

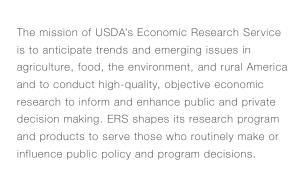
**Economic** Research Service

Economic Information Bulletin Number 203

# **America's Diverse Family Farms**

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Broad descriptions of farms based on U.S. averages can mask variation among different sizes and types of farms. This report uses a farm classification, or typology, developed by USDA's Economic Research Service (ERS) that categorizes farms into more homogeneous groupings to better understand conditions within the Nation's diverse farm sector. The classification is based largely on annual revenue of the farm, major occupation of the principal operator, and family/nonfamily ownership of the farm.



## **Farm Typology**

The farm typology, or classification, developed by ERS primarily focuses on the "family farm," or any farm where the majority of the business is owned by an operator and individuals related to the operator. USDA defines a farm as any place that produced and sold—or normally would have produced and sold—at least \$1,000 of agricultural products during a given year. USDA uses acres of crops and head of livestock to determine if a place with sales of less than \$1,000 could normally produce and sell that amount. Farm size is measured by gross cash farm income (GCFI), a measure of the farm's revenue that includes sales of crops and livestock, Government payments, and other farm-related income, including fees from production contracts.

Differences among farm types are illustrated in this report using 2017 data from the Agricultural Resource Management Survey (ARMS), an annual survey conducted by USDA's National Agricultural Statistics Service and ERS. The analysis in this report is based on a sample of approximately 21,000 farms.

#### Small Family Farms (GCFI less than \$350,000)

- Retirement farms. Small farms whose principal operators report they are retired, although they continue to farm on a small scale (218,204 farms; 10.7 percent of U.S. farms in 2017).
- Off-farm occupation farms. Small farms whose principal operators report
  a major occupation other than farming (831,791 farms; 40.8 percent of
  U.S. farms).
- Farming-occupation farms. Small farms whose principal operators report farming as their major occupation.
  - Low-sales. GCFI less than \$150,000 (646,407 farms; 31.7 percent of U.S. farms)
  - Moderate-sales. GCFI between \$150,000 and \$349,999 (115,518 farms; 5.7 percent of U.S. farms)

#### Midsize Family Farms (GCFI between \$350,000 and \$999,999)

Family farms with GCFI between \$350,000 and \$999,999 (127,862 farms;
 6.3 percent of U.S. farms).

#### Large-Scale Family Farms (GCFI of \$1,000,000 or more)

- Large family farms. Farms with GCFI between \$1,000,000 and \$4,999,999 (50,598 farms; 2.5 percent of U.S. farms).
- Very large family farms. Farms with GCFI of \$5,000,000 or more (5,872 farms; 0.3 percent of U.S. farms).



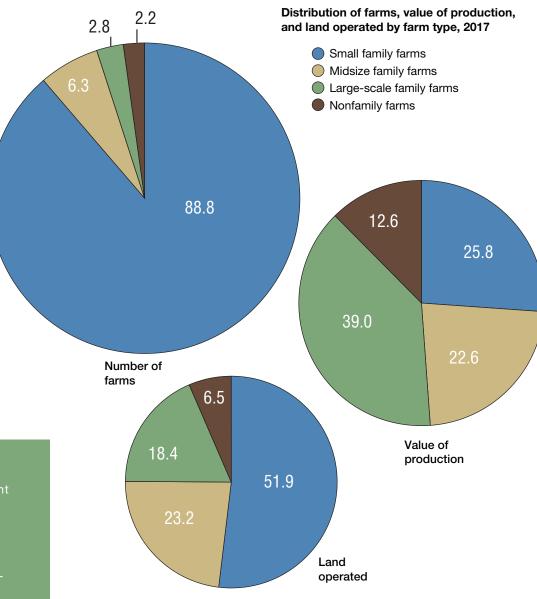
# Farms, Production, and Farmland

Most U.S. farms are small; small farms operate over half of U.S. farmland but account for 26 percent of production.

- Eighty-nine percent of farms are small, and these farms accounted for 52 percent of the land operated by farms in 2017.
- Large-scale family farms accounted for the largest share of production, at 39 percent.
- Family farms of various types together accounted for 98 percent of farms and 87 percent of production in 2017.
- Nonfamily farms accounted for the remaining farms (2 percent) and production (13 percent). Fifteen percent of nonfamily farms had gross cash farm income (GCFI) of \$1,000,000 or more, and they accounted for 89 percent of nonfamily farms' production. Examples of nonfamily farms include partnerships of unrelated partners, closely held nonfamily corporations, farms with a hired operator unrelated to the owners, and (relatively few) publicly held corporations.



Changes in questionnaire design between the 2016 and 2017 Agricultural Resource Management Surveys contributed to a change in the share of farming operations classified as "retirement farms." More principal operators reported their primary occupation as farming in 2017. This led to an increase in the number of low-sales farms—those with gross cash farm income less than \$150,000—and a decrease in retirement farms. As a result of the changes in the composition of these groups, caution should be used in comparing to data from earlier years.



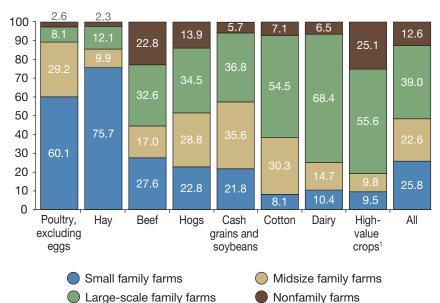
Note: Details may not add to 100.0 percent due to rounding. Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2017 Agricultural Resource Management Survey.

#### Different types of farms account for the production of specific commodities.

- Large-scale family farms accounted for over two-thirds of dairy production and over half of high-value crops like fruits and vegetables.
- Midsize and large-scale family farms dominate cotton production (85 percent), with large-scale farms contributing over half of production and midsize farms an additional one-third. Midsize and large-scale family farms both accounted for over one-third of total cash grain/soybean production (for a combined total of 72 percent).
- Small and large-scale farms together accounted for 60 percent of beef production in 2017. Small farms generally have cow/calf operations, while large-scale farms are more likely to operate feedlots.
- Small farms produce 60 percent of U.S. poultry output and 76 percent of hay. Much of poultry production is done under production contracts.

#### Value of production for selected commodities by farm type, 2017

#### Percent of value of production



<sup>1</sup>High-value crops include vegetables, fruits/tree nuts, and nursery/greenhouse products. Note: Details may not add to 100.0 percent due to rounding.

Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2017 Agricultural Resource Management Survey.



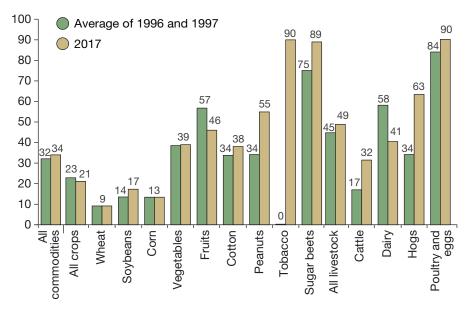
# Production Under Contract

One-third of U.S. farm output is produced under contract, but the share differs by commodity (see box, "Types of Contracts").

- Contracts are used to manage price and production risks, to procure farm products with specified qualities, and to provide farmers with assured outlets and buyers with assured product flows. The production share of all commodities under contract in 2017 (34 percent) is close to the share in 1996/1997 (32 percent). However, the share each year ranged from 31 percent to 41 percent over the past two decades—with no discernible trend—and averaged 37 percent.
- More than half of U.S. production of peanuts, tobacco, sugarbeets, hogs, and poultry/eggs in 2017 was under contract. In contrast, only small shares of wheat, soybeans, or corn were grown under contract, as has been the case since 1996/1997.
- Tobacco has demonstrated the largest increase in share of production under contract, from less than 1 percent in 1996/1997 to 90 percent in 2017. Cigarette manufacturers switched from cash auctions to contracts to ensure sufficient supply of the types of tobacco they need.
- Hogs produced under contract nearly doubled from 34 percent in 1996/97 to 63 percent in 2017. Contracts afford processors more control over the characteristics of the hogs they acquire, helping them provide consistent quality of meat to consumers.

## Share of value of production under marketing or production contracts for selected commodities (all farms), 1996-97 and 2017

#### Percent of value of production



Note: An average of 1996 and 1997 was used to provide a more statistically reliable estimate. Source: USDA, National Agricultural Statistics Service and Economic Research Service, 1996, 1997, and 2017 Agricultural Resource Management Survey.

### **Types of Contracts**

The Agricultural Resource Management Survey (ARMS) identifies two types of contracts:

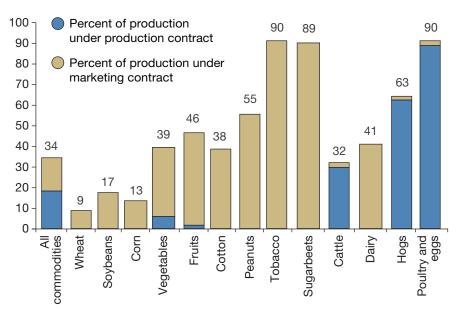
- Marketing contracts. Ownership of the commodity remains
  with the farmer during production. The contract, reached prior
  to harvest, sets a price (or a pricing formula), product quantities/
  qualities, and a delivery schedule. Contractor involvement in
  production is minimal.
- Production contracts. The contractor usually owns the commodity during production, and the farmer is paid a fee for services rendered. The contract specifies farmer and contractor responsibilities for inputs and practices. The contractor often provides specific inputs and services, production guidelines, and technical advice.

# Production contracts are widely used by poultry and hog farms, while marketing contracts are more common on crop farms.

- The value of contract production was nearly evenly split between marketing and production contracts in 2017.
- Production contracts were commonly used on livestock farms, representing the majority of production on poultry/egg and hog farms, and almost onethird of production on cattle farms.
- Marketing contracts were commonly used on crop farms. Roughly 90
  percent of production on tobacco and sugar beet farms was under
  marketing contract. Fruit and vegetable farms had between one-third and
  one-half of their production under marketing contract.
- Only 9 to 17 percent of corn, soybean, and wheat production was produced under marketing contract in 2017.

## Share of production under contract by contract type and commodity (all farms), 2017

#### Percent of value of production



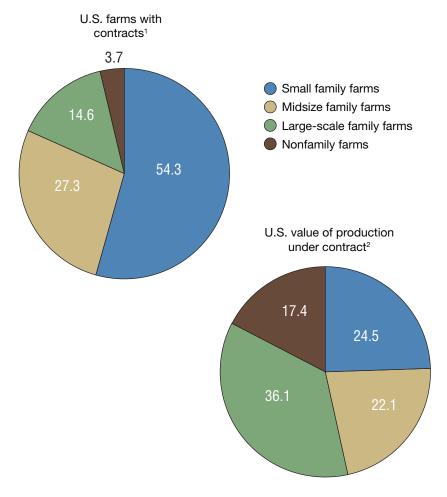
Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2017 Agricultural Resource Management Survey.

### Small family farms dominate the count of farms with contracts, but most contract production occurs on larger farms.

- Only 8 percent of U.S. farms have contracts. Two-thirds of the value of U.S. farm production is sold without contracts.
- Family farms accounted for 83 percent of all contract production in 2017.
- While 95 percent of small family farms do not have contracts, they represented 54 percent of the farms that did have contracts in 2017 and accounted for 25 percent of the production under contract (mostly from moderate-sales farms).
- In contrast, large-scale family farms together accounted for 15 percent of farms with contracts but 36 percent of contract production in 2017.



#### Distribution of farms with contracts and the value of production under contract by farm type, 2017



<sup>1</sup>Farms reporting production under production contracts, marketing contracts, or both.

<sup>2</sup>Includes commodities under production or marketing contracts.

Note: Details may not up add to 100.0 percent due to rounding.

Source: USDA, Economic Research Service and National Agricultural Statistics Service, 2017 Agricultural Resource Management Survey.

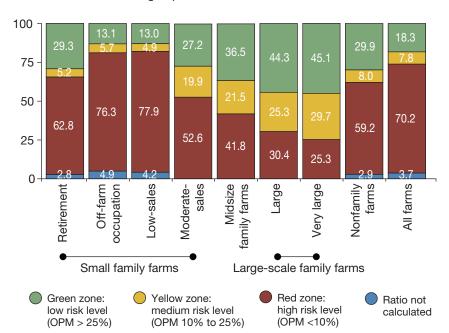
### **Farm Financial Performance**

Financial performance varies across farm size. Most small farms have an operating profit margin (OPM) in the red zone – indicating a higher risk of financial problems - while most midsize, large, and very large farms operate under less financial risk (see figure for definition of OPM).

• Between one-half and three-quarters of small farms—depending on the farm type—had an OPM in the high-risk red zone in 2017. However, many small farms have operators that do not consider farming their primary occupa-

#### Farms by operating profit margin (OPM) and farm type, 2017

Percent of farms in each group



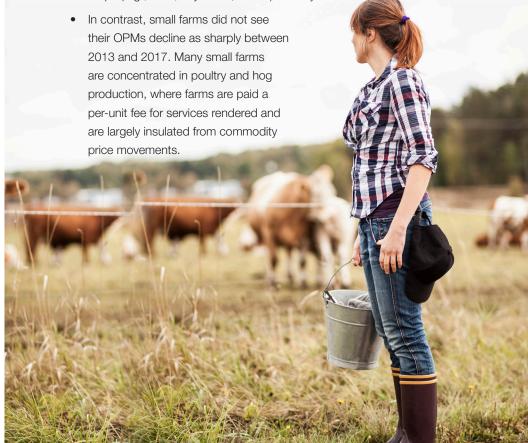
Notes: Details may not add to 100.0 percent due to rounding. Ratios not calculated for farms without gross farm income.

Operating profit margin (OPM) = 100 X (net farm income + interest paid - charges for unpaid labor and management) ÷ gross farm income.

Source: USDA. National Agricultural Statistics Service and Economic Research Service. 2017 Agricultural Resource Management Survey.

tion and receive little or no income from farming. Instead, these small farms receive substantial income from off-farm sources, and these earnings are not reflected in OPM.

- Nevertheless, many small farms operate in the low-risk green zone, as do between 37 and 45 percent of midsize, large, and very large farms.
- In 2017, net farm income for the sector declined almost 40 percent from its peak in 2013, though it was only slightly below its 10-year average. Midsize, large, and very large farms had substantial declines in the share of farms with an OPM in the green zone between 2013 and 2017. Lower commodity prices worsened the OPM of many midsize, large, and very large farms, especially those that produced field crops (e.g., corn, soybeans, wheat) or dairy.

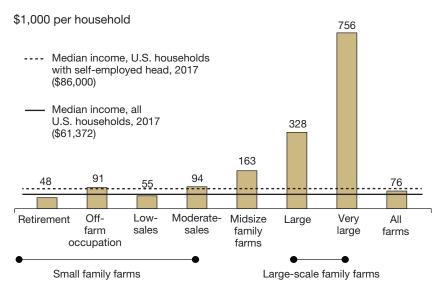


### **Farm Operator Household** Income and Wealth

Farm households in general are not low-income or low-wealth when compared with all U.S. households.

- Fifty-nine percent of farm households received an income at or above the median for all U.S. households in 2017. Median household income in five out of seven family farm types exceeds both the median income for all U.S. households and the median income for U.S. households with a selfemployed head.
- Overall, only 4 percent of farm households had lower wealth than the median U.S. household in 2017.

#### Median operator household income by farm type, 2017



Notes: Operator household income is not estimated for nonfamily farms.

Operator household income includes both farm and off-farm income received by household members. Median income falls at the midpoint of the distribution of households ranked by income; half of households rank above the median and half below it.

Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2017 Agricultural Resource Management Survey for farm households. U.S Department of Commerce, U.S. Bureau of the Census. 2018 Current Population Survey for all U.S. households.

- Self-employment or wage/salary jobs are the main source of off-farm income for farm households. Farm households often use off-farm income to cover farm expenses and fund their farm operations.
- · Operators of small farms—especially retirement, off-farm occupation, and low-sales farms—often report losses from farming. Some operators reporting losses may write farm losses off against other income for income tax reporting purposes.

#### Farm households with income or wealth below the median for all U.S. households, 2017

110030110103, 2017				
	Farm households with			
Farm type	Income below U.S. median (\$61,372)	Wealth below U.S. median (\$99,168)		
	Percent of far	farm households		
Small family farms:				
Retirement	60.4	3.3		
Off-farm occupation	31.2	4.1		
Low-sales	54.9	3.9		
Moderate-sales	32.1	3.5		
Midsize family farms	21.2	3.7		
Large-scale family farms:				
Large	13.6	6.4		
Very large	12.7	6.1		
All family farms	41.0	4.0		

Notes: Operator household income and wealth are not estimated for nonfamily farms.

U.S. median wealth was deflated to 2017 dollars using GDP (gross domestic product) chain-type price index.

Source: USDA. Economic Research Service and National Agricultural Statistics Service. 2017 Agricultural Resource Management Survey. U.S. Dept. of Commerce, Bureau of the Census, 2018 Current Population Survey. Board of Governors of the Federal Reserve Board, in cooperation with the U.S. Department of the Treasury, 2016 Survey of Consumer Finances.

### Average (mean) farm operator household income by source and farm type, 2017

	Total		Income from farming		Income from off-farm sources		
Farm type	average income	Amount	Negative	Total	Earned <sup>1</sup>	Unearned <sup>1</sup>	
	Dollars per household		Percent of households	Do	Dollars per household		
Small family farms							
Retirement	67,384	6,210	55.6	61,174	25,272	35,902	
Off-farm occupation	118,152	-1,745	67.5	119,897	96,204	23,693	
Farming-occupation							
Low-sales	69,026	-107	54.2	69,133	35,557	33,575	
Moderate-sales	114,116	51,154	20.5	62,962	32,823	30,139	
Midsize family farms	200,040	126,136	15.2	73,904	53,304	20,600	
Large-scale family farms	534,884	449,717	11.2	85,168	63,015	22,153	
All family farms	113,495	23,678	54.2	89,817	61,458	28,359	

<sup>1</sup>Earned income comes from off-farm self-employment or wage/salary jobs. Unearned income includes interest and dividends, benefits from Social Security and other public programs, alimony, annuities, net income of estates or trusts, private pensions, etc.

Notes: Components of income may not sum to totals due to rounding.

Operator household income is not estimated for nonfamily farms.

Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2017 Agricultural Resource Management Survey.



### **Farm Legal Organization**

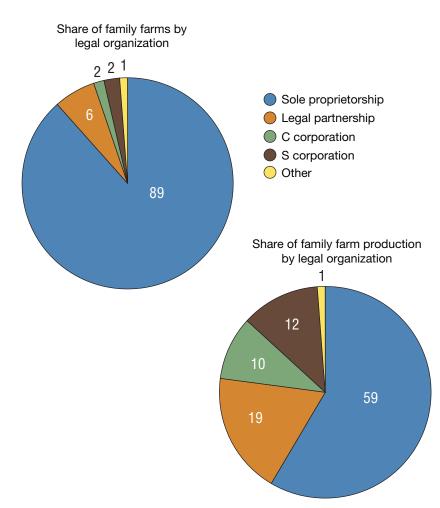
The vast majority of family farms (89 percent) are operated as sole proprietorships owned by a single individual or family, and they account for 59 percent of the value of production (see box, "Legal Organization of Family Farms").

- Sole proprietorships are the most common form of legal organization across the farm typology.
- Seventy-six percent of production on small family farms and 70 percent on midsize farms come from farms organized as sole proprietorships.
- Relatively few farms—2 percent—are organized as C corporations (or "regular" corporations), and they accounted for 10 percent of the value of agricultural production in 2017.
- Ninety-seven percent of family farms are organized as pass-through entities (sole proprietorships, partnerships, or S corporations); pass-through entities accounted for 89 percent of production.

### Legal Organization of Family Farms

The legal organization of a family farm determines how its income is taxed. Farms that are sole proprietorships, partnerships, and Subchapter S corporations are passthrough entities, meaning any profit or loss from them is passed to the owner/partner/shareholder, and tax is paid at the individual level on their personal income tax returns. Farms may choose to organize as Subchapter C corporations, and such corporations are liable for corporate income taxes; any dividends paid to their shareholders may be subject to individual income taxes as well.

Most family farms are organized as sole proprietorships, and they account for most farm production



Note: Details may not add up to 100 percent due to rounding. Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2017 Agricultural Resource Management Survey.

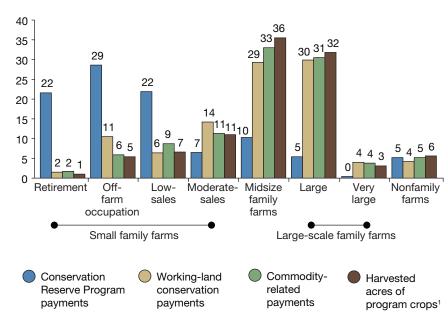
# **Government Payments and Federal Crop Insurance**

#### Recipients of Government payments differ by program.

- Crop commodity program payments are targeted at current or historical production of specific crops and generally reflect acreage in crops historically eligible for support. Seventy-five percent of these payments went to moderate-sales, midsize, and large family farms in 2017, which historically have produced the largest share of program crops; in 2017, they accounted for 79 percent of acres in program crops. Commodity program payments are limited to \$125,000 annually per person or legal entity.
- Thirty-four percent of working-land conservation payments went to largescale family farms, 29 percent went to midsize family farms, and 33 percent went to small family farms (i.e., retirement, off-farm occupation, low-sales, and moderate-sales farms). These programs target production by focusing environmental programs on lands currently in production on crop or livestock operations.
- USDA's Conservation Reserve Program targets removal of environmentally sensitive land from production. In 2017, 73 percent of these payments went to retirement, off-farm occupation, and low-sales farms, farm types deriving a lower share of their household income from production.
  - Seventy percent of all farms received no farm-related Government payments in 2017.

#### Distribution of Government payments and harvested acres of program crops by farm type, 2017

Percent of U.S. payments or acres of program crops (bars of a given color sum to 100%)



<sup>&</sup>lt;sup>1</sup> Program crops include corn, peanuts, rice, sorghum, soybeans, barley, oats, wheat, canola, other oilseeds, and dry edible beans/peas/lentils.

#### Note: Conservation programs:

- Conservation Reserve Program Conservation Reserve Program and Conservation Reserve Enhancement Program.
- Working-land conservation programs—Environmental Quality Incentives Program, Conservation Security Program, and Conservation Stewardship Program.
- All other Federal conservation programs—Includes the Agricultural Conservation Easement Program and other miscellaneous conservation payments (about 2 percent of Government payments, not presented separately).

Commodity-related programs - Includes Price Loss Coverage Program, Agricultural Risk Coverage Program, Margin Protection Program for dairy, loan deficiency payments, marketing loan gains, and agricultural disaster payments.

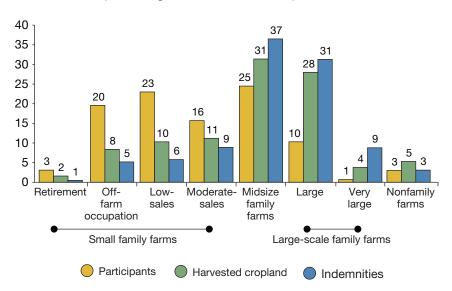
Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2017 Agricultural Resource Management Survey. Details may not add to 100 percent due to rounding.

### Indemnities from Federal crop insurance are roughly proportional to acres of harvested cropland.

- Midsize and large family farms together received 68 percent of indemnities while accounting for 59 percent of harvested cropland in 2017.
- Midsize and large farms' share of indemnities reflects their high participation in Federal crop insurance. About two-thirds of midsize farms and threefourths of large farms participated in Federal crop insurance, compared with one-sixth of all U.S. farms.
- Grain and oilseed farms—the most common specialization among midsize and large family farms—accounted for 57 percent of all participants in Federal crop insurance and 63 percent of harvested cropland in 2017.

#### Federal crop insurance participants, harvested cropland, and indemnities by farm type, 2017

Percent of U.S. participants, acres of cropland, and indemnities (bars of a given color sum to 100%)



Notes: Details may not add to 100 percent due to rounding.

Indemnities are payments from insurance to compensate for losses. Participants are farms paving premiums.

Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2017 Agricultural Resource Management Survey.



# Conclusions and **Implications**

- Farming is still overwhelmingly a family business. Ninety-eight percent of U.S. farms are family farms, and they account for 87 percent of farm production.
- Small farms make up 89 percent of the farm count and operate half of the farmland. The largest share of farm production (39 percent), however, occurs on large-scale family farms, although small farms account for over half of poultry and hay production.
- One-third of U.S. farm output is produced under contract, but the share differs by commodity. Production contracts represented the majority of production on poultry/egg and hog farms, and almost one-third of production on cattle farms in 2017. Marketing contracts are commonly used on crop farms. Almost 90 percent of production on tobacco and sugar beet farms was under marketing contract in 2017.
- The share of farms with an operating profit margin (OPM) in the green zone varied by farm size in 2017. Between one-half and three-fourths of small farms—depending on the farm type—have an OPM in the high-risk red zone, compared with 25-42 percent of midsize and large-scale farms. Nevertheless, many small farms in each type operate in the low-risk green zone, with an OPM greater than 25 percent, as do more than 36 percent of midsize, large, and very large farms. Midsize, large, and very large farms saw the largest decline in the share with an OPM in the green zone between 2013 and 2017, consistent with lower net farm income for the sector.

- Farm households in general are neither low income nor low wealth. About 41 percent of farm households had income below the median for all U.S. households in 2017, and 4 percent had wealth less than the U.S. median. Smallfarm households rely heavily on off-farm sources for their income, so general economic policies—such as tax or economic development policy—can be as important to them as traditional farm policy.
- Conservation Reserve Program (CRP) payments go to different farms than other farm-related Government payments. CRP targets retirement of environmentally sensitive cropland; its payments largely go to retirement, offfarm occupation, and low-sales farms. Commodity-related and working-land payments, in contrast, go to family farms with gross cash farm income (GCFI) of \$150,000 or more, consistent with their higher levels of production value. Most U.S. farms, however, do not receive Government payments and are not directly affected by them, although they may be affected indirectly by changes in land values and rents.

#### For further information, contact:

Christopher B. Burns christopher.burns@ers.usda.gov (202) 694-5329 James M. MacDonald (202) 694-5610 macdonal@ers.usda.gov

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