

## GENERAL EXPLANATION Continued

weights was used to distribute all such cases over all census classes. This procedure assumes the nonrespondent population is correctly represented by non-response adjustment weights.

The second estimation problem involved the JES farms that matched farms not included in the ASCS sample. Since the nonsample places did not receive a census report, no measure of the effect of mailing, processing, or respondent reaction was available. Names and addresses of the JES farms were matched to ASCS nonsample cases and 74-A90's were obtained for all matched cases. However, since the nonsample cases did not reflect effects of census processing, the ASCS sample was represented in the coverage estimation by using the census ASCS sample weights.

For the 1974 census coverage evaluation program, an additional physical search was completed for all missed farms with value of products of \$40,000 or more. The purpose of this additional search was to try to locate late additions received subsequent to the initial processing. As a result, some of the missed farms were reclassified to the "included in the census" category.

### Coverage Check Results

#### Estimates of Census Coverage

Estimates of the census coverage for farms are based upon the open segment sample (i.e., farm operators live inside the area segments) from the JES. Estimates for the value of products sold are based upon the sample estimates for the missed farms and sample estimates for the included and overcounted farms. All sample units were reviewed to determine qualification under the 1974 farm definition as well as the 1959 farm definition. Coverage estimates are provided in table 15 under the 1959 definition for comparability purposes.

Estimates of farms and value of products are presented in tables 5, 6, 7, and 8 for the United States and census regions, and specified States in tables 13 and 14. Estimates of land in farms are presented in table 9 by census region and

divisions. The sampling error of estimates are presented in tables 16 and 17.

Estimates indicate that about 89 percent of all farms and 97 percent of the value of agriculture products sold are included in the census in the conterminous United States. Census coverage for larger farms (i.e. value of products sold of \$2,500 or more) was more complete than for smaller units, since the larger farms are more likely to be included in the census source lists and receive more intensive followup and processing to insure that they are included. Census coverage in the North Central and Western States was somewhat greater than in the Northeastern and Southern States, primarily due to the higher proportions of larger farms in the first two divisions named.

The estimated number of units identified as overcounted in the census was about 41,000 (approximately 2 percent of the estimated total farms). Of these, about 33 percent were duplicated census reports for a single farm. The remaining farms were represented by multiple census nonrespondents or combinations of a census report plus a nonrespondent.

Evaluation estimates for acres reported indicate about a 7-percent net undercount for the United States. This estimate includes acres over and under enumerated on correctly counted farms, acres on overcounted farms, and acres on missed farms. It does not include acres for census nonrespondents of ASCS nonsample units. Components of net error for total land are shown in table 1.

#### Characteristics of Missed Farms

Tables 10, 11, and 12 refer only to farms which were not included in the census. Although the missed farms probably represent the larger proportion of the total census error, the data presented do not represent net error. The missed farm data do not represent all the census error because the reporting error for items other than acres on included and overcounted farms was not measured.

The estimated total farms identified as missed in the census was approximately 266,000. These farms are primarily smaller operations with less than \$2,500

Table 1. **Components of Net Error for Total Land**

(Excludes acres for census nonrespondents and ASCS nonsample units)

	Land in farms (acres)	Percent of estimated total
Reported in census.....	776,043,140	92.6
Plus net difference for correctly counted farms....	+19,631,160	+2.3
Minus acres on overcounted farms.....	-2,773,990	-.3
Plus acres on missed farms..	+45,159,361	+5.4
Estimated total.....	838,059,671	100.0

value of products sold. About 60 percent of the missed farms are in this group. The total missed farm group had an estimated 3.0 percent of the total value of all agricultural products sold, which further indicates their relatively small size.

The farm operations not included in the census are classified into two groups:

1. Coverage sample farms not located on the census mailing list.
2. Coverage sample farms on the census mailing list which were classified as nonfarm (out of scope) due to incorrect reporting, incomplete reporting, or processing error.

The coverage estimates indicate about 59 percent of the total missed farms were not on the mailing lists and 41 percent were on the mailing lists but were incorrectly classified based on the information reported. For missed farms with \$2,500 or more value of products sold, about 56 percent were not on the mailing lists and 44 percent were on the mailing lists but misclassified based on information reported. Further analysis was completed to determine the reasons for the incorrect classification. The reasons for misclassification were extracted from census questionnaires, correspondence with respondents, and records rejected by the computer because they failed to meet minimum farm criteria. The major reason that the census respondent was classed as out of scope was because of an incorrect or incomplete response to the screening questions on the questionnaire, presumably caused by a misunderstanding or misinterpretation of the questions (section 2 of form 74-A1). The screening question response problem accounted for about 53 percent of the