FARM POPULATION ESTIMATES FOR 1976

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ABSTRACT

An average of 8,253,000 persons lived on farms in rural areas of the United States in the 12-month period centered on April 1976. The North Central Region, with 3.8 million persons living on farms, is the most populous; the South, with 2.9 million farm residents, ranks second. The 1976 estimate of U.S. farm population was almost 1.5 million (or 15 percent) lower than in 1970. For the 1970-76 period, the average net loss of farm population through migration or reclassification of residence from farm to nonfarm was about 270,000 annually. The average rate of this net outflow was 2.9 percent. The United States and all geographic regions and divisions had a significant decline in both the volume and rate of farm outmovement during 1970-76 as compared to earlier years. Of the four major U.S. geographic regions, only the West registered a farm population increase since 1970.

Keywords: Farm population, Migration, Regional analysis.

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An average of 8,253,000 persons lived on farms in rural areas of the United States in the 12-month period centered on April 1976. 1/ This 1976 estimate of farm population is about 600,000, or 6.9 percent, smaller than in 1975, and almost 1.5 million, or 15.0 percent, lower than in 1970.

Four-fifths of the 1976 farm population lived in counties outside Standard Metropolitan Statistical Areas. 2/ However, the resurgence of population growth that has characterized nonmetro counties as a whole since 1970 does not extend to the population living on farms. From April 1970 to July 1975, nonmetro counties increased in population by 6.6 percent compared with a metro growth of only 4.1 percent. In contrast, in the 1960's, the nonmetro population growth was only one-fourth as high as that in metro areas. 3/ Throughout both periods, the farm population has continued its long-term downward trend although the rate of loss has been lower since 1970.

The average rate of farm population decline for 1970-76 was 2.7 percent annually, compared with an annual rate of 4.8 percent in the 1960-70 decade. The annual rate of farm population loss in the 1970's remains below the average experienced in the 1960's, although there has been some acceleration in recent years. The number of farm residents appeared to be leveling off in the early 1970's. The average rate of decline from 1970 to 1974 was a low 1.2 percent a year. Since 1974, the rate of loss has accelerated with an average annual decline for 1974-76 of 5.8 percent.

1/ This estimate is an annual average computed by using quarterly data for the year centered on the April date for which the estimate is prepared. In this case, quarterly estimates for October 1975 and January, April, July, and October 1976 were used (see explanations on p. 7).

2/ Banks, Vera J. and Diana DeAre. Farm Population of the United States: 1976. Current Population Reports, Farm Population, Series Census-ERS, P-27, No. 49. U.S. Bur. Census and U.S. Dept. Agr., Washington, D.C. Sept. 1977.

3/ Beale, Calvin L. The Revival of Population Growth in Nonmetropolitan America. ERS-605. Econ. Res. Ser., U.S. Dept. Agr., June 1975; and "A Further Look at Nonmetropolitan Population Growth Since 1970," Amer. J. Agr. Econ., Vol. 58, No. 5, pp. 953-958. Dec. 1976.

However, approximately 130,000 of the 611,000 indicated decline in the U.S. farm population between 1975 and 1976 may be attributable to new Bureau of the Census procedures for processing survey information on farm and nonfarm residence. 4/ Thus, both the 1975-76 loss and the average annual decline for 1970-76 are somewhat inflated due to procedural changes. Nonetheless, the remaining decline of 481,000 for 1975-76 would still imply some acceleration in farm population loss. During this period of relatively high agricultural activity, no specific conditions are known that would have precipitated greater farm population decline.

Historically, the downward trend in the number of farm residents has been accompanied by steady increases in the number of nonfarm residents -- persons living in urban areas, small rural towns, and open country. Consequently, there has been a continuing decline in the farm share of the total U.S. population. In 1976, about 1 person out of every 26, or 3.9 percent of the Nation's 214 million people, had a farm residence. When the number of U.S. farm residents reached its estimated peak in 1916, about 1 person in 3 lived on a farm. 5/

Farm Population Changes in Geographic Regions and Divisions

The North Central Region with 3.8 million persons living on farms, or 46 percent of the national farm total, continues to have the largest farm population (table 1). The South, with 2.9 million farm residents, ranks second. Although there has been some slight increase in the North Central's proportion and a decline in the South's proportion, the relative position of these two regions has not changed significantly since 1970. However, over a longer period, their positions have shifted. From 1920, when the farm population was first enumerated, until 1950 more than half of all farm people lived in the Southern States.

Over the years, the South has traditionally experienced heavier farm population loss than the rest of the country, a characteristic still in evidence. From 1970 to 1976, this region lost almost a fourth of its farm residents; although there were some variations, substantial farm population loss was experienced by all three divisions of the South.

Of the four major U.S. regions, only the West showed an increase in farm population since 1970. The number of persons living on western farms was estimated at about 950,000 in 1970 and 1,000,000 in 1976. Although this indicated increase may reflect relative stability rather than actual growth, either trend

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4/ The revision in farm population processing procedures in the Bureau's Current Population Survey is explained in detail in the joint annual Census-ERS farm population report for 1976 (see footnote 2).

5/ Banks, Vera J. and Calvin L. Beale. Farm Population Estimates for 1910-70. Stat. Bul. 523. U.S. Dept. Agr., Washington, D.C., July 1973.

Table 1-- U.S. farm population by regions and divisions, April 1976 and 1970

Area	Number		Percent of total farm population		Percentage change, 1970-76
	1976 1/	1970	1976 1/	1970	
	--- Thou. ---		------- Pct. -------		
United States	8,253	9,712	100.0	100.0	-15.0
Region: 2/					
Northeast	597	699	7.2	7.2	-14.5
North Central	3,800	4,305	46.0	44.2	-11.7
South	2,855	3,754	34.6	38.7	-23.9
West	1,000	954	12.1	9.8	4.8
Division: 2/					
New England	137	128	1.7	1.3	6.6
Middle Atlantic	461	571	5.6	5.9	-19.2
East North Central	1,756	2,053	21.3	21.1	-14.5
West North Central	2,044	2,252	24.8	23.2	-9.2
South Atlantic	970	1,357	11.8	14.0	-28.5
East South Central	1,088	1,329	13.2	13.7	-18.1
West South Central	797	1,069	9.7	11.0	-25.4
Mountain	418	446	5.1	4.6	-6.3
Pacific	582	508	7.1	5.2	14.6

1/ Similar estimates for States are not available.

2/ States in the geographic regions and divisions are: NORTHEAST -- New England: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut; Middle Atlantic: New York, New Jersey, Pennsylvania. NORTH CENTRAL -- East North Central: Ohio, Indiana, Illinois, Michigan, Wisconsin; West North Central: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas. SOUTH -- South Atlantic: Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida; East South Central: Kentucky, Tennessee, Alabama, Mississippi; West South Central: Arkansas, Louisiana, Oklahoma, Texas. WEST -- Mountain: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada; Pacific: Washington, Oregon, California, Alaska, Hawaii.

represents a change from the previous decade. Between 1960 and 1970, the West lost more than a third, or a half million farm residents. After remaining at about 10 percent in both 1960 and 1970, the West's share of the national farm population total was up to 12 percent in 1976. All of the West's farm population gain is attributable to the Pacific States, which show a 15-percent increase since 1970.

In 1976, the farm population in the Northeast Region was about 600,000, or 7 percent of all farm people.

Components of Farm Population Change

Between April 1975 and April 1976, there was an estimated net loss to the U.S. farm population of 635,000 persons who either moved away from farms or lived on places where agricultural operations ceased, and thus were reclassified into the nonfarm category (table 2). This loss was partly offset by an estimated 24,000 more births than deaths among farm people.

Estimates of the components of farm population change -- births, deaths, and net change through migration and reclassification of residence -- fluctuate from year to year. In part, this is due to sampling variation; therefore, averages for a period of years are deemed more reliable. For the 1970-76 period, the average net loss to the farm population through migration and reclassification of residence from farm to nonfarm was 272,000 annually (table 3). The average of 29,000 more farm births than deaths partly offset this loss.

The absolute average amount of net outmovement indicated for the 1970's represents a substantial reduction in farm population loss through migration. The annual net loss of 272,000 for 1970-76 is about half that of 594,000 annually for 1965-70 and almost two-thirds lower than the 1960-65 annual loss of 794,000. However, as the total farm population from which migrants are drawn continues to diminish, it is no longer possible for it to continue to yield more than 500,000 migrants annually as it did from 1935-40 through 1965-70 (fig. 1). More people are thought to be involved in actual net outmovement than in the reclassification of residences from farm to nonfarm. However, the exact extent of these components separately is not known.

The annual rate of net outmigration, in which the average amount of net outmigration and reclassification is expressed as a percentage of the average farm population, was 2.9 percent for 1970-76. A rate of net outmovement of the low magnitude indicated for the 1970's has not been observed in the farm population since the late 1940's, when returning World War II veterans and defense workers temporarily checked farm population decline (fig. 2). During both the 1950's and 1960's, the rate of net outmovement remained at a relatively constant high level -- about 5 percent -- even though the absolute average loss was decreasing.

Heavy southern farm population loss was reflected in the high rate of net outmigration from the region. For 1970-76, the rate of net outmovement from southern farms was 4.7 percent annually, the highest rate of net outflow among the four geographic regions of the Nation. Although the South continues to be

Table 2--U.S. farm population and components of farm population change by regions and divisions, April 1975-76.

Area	Farm population, April 1976	Natural increase			Net change through migration and reclassification of residence 1/	Farm population, April 1975
		Total	Births	Deaths		
	Thousands					
United States	8,253	24	111	-87	-635	8,864
Region: 2/						
Northeast	597	1	8	-7	-44	641
North Central	3,800	12	51	-40	-292	4,080
South	2,855	7	37	-30	-292	3,140
West	1,000	5	14	- 9	-7	1,003
Division: 2/						
New England	137	3/	2	-2	7	130
Middle Atlantic	461	1	7	-6	-51	511
East North Central	1,756	3	21	-18	-81	1,834
West North Central	2,044	8	30	-22	-211	2,246
South Atlantic	970	2	12	-11	-108	1,076
East South Central	1,088	3	14	-12	-114	1,199
West South Central	797	2	10	-8	-70	865
Mountain	418	2	6	-4	-18	434
Pacific	582	2	7	-5	11	569

1/ Includes persons who did not move but who were in or out of the farm population because agricultural operations on the places where they were living either ceased or were begun.
2/ Similar estimates for States are not available. For States included in each region and division, see table 1.
3/ Fewer than 500 people.

Table 3--Annual averages of components of farm population change and rate of net migration for the United States, by regions and divisions, April 1970-76

Area	Natural increase			Net change through migration and reclassification of residence 1/	Annual rate of net migration 2/
	Total	Births	Deaths		
	- - - - - - - - - Thousands - - - - - - - - -				- Pct.-
United States	29	122	-93	-272	-2.9
Region: 3/					
Northeast	1	9	-8	-18	-2.8
North Central	13	55	-42	-97	-2.3
South	10	44	-34	-160	-4.7
West	5	14	-9	3	.3
Division: 3/					
New England	4/	2	-2	1	1.1
Middle Atlantic	1	7	-6	-19	-3.7
East North Central	5	24	-19	-54	-2.8
West North Central	8	31	-22	-43	-1.9
South Atlantic	3	15	-12	-68	-5.7
East South Central	3	16	-13	-43	-3.5
West South Central	3	12	-9	-48	-5.1
Mountain	2	7	-4	-7	-1.6
Pacific	2	7	-5	10	1.8

1/ Includes persons who did not move but who were in or out of the farm population because agricultural operations on the places where they were living either ceased or were begun.

2/ Based on annual average net change in population through migration per 100 persons in the average April farm population for the period indicated.

3/ Similar estimates for States are not available. For States included in each region and division, see table 1.

4/ Fewer than 500 people.

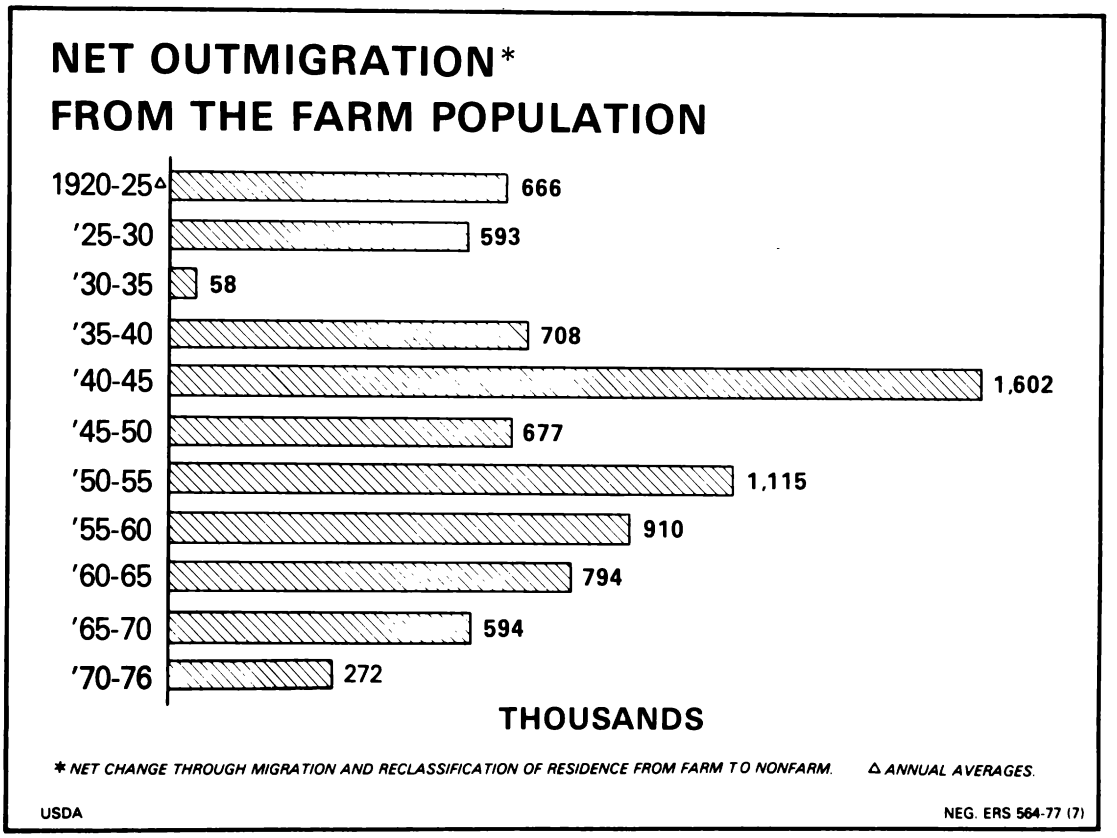

Figure 1

the greatest exporter of farm people, the rate of outmovement for the 1970's is considerably lower than in recent decades. During 1960-70 and 1950-60, the region's average percentage of net outmigration was 7.3 and 6.6, respectively. Increased farm population retention occurred in all of the three divisions of the South. However, the East South Central Division, where the rate of net outflow was cut in half from 1960-70, was the most improved.

Among the geographic divisions of the country, average annual rates of net outmigration for 1970-76 ranged from a low 1.6 percent for the Mountain States to a high of 5.7 percent for the South Atlantic States. There was a little net inmigration indicated for both the Pacific and New England divisions. The decrease in the annual volume and rate of farm outmigration appeared in all U.S. geographic regions and divisions.

Definitions and Explanations

Population coverage. Estimates presented in this report relate to the rural civilian population living on farms, without regard to occupation. For convenience, the term "farm population" is used without qualification, although the relatively few members of the Armed Forces living on farms are excluded.

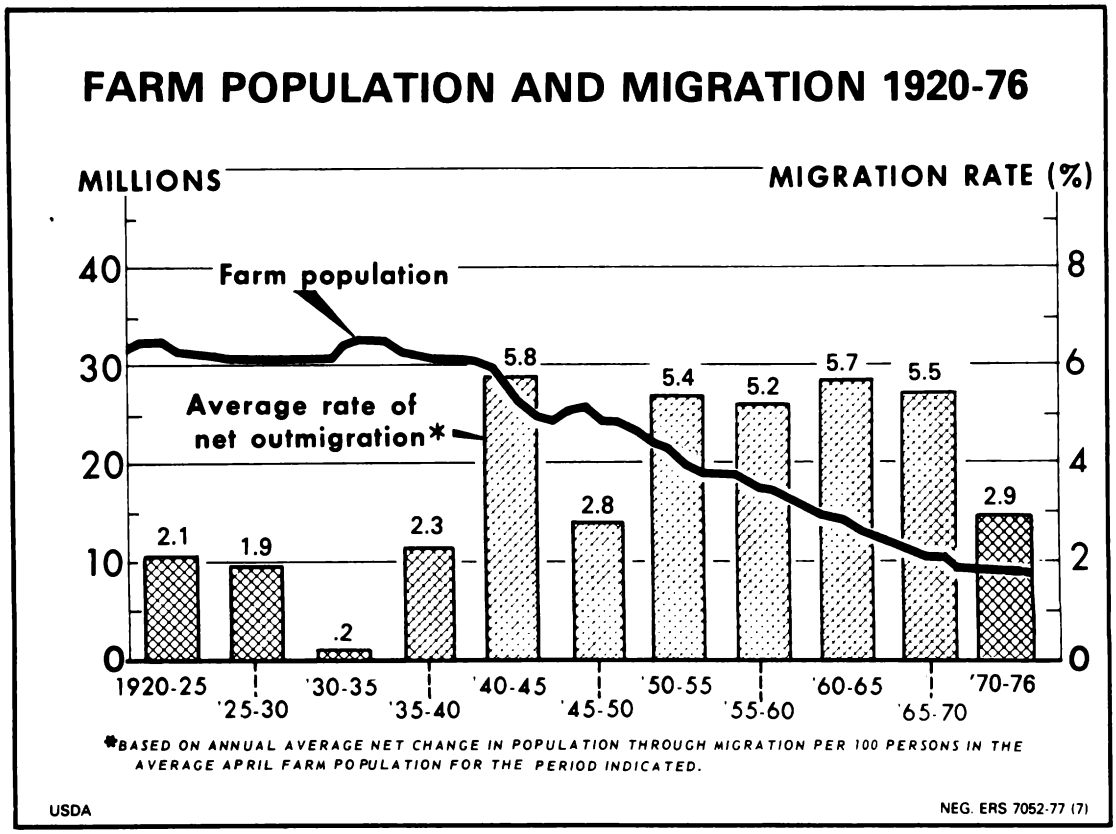

Figure 2

Farm population. From April 1960 through August 1975, the farm population was defined as all persons living in rural territory on places of 10 or more acres, if as much as $50 worth of agricultural products were sold from the place in the reporting year. It also includes those living on places of under 10 acres, if as much as $250 worth of agricultural products were sold from the place in the reporting year.

In the Current Population Survey (CPS) of the Bureau of the Census, from which current estimates of the total U.S. population are obtained, unmarried persons attending college away from home are enumerated as residents of their parents' homes. In the Censuses of Population, such persons are enumerated as residents of the communities in which they live while attending college. The effect of this difference is to classify a larger number of college-age persons as farm residents in the CPS than would be so classified under decennial census usage.

Persons in institutions, summer camps, motels, and tourist camps as well as those living in rented places where no land is used for farming were classified as nonfarm.

In August 1975, the U.S. Department of Agriculture (USDA) and the Bureau of the Census announced a change in the official farm definition. Under the new definition, a farm is identified on the basis of sales alone, and is defined as any place from which $1,000 or more of agricultural products are

sold or would normally be sold in the reporting year. However, all of the farm population figures presented in this report are based on the acreage-sales farm definition in use from 1960 to late 1975. Since the $1,000 sales item was not asked in the Current Population Survey for all five of the months needed in computing the U.S. April-centered annual average for 1976 (see "April-centered annual averages" below), comparable farm population estimates for both the old and the new definition are not available for 1976. A future joint Census-ERS farm report will present April-centered annual average data for 1977 and will include a statement of the effects of the definitional change on the size and characteristics of the farm population.

April-centered annual averages. Such averages of the total U.S. farm population are computed by using data from the five quarters centered on the April date for which the estimate is being prepared. For example, for April 1976, quarterly estimates for the months of October 1975 and January, April, July, and October 1976 were used with a weight of one-eighth given to each of the two October estimates and a weight of one-fourth to each of the estimates of the other 3 months.

Rounding. Individual figures in this report are rounded to the nearest thousand and have not been adjusted to group totals, which are independently rounded. Percentages are rounded to the nearest tenth of a percent; therefore, percentages in a distribution do not always add to exactly 100 percent.

Sources and limitations. Annual estimates of the total number of people living on U.S. farms are obtained from the Current Population Survey of the Bureau of the Census. These estimates are based on sample data and are subject to sampling variability.

The standard error is primarily a measure of sampling variability; that is, of the variations occurring by chance because a sample rather than the whole of the population is surveyed. The calculated standard error also partially measures the effect of response and enumeration errors but does not measure any systematic biases in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census figure by less than the standard error. Chances are about 95 out of 100 that the difference would be less than twice the standard error. Tables of standard errors for April-centered annual averages for 1970-76 are presented in the joint annual Census-ERS farm population report for 1976. 6/

Data for geographic areas and for components of farm population change are based on data obtained from the 1976 and earlier June Enumerative Surveys of USDA's Statistical Reporting Service. The 1976 sample for the survey was a probability area sample of the 48 conterminous States, consisting of approximately 17,000 area segments (sampling units). Information was obtained from about 25,000 farm households associated with these sample units.

6/ See footnote 2.

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Since the estimates are based on a sample, they may differ somewhat from figures that would be obtained if a complete census count had been taken. As in any survey work, results are subject to error of response and of reporting as well as to sampling variability.

Area estimates for 1976 are tied to 1970 benchmark figures developed to reflect the 1970 relationship between regional farm population estimates obtained from the Census of Population and the Current Population Survey. In addition to being tied to benchmark figures for decennial census years, the area estimates are adjusted to conform to the total farm population estimates obtained annually by the Bureau of the Census.

Earlier comparable reports. Estimates for earlier years on number, migration, and natural increase of farm people were published by USDA in Farm Population Estimates, 1910-70, Stat. Bul. 523, July 1973. Annual estimates from 1971 to date are available in:

(1) Farm Population Estimates for 1971 and 1972 (RDS-1).

(2) Farm Population Estimates for 1973 (ERS-561).

(3) Farm Population Estimates for 1974 (AER-319).

(4) Farm Population Estimates for 1975 (AER-352).

Other related reports. Estimates of the demographic, social, and economic characteristics of the 1976 farm population are presented in the cooperative annual Census-ERS farm report. 7/

Single copies of all the above reports are available free from ERS Publications, Rm.0054-S, U.S. Department of Agriculture, Washington, D.C. 20250.

7/ See footnote 2.

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