CHAPTER 3

American Farms



While the American landscape is dominated largely by agriculture, these operations vary widely to cope with different soils, water conditions, and markedly distinct weather patterns. Farms and farm families remain powerful symbols in American culture, despite the long-term decline in their numbers. The number of farms fell dramatically after its peak of nearly 7 million in 1935, with most of the decline occurring during the 1940s, 1950s, and 1960s (fig. 3-1). The decline in farm numbers continues, but at a slower pace. By 1997, about 1.9 million farms remained. Because the amount of farmland did not decrease as much as the number of farms, the remaining farms have a larger average acreage.

The trend in the number of farms differs by acreage class. The number of farms with at least 500 acres increased steadily from 1880 through the 1960s, before stabilizing at 350,000 to 370,000 farms (fig. 3-2). Farms with 1 to 49 acres declined from their maximum of 2.7 million in 1935 to about half a million in 1974. After 1974, the count of these farms has ranged between 540,000 and 640,000. In contrast, the number of farms with 50-499 acres declined from 3.9 million in 1935 continuously to about 1 million farms in 1997. As a result of

Figure 3-1

these changes, farms with fewer than 50 acres and farms with more than 500 acres have both increased their share of total farms since 1974, but midsize farms' share has declined.

Acres or Sales?

When following changes in farm size over long periods of time, acres are generally used to indicate farm size. Nevertheless, the level of sales of farm products is a better indicator of farm size, since it unambiguously measures economic activity in dollars. In contrast, farm acreage just measures an input, land, with no indication of the value of what is actually produced. The number of acres necessary to produce a given dollar amount of farm products varies with the characteristics of the land and the value of the products produced. Cattle operations, for example, may have a low volume of sales, but encompass many acres of pasture or range. Thus, not all farms that are large in acreage have high sales. In fact, most farms with more than 500 acres in 1997 were not classified as large



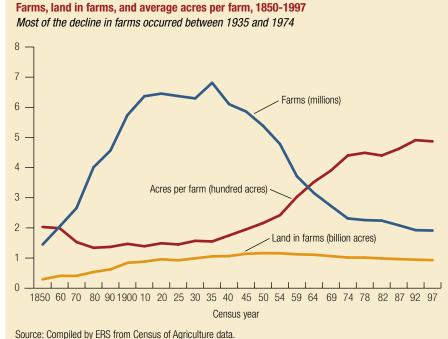
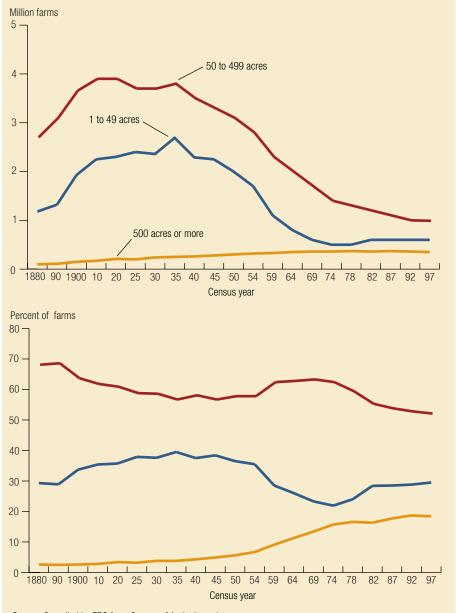


Figure 3-2

Distribution of farms by acreage class, 1880-1997

The share of farms with 500 acres or more increased from 4 percent in 1935 to 18 percent in 1997



Source: Compiled by ERS from Census of Agriculture data.

Farming today consists of enormously different farms growing numerous crop and livestock products for sale in markets that range from their immediate neighbors to consumers worldwide. Farms differ in size, type and value of commodities produced, technology used, resource endowment, financial status, and many other attributes....

It is essential to recognize and understand this diversity that makes up today's agriculture if we are to adequately prepare for its future.



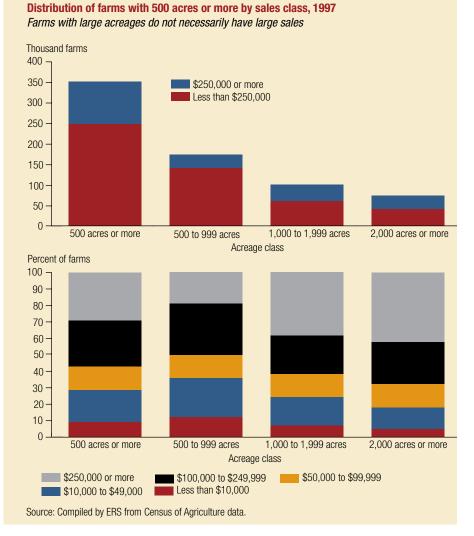
farms, defined by the National Commission on Small Farms (1998) as farms with sales of \$250,000 or more (fig. 3-3).

Changes in the distribution of farms by sales class in the last four censuses can be compared across time by using the producer price index for farm products to adjust for price changes. Unfortunately, constant-dollar sales classes cannot be prepared before 1982, due to incomplete census records for individual farms prior to that year.

Figure 3-3

Change by Sales Class, 1982 to 1997

Changes in the counts of farms by constant-dollar sales class—from 1982 onward—are consistent with the trends in the counts by acreage class that were discussed earlier. Only one sales class grew consistently over the 16-year period (fig.3-4). Large farms increased their numbers by 53,000, growing from 104,000 in 1982 to 157,000 by 1997. The share of all farms in this group also grew, from 5 percent to 8 percent over the same period. Most farms in the large farm group had sales between \$250,000 and \$499,999, but the number of farms with sales of at least \$500,000 grew more rapidly (table 3-1).



The number of farms in the other sales classes declined in each inter-census period, with the exception of farms with sales less than \$10,000 (fig. 3-4). There, the number of farms declined from 1982 to 1987 and from 1987 to 1992, but increased from 1992 to 1997. As shown in table 3-1, most of the increase from 1992 to 1997 occurred among "point farms," or farms with sales less than \$1,000 that might normally have sales that high and satisfy the criteria necessary to be considered a farm. (See the box, Defining Point Farms.) Because of this growth, farms with sales less than \$10,000 now account for half of all U.S. farms.

Most of the increase in point farms, however, is due to a change in the classification of farms that enroll all their cropland in the Conservation Reserve or Wetlands Reserve Programs (CRP or WRP). The agricultural census did not count such operations as farms in 1992, if they did not sell at least \$1,000 worth of farm products (U.S. Bureau of the Census, 1994, p. B-1). They were counted as point farms in the 1997 Census, however, on the grounds that they normally could have sold \$1,000 worth of products (U.S. Department of Agriculture, 1999, p. A-2).

There were 66,716 of these CRP/WRP establishments in 1992. When these farms are added to the 1992 count of point farms to be consistent with the 1997 Census, the 1992-97 change in the number of point farms shifts from a gain of 30 percent (as shown in table 3-1) to a loss of 1 percent. In addition, the 9-percent increase in the number of farms with sales less than \$10,000 decreases to 2 percent.

Diversity Among American Farms

Despite the rapid growth in the number of farms with sales of \$250,000 or more, most farms have sales below that level and are classified as small. While some definitions would set a lower sales limit to classify a farm as small, farms with sales under \$250,000 are small businesses compared with other businesses in the general economy.

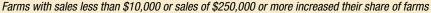
Defining Point Farms

The official definition of a farm for census purposes 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 (U.S. Department of Agriculture, 1999, p. VII)." If a place does not have \$1,000 in sales, a "point system" assigns values for acres of various crops and head of various livestock species to estimate a normal level of sales. Point farms are farms with fewer than \$1,000 in sales but have 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. Both the Agricultural Resource Management Survey (ARMS) and the census of agriculture use the point system to help identify farms meeting the current definition.

Note that the farms and point farms identified in the figures and table are defined in current dollars, not constant dollars. Farms and point farms are determined for each census, based on current dollars.

Figure 3-4

Distribution of farms by constant dollar sales class, 1982-1997



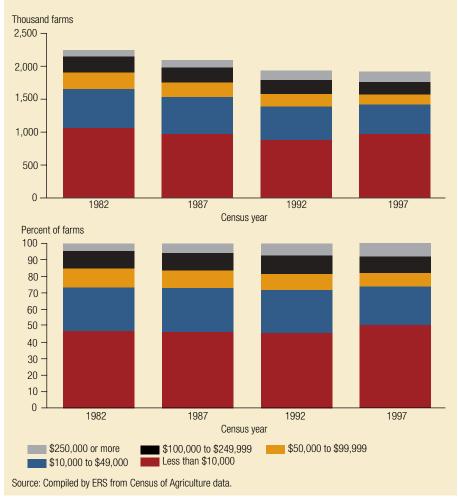


Table 3-1.

Number of farms by constant dollar sales class (1997 dollars), 1982, 1987, 1992, and 1997

	Census year				Change		
les class	1982	1987	1992	1997	1982 to 1987	1987 to 1992	1992 to 1997
		Numb	er of farms			Percent	
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	1,051,510	966,743	879,842	962,966	-8.1	-9.0	9.4
Point farms ¹	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
Sales between \$10,000 and \$49,999	592,328	557,006	502,229	444,745	-6.0	-9.8	-11.4
\$10,000 to \$19,999	262,616	256,448	234,770	212,120	-2.3	-8.5	-9.6
\$20,000 to \$24,999	82,080	78,078	68,709	61,920	-4.9	-12.0	-9.9
\$25,000 to \$39,999	167,003	151,212	137,341	117,196	-9.5	-9.2	-14.7
\$40,000 to \$49,999	80,629	71,268	61,409	53,509	-11.6	-13.8	-12.9
Sales between \$50,000 and \$99,999	253,069	217,479	186,937	158,160	-14.1	-14.0	-15.4
Sales between \$100,000 and \$249,999	239,923	228,514	216,334	189,417	-4.8	-5.3	-12.4
Sales of \$250,000 or more	104,146	118,014	139,958	156,571	13.3	18.6	11.9
\$250,000 to \$499,999	70,173	76,764	86,968	87,777	9.4	13.3	0.9
\$500,000 to \$999,999	22,914	27,151	34,911	42,860	18.5	28.6	22.8
\$1,000,000 to \$2,499,999	8,090	10,250	13,139	19,069	26.7	28.2	45.1
\$2,500,000 to \$4,999,999	1,724	2,213	2,919	4,066	28.4	31.9	39.3
\$5,000,000 or more	1,245	1,636	2,021	2,799	31.4	23.5	38.5

¹ Point farms have sales of less than \$1,000 (current dollars), but are still considered farms because they would be expected to normally sell at least \$1,000 of agricultural products. Point farms are defined in current dollars, rather than constant dollars, because they are identified in each census on the basis of current dollars.

Source: Compiled by ERS from the 1997 Census Longitudinal File.



Family farms may be organized as proprietorships, partnerships, or family corporations. Nonfamily farms include those organized as nonfamily corporations or cooperatives, as well as any proprietorships, partnerships, or family corporations with hired managers. Most farms (98 percent) are family farms. Large family farms are often organized as family corporations, and these account for growing shares of farm sales, but—contrary to popular belief—the share of farms and sales accounted for by nonfamily corporations is small and has been relatively stable since 1978 (fig. 3-5).

Farms vary widely in their characteristics, ranging from very small retirement and residential farms to establishments with sales in the millions. A farm typology developed by USDA's Economic Research Service (ERS) categorizes farms into more homogeneous groups than classifications based on sales volume alone. (See the box, Defining the Farm Typology.)

The typology is based on the occupation of operators and the sales class of farms. In the case of limited-resource farmers, the asset base and total household income—as well as sales—are low. Compared with classification by sales alone, the ERS typology is much more reflective of operators' expectations from farming, stage in the life cycle, and dependence on agriculture.

The typology identifies five groups of small family farms: (1) limited-resource farms, (2) retirement farms, (3) residential/ lifestyle farms, (4) farming-occupation/ low-sales farms, and (5) farming-occupation/high-sales farms. To cover the remaining farms, the typology identifies two groups of larger family farms (large and very large family farms) plus nonfamily farms.

The groups differ in their contribution to agricultural production, their product specialization, farm program participation, and dependence on farm income. Differences among farm typology groups (e.g., product specialization, program participation) are illustrated in a series of charts using 2000 data from the Agricultural Resource Management Survey

Figure 3-5

Distribution of farms and farm product sales, by business organization, 1978-97 *Nonfamily corporation share of farms and sales is stable*



¹Includes cooperatives, estates or trusts, and institutional farms. Source: Compiled by ERS from Census of Agriculture data.

small Family Farms sales less than \$250,000)	Other Family Farms			
• Limited-resource farms. Small farms with sales less than \$100,000, farm assets less than \$150,000, and total operator household income less than \$20,000. Operators may report any major occupation, except hired	 Large family farms. Sales between \$250,000 and \$499,999. Very large family farms. Sales of \$500,000 or more. 			
manager.	Nonfamily Farms			
 Retirement farms. Small farms whose operators report they are retired.* Residential/lifestlye farms. Small farms whose operators report a major occupation other than farming.* 	Nonfamily farms. Farms organized as nonfamily corporations or cooperatives, as well as farms operated by hired managers			
 Farming-occupation farms. Small farms whose operators report farming as their major occupation.* 				
 Low-sales. Sales less than \$100,000. High-sales. Sales between \$100,000 and \$249,999. 				

*Excludes limited-resource farms whose operators report this occupation.

(ARMS). The ARMS is an annual survey conducted by ERS and by USDA's National Agricultural Statistics Service.

Share of Farms, Assets, and Production

Most farms are small, but small farms account for a modest share of production.

■ Ninety-two percent of U.S. farms are small (fig. 3-6), and small farms account for 71 percent of the assets involved in

farming, including 67 percent of the land owned by farmers (fig. 3-7).

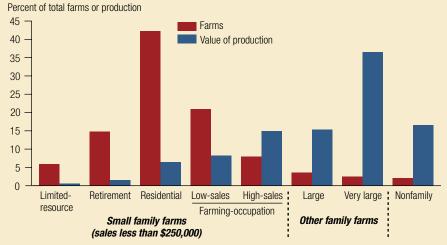
■ But, large family farms, very large family farms, and nonfamily farms (8 percent of all farms) account for about 68 percent of production (fig. 3-6).

Specialization and Diversification

Specialization and diversification vary among the farm typology groups.

Figure 3-6

Share of total farms and value of production, 2000 Large, very large, and nonfamily farms account for 68 percent of the value of production



Source: 2000 Agricultural Resource Management Survey (ARMS).

Share of farm business assets and acres owned, 2000

Small farms account for most of the assets (including land) owned by farms

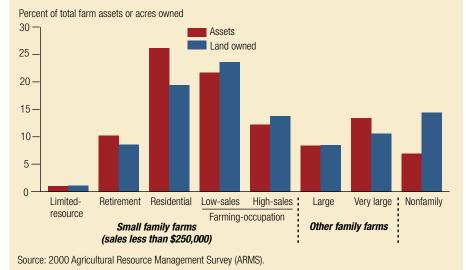
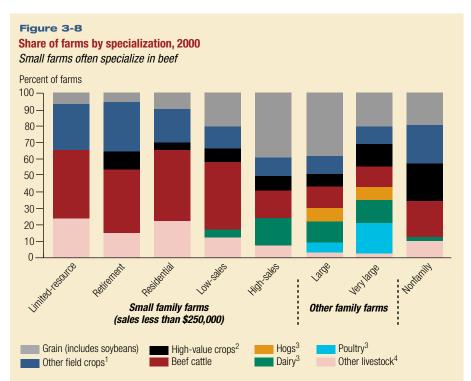


Figure 3-7





Commodity accounts for at least half of the farm's value of production. Estimates of high-value crop, hog, dairy, and poultry farms were suppressed for specific typology groups, due to insufficient observations.

¹Tobacco, cotton, peanuts, and general crops. Also includes farms with all cropland in the Conservation Reserve or Wetlands Reserve Programs (CRP & WRP).

²Vegetables, fruits & tree nuts, and nursery & greenhouse. Included in "other field crops" for limited-resource farms.

³Included in "other livestock" when not shown separately.

⁴Includes sheep, goats, horses, mules. ponies, fur-bearing animals, bees, fish, and any other livestock.

Source: 2000 Agricultural Resource Management Survey (ARMS).

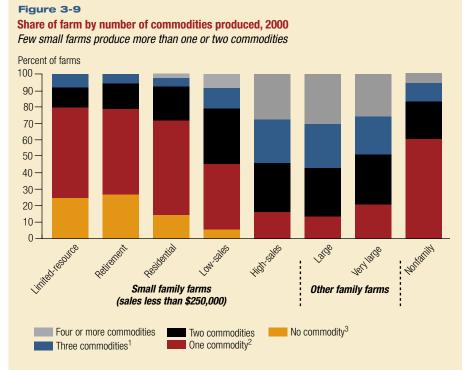


■ About two-fifths of the limited-resource, retirement, residential/lifestyle and low-sales small farms specialize in beef cattle (fig 3-8). Beef cattle—particularly cow-calf operations—often have low and flexible labor requirements compatible with off-farm work and retirement.

■ In contrast, two commodity groups cash grains and dairy—account for over half of all high-sales small farms and large family farms. ■ Many small farms specialize in a single commodity, but high-sales small farms, large family farms, and very large family farms tend to produce multiple commodities (fig. 3-9).

Government Program Participation

All farm typology groups participate in government farm programs to some extent, but the relative importance of the programs varies.



Based on 26 commodities or commodity groups

¹Includes the estimate for four or more commodities, when not shown separately. ²In the nonfamily farm group, includes farms producing no commodities. ³Largely farms with all cropland in the Conservation Reserve Wetlands reserve programs (CRP & WRP)

Source: 2000 Agricultural Resource Management Survey (ARMS).



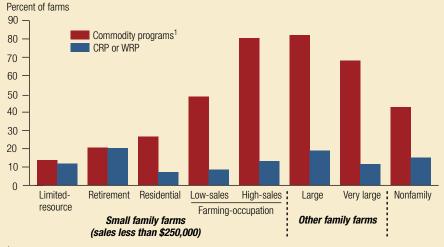
■ High-sales small farms, large family farms, and very large family farms are most likely to receive commodity program payments (fig. 3-10).

■ These three groups receive nearly three-fourths of commodity program payments, reflecting their production of program commodities (fig. 3-11).

Figure 3-10

Share of farms receiving commodity program payments and payments from the Conservation Reserve or Wetlands Reserve Programs, 2000

Most high-sales, large, and very large farms receive payments from commodity programs



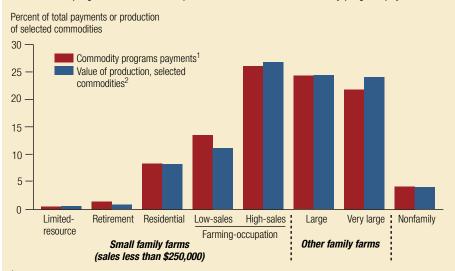
¹Agricultural disaster payments, loan deficiency payments, and transition payments.

Source: 2000 Agricultural Resource Management Survey (ARMS).

Figure 3-11

Distribution of total payments from commodity programs

Production of program commodities explains the distribution of commodity program payments



¹Agricultural disaster payments, loan deficiency payments, and transition payments. ²Barley, corn, cotton, rice, sorghum, soybeans, wheat, and oats

Source: 2000 Agricultural Resource Management Survey (ARMS).



Figure 3-12

Distribution of total payments from the Conservation Reserve or Wetlands Reserve Programs and acres enrolled in the programs, 2000

Retirement, residential/lifestyle, and low-sales farms account for nearly two-thirds of CRP and WRP payments and acres

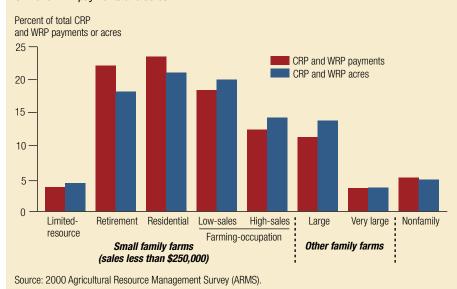
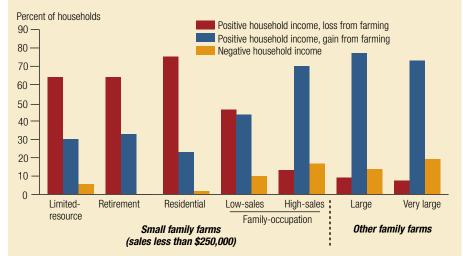


Figure 3-13

Operator households with negative income, 2000

Off-farm income supported many small-farm households



Note: The estimate of households with negative income is suppressed for retirement farms, due to insufficient observations.

■ Retirement, residential/lifestyle, and low-sales small farms, on the other hand, account for nearly two-thirds of CRP and WRP payments and the acres enrolled in the programs (fig. 3-12).

Household Income

Small-farm households rely heavily on off-farm income.

■ Most small-farm households have positive household income, even when they incur losses from farming (fig 3-13).

■ Households operating very large farms, large farms, and high-sales small farms receive a significant share of their income from farming (fig. 3-14).

■ For the remaining small-farm households, off-farm income makes a substantial contribution to economic well-being.

Farm Policy and Family Farms

The number of farms has fallen dramatically since its peak in 1935. In the meantime, the number of large farms has grown, which means that large farms now form a larger share of the total U.S. farms. Nevertheless, most of the remaining farms are family run businesses with sales less than \$250,000. The diversity of today's farms has some implications that are discussed below.

■ Production is concentrated among large family farms, very large family farms, and nonfamily farms. The Nation relies on larger farms for most of its food and fiber, despite the large number of small farms.

■ There is unlikely to be a "one-sizefits-all" policy for family farms. The variety of farm types—what they produce and their differences in characteristics, economic situation, and household and business arrangements—makes any one policy instrument appropriate for only a portion of the family farm population. ■ Commodity programs are most relevant to high-sales small farms, large family farms, and very large family farms. These farms produce most of the commodities that farm programs have traditionally supported.

■ The nonfarm economy is critically important to households operating small family farms. Because small-farm

households rely on off-farm work for most of their income, general economic policies, such as tax or economic development policy, can be as important to them as traditional "farm" policy.

■ Small family farms manage and operate the bulk of farm assets, including the soil, water, energy, and natural habitat resources associated with farmland use. In this regard, policies addressing natural resource quality and conservation can play a major role in the portfolio of policy instruments addressing the American family farm.

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Figure 3-14

Sources of operator household income, 2000

Households operating residential/lifestyle, large, or very large farms have household income above the U.S. average

