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## RESPONSE: IMPACT ON KNOWLEDGE OF FARM OPERATORS

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Rich Allen and Jill Findeis discussed the information released in the preliminary report of the 2002 Census of Agriculture. More specifically, they pointed out that the 2002 Census of Agriculture:

- **Allows counting more than one operator per farm.** Previous censuses applied the “one farm, one operator” principal.
- **Collects detailed information for up to three operators.** Previous censuses collected this information on just one operator.
- **Adjusts for undercoverage.** Except for the 1978 Census of Agriculture, previous censuses published unadjusted data, with the exception of adjustment percentages for a few data items.
- **Collects information on operator households.** The 2002 Census of Agriculture is the first to collect information on (1) the number of households sharing net income and (2) the number of people in the households of the principal, second, and third operators.

I will discuss the effects of these changes on our knowledge of farm operators. In most cases, I am only emphasizing what Rich and Jill have already stated. Their presentations were clear, and the effects of this new census information regarding our knowledge of farm operators are self-evident.

### Counting and describing Multiple Operators

The “one farm, one operator” rule is a simplifying assumption used in past censuses. We have known for some time that this assumption is false, but the 2002 Census of Agriculture shows how false it is. Counting *all* the operators increases the count of operators by nearly 50 percent, from 2.1 operators to 3.1 million. As pointed out by Rich, counting all operators for each operation gives a better estimate of the number of people actually involved in managing farms.

Knowing the characteristics of the additional operators—collected by the 2002 Census—is also important. Jill did a good job of describing these additional operators. Between one-half and two-thirds of the additional operators are women, depending on race and Hispanic origin. More than half of the additional operators work off-farm, with variation by gender, race, and Hispanic origin.

Jill mentioned the importance of knowing the age of the second and third operators; I will expand on this point. Information on these additional operators is especially important when trying to understand the future of agriculture, given the advanced age of principal farm operators. Compared with the labor force in general, primary operators are old. Their average age was 55 in 2002, up from 50 in the late 1970's. The advanced age of principal operators has led to concern about the future of farming as older farmers leave the business.

Finding replacements for exiting older farmers, however, may be less of a problem than indicated by age statistics for primary operators. At least some replacements for principal operators are currently working as secondary operators alongside older operators. The 2002 Census, by collecting information

on up to three operators, should shed some light on the number replacement farmers currently available on farms.

Jill did not show how many older operators—say, 55 years old or more—farm with a younger second or third operator. This is not a criticism of Jill’s paper. She did all that was possible, given the layout of the preliminary tables.

## **Coverage Adjustment**

The 2002 Census goes further in adjusting for undercoverage than previous censuses. It used an area frame to adjust all its data for undercoverage at the national, State, and county level. The 1978 Census also adjusted its data for undercoverage, but just down to the State level. In contrast the 1987, 1992, and 1997 censuses each published unadjusted data, except for adjustment percentages for a few data items in an appendix table. The 1982 Census did not even publish the adjustment percentages.

The coverage adjustment eliminates two long-standing shortcomings of the published census data. First, as explained by Rich, adjusting for undercoverage gives a farm count more representative of all farm operations, particularly small and minority farms. Second, the farm count from the census now should now track the official farm count more closely.<sup>1</sup>

There is an additional benefit from the coverage adjustment. The adjusted census count will also be closer to the count from the Agricultural Resource Management Survey (ARMS), since the ARMS farm count is weighted to agree with official farm count. ARMS is an annual sample survey that collects detailed financial data on farm businesses and the operators and households that run them. The survey is conducted jointly by NASS and the Economic Research Service (ERS).

Having the census and ARMS more closely aligned means that it will be easier to use them in conjunction with each other. We can take advantage of both the detailed data collected by ARMS and the ability of the Census to provide county-level data. ARMS can be used to generate detailed information for farms and their operators, while the census can be used to generate less detailed information, but at a much finer geographic level. How well the undercoverage adjustment works at the county level, however, will be clearer as analysts work with the data. Making undercoverage adjustments down to the county level is new.

## **Additional Household Information**

The 2002 Census of Agriculture is the first Census to collect basic information on operator households. Two items were released in the preliminary report:

- A count of the number of households sharing the net income of the operation.
- A count of the number of persons in the households of the principal, second, and third operators.

A related item, percentage of the principal operator’s household income from the operation, will be released later.

Knowing the number of households sharing income and the number of people in the principal, second, and third operator households should go a long way in understanding how farming is organized today. As pointed out by Jill, only 21 percent of farms share income with more than one household. However,

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<sup>1</sup> Rich covered the second point in his paper, distributed at this Forum, but not in his presentation.

these farms are more likely to have high sales, and the new information will help use know more about the households involved in larger, more commercially oriented farms.

Knowing the share of household income from the farm can be used with days worked off-farm and principal occupation to gain a better understanding how income from both farm and off-farm sources contributes to the well-being of farm households. Jill has a good start on this information. Other data sources, such as ARMS can provide similar information, but the census has the advantage of being a complete enumeration, making it statistically more reliable than a sample, particularly at the county level.

### **Historic Comparability in Perspective**

The coverage adjustment and the way the Hispanic origin and racial classification questions are asked reduce the comparability between the 2002 Census and previous censuses.<sup>2</sup> This reduction in comparability may cause concern among some census data users. For perspective, however, past changes also affected the comparability of census data over time. Consider some examples drawn from Rich's paper:

- The farm definition changed seven times since the census began in the mid-1800's.
- CRP and WRP farms were added to the census count in 1997. The 1997 count also included some additional establishments not considered as farms prior to the adoption of the North American Industry Classification system.
- The census shifted from personal interviews to mail questionnaires to collect the data.
- The Census Bureau adjusted the 1978 Census for undercoverage, but not subsequent censuses.

Despite these changes, analysts still made comparisons among censuses. Even the changes introduced in the 2002 Census do not prevent comparisons over time. Rich was able to adjust past census data to create the time series he discussed.

Concern over comparability should not prevent changes to improve the quality of census data and efforts to collect data more representative of current state of the farm sector. We gain a great deal of new, relevant information about farm operators, their households, and their farms from the 2002 Census.

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<sup>2</sup> Changes in the Hispanic origin and racial classification questions were discussed in Rich's paper, but not in his presentation.