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U.S. Farm and Farm-Related Employment in 1990

A Significant Source of Jobs in Many Areas

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In this report... Farm and farm-related industries provided over 21 million jobs, or 15.7 percent of U.S. employment, in 1990. These industries employed 264,000 more workers in 1990 than in 1989, with most of the new jobs (381,000) in agricultural wholesale and retail trade. But some farm-related industries lost jobs, with the largest decline, over 90,000 jobs, in agricultural processing and marketing. Although the overall number of jobs rose, farm and farm-related employment's share of total U.S. employment declined.

Farming and its related industries provided 21.3 million jobs in 1990, the most recent year for which data are available. More than a third of farm and farm-related employment comes from farming and its closely related industries, which provide agricultural services and inputs and process and market agricultural goods. Farm production employment, which includes farm proprietors and hired farmworkers, provided 3.1 million jobs (fig. 1). Agricultural services, forestry, and fishing employed 388,000 workers. Agricultural input industries, including farm machinery and equipment manufacturing, provided nearly 413,000 jobs. Agricultural processing and marketing industries, which prepare agricultural products after they leave the farm, contributed almost 3.3 million jobs. Industries peripherally related to farming--wholesale and retail trade of agricultural products (13.6 million jobs) and indirect agribusiness such as chemical and fertilizer mining and food products machinery manufacturing (0.5 million jobs)--accounted for the largest share of farm and farm-related employment.

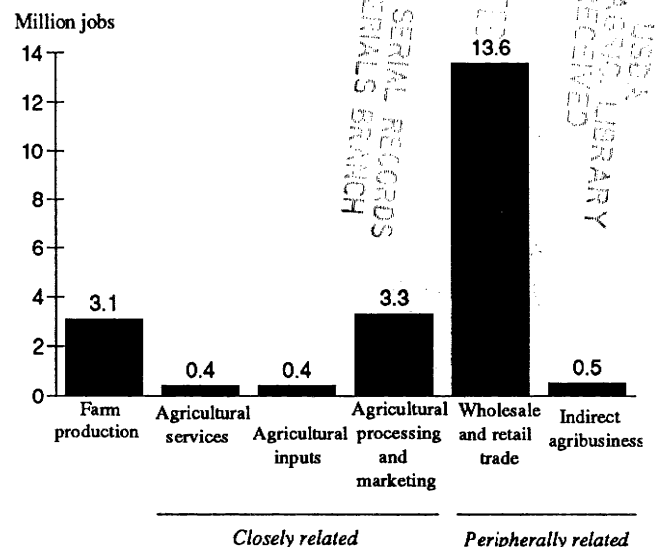
The terms "jobs" and "employment" are used interchangeably in this report. Estimates of total U.S. employment and farm and farm-related employment include both wage and salary jobs and self-employed persons.

Our estimates of farm and farm-related employment differ from those previously released by USDA's Economic Research Service because we used an updated list of industries considered to be related to farming. Previous years' data have been revised to reflect the 1990 estimation procedures (see Appendix--Data Sources and Definitions).

Figure 1

Farm and farm-related employment, 1990

Wholesale and retail trade, although only peripherally related to farming, accounted for most farm and farm-related employment.



Farm and Farm-Related Employment Growth Slight in 1989-90

Farm and farm-related industries employed 264,000 more workers in 1990 than in 1989, up 1.3 percent, with most of the new jobs (381,000) in agricultural wholesale and retail trade. Although the number of jobs rose, farm and farm-related employment's share of total U.S. employment declined.

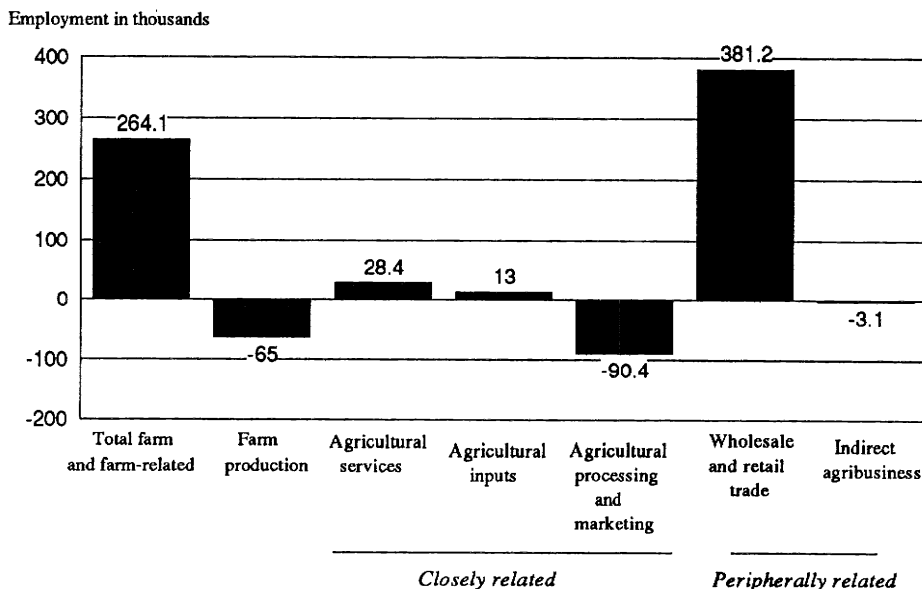
Farm and farm-related industries provided 21.3 million jobs in 1990, a gain of about 0.3 million jobs from 1989 (fig. 2). While farm and farm-related jobs increased, their share of total U.S. employment fell from 15.8 percent in 1989 to 15.7 percent in 1990. Employment growth was mixed among industries, with agricultural wholesale and retail trade employment growth offsetting declines in most other farm-related industries.

Farm production continued its long-term trend toward labor-saving technology, losing 65,000 farm proprietors and hired farmworkers since 1989. Agricultural processing and marketing industries lost over 90,000 jobs; apparel and textile manufacturing accounted for much of the decline, losing 74,800 jobs. Meat, grain, and fruit and vegetable processors increased employment, but these gains were not large enough to offset the overall job loss in processing and marketing.

Agricultural services, forestry, and fishing gained more than 28,000 jobs from 1989 to 1990. Most of the new jobs were in agricultural services such as crop harvesting. Agricultural input industries gained almost 13,000 jobs, with 80 percent of the employment gain in wholesale trade of farm machinery, equipment, and supplies.

Agricultural wholesale and retail trade industries accounted for most of the gains in farm-related employment, adding 381,000 jobs. Trade industries, considered only peripherally related to farming, are involved in the sale of processed agricultural goods to consumers. Employment growth in agricultural wholesale and retail trade is not driven by farming activity but by population growth and increased consumer demand for farm products. For example, from 1989 to 1990, U.S. population increased 1.1 percent. Indirect agribusinesses lost 3,000 jobs during 1989-90. This varied industry group has relatively minor linkages to farming, and includes manufacturers of food products machinery and pulpwood products.

Figure 2
Change in farm and farm-related employment, 1989-90
Most jobs lost were in processing and marketing.



Farm and Farm-Related Industries Provide Nearly 25 Percent of Total Nonmetro Employment

Although farm and farm-related industries constitute nearly a quarter of total nonmetro employment, more than twice as many farm and farm-related jobs are in metro counties as in nonmetro counties.

Over 6.4 million farm and farm-related jobs were in nonmetro areas in 1990 (table 1). While farm and farm-related industries provided many nonmetro jobs, nearly 70 percent of all farm and farm-related employment was concentrated in metro areas. However, such jobs accounted for less than 14 percent of total metro employment.

The size and importance of farming and certain farm-related industries differ between metro and nonmetro counties. Over 66 percent of all farm production jobs were in nonmetro counties,

accounting for 32 percent of all nonmetro farm and farm-related employment. Nonmetro counties contained only 19 percent of all agricultural wholesale and retail trade jobs, but these jobs provided 41 percent of nonmetro farm and farm-related employment. In contrast, farm production jobs accounted for only 7 percent of total farm and farm-related employment in metro counties. Metro counties contained almost 81 percent of agricultural wholesale and retail trade jobs, which made up 74 percent of metro farm and farm-related employment.

Table 1--Farm and farm-related employment, 1990
Most farm and farm-related jobs were in metro areas.

Industry	Metro	Nonmetro	Nonmetro share
	-----Million-----		Percent
Total employment ¹	109.4	25.9	19.1
Farm and farm-related	14.9	6.4	30.2
Farming:			
Farm production	1.0	2.1	66.4
Closely related:			
Agricultural services	.3	.1	35.2
Inputs	.2	.2	51.8
Processing and marketing	2.0	1.3	38.5
Food and kindred products	1.0	.5	31.6
Apparel and textiles	.8	.6	44.8
Other	.2	.2	42.6
Peripherally related:			
Wholesale and retail trade	11.0	2.6	19.2
Indirect agribusiness	.4	.1	25.7

¹Numbers and percentages may not add to total because of rounding.

Regions Vary in Nonmetro Reliance on Farm and Farm-Related Jobs

Nonmetro counties in the Northern Plains depend the most on farm and farm-related industries for jobs. These industries account for nearly 30 percent of the region's total nonmetro employment, with about half of the farm and farm-related jobs in farm production.

Farm and farm-related industries' share of total nonmetro employment ranged from 18 percent in the Northeast to 30 percent in the Northern Plains (table 2, fig. 3). The composition of farm and farm-related employment in regions differs as well. Nonmetro counties in the Northern Plains had the greatest regional concentrations in farm production and agricultural input employment, together comprising 16 percent of total nonmetro employment. In the urbanized Northeast, agricultural wholesale and retail trade provided most of the nonmetro farm and farm-related jobs.

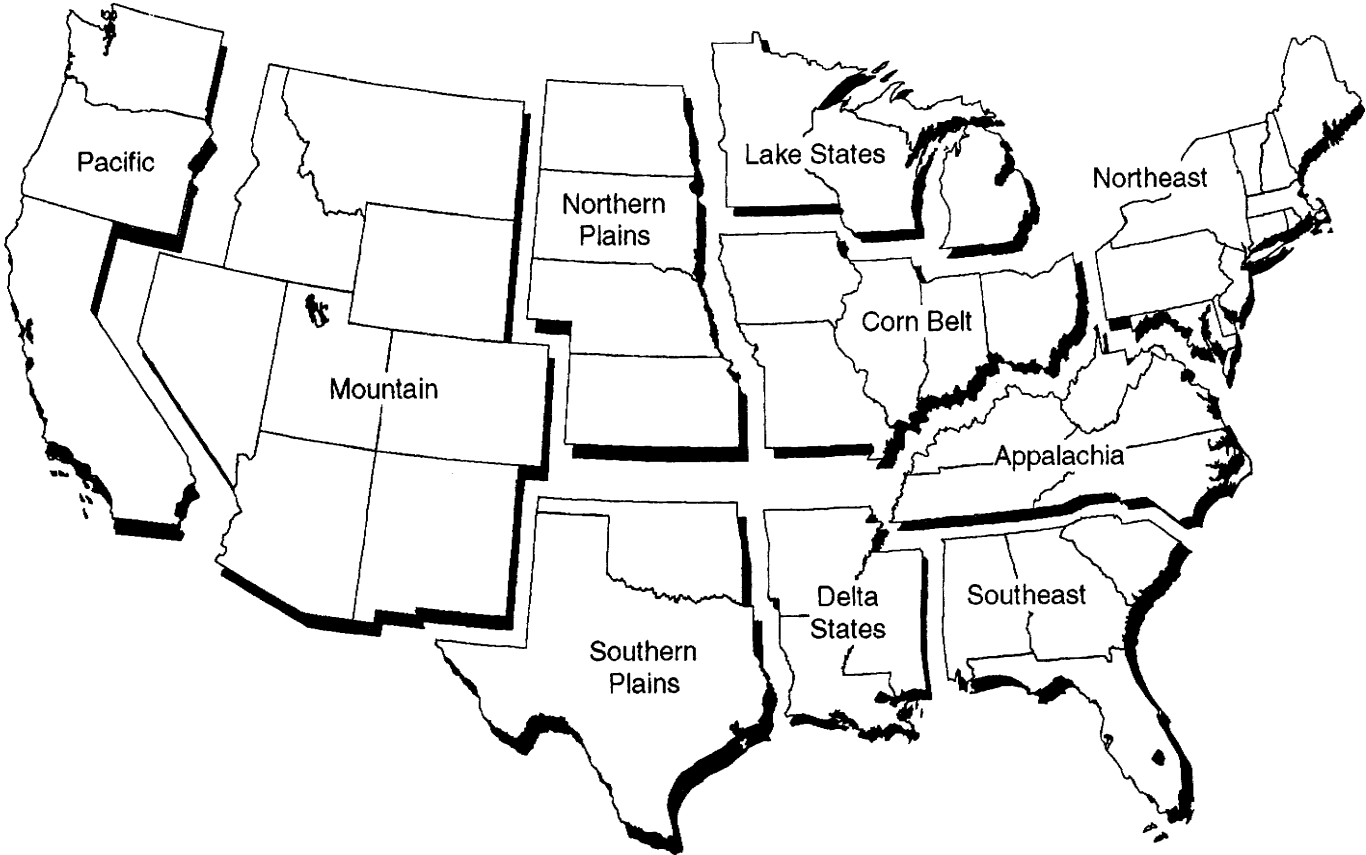
Agricultural services, forestry, and fishing were more important to nonmetro counties in the Pacific than in any other region, providing 1.4 percent of nonmetro employment. Forestry operations in Washington and Oregon were the principal employers. The Southeast (9.8 percent) and Appalachia (8.4 percent) had the largest nonmetro employment concentrations in agricultural processing and marketing industries. Apparel and textile manufacturing contributed about 75 percent of these regions' agricultural processing and marketing jobs.

Table 2--Share of total nonmetro employment by farm and farm-related industry and region, 1990
Farm production accounted for the largest share of nonmetro employment in the Plains States.

Region	Total farm and farm-related industries ¹	Farm production	Agricultural services	Agricultural inputs	Agricultural processing and marketing	Wholesale and retail trade	Indirect agri- business
<i>Percentage of nonmetro employment</i>							
United States	24.8	8.0	0.5	0.8	4.9	10.0	0.5
Appalachia	26.6	7.3	.3	.5	8.4	9.5	.7
Corn Belt	24.7	9.5	.3	1.3	3.5	9.4	.6
Delta States	25.1	7.7	.6	.9	6.3	8.9	.7
Lake States	25.6	9.5	.5	1.1	3.1	10.9	.6
Mountain	21.1	6.7	.5	.6	1.7	11.1	.6
Northeast	18.3	3.3	.4	.3	3.0	10.9	.4
Northern Plains	29.7	14.0	.4	1.8	4.0	9.3	.1
Pacific	24.3	8.3	1.4	.7	2.1	11.5	.4
Southeast	27.3	5.4	.5	.7	9.8	10.1	.7
Southern Plains	26.5	12.4	.4	.8	3.3	9.3	.2

¹Percentages may not add to total because of rounding.

Figure 3
U.S. farm production regions



Level and Composition of Farm and Farm-Related Employment Vary Among States

Farm and farm-related industries accounted for 15.7 percent of total U.S. employment, but in 30 States these industries' share of jobs exceeded the national average. Among farm and farm-related industries, wholesale and retail trade of agricultural products accounted for the largest share of total employment in all States except North and South Dakota.

Farm and farm-related jobs ranged from 10.7 percent of total State employment in Nevada to 25.7 percent in North Dakota (table 3). Most of the agricultural jobs in North Dakota were in farm production, which provided almost 12 percent of total State employment. Alaska far exceeded other States in the share of jobs in agricultural services (5.6 percent), with most of these jobs in forestry and fishing. Agricultural input jobs were most important in the traditional farm States of Iowa (1.9 percent of total employment), Nebraska (1.6 percent), and North Dakota (1.4 percent). Agricultural processing and marketing had strong links to the economy of

several Southern States. These industries provided over 5 percent of total State employment in North and South Carolina, Alabama, Mississippi, Arkansas, and Georgia. The apparel and textile industry was the source of much of the processing and marketing employment in these States. Wholesale and retail trade of agricultural products contributed the bulk of farm and farm-related jobs, providing 9-12 percent of total employment in all States. Indirect agribusiness was most important in Wyoming, where it provided 1.8 percent of the State's jobs. These jobs were concentrated in chemical and fertilizer mining.

Table 3--Share of total State employment by farm and farm-related industry, 1990*Farm and farm-related industries provided 25 percent or more of all jobs in Iowa, North Dakota, and South Dakota.*

State	Total farm and farm-related industries		Farm production	Agricultural services	Agricultural inputs	Agricultural processing and marketing	Wholesale and retail trade	Indirect agri-business
Percentage of total employment								
United States	15.7	(21,285,425)	2.3	0.3	0.3	2.4	10.0	0.4
Alabama	19.3	(389,152)	3.1	.3	.4	6.0	9.1	.5
Alaska	16.6	(51,425)	.2	5.6	.1	1.8	8.9	--
Arizona	13.5	(245,101)	1.1	.3	.1	.7	11.2	.1
Arkansas	21.8	(255,716)	5.6	.6	.6	5.2	9.0	.9
California	14.0	(2,277,497)	1.6	.4	.2	1.9	9.7	.3
Colorado	14.7	(289,135)	2.2	.2	.2	1.7	10.2	.2
Connecticut	11.2	(222,699)	.4	.2	.1	1.0	9.2	.3
Delaware	13.4	(55,458)	1.2	.2	.2	2.2	9.4	.3
Florida	15.7	(1,054,782)	1.4	.4	.3	1.3	12.1	.2
Georgia	18.6	(676,391)	2.0	.3	.3	5.1	10.1	.7
Hawaii	16.6	(114,573)	2.1	.1	.1	2.1	12.2	.1
Idaho	23.3	(120,723)	6.9	.6	1.1	3.7	10.4	.6
Illinois	14.4	(910,990)	1.7	.2	.6	1.8	9.6	.6
Indiana	16.0	(481,566)	2.9	.2	.4	1.7	10.3	.5
Iowa	25.0	(399,904)	8.3	.4	1.9	3.8	10.1	.5
Kansas	19.3	(283,177)	5.8	.3	.8	2.7	9.3	.5
Kentucky	21.3	(398,446)	6.7	.3	.4	3.4	10.1	.5
Louisiana	15.9	(306,055)	2.5	.3	.4	1.8	10.4	.4
Maine	17.2	(115,678)	1.8	.5	.1	3.9	10.4	.4
Maryland	12.7	(336,347)	.9	.3	.1	1.3	9.9	.3
Massachusetts	12.8	(474,847)	.3	.3	.1	1.6	10.2	.4
Michigan	14.0	(654,206)	1.7	.2	.2	1.0	10.6	.3
Minnesota	17.4	(458,945)	4.5	.2	.6	2.1	9.7	.4
Mississippi	21.2	(246,016)	4.8	.4	.6	5.5	9.4	.6
Missouri	17.5	(519,557)	4.4	.3	.5	2.6	9.3	.4
Montana	20.7	(85,951)	7.5	.5	.6	1.0	10.7	.5
Nebraska	23.0	(220,329)	7.3	.4	1.6	3.6	9.9	.2
Nevada	10.7	(75,596)	.7	.2	.1	.3	9.3	.1
New Hampshire	13.9	(88,704)	.7	.3	.1	1.3	11.1	.3
New Jersey	12.7	(553,946)	.3	.2	.1	2.0	9.6	.5
New Mexico	14.8	(104,949)	2.6	.2	.2	.9	10.7	.3
New York	12.6	(1,232,735)	.7	.2	.1	1.9	9.5	.3
North Carolina	22.0	(841,852)	2.5	.2	.3	8.6	9.8	.6
North Dakota	25.7	(93,489)	11.7	.3	1.4	2.2	10.1	--
Ohio	14.4	(832,274)	1.9	.2	.2	1.3	10.3	.5
Oklahoma	17.2	(274,284)	5.1	.3	.3	1.8	9.7	.1
Oregon	17.7	(277,759)	4.0	.9	.4	1.7	10.5	.3
Pennsylvania	15.4	(956,095)	1.3	.2	.2	3.1	10.3	.4
Rhode Island	13.8	(74,301)	.3	.2	--	2.2	10.7	.4
South Carolina	20.2	(380,472)	2.0	.2	.2	7.1	10.0	.7
South Dakota	25.2	(96,820)	11.0	.3	.9	2.8	10.0	.2
Tennessee	19.7	(532,984)	4.2	.2	.3	4.6	9.8	.6
Texas	15.2	(1,325,087)	2.5	.2	.3	1.8	10.2	.3
Utah	14.6	(127,277)	2.2	.2	.2	1.7	10.1	.4
Vermont	17.0	(57,205)	3.1	.4	.3	1.7	11.3	.2
Virginia	14.9	(537,111)	1.7	.3	.2	3.2	9.2	.4
Washington	16.4	(444,110)	3.0	.8	.3	1.6	10.4	.3
West Virginia	16.0	(118,841)	3.2	.3	.4	1.5	10.4	.3
Wisconsin	19.1	(528,714)	4.2	.3	.7	2.6	10.5	.8
Wyoming	18.0	(44,589)	5.0	.3	.4	.6	9.9	1.8

-- = Less than 0.1 percent.

Numbers in parentheses are total farm and farm-related jobs.

SUMMARY OF REPORT

Agricultural Jobs Increasing, but Most Growth Is Off the Farm

Number 13, April 1993

Contact: Alex Majchrowicz, (202) 219-0525

Farm and farm-related employment rose by 5.1 million jobs during 1975-89, but most of the growth was in off-farm agricultural wholesale and retail trade. Farm production jobs dropped by 780,000, according to the Economic Research Service report, *Changes in Farm and Farm-Related Employment, 1975-89*. Farm production jobs continued their long-term decline as new technology replaced labor, and periods of unfavorable farm economic conditions induced farmers to leave farming. Farm production accounted for less than 14 percent (3.2 million in 1989) of total (23 million) U.S. farm and farm-related jobs, which include businesses that provide farm inputs and process or sell agricultural goods. Employment in wholesale and retail trade of agricultural products rose to account for more than 50 percent of total farm and farm-related employment.

The number of farm and farm-related jobs grew by 28 percent in 1975-89, yet accounted for a declining share of all U.S. jobs, 17.3 percent in 1989, down from 19.5 percent in 1975. Farm and farm-related jobs were concentrated in urban areas because of the large number of agricultural wholesale and retail jobs that serve consumer markets. Industries with upstream linkages to farming (agricultural inputs and services) and those linked downstream (processing and marketing, agricul-

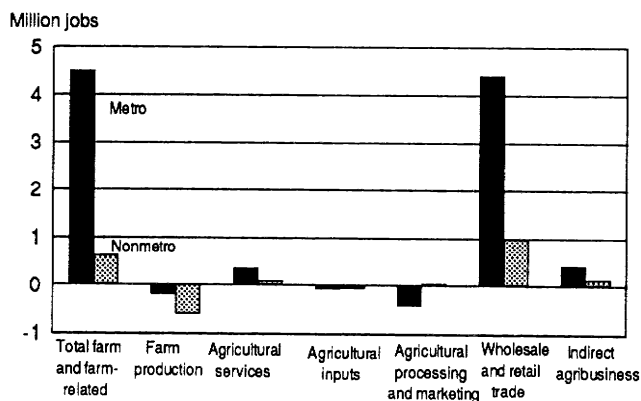
tural wholesale and retail trade, and indirect agribusiness) provided about 86 percent of farm-related jobs.

Importance and Types of Agricultural Jobs Vary by State

The Northeast, Pacific, and Corn Belt regions, areas with large populations, had the greatest number of farm and farm-related jobs in the Nation. However, the economic importance of agricultural jobs varies by State. California's 2.5 million farm and farm-related jobs accounted for only about 16 percent of that State's employment, while Iowa's 431,000 agricultural jobs provided over 27 percent of total State employment, the highest in the Nation.

Agricultural wholesale and retail trade provides most farm and farm-related jobs in all States except North and South Dakota, where farm production accounted for 43-45 percent of these jobs. Chemical and fertilizer mining made Wyoming the most reliant of all States on agricultural input industries, which provided over 8 percent of the State's farm and farm-related jobs. Apparel and textile manufacturing drives North Carolina's agricultural processing and marketing industries, which provided 36 percent of farm and farm-related jobs in that State.

Change in farm and farm-related employment, 1975-89
Most job gains were off the farm and in metro areas.



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