

Comparing ARMS and Census Estimates of Multiple-Operator Farms

The long-held “one farm, one operator” assumption was dropped when the Census of Agriculture and ARMS collected data for the year 2002. Both the census and the survey collected information on the principal and secondary farm operators. The census and ARMS asked respondents to report the total number of operators on their farms and provide more detailed information—such as age and occupation—for up to three operators. Subsequent censuses and surveys will continue to collect this information.

ARMS and the census provide counts of the total number of farms, the total number of operators, the number of multiple-operator farms, and the number of multiple-generation farms. This appendix compares selected estimates from the 2003 ARMS—used extensively in this Family Farm Report—with corresponding estimates from the census (appendix table). The survey and census provide generally consistent estimates.

The ARMS estimate of the total number of operators is about 3 percent higher than the census estimate, reflecting an adjustment made to the 2003 ARMS data. Some farmers reported to ARMS that they were the only operator, but later reported that their spouses were also operators. The count of operators in ARMS was adjusted upward to include the spouses in these cases. (The Census of Agriculture did not ask if the spouse was as an operator, so the census count could not be adjusted.) Without the adjustment, the ARMS count of all operators falls within 1 percentage point of the count from the Census of Agriculture. The situation is similar for the count of multiple-operator households. The unadjusted estimate is closer to the census estimate than is the adjusted estimate. The ARMS estimate of multiple-generation farms is fairly close to the corresponding census estimate, within 13 percentage points.

Appendix table

The 2002 Census of Agriculture and 2003 ARMS show similar estimates of farms, operators, multiple-operator farms, and multiple-generation farms

Item	2002 Census	2003 ARMS	2003 ARMS, without spouse adjustment
Number of farms (and principal operators)	2,128,982	2,121,107	2,121,107
ARMS estimate as percentage of census	na	99.6	99.6
Total operators (principal and secondary)	3,115,172	3,214,092	3,090,153
ARMS estimate as percentage of census	na	103.2	99.2
Number of multiple-operator farms	803,127	990,169	866,229
ARMS estimate as percentage of census	na	123.3	107.9
Number of multiple-generation farms ¹	193,631	167,618	167,618
ARMS estimate as percentage of census	na	86.6	86.6

na = Not applicable.

¹Farms reporting a difference of at least 20 years between the ages of their youngest and oldest operators.

Source: Allen and Harris (2005) and USDA, Economic Research Service, 2003 Agricultural Resource Management Survey, Phase III.