



U.S. DEPARTMENT OF AGRICULTURE

Economic
Research
Service

Economic
Information
Bulletin
Number 220

December
2020

America's Diverse Family Farms

2020 Edition



For further information, contact

Christine E. Whitt	(202) 694-5288	christine.whitt1@usda.gov
Jessica E. Todd	(202) 694-5363	jessica.todd@usda.gov
James M. MacDonald	(202) 694-5610	james.macdonald@usda.gov

Images used in this publication are a derivative of images from Getty Images.

Use of commercial and trade names does not imply approval or constitute endorsement by USDA.

To ensure the quality of its research reports and satisfy governmentwide standards, ERS requires that all research reports with substantively new material be reviewed by qualified technical research peers. This technical peer review process, coordinated by ERS' Peer Review Coordinating Council, allows experts who possess the technical background, perspective, and expertise to provide an objective and meaningful assessment of the output's substantive content and clarity of communication during the publication's review.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

Broad descriptions of farms based on U.S. averages can mask variations among farm sizes and types. For example, in 2019, the average value of production on the 2 million U.S. farms amounted to \$168,218. Few farms, however, are near the average: Almost half of the farms had production valued at \$6,000 or less, while more than 60 percent of all production occurred on farms with at least \$1 million of agricultural output.

This report uses a farm classification, or typology, developed by USDA's Economic Research Service (ERS) to categorize farms into more homogeneous groupings to better understand conditions across the Nation's diverse farm sector. The classification is based largely on the annual revenue of the farm, the main occupation of the farm's principal producer, and family or non-family ownership of the farm. In this report, there are many sections that appear every year. The data and statistics for these sections are generally similar across the years. The operating profit margin section has varied the most over the years because of the variability in the farm economy.

Farm Typology

The farm typology, developed by ERS, focuses primarily on the “family farm,” or any farm where the majority of the business is owned by the principal operator—the person who is most responsible for making day-to-day decisions for the farm—and by individuals who are related to the principal operator. USDA defines a farm as any place that, during a given year, produced and sold—or normally would have produced and sold—at least \$1,000 of agricultural products. USDA uses acres of crops and head of livestock to determine whether 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.

This report uses 2019 data from the Agricultural Resource Management Survey, an annual survey conducted by USDA’s National Agricultural Statistics Service and USDA’s Economic Research Service. The analysis in this report is based on a sample of approximately 14,450 farms.





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

- **Retirement farms.** Small farms whose principal operators report having retired from farming, though continuing to farm on a small scale (215,959 farms; 10.7 percent of U.S. farms in 2019).
- **Off-farm occupation farms.** Small farms whose principal operators report a primary occupation other than farming (833,450 farms; 41.4 percent of U.S. farms).
- **Farming-occupation farms.** Small farms whose principal operators report farming as their primary occupation. Farming occupation farms are further sorted into two classes:
 - **Low-sales.** Farms with GCFI less than \$150,000 (653,716 farms; 32.4 percent of U.S. farms).
 - **Moderate sales.** Farms with GCFI between \$150,000 and \$349,999 (103,058 farms; 5.1 percent of U.S. farms).

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

- Farms with GCFI between \$350,000 and \$999,999 (107,316 farms; 5.3 percent of U.S. farms).

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

- **Large.** Farms with GCFI between \$1,000,000 and \$4,999,999 (48,339 farms; 2.4 percent of U.S. farms).
- **Very large.** Farms with GCFI of \$5,000,000 or more (5,780 farms; 0.3 percent of U.S. farms).

Nonfamily Farms

- Any farm where the principal operator and people related to the principal operator do not own a majority of the business (47,451 farms; 2.4 percent of U.S. farms).

Farms, Production, and Farmland

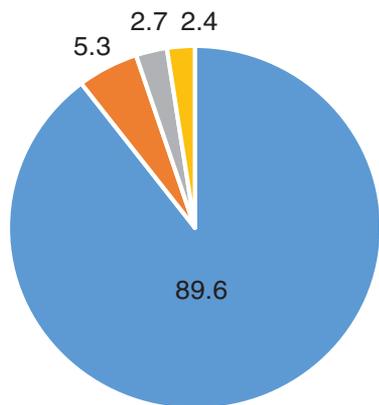
Most U.S. farms are small; small farms operate almost half of U.S. farmland and account for 22 percent of production.

- Approximately 90 percent of the farms are small. In 2019, small farms accounted for 49 percent of the land operated by farms.
- Large-scale family farms accounted for the largest share of production, at 44 percent.
- Family farms as a group, across type, accounted for 98 percent of farms and 86 percent of production in 2019.
- Nonfamily farms accounted for the remaining farms (2 percent) and production (14 percent). Fifteen percent of nonfamily farms had GCFI of \$1 million or more. Such farms accounted for 87 percent of nonfamily farms' production. Examples of nonfamily farms include partnerships of unrelated partners, closely held nonfamily corporations, farms with a hired producer unrelated to the owners, and publicly held corporations.

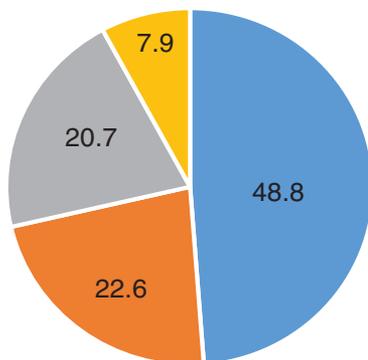
Distribution of farms, land operated, and value of production by farm type, 2019

- Small family farms
- Midsize family farms
- Large-scale family farms
- Nonfamily farms

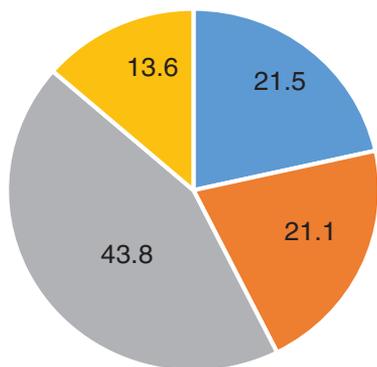
Percentage of farms



Percentage of land operated



Percentage of value of production



Notes: Due to rounding, numbers may not add to 100.

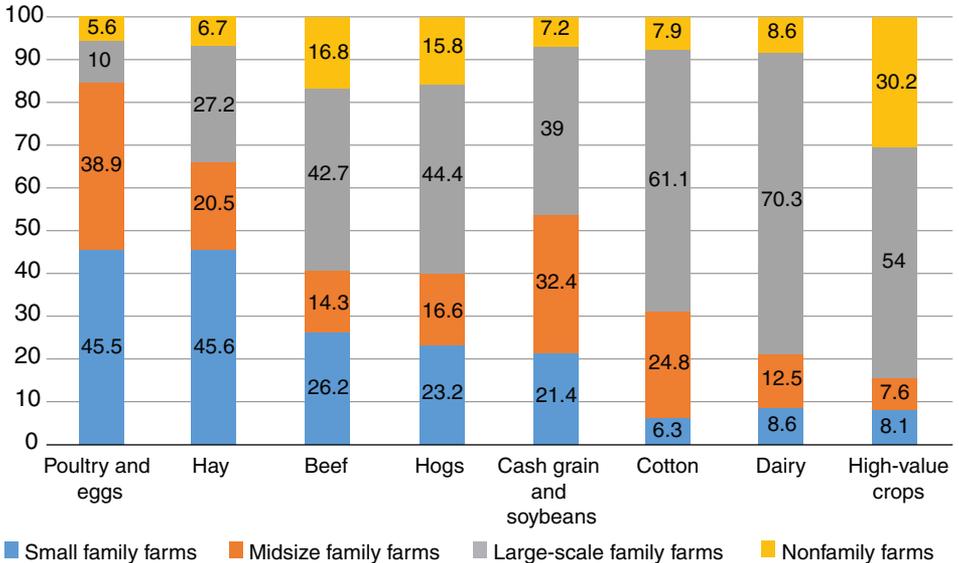
Source: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey.

Different types of farms produce specific commodities.

- Large-scale family farms account for over two-thirds of dairy production, while large-scale family farms produce just over 50 percent of high-value crops such as fruits and vegetables. Nonfamily farms produce more than 30 percent of high-value crops, nearly double that of any other major commodity grouping.
- Midsize and large-scale family farms dominate the production of cotton (86 percent of production), cash grains/soybeans (71 percent), and hogs (61 percent).
- Small and large-scale farms together account for 69 percent of beef production. Small farms generally have cow/calf operations, while large-scale farms are more likely to operate feedlots.
- Small farms produce 45 percent of U.S. poultry and egg output and 46 percent of hay. Much of poultry production is done under production contracts, with a contractor paying a fee to a farmer who raises poultry to maturity.

Value of production for selected commodities by farm type, 2019

Percent of value of production



Note: High-value crops include fruits, vegetables, tree nuts, and nursery/greenhouse crops. Due to rounding, numbers may not add to 100.

Source: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey.

Farm Financial Performance

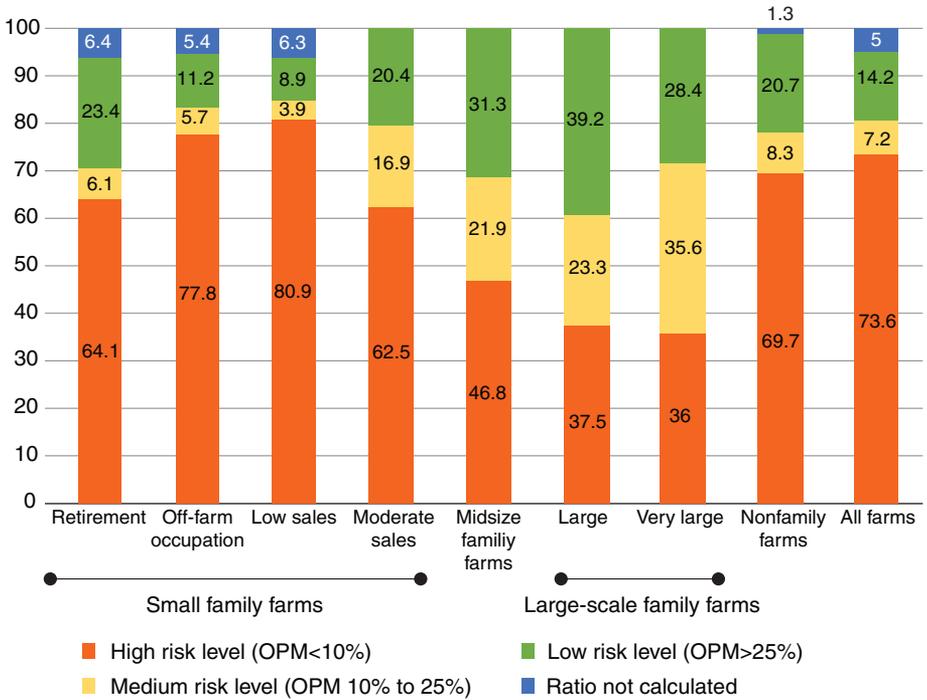
Financial performance varies across farm size. Most small farms have an operating profit margin (OPM) in the red zone—indicating a higher risk of financial problems—while most midsize, large, and very large farms operate in a lower financial risk zone. (See figure figure below for the definition of OPM.)

- Between 62 and 81 percent of small family farms—depending on the farm type—had an OPM in the high-risk red zone. Many small farms, however, have operators who do not consider farming to be their primary occupation and who receive little or no cash income from farming. Instead, these small farms receive substantial income from off-farm sources. Income from off-farm sources are not reflected in OPM.
- Between 9 and 23 percent of small farms operate in the low-risk green zone, while a larger share, between 28 and 39 percent of midsize, large, and very large farms operate in the low-risk green zone.



Farms by operating profit margin and farm type, 2019

Percent of farms in group



Notes: Due to rounding, sums may not add to 100 percent. Operating profit margin (OPM) = 100 X (net farm income + interest paid charges for unpaid labor and management) / gross farm income. OPM ratios are not calculated for operations with zero gross farm income.

Source: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey.



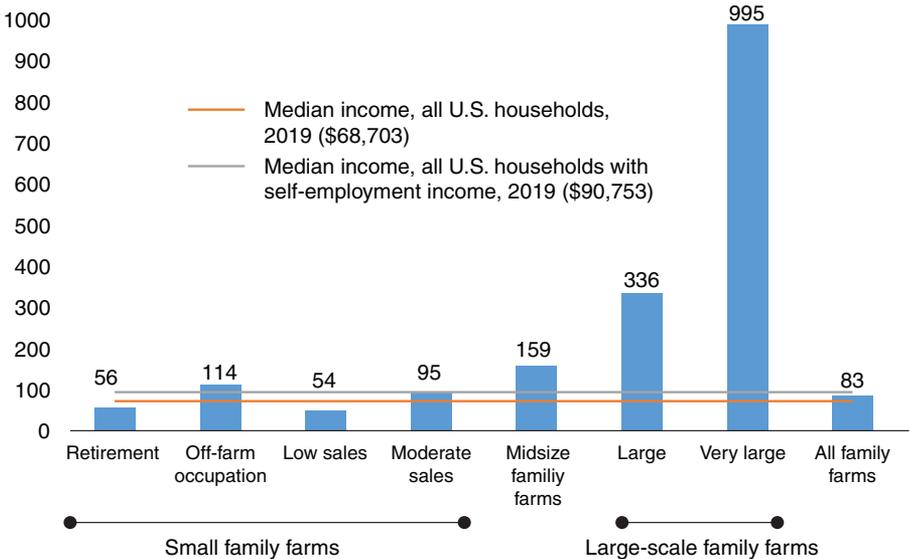
Farm Operator Household Income and Wealth

Generally, farm households are not low income or low wealth when compared with all U.S. households.

- In 2019, 57 percent of farm households received an income at or above \$68,703, the median for all U.S. households. Median household income in five out of seven farm types exceeded both the median U.S. household income and the median income for U.S. households with self-employment income.
- The median income for all family farm households is lower than the median among all U.S. households with self-employment income.

Median operator household income by farm type, 2019

Dollars (thousands)



Notes: Operator household income includes both farm and off-farm income received by household members. Half of all households have incomes above the median, and half have incomes below the median.

Sources: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey for farm households. U.S. Department of Commerce, Bureau of the Census, 2019 Current Population Survey, March supplement, for all U.S. households.

- Overall, only 3 percent of farm households had lower wealth than the median U.S. household. Farming is capital intensive and is generally dependent on large acreages of farmland that contributes to high wealth.
- Farm households often use off-farm income to cover farm expenses. While self-employment and wage/salary jobs are the primary sources of off-farm income for farm households, public and private pensions, interest and dividend payments, asset sales, Social Security payments, and other sources of income provide a significant share of off-farm income, particularly for retirement farms.
- Operators of small farms—especially retirement, off-farm occupation, and low-sales farms —often report losses from farming.

Farm households with income or wealth below the median for all U.S. households, 2019		
Farm households with...		
	Income below U.S. median (\$68,703)	Wealth below U.S. median (\$121,700)
Percent of farm households		
Small family farms		
Retirement	64.3	2.7
Off-farm occupation	22.9	2.7
Low-sales	67.1	3.7
Moderate sales	36.6	2.0
Midsized family farms	24.1	3.5
Large-scale family farms		
Large	16.3	4.9
Very large	11.9	1.8
All family farms	42.7	3.1

Note: Operator household income and wealth are not estimated for nonfamily farms. Wealth is the value of household assets minus household debt. Given that net income is a calendar year flow, all income and expenses are included when they occur from January 1 to December 31.

Sources: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey. U.S. Department of Commerce, Bureau of the Census, 2019 Current Population Survey. Board of Governors of the Federal Reserve Board, in cooperation with the U.S. Department of the Treasury, 2019 Survey of Consumer Finances.



Farm operator household income by source and farm type, 2019

Farm type	Mean total income	Income from farming		Mean income from off-farm sources		
		Mean amount	Is negative	Total	Earned	Unearned
	Dollars per household		Percent of households	Dollars per household		
Small family farms						
Retirement	77,948	11,467	40.9	66,481	32,679	33,802
Off-farm occupation	153,185	855	58.3	152,330	127,778	24,553
Low-sales	64,055	-1,427	50.9	65,482	31,848	33,634
Moderate sales	98,305	42,170	24.1	56,135	33,158	22,977
Midsize family farms	169,831	110,512	16.9	59,319	38,901	20,418
Large-scale family farms						
Large	415,525	350,839	15.0	64,686	39,420	25,266
Very large	1,370,225	1,269,171	9.3	101,053	68,443	32,611
All family farms	123,368	21,730	48.6	101,638	73,320	28,318

Notes: Operator household income is not estimated for nonfamily farms. 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 pensions, alimony, annuities, net income of estates or trusts, private pensions, etc.

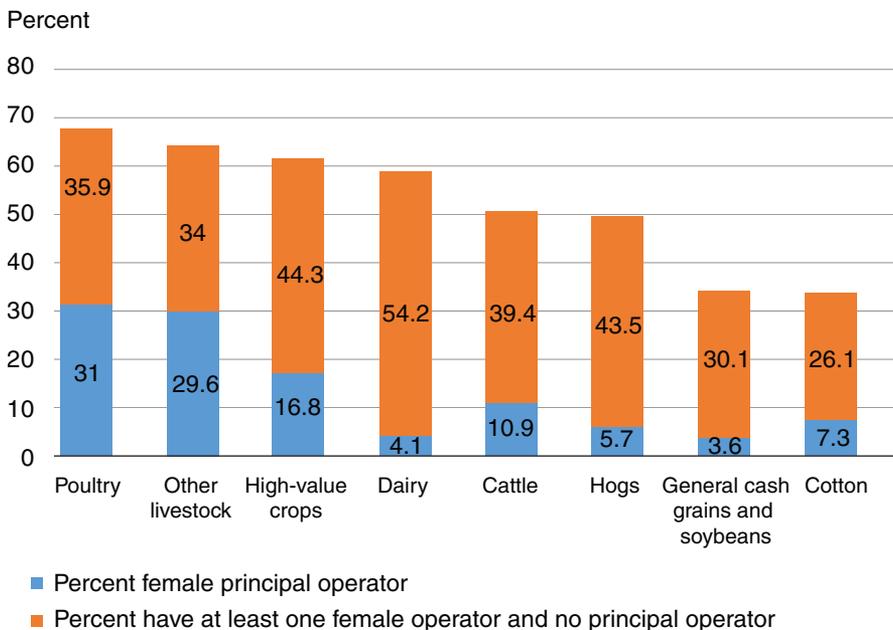
Source: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey.

Women in Agriculture

Female principal operators and operations with female operators make up a significant share of livestock and high-value crop operations.

- Women are operators in more than half (51 percent) of all farming operations. Women are the principal operators on 14 percent of operations, and another 37 percent of operations have female operators who were not identified by the respondent as the principal operator.
- Operations with principal female operators contributed just over 4 percent of the total value of production in 2019. In addition, the highest share of principal female operators is found among farms specializing in poultry and other livestock (including horses, bees, sheep, lambs, goats, etc.), at 31 and 30 percent, respectively.
- Women comprise only 4 percent of the principal operators on dairy specializing operations, but overall, women are principal operators or operators on 58 percent of all farms specializing in dairy.
- Among operations with at least one female operator, 78 percent of those female operators are the spouse of the principal operator and work on the farm.

Share of operations with a female principal operator and operations with at least one female operator, 2019



Note: High-value crops include fruits, vegetables, and nursery/greenhouse crops.

Source: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey.

Definition of Direct Sales

Direct sales are the sales of commodities produced, raised, or grown on the farm and sold either direct to the consumer or to intermediary supply chains that sold directly to individuals (such as retail outlets and regional distributors) or to institutions (such as schools and hospitals). A supply chain is the sequence of processes involved in the production and distribution of a commodity. Christmas trees and flowers, nursery products, craft items, and processed products such as jellies, sausages, and hams are excluded from the analysis of direct sales. Also, commodities produced under production contracts are excluded from this analysis. Direct sales of livestock include selling a pre-determined size share of livestock that is raised on the farm and processed for the consumer.

Because a small share of operations participate in direct sales and these operations are quite small, different gross cash farm income cutoffs are used to group direct sales operations in place of the GCFI cutoffs used earlier for the overall farm typology.

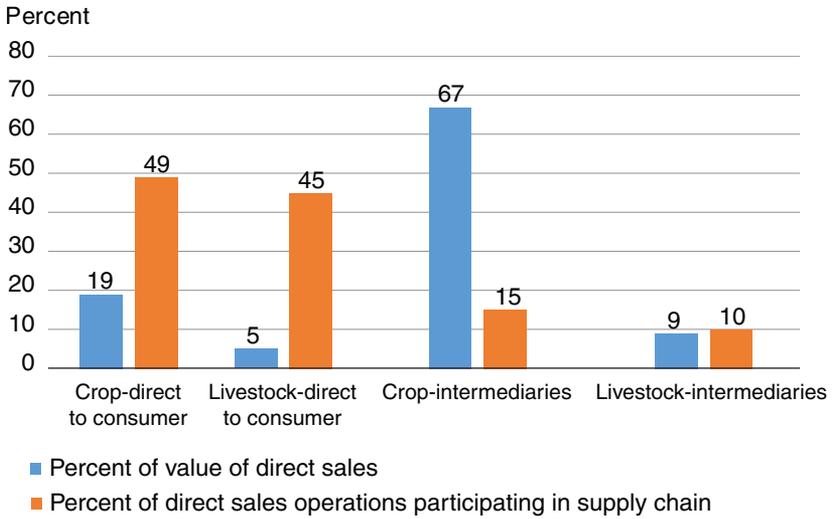


Direct sales

Direct-to-consumer crop sales are the most common form of all direct sales.

- In 2019, 9 percent of operations sold commodities through direct to consumer (DTC) or intermediary supply chains and amounted to almost \$8 billion in sales—over 2 percent of the total value of farm production. Of this 9 percent, 49 percent sell crops and 45 percent sell livestock DTC. Only 15 percent sell crops through an intermediary and 10 percent sell livestock this way. Fifteen percent of operations sell commodities using both DTC and intermediary supply chains.
- Although a small share of direct sales operations sells crops through intermediary supply chains, these operations account for 67 percent of the total value of direct sales. Direct sales through intermediaries occurred mainly on farms with greater than \$350,000 in GCFI.
- Farms with low GCFI (less than \$75,000) accounted for 61 percent of DTC livestock sales, which is consistent with the large share of small farms overall that specialized in livestock, particularly beef production.
- Farms with low GCFI (less than \$75,000) accounted for 23 percent of DTC crop sales. More than half (55 percent) of DTC crop sales are by farms with GCFI greater than \$350,000 (either midsize, large-scale family farms, and non-family farms), which is consistent with the fact that these larger operations produced most U.S. crops overall. Of the 55 percent, 69 percent are operations specialized in high-value crop production. However, small farms are still disproportionately represented by the number of farms among DTC crop sales.

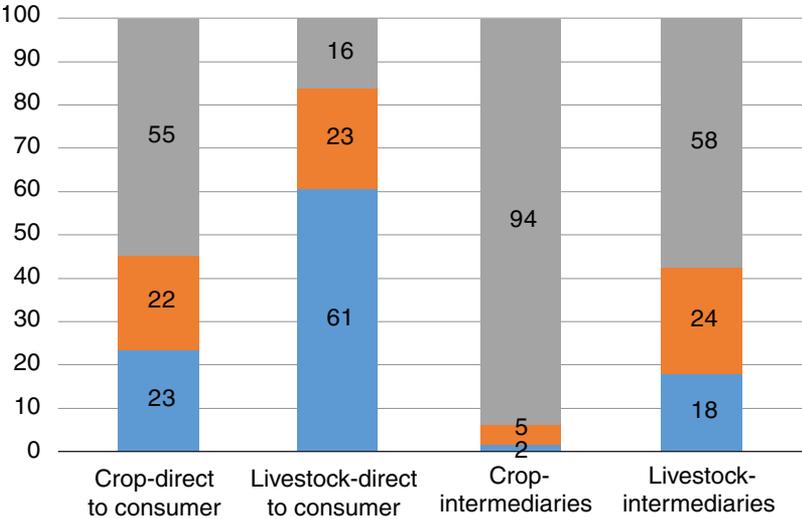
Share of total value of direct sales and share of direct sales operations by supply chain



Source: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey.

Direct sales supply chain by farm type, 2019

Percent



- Percent of sales by farms with GCFI < 75,000
- Percent of sales by farms with 75,000 >= GCFI and < 350,000
- Percent of sales by farms with GCFI >= 350,000

Note: GCFI = gross cash farm income. Intermediary supply chains sold directly to individuals (such as retail outlets and regional distributors) or to institutions (such as schools and hospitals). Due to rounding, numbers may not add to 100.

Source: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey.

Succession Planning

Note about succession planning

Succession planning usually denotes the gradual transfer of ownership, control, and participation in the farm business, as opposed to estate planning triggered by the principal operator's (or owner's) death. It can also be a limited transfer of ownership such as inheritance or a trust. So technically there can be a succession plan without someone being identified as a successor. There also may be inconsistencies in respondent's reports of being retired that are used for classifying the farm into the "retirement" typology group and in what the principal operator reports about their retirement plans in the next 5 years.

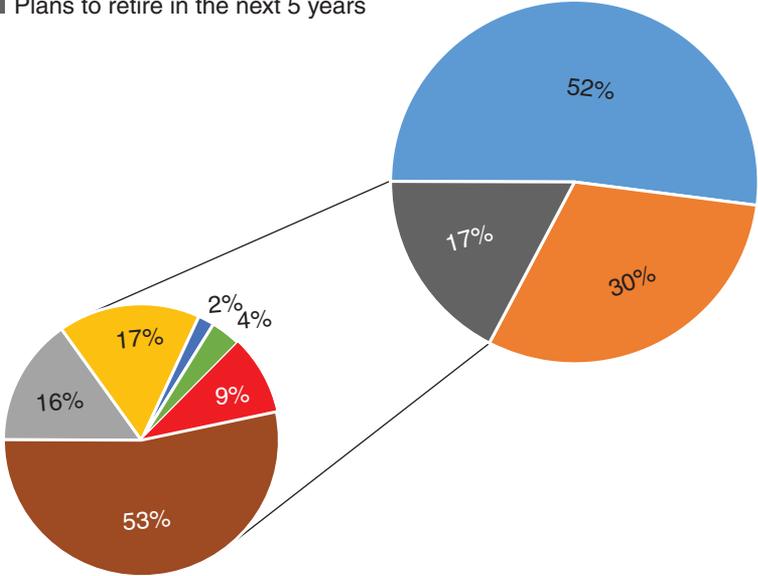
17 percent of principal operators plan to retire in the next 5 years, 52 percent do not, and 30 percent don't know.

- A succession plan describes how the farm operation will be passed on to the next generation of farmers or if the farm will be sold, although it does not necessarily identify an individual successor. Of the 17 percent of farm operators planning to retire in the next 5 years, more than half have not developed a succession plan and another 9 percent indicated they had a succession plan but had not yet identified a successor.
- Thirty-three percent of principal operators who plan to retire in the next 5 years anticipate passing the operation on to someone in the family, with half of those operations to be passed on to family members who currently work on the farm and half to family members who do not.
- Principal operators planning to retire in the next 5 years operate 15 percent of total farmland, a share that is similar to their overall representation in the number of farm operations. Of that 15 percent of farmland, 48 percent are on operations with principal operators who already have an identified successor. The remainder of the land is part of operations where the principal operator either has a succession plan that does not include an identified successor (23 percent) or the principal operator has not yet decided on a succession plan (29 percent). Based on these findings, within the next 5 years, we estimate 8 percent or less of farmland is likely to become available for purchase from retiring principal farm operators.



Share of operators who plan to retire in the next 5 years and their succession plans, 2019

- No plan to retire within the next 5 years
- Doesn't know if they will retire in the next 5 years
- Plans to retire in the next 5 years



- Planning to retire in the next 5 years but has no succession plan
- Successor is a family member who does not work on the farm
- Successor is a family member who works on the farm
- Successor works on the farm and is not a family member
- Successor does not currently work on the farm nor is family member
- Successor has not been identified

Note: Due to rounding, sums may not add to 100 percent.

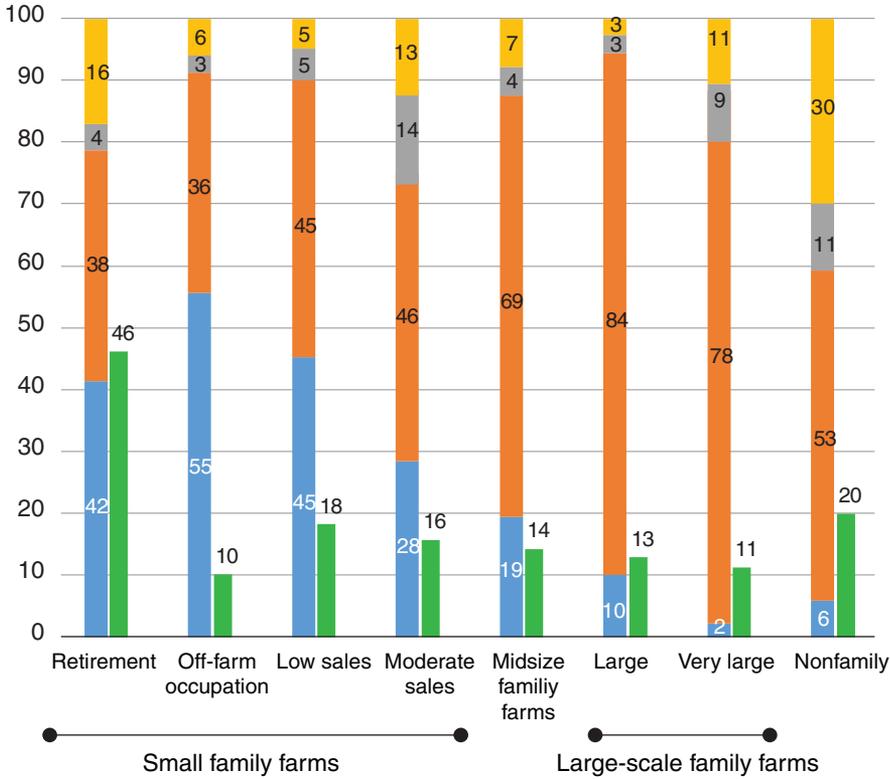
Source: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey.

Overall, family members who work on the farm are most likely to be identified as the successor of the farm operation.

- In 2019, 46 percent of principal operators of retirement farms (i.e., they consider themselves as retired from farming; 10.7 percent of all farms) are planning to completely retire in the next 5 years. For these operators, a family member who doesn't work on the farm is most likely to be identified as the successor of the operation.
- Only a small share—between 10-20 percent of principal operators for all other operations—plan on retiring in the next 5 years.
- As farm size increases, from small to very-large family farms, a greater share of principal operators identified that a family member who works on the farm will succeed them on the operation.
- The principal operators of nonfamily farms are the most likely among farm types to identify a nonfamily member who does not currently work on the farm as their successor.

Farms by succession plan type and share planning to retire in the next 5 years by farm type, 2019

Percent



- Planning to retire in the next 5 years
- Family member and works on the farm
- Successor is a family member not working on the farm
- Someone who works on the farm
- Someone who does not currently work on the farm nor is family member

Source: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey.

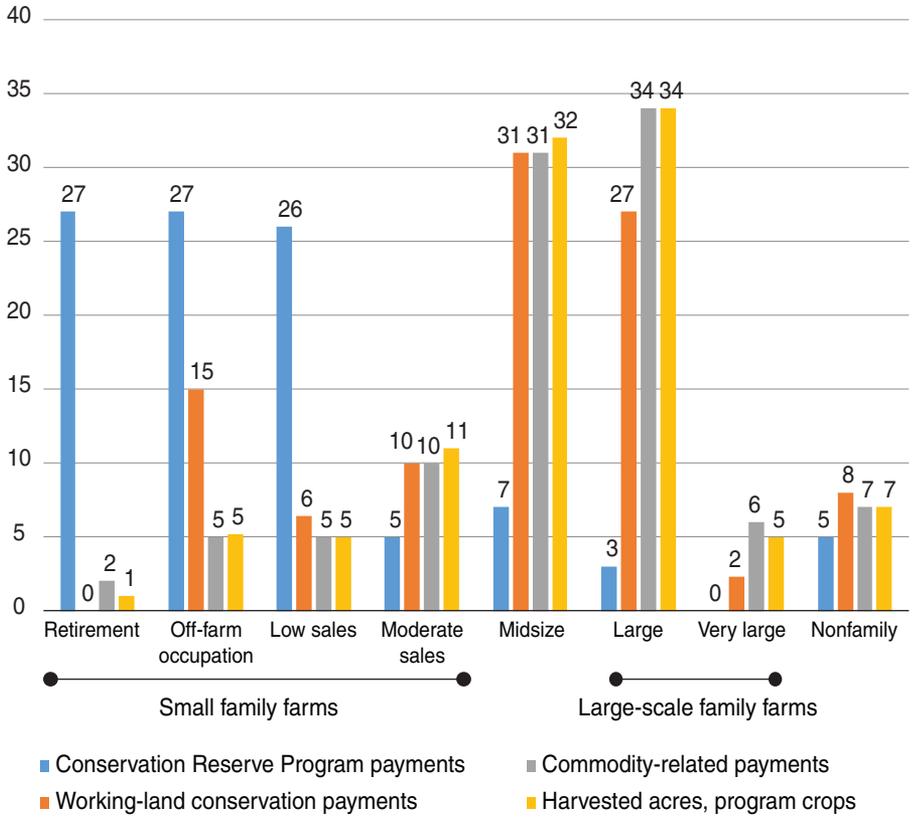
Government Payments and Federal Crop Insurance

Recipients of Government payments differ by program.

- Commodity-related program payments were received by 20 percent of U.S. farms, which generally reflects acreage in crops historically eligible for support. Eighty-one percent of these payments went to moderate-sales, midsize, and large-scale family farms in 2019, exactly proportional to their 81 percent share of acres in program crops.
- Twenty-seven percent of working-land conservation payments went to large family farms, another 31 percent went to midsize family farms, and 31 percent went to small family farms.
- USDA's Conservation Reserve Program targets environmentally sensitive cropland for removal from production. In 2019, retirement, off-farm occupation, and low-sales farms received 80 percent of payments under this program.
- Sixty-nine percent of all farms received no farm-related Government payments in 2019.

Distribution of selected Government agricultural program payments, 2019

Percent



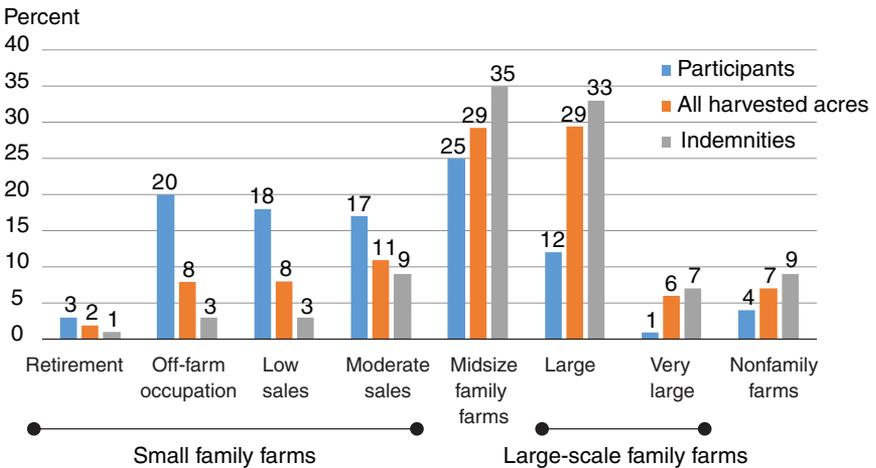
Notes: Program crops include cotton, barley, corn, dry edible beans/peas/lentils, oats, peanuts, rice, sorghum (grain), soybeans and other oilseeds, canola, and wheat. Market Facilitation Payments are included in commodity-related payments. The bars of the same color add to 100 percent.

Source: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 Agricultural Resource Management Survey.

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

- About two-thirds of midsize farms and large family farms participated in Federal crop insurance, compared with one-sixth of all U.S. farms. While midsize and large family farms make up 8 percent of all U.S. farms, they accounted for 25 and 12 percent of crop insurance participants, respectively, and 59 percent of all harvested cropland acres.
- Grain and oilseed farms—the most common specialization among midsize and large family farms—accounted for 66 percent of all participants in Federal crop insurance and 64 percent of all harvested cropland in 2019.
- Midsize and large family farms together received 68 percent of indemnities from Federal crop insurance in 2019. Midsize and large family farms’ share of indemnities reflects their commodity mix and their high participation in Federal crop insurance.

Federal crop insurance participants, harvested cropland, and indemnities, 2019



Note: Indemnities are payments from insurance to compensate for losses and will depend on variation in prices, weather, and other events that result in loss. Participants are farms paying their share of Government-subsidized crop insurance premiums. Premiums are a farm expense that may be paid in a calendar year other than the calendar year in which an indemnity is received and are not subtracted here.

Source: USDA, National Agricultural Statistics Service, and USDA, Economic Research Service, 2019 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 86 percent of farm production.
- **Small family farms make up 90 percent of the farm count and operate almost half of the farmland.** The largest share of the value of farm production (44 percent), however, occurs on large-scale family farms. Small farms account for over half the value of poultry and hay production.
- **The share of farms with an operating profit margin (OPM) at low risk varied by farm size in 2019.** Between 62 and 81 percent of small farms have an OPM in the high-risk zone—depending on the farm type—compared with 36-47 percent of midsize and large-scale farms. Some small farms in each type operate at low risk, as do more than 28 percent of midsize, large, and very large farms.
- **Farm households, in general, are neither low income nor low wealth.** In 2019, median farm household income, which includes both farm and off-farm income source, exceeded that for all U.S. households but was lower than the median among all U.S. households with self-employment income. About 43 percent of farm households had income below that of the median for all U.S. households, and 3 percent had wealth less than the U.S. median in 2019.
- **Women play a key role in over half of farm operations.** Women are operators in over half (51 percent) of all farming operations. The largest share of principal female operators is found among farms specializing in poultry and other livestock, at 31 and 30 percent, respectively.
- **Only 9 percent of farm operations participate in direct sales supply chains, with direct to consumer (DTC) crop sales being the most common form of direct sales.** Farms with GCFI greater than \$350,000 contribute over half (55 percent) of DTC crop sales; in contrast, farms with low GCFI (less than \$75,000) accounted for 61 percent of DTC livestock sales.
- **Seventeen percent of all principal operators plan to retire in the next 5 years.** However, more than 60 percent do not have a succession plan or have not yet identified a successor.

- **Conservation Reserve Program (CRP) payments go to different farms than other Government payments.** CRP payments target environmentally sensitive cropland, with most payments going to retirement, off-farm occupation, and low-sales farms. In contrast, most commodity-related and working-land payments go to family farms with GCFI of \$350,000 or more. Most U.S. farms, however, do not receive Government payments and are not directly affected by them, although they may be affected indirectly by other market variables, such as land values and rents.

The mission of USDA's Economic Research Service is to anticipate trends and emerging issues in agriculture, food, the environment, and rural America and to conduct high-quality, objective economic research to inform and enhance public and private decision making. ERS shapes its research program and products to serve those who routinely make or influence public policy and program decisions.

Follow us on Twitter
@USDA_ERS

www.ers.usda.gov