

Women Farmers in Transition

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The number of farms with women as primary operators increased by 58 percent from 1978 to 1997. Much of that increase was from growth in animal specialty and general livestock farms. Once primarily focused on beef cattle, women primary farm operators have diversified in the last 20 years to specialize in horses, aquaculture, fur-bearing animals, and other kinds of livestock. On average, women operate smaller farms than men, and are far more likely to inherit their farms. This chapter presents important information about trends in and characteristics of farms operated primarily by women.

Introduction

The number of farms operated by women rose from 104,134 in 1978 to 165,102 in 1997, a 58-percent increase. By 1997, women were the primary operators of 9 percent of the Nation's farms, up from 5 percent in 1978, a shift reflecting women's increasing activity in all segments of the agricultural sector. Women may operate farms on their own, or with a partner or partners. They may work solely on the farm or combine onfarm and off-farm work. Women's participation in farming is as varied and diverse as the kinds of operations they run. Women who are not primary operators often provide services such as bookkeeping or purchasing, without receiving any cash income. This makes it more difficult to measure their contributions.

Sources of Information

The census of agriculture began collecting data on women as primary farm operators in 1978; since then, the census has recorded a steady increase in the share of women operators. A primary source of information here is the Census of Agriculture Longitudinal data file, (see Appendix I, "Sources of Data"), which enables women operators and the farms they operate to be tracked for the census years 1978, 1982, 1987, 1992, and 1997.

Two other surveys provide information about trends for women farmers—the Agricultural Resource and Management Survey (ARMS), conducted by the Economic Research Service (ERS) and the National Agricultural Statistics Service (NASS); and the Agricultural Economics and Land Ownership Survey (AELOS), conducted by NASS.

All three data sources ask respondents to name a primary farm operator, and then ask questions about the farm business, the farm household, and the primary operator. When a husband and wife operate a farm, the male is generally recorded as the primary operator. As a result, information about women's contributions has historically been limited to questions directed to

the primary (male) operator about his spouse, and to those circumstances in which a woman is the primary operator. Surveys since 2000 have collected more detailed information on all activities by farm women.

Livestock Farms Increase in Number and Share

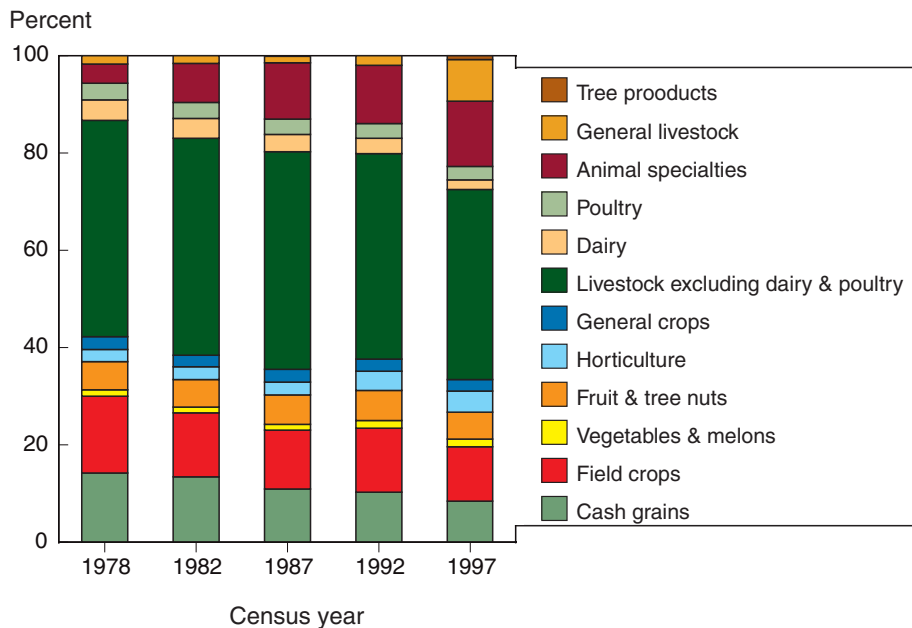
In 1978, 58 percent of women farmers specialized in livestock (versus 53 percent for men); by 1997, this category grew to more than 66 percent. During this period, two types of women-operated livestock farms—animal specialties and general livestock—increased both in number and share (appendix table V-2). The share of general livestock farms grew from 2 percent of farms operated by women in 1992 to 8.6 percent in 1997 (fig. 6-1); some of this increase could be due to changes in the treatment of responses to the census.

Animal specialties grew from 4,043 farms, or under 4 percent of farms operated by women in 1978, to 22,117 farms, over 13 percent, in 1997 (fig. 6-1). Most of this increase was in horse farms; women-operated horse farms increased from 3,428 in 1978 to 20,616 in 1997, a 500-percent increase in 20 years. The number of horse farms operated by men increased 170 percent over the period. Once considered a niche activity centered on the racing industry, equestrian-related enterprises have grown into big businesses. Interest in equine sports has increased, and women are active participants in this field. Animal specialty operations, and horse farms in particular, are unique in that they provide income to a wide variety of related equine businesses and industries. Like other livestock operations, they purchase feed and hay, and peripheral

Figure 6-1

Types of farms operated by women, 1978-97

Women have increased their share of livestock farms especially animal specialties like horse farms



Source: USDA, National Agricultural Statistics Service, compiled from the Census of Agriculture Longitudinal data file.

equipment like tractors, trucks, trailers, farm structures, and fencing. In addition, horse farms purchase equine apparel and equipment, and obtain services from farriers, veterinarians, and horse dentists. Even real estate values may be affected by the rising demand for choice land by horse farm, and potential horse farm, operators. While the racing industry has declined over the last 20 years, other horse sports—including show hunting and jumping, field hunting, driving, cutting, roping, dressage, and endurance—have grown.

Smaller Farms More Likely To Have Women as Primary Operators

Farms of less than 100 acres accounted for about 60 percent of all women-operated farms in 1997 and about 43 percent of farms operated by men, with each share growing slightly since 1978 (fig. 6-2). However, total land in these farms has never accounted for more than 7 percent of women’s total farmland or 4 percent of men’s.

Most U.S. acreage is on farms of 500 acres or more, which represent almost 10 percent of women-operated farms and cover 70 percent of their total acreage. Almost 20 percent of farms operated by men fell in this category, accounting for up to 80 percent of their acreage.

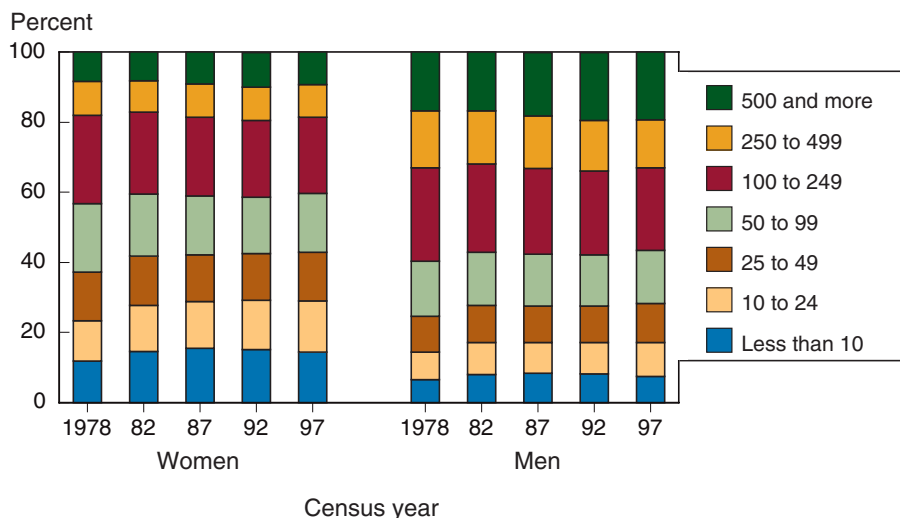
Overall, sales per farm were much lower for women than men in all census years (fig. 6-3). Average sales per farm¹ increased from just under \$24,000 for women crop farmers in 1978 to just over \$47,000 in 1997. Sales on crop farms operated by men increased from nearly \$60,000 in 1978 to \$120,000 in 1997. Most farms operated by women (over 60 percent in each census) have sales less than \$10,000 (fig. 6-4). In 1997, almost 69 percent of women operators fell into this category. Men had only about 49 percent of farms in this sales class.

¹ When using sales to measure trends in farm size over time, it is important to adjust for changes in agricultural prices, which will change revenue without any changes in the physical volume of production. Accordingly, in this chapter sales of agricultural products are adjusted for price changes using the Producer Price Index (PPI) for farm products, which is also the USDA/National Agricultural Statistics Service (NASS) index of prices received by farmers. Sales classes from the various censuses of agriculture presented in this chapter are expressed in 1997 constant dollars. Changes in the number of farms by constant-dollar sales classes, therefore, reflect changes in the quantity of products sold. Unfortunately, constant-dollar sales classes cannot be prepared before 1982, due to incomplete census records for individual farms prior to that year.

Figure 6-2

Distribution of farms within acreage class by gender, 1978-97

Women are far more likely to operate farms with small acreage than men and are only half as likely to farm 500 or more acres

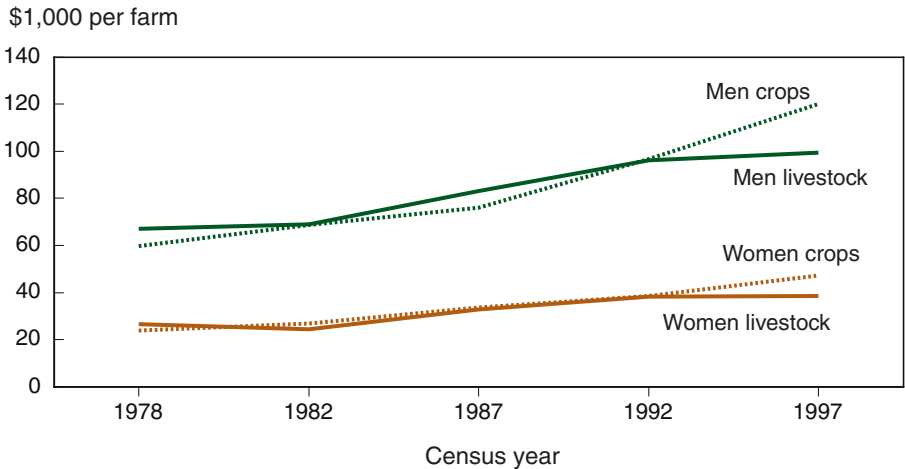


Source: USDA, National Agricultural Statistics Service, compiled from the Census of Agriculture Longitudinal data file.

Figure 6-3

Average sales per farm by operator gender, 1978-97

Sales per farm are much lower for women than men

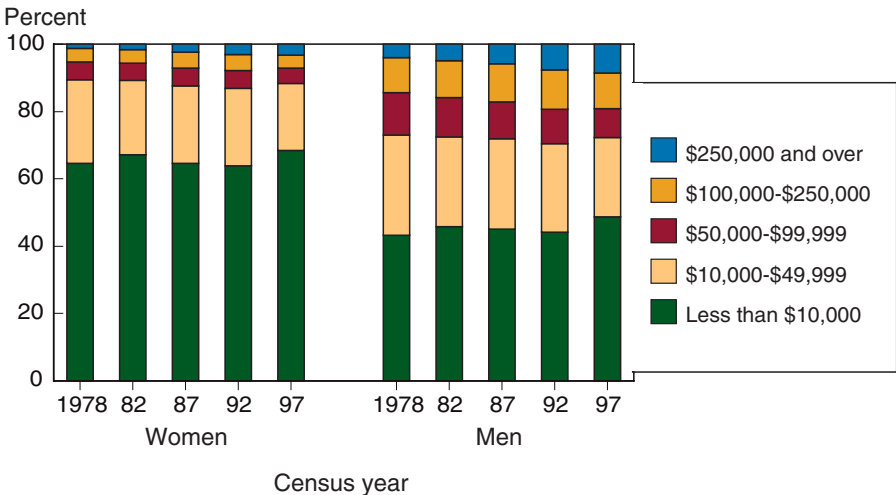


Source: USDA, National Agricultural Statistics Service, compiled from the Census of Agriculture Longitudinal data file.

Figure 6-4

Distribution of farms within sales class by gender, 1978-97

Women farmers have a larger portion of their farms in the lower sales classes than men operators



Source: USDA, National Agricultural Statistics Service, compiled from the Census of Agriculture Longitudinal data file.

Both men and women showed declines in the share of farms in the middle sales classes, and showed increases in the share of farms with sales greater than \$250,000. The number of farms run by women in the highest sales class increased more than 300 percent (4,000 farms) between 1978 and 1997. A similar increase occurred for men, though not as large on a percentage basis. The steady gains in the largest sales class for women are offset by the decline in all other classes except the lowest. Still, average sales per farm continue to be lower for women than for men in all sales categories.

Share of Women Primary Operators Who Are 54 or Younger Has Increased

Women typically start farming later than men, partly due to inheritance (table 6-1). While the average age of women farmers has remained steady (58), the age distribution has changed slightly. In 1978, 38 percent of women operators were under 55, compared with almost 44 percent by 1997. The share of men operators under 55 fell from 60 percent to 52 percent during the same period, with average age increasing from 50 to 53. Both men and women showed increases in the class representative of retirees, 65 and over—36 percent of women operators and a quarter of men fell in this category in 1997.

Women Operators Are Less Likely To Report Farming as Their Primary Occupation

Women operators are less likely than men to declare farming as their main occupation. Just over 45 percent of women farm operators reported farming as their main occupation according to the 1997 Census, versus 55 percent for men (table 6-2). These numbers dropped by about 5 percentage points for both men and women from 1992 to 1997. This may reflect both an increase in operators over 65 who are retired and an increase in off-farm work.

Table 6-1—Farm operators by gender and age class, 1978-97

Item	1978	1982	1987	1992	1997
<i>Number</i>					
Women:					
Under 45	19,966	29,970	33,406	33,615	35,353
45-54	20,068	22,058	23,272	28,513	36,451
55-65	29,287	30,368	30,302	30,735	33,727
65 and older	34,813	39,203	44,661	52,293	59,571
All	104,134	121,599	131,641	145,156	165,102
<i>Percent</i>					
Under 45	19.2	24.6	25.4	23.2	21.4
45-54	19.3	18.1	17.7	19.6	22.1
55-65	28.1	25.0	23.0	21.2	20.4
65 and older	33.4	32.2	33.9	36.0	36.1
<i>Number</i>					
Men:					
Under 45	695,929	769,596	656,317	554,863	485,394
45-54	490,896	483,354	431,638	400,820	430,278
55-65	482,431	506,034	465,514	399,104	393,627
65 and older	308,774	360,393	402,649	425,357	437,458
All	1,978,030	2,119,377	1,956,118	1,780,144	1,746,757
<i>Percent</i>					
Under 45	35.2	36.3	33.6	31.2	27.8
45-54	24.8	22.8	22.1	22.5	24.6
55-65	24.4	23.9	23.8	22.4	22.5
65 and older	15.6	17.0	20.6	23.9	25.0

Source: USDA, Economic Research Service, compiled from the Census of Agriculture Longitudinal data file.

Women are consistently more likely than men to fully own their farms and less likely than men to be tenant farmers. Almost 80 percent of women operators were full owners of their operations in 1997 (table 6-3), compared with 58 percent of men. The degree of full ownership has remained relatively stable among both men and women.

Women Are More Likely To Inherit Farms Than Men

Many women enter farming differently than men do. Inheritance² plays a substantial role in women's decisions to farm, accounting for 20-27 percent of their farm numbers, depending on the census year (fig. 6-5). Anywhere from 30,000-37,000 farms were inherited by women in any 5-year census period. This differs considerably from men's operations, where only about 1 percent (or around 20,000 farms) were inherited from women in a census period (table 6-4). Nevertheless, the number of farms inherited by men is growing, while the number of new entries and continuing operations³ has declined. About 30 percent of women's farm operations in any census are continuing operations, and new entrants account for an additional 42-48 percent. Men run continuing operations at twice the rate of women farmers (60-65 percent), and their entry rates are much lower (about 10 percent).

² Inheritance by a woman is estimated from the census of agriculture by measuring a change in a farm operation from a man operator to a woman operator over specified census years. Inheritance by a man is estimated by measuring a change in a farm operation from a woman operator to a man operator over specified census years.

³ Continuing operations include all operations that are not classified as inherited or as new entrants.

Table 6-2—Farm operators by gender and primary occupation, 1978-97

Item	1978	1982	1987	1992	1997
<i>Number</i>					
Women:					
Farming	52,466	62,532	67,488	73,444	75,166
Other	51,668	59,067	64,153	71,712	89,936
All	104,134	121,599	131,641	145,156	165,102
<i>Percent</i>					
Farming	50.4	51.4	51.3	50.6	45.5
Other	49.6	48.6	48.7	49.4	54.5
<i>Number</i>					
Men:					
Farming	1,097,856	1,172,255	1,070,691	979,706	886,394
Other	880,174	947,122	885,427	800,438	860,363
All	1,978,030	2,119,377	1,956,118	1,780,144	1,746,757
<i>Percent</i>					
Farming	55.5	55.3	54.7	55.0	50.7
Other	44.5	44.7	45.3	45.0	49.3
<i>Number</i>					
All:					
Farming	1,150,322	1,234,787	1,138,179	1,053,150	961,560
Other	931,842	1,006,189	949,580	872,150	950,299
All	2,082,164	2,240,976	2,087,759	1,925,300	1,911,859

Source: USDA, Economic Research Service, compiled from the Census of Agriculture Longitudinal data file.

Table 6-3—Farm operators by gender and farmland tenure¹, 1978-97

Item	1978	1982	1987	1992	1997
<i>Number</i>					
Women:					
Full	82,864	96,816	104,345	112,920	131,660
Part	13,779	16,251	17,968	21,750	22,451
Tenant	7,491	8,532	9,328	10,486	10,991
All	104,134	121,599	131,641	145,156	165,102
<i>Percent</i>					
Full	79.6	79.6	79.3	77.8	79.7
Part	13.2	13.4	13.6	15.0	13.6
Tenant	7.2	7.0	7.1	7.2	6.7
<i>Number</i>					
Men:					
Full	1,137,397	1,228,957	1,134,202	998,818	1,015,231
Part	605,584	639,998	591,044	574,907	551,388
Tenant	235,049	250,422	230,872	206,419	180,138
All	1,978,030	2,119,377	1,956,118	1,780,144	1,746,757
<i>Percent</i>					
Full	57.5	58.0	58.0	56.1	58.1
Part	30.6	30.2	30.2	32.3	31.6
Tenant	11.9	11.8	11.8	11.6	10.3

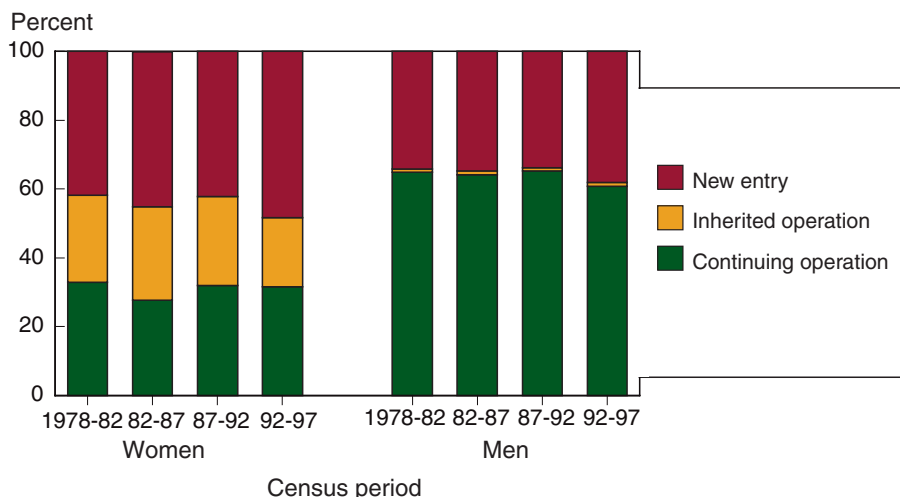
¹The share of farmland that is owned by the operator. On a tenant operation, all the farmland is rented.

Source: USDA, Economic Research Service, compiled from the Census of Agriculture Longitudinal data file.

Figure 6-5

Continuing farms, inherited farms, and new entries by gender, 1978-97

A larger portion of women farmers inherit their farms than men; however, the majority of women farmers in any given farm census are new entrants



Source: USDA, National Agricultural Statistics Service, compiled from the Census of Agriculture Longitudinal data file.

Table 6-4—Farms by operator gender, type of entry, and census period, 1982-97

Item	1978 to 1982	1982 to 1987	1987 to 1992	1992 to 1997
	<i>Number</i>			
Women operated farms: ¹	121,599	131,641	145,156	165,102
Continuing operations ²	40,011	36,505	46,346	52,072
Inherited from men	30,734	35,725	37,710	33,121
New entrants	50,854	59,411	61,100	79,909
Men operated farms: ¹	2,119,377	1,956,118	1,780,144	1,746,757
Continuing operations ²	1,374,558	1,255,854	1,161,461	1,061,725
Inherited from women	18,718	21,510	17,784	20,096
New entrants	726,101	678,754	600,899	664,936

¹ Number of farms at the end of the census period.

² All operations that are not classified as inherited or as new entrants.

Source: USDA, Economic Research Service, compiled from the Census of Agriculture Longitudinal data file.

Farms Operated Primarily by Women Are Growing in Numbers as Entry Rates Are Higher Than Exit Rates

Women's exit rates from farming are generally higher than men's, and at least some of this may be attributable to the kind of farms they run: smaller in acreage and lower in sales. However, women-operated farms are growing in number because they show even higher entry rates.

Minority women, except for Black women, have entered farming at very high rates. In 1978, there were 3,371 farms operated by Black women, accounting for 3.2 percent of women's farms. By 1997, that number of farms had declined to 1,710, just 1.0 percent of women's farms (table 6-5). While the number and share of Black women operators were declining, others increased. Farms operated by White women increased the most in numbers in the last 20 years, from around 99,000 in 1978 to just over 160,000 by 1997. Both the shares and numbers of other minority operators—including Native Americans and Asian/Pacific Islanders—increased, in some cases nearly tripling in number.

Emphasis on Primary Operator Understates Women's Role in Farm Businesses

While the longitudinal file provides useful information on women's farms since 1978, it only contains data on women who are listed as the primary operator of the farm. More recently, the census and ARMS survey have asked for information on all farm operators. In the 2002 Census, a woman was listed as the primary operator on 237,819 farms, or 11.2 percent of the total, up from 9.5 percent in 1997. But the survey also asked for information on additional operators on multiple-operator farms and found an additional 584,564 women that were farm operators, on farms where men were the primary operators. In turn, those data suggest that nearly 40 percent of U.S. farms in 1997 had at least one woman operator.

Table 6-5—Farm operators by gender and race, 1978-97

Item	1978	1982	1987	1992	1997
<i>Number</i>					
Women:					
White	99,093	116,580	127,481	140,715	160,035
Black	3,371	3,121	2,053	1,830	1,710
Native American	608	775	806	991	1,295
Asian	361	413	468	688	916
Other	701	710	833	932	1,146
All	104,134	121,599	131,641	145,156	165,102
<i>Percent</i>					
White	95.2	95.9	96.8	96.9	96.9
Black	3.2	2.6	1.6	1.3	1.0
Native American	0.6	0.6	0.6	0.7	0.8
Asian	0.3	0.3	0.4	0.5	0.6
Other	0.7	0.6	0.6	0.6	0.7
<i>Number</i>					
Men:					
White	1,930,733	2,070,029	1,915,638	1,741,098	1,704,166
Black	30,052	30,129	20,901	16,986	16,741
Native American	5,623	6,436	6,328	7,355	9,343
Asian	4,413	4,795	4,818	4,810	5,241
Other	7,209	7,988	8,433	9,895	11,266
All	1,978,030	2,119,377	1,956,118	1,780,144	1,746,757
<i>Percent</i>					
White	97.6	97.7	97.9	97.8	97.6
Black	1.5	1.4	1.1	1.0	1.0
Native American	0.3	0.3	0.3	0.4	0.5
Asian	0.2	0.2	0.2	0.3	0.3
Other	0.4	0.4	0.4	0.6	0.6

Source: USDA, Economic Research Service, compiled from the Census of Agriculture Longitudinal data file.

The Survey of Women on Farms, conducted by researchers at Penn State University in 2000, focused on all women's activities as farm operators, co-operators, bookkeepers, financial and technical advisors, errand runners, and housewives. The survey provides detailed information on how women operate their farms, the extent of their involvement in ownership and decision-making, and their future plans, in addition to the structural and financial characteristics of their farms. The survey reported that 53 percent of women considered themselves to be "the main operator or one of the main operators of the farm or ranch." This suggests that the earlier surveys reflect a conservative estimate of women's participation as operators on the farm.

Summary and Conclusions

Women account for a sharply growing number of primary farm operators, and they account for a small but sharply growing share of U.S. farms.

Women operate smaller farms than men. Once primarily focused on beef cattle, women farmers have diversified to specialize in other kinds of livestock such as horses, aquaculture, and fur-bearing animals. While women farm operators are generally older than men (at least partially due to their

large share of inherited operations), their age distributions clearly suggest increased participation at younger ages. And while the average age of women farmers has generally remained at 58 since 1978, the average age for men increased from 51 in 1982 to 54 in 1997.

Women primary operators are less likely than men to call themselves farmers. This may be because some are retired and do not consider themselves to be actively involved in farming while others have small operations that are secondary to an off-farm job.

Women are far more likely to inherit their farms than men are. More than 25 percent of women operators inherited their farms from their spouse during the four intercensus periods (1978-82, 1982-87, 1987-92, 1992-97), versus 2 percent of men. Most women start farming as new entrants, while men are much more likely to run continuing operations.

One Operator Per Farm

The census of agriculture historically defined a farm operator as the single person who made the majority of management decisions. Therefore, for agricultural census purposes, the number of farm operators was the same as the number of farms. In cases where both the husband and wife jointly operated the farm, the management role of one or the other was not measured; most likely, it was the woman's. Both ARMS and AELOS also collected data in a similar manner—one operator per farm.

In 2002, the Census and the ARMS collected information for up to three operators, with one designated as the primary operator or senior partner. They also asked for the total number of individuals involved in the day-to-day decisionmaking for the farm, and how many were women. The Canadian census of agriculture first collected this type of information in 1991; of the 100,700 women farm operators identified, 84 percent farmed with their husbands and another 6 percent farmed in multi-operator situations (Cloutier and Kemp, 1994). The additional 2002 ARMS and U.S. census questions will provide more accurate information about women operators on U.S. farms.