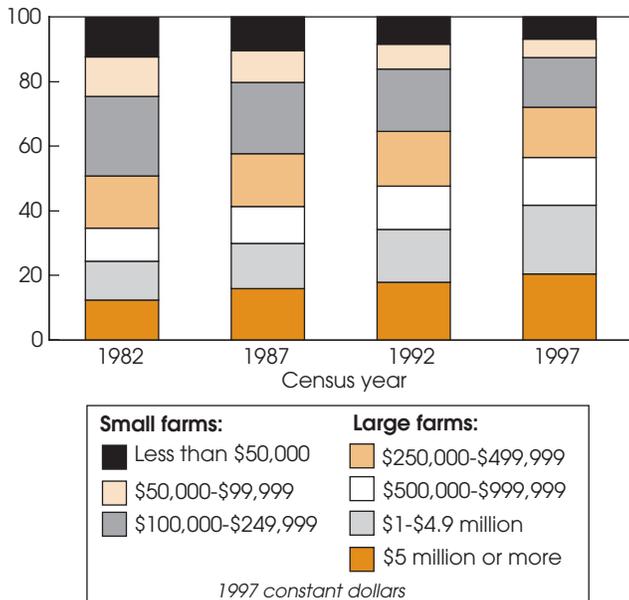
Regardless of how CRP/WRP farms are handled, farms with sales of less than \$10,000 constitute a large proportion of the total. These very small farms amounted to over two-fifths of all U.S. farms in Censuses before 1997, when CRP/WRP farms were not counted.

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Measuring Sales in the Farm Sales Classes

Large Farms' Share of Total Sales Rose to 72 Percent In 1997

Percent of total sales



Source: Compiled by ERS from Census of Agriculture data.
Economic Research Service, USDA

In addition to the shift in number of farms in the various sales classes, marked shifts occurred in the distribution of total sales among farm sales classes.

- The share of all sales accounted for by large farms increased steadily from 51 percent in 1982 to 72 percent in 1997.
- The largest gains in share occurred in the classes with sales of \$1 million-\$4.9 million (1.2 percent of farms in 1997), and \$5 million or more (0.1 percent of farms); each of these two highest sales categories now accounts for about one-fifth of agricultural sales.
- Farms with sales of at least \$5 million specialized in relatively few commodities in 1997:
 - high-value crops (vegetables and melons, fruits and tree nuts, and horticultural specialties), 34 percent;
 - cattle feedlots, 20 percent;
 - poultry and eggs, 16 percent; and
 - dairy, 9 percent.
- Farms with sales of \$1 million-\$4.9 million tended to specialize in a wider variety of commodities in 1997:
 - high-value crops, 21 percent;
 - poultry and eggs, 20 percent;
 - dairy, 12 percent;
 - hogs, 11 percent;
 - cash grains, 10 percent; and
 - field crops other than cash grains, 11 percent.

Defining Farms & Point Farms

The official Census definition of a farm is “any place from which \$1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year.” If an operation does not have \$1,000 in sales, a “point system” assigns values for acres of various crops and head of livestock to estimate a normal level of sales. “Point farms” are farms with fewer than \$1,000 in sales with points worth at least \$1,000. Point farms tend to be very small. Some, however, may normally have large sales but experience low sales in a particular year due to bad weather, disease, or other factors. Farms and point farms are determined for each Census, based on current dollars.

Although the official farm definition has not changed since the 1974 Census of Agriculture, minor differences existed between Census and USDA definitions. The Census Bureau excluded Christmas tree farms and farms with all their cropland enrolled in the Conservation or Wetlands Reserve Program (CRP and WRP). The Bureau, however, included farms having five or more horses and sales of no other farm products; USDA’s National Agricultural Statistics Service (NASS) excluded these in its surveys. After responsibility for the Census of Agriculture was transferred to NASS from the Census Bureau by the 1997 Appropriations Act, the NASS and Census farm definitions merged. The 1997 Census included Christmas tree and CRP/WRP farms, and NASS surveys began to include horse farms in 1995.

Two new types of farms—operations specializing in maple syrup or “short rotation wood crops” (other than Christmas trees)—were added to both counts starting in 1997, with implementation of the new North American Industry Classification System. Short rotation wood crops have a harvest cycle of less than 10 years and include trees grown for pulp or tree stock in addition to Christmas trees.

The addition of these new farm types, however, had far less effect on the farm count than the addition of CRP/WRP farms, simply because there were fewer of them. Farms specializing in maple syrup or short rotation wood crops totaled 14,400 in 1997. About 8,800 of these farms had sales less than \$10,000, including 1,500 point farms.

The Issue of Concentration

Acreage-class and sales-class data show a trend toward bigger farms—operating at least 500 acres or selling at least \$250,000 in farm products. Compared with acreage-class data, the sales-class data capture less of an increase in smaller farms, after making the adjustment in 1992 to include CRP/WRP point farms.

Changes in the distribution of sales volume by size of farm, however, were actually more dramatic than changes in the distribution of farm numbers. In discussions of farm structure, the growing share of production on fewer farms and fewer acres is referred to as concentration.

Concentration has been in progress for at least a century. In 1900, 17 percent of U.S. farms accounted for 50 percent of farm sales. By 1997, 2 percent of farms generated half of the agricultural sales. This 2 percent includes all farms with sales above \$1 million, plus nearly half (47 percent) of farms with sales of

\$500,000-\$999,999. On the other hand, the 17-percent figure for 1900 also indicates that some concentration existed a century ago, since production was not evenly distributed across all farms.

In most industries, concentration is not considered a policy issue until a very small number of firms—such as two to four—dominates the industry. The 2 percent of U.S. farms accounting for half of agricultural sales includes 46,100 farm operations, far too many for any individual farmer to hold much market power. Although for some commodities the level of concentration is far higher than for farms overall, agriculture as a sector is not highly concentrated compared with other industries. **AO**

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For More Information

How does the change in farm numbers vary by farm size?
www.ers.usda.gov/briefing/FarmStructure/Questions/farmnumbers.htm

How concentrated is U.S. agricultural production?
www.ers.usda.gov/briefing/FarmStructure/Questions/concentration.htm

1997 Census of Agriculture, U.S. Department of Agriculture, National Agricultural Statistics Service. *Vol. 1: Geographic Area Series, Part 51: United States Summary and State Data, AC97-A-51*, March 1999.