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Agriculture-Related Employment

Farm Commodity Programs and Rural Economies

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In this report... *The nature of the U.S. farm sector and the character of nonmetro America are changing. Today's typical farm is highly dependent on other agribusiness firms including input industries (chemicals, fuels, equipment, and farm machinery) for basic production needs and on an increasingly centralized food manufacturing system which responds to increased consumer demands for more processed farm goods. Wholesale and retail trade activities, often considered part of the food and fiber system, are more closely linked to final demand and changing consumer preferences. This report describes the modern food and fiber complex and government commodity programs and how they affect nonmetro economies.*

Agribusiness (farming and input, processing and marketing industries) and wholesale-retail trade account for nearly 19 percent of the employment in America today (fig. 1). About 30 percent of all these jobs are located in nonmetro areas. In 785 nonmetro counties (there are more than 3,000 U.S. counties), agribusiness accounts for one-third or more of total county employment. In about one-half of these agribusiness counties, farm production alone accounts for one-third or more of county employment. There are many more agribusiness-dependent than farming-dependent counties because agricultural production has important downstream links (food transportation, processing, and marketing) and upstream links (suppliers of farm inputs such as fertilizer and machinery) to local and regional markets.

In recent years, employment in the agribusiness sector has mostly declined. Farm production employment continues to decline as it has since World War II, with the exception of a couple of years of growth at the end of the 1970's, and in spite of substantial Federal outlays for farm commodity programs during the 1980's. Employment in processing and marketing industries, which experienced some growth during the 1970's, shrank during the 1980's. Employment in wholesale and retail trade involving food and fiber products has been growing, but most of this employment is located in metropol-

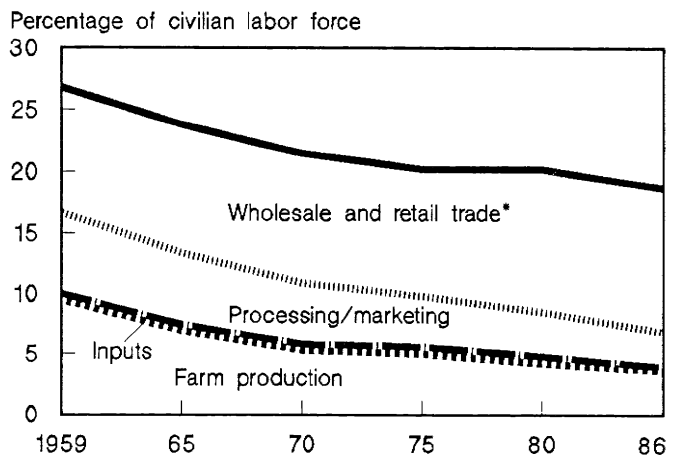
itan areas. This suggests that, in those rural areas where agribusiness dominates, the local economy will continue to have difficulty generating employment and population growth.

Farm households increasingly depend on off-farm employment to improve the level and stability of total household income. Income from off-farm jobs, investments, and transfers accounted for over half of all U.S. farm household income over the 1984-88 period. Low farm business income no longer necessarily correlates with low total farm household income.

Direct government commodity program payments and net CCC loans for covered crops contributed about 12 percent of total U.S. farm household income during 1984-88. Because government payments are made only for selected commodities and their production is concentrated in specific geographic areas, the importance of government payments to farm family well-being varies substantially across regions.

Figure 1
Agriculture-related employment

The food and fiber sector still accounts for nearly 19 percent of the jobs in America today.



*Includes indirectly related agribusiness.

The Agricultural Complex—An Important Employer in Farm Production Regions

Agribusiness accounts for 19 percent of all American jobs. In nonmetro areas, over 40 percent of food and fiber employment is in farm production. In metro areas, wholesale and retail trade account for 60 percent of food and fiber employment.

The agricultural complex, defined to include employment in farming, farm input industries, and all businesses that support the delivery and sale of food, clothing, shoes, and tobacco to domestic and foreign consumers, accounts for nearly 19 percent of the jobs in America today. Of these jobs, about 19 percent, or 3.8 million, are in farm production—farmers, hired farmworkers, or agricultural services. Of the remaining jobs, 2 percent are in agricultural input industries, 15 percent are in agricultural marketing and processing industries, and 52 percent are in food and fiber wholesaling and retailing.

Agricultural Complex Is an Important Source of Rural Jobs

Only about 30 percent of all U.S. food and fiber employment is located in nonmetropolitan areas (table 1). The biggest difference between the metro and nonmetro agricultural complex is the relative importance of farm production and wholesale and retail trade. Over 40 percent of nonmetro food and fiber employment is still in farm production, while 60 percent of metro food and fiber employment is in wholesale and retail trade. Wholesale and retail trade activities tend to be located closer to where the final demand for the goods are (usually cities and surrounding suburbs).

Only in the Northern Plains does the combination of farm production and input industry employment exceed

20 percent of nonmetro employment. In most regions, it is less than 15 percent (table 2). When food processing and marketing employment is added, the share of nonmetro employment in most farm production regions is still below 20 percent.

However, adding employment in wholesale and retail trade of agricultural products shows that the agricultural complex is an important source of rural jobs in every farm production region (see appendix figure on p. 14). In the Northern Plains, it accounts for over 35 percent of local nonmetro employment (table 2). In other farm production regions, this percentage ranges from 23 percent in the Northeast to 32 percent in the Lake States.

The mix of agribusiness employment varies by region. For example, Appalachia has the largest share (19 percent) of total agribusiness jobs in nonmetro America, as well as the largest share (29 percent) of the jobs in the agricultural processing and marketing industries (primarily textiles and apparel) (table 3). The Corn Belt, on the other hand, claims the largest share in farm production jobs (21 percent) and in agricultural input industries (24 percent). In contrast, the Pacific States have one of the smallest shares of nonmetro jobs in farm production, input, and processing and marketing industries.

Table 1—Comparing agriculture-related employment between metro and nonmetro areas

Only about 30 percent of all agriculture-related employment is located in nonmetro areas.

Sector	Metro	Nonmetro	Nonmetro share*
	Million		Percent
Total 1986 employment	86.6	20.1	18.8
Agricultural employment	14.1	5.9	29.5
Farm production	1.4	2.4	62.1
Input industries	.2	.2	47.9
Processing and marketing industries	1.9	1.1	36.2
Food and kindred products manufacturing	1.0	.4	30.0
Apparel and textile manufacturing	.8	.5	41.1
Miscellaneous processing and marketing	.2	.2	42.8
Wholesale and retail trade of agricultural products	8.6	1.8	17.5
Other agribusiness	1.9	.4	18.9

*Figures may be slightly off due to rounding.

Table 2—Nonmetro agriculture-related employment, by region*The Northern Plains leads with 35 percent, while the Northeast region has only 23 percent.*

Region	Farm production (1)	Input industries (2)	Processing and marketing industries (3)	Total agribusiness (1) - (3)	Wholesale and retail trade industries (4)	Food and fiber system (1) - (4)
<i>Percentage of total nonmetro employment</i>						
United States	11.7	0.9	5.5	18.1	9.1	29.4
Northeast	5.6	.4	4.2	10.2	9.8	22.8
Lake States	14.4	1.1	3.8	19.3	10.0	32.1
Corn Belt	14.5	1.3	3.8	19.6	8.6	30.8
Northern Plains	19.0	1.9	4.5	25.4	8.4	35.2
Appalachia	10.9	.6	9.6	21.0	8.3	31.5
Southeast	8.0	.8	10.0	18.8	9.0	30.3
Delta	10.8	.9	6.7	18.5	7.9	28.6
Southern Plains	15.9	.9	3.3	20.1	8.5	30.1
Mountain	9.9	1.0	2.0	13.0	10.5	24.5
Pacific	12.5	.7	2.7	15.9	11.1	28.8

Table 3—Each region's share of agriculture-related jobs*Appalachia has the largest share of total agribusiness jobs in nonmetro America, while the Corn Belt claims the largest share in farm production jobs.*

Region	Farm production	Input industries	Processing and marketing industries	Total agribusiness	Wholesale and retail trade industries	Food and fiber system*
<i>Thousands</i>						
Nonmetro United States	2,352	188	1,097	3,636	1,830	5,905
<i>Percent</i>						
Northeast	5.4	5.2	8.6	6.3	12.1	8.7
Lake States	10.6	10.5	5.9	9.2	9.5	9.4
Corn Belt	21.1	24.0	11.8	18.4	16.1	17.8
Northern Plains	10.0	12.7	5.1	8.7	5.7	7.4
Appalachia	15.2	10.1	28.7	19.0	14.9	17.6
Southeast	7.4	8.8	19.9	11.3	10.7	11.2
Delta	7.0	7.6	9.3	7.7	6.6	7.4
Southern Plains	10.2	7.5	4.5	8.3	7.1	7.7
Mountain	7.1	9.2	3.1	6.0	9.6	6.9
Pacific	5.5	4.1	2.5	4.5	6.3	5.0

*Includes indirect agribusiness.

Slightly Over Half of U.S. Agribusiness Counties Specialize in Farm Production

In 434 agribusiness counties, farm production accounts for one-third or more of county employment. The remaining agribusiness counties are more diversified, with farm production, agricultural inputs, and agricultural processing and marketing industries accounting for one-third of county employment.

There are 800 counties (785 nonmetro and 15 metro) where farming, farm input, and processing and marketing activities employed a third or more of the labor force in 1986 (fig. 2). (These activities are the components of the food and fiber sector that are most closely linked to farming.) Farm production alone constituted at least one-third of total county employment in more than half of these agribusiness counties (434). The remaining (366) agribusiness counties were more diversified, with farm production, agricultural input industries, and agricultural processing and marketing industries accounting for one-third or more of total county employment.

Where Agribusiness Counties Are Located

Nearly 70 percent of the agribusiness counties are located in the Great Plains, western Corn Belt, and Appalachia (table 4). These counties are particularly

important to the economy of the Northern Plains where agribusiness industries employ a third or more of the local labor force in almost two-thirds of the counties. In the Southern Plains, Corn Belt, Mountain States, and Appalachia, local concentrations of agribusiness counties are less, but they still account for at least one-quarter of the counties in each region.

Specialized agribusiness counties, where farm production alone accounts for at least one-third of total county employment, are found primarily in the large-scale farming and ranching areas of the Great Plains, Corn Belt, and Mountain States. These regions account for over three-quarters of the specialized agribusiness counties. In contrast, the more diversified agribusiness counties predominate in Appalachia, the Southeast, and the Delta region, where agricultural processing and marketing industries play a more significant role in the farm economy.

Table 4—Specialized and diversified agribusiness counties, by region

The Northern Plains has the most agribusiness counties, 74 percent of which are specialized.

Region	Total counties	Agribusiness counties		
		Total	Specialized*	Diversified**
<i>Number</i>				
United States	3,076	800	434	366
Northeast	245	0	0	0
Lake States	241	40	20	20
Corn Belt	496	132	71	61
Northern Plains	317	197	145	52
Appalachia	475	129	48	81
Southeast	339	65	8	57
Delta	221	50	17	33
Southern Plains	331	97	60	37
Mountain	278	72	56	16
Pacific	133	18	9	9

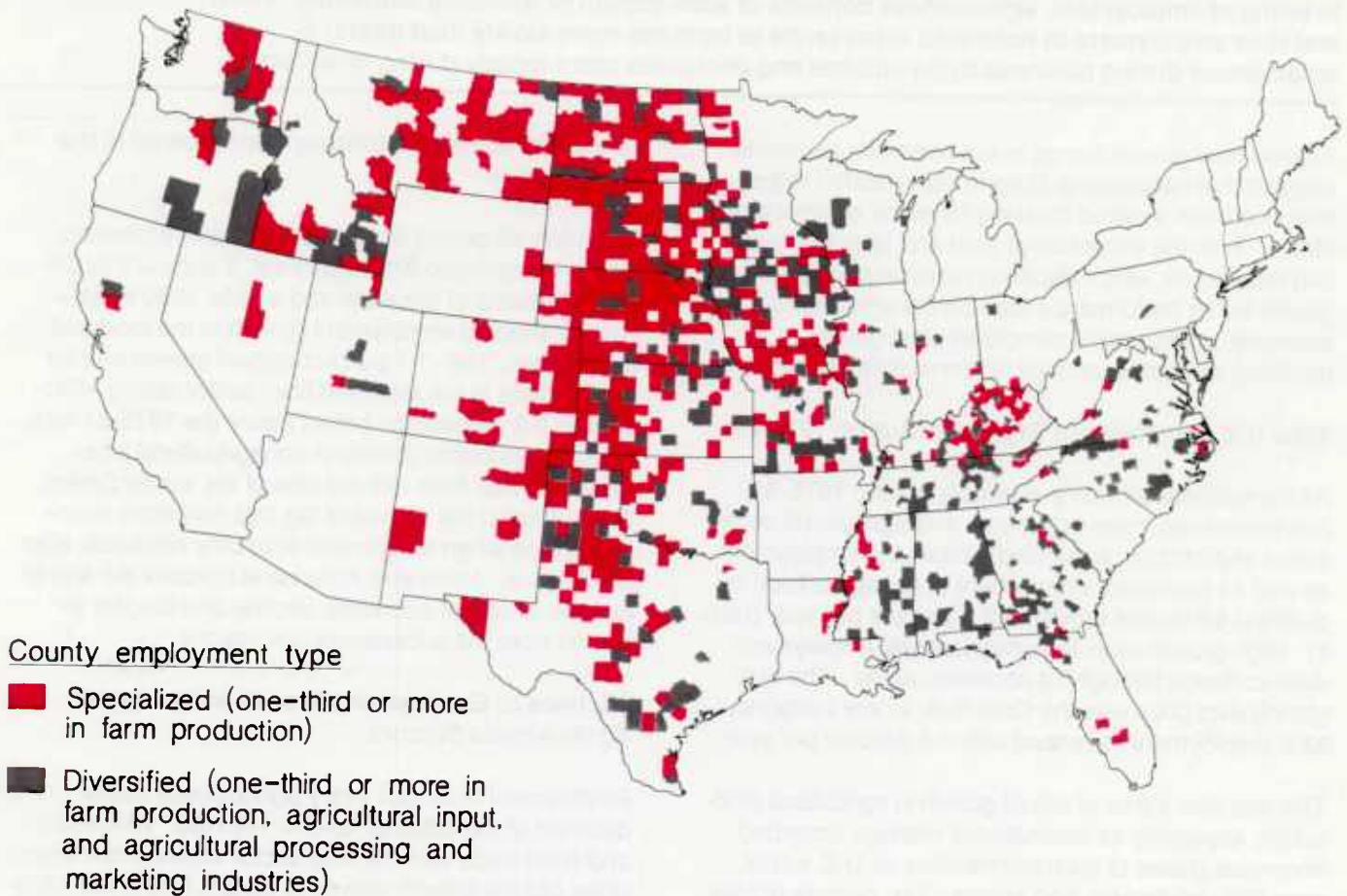
*One-third or more of county employment in farm production.

**One-third or more of county employment in farm production, agricultural input industries, and agricultural processing and marketing industries.

Figure 2

U.S. agribusiness counties

About one-quarter of U.S. counties are agribusiness counties. The majority are located in the Great Plains, western Corn Belt, and Appalachian regions.



Specializing in Agriculture-Related Industries Mixed Blessing for Nonmetro Communities

In terms of employment, agribusiness consists of slow-growth or declining industries. Food and fiber employment in nonmetro areas tends to increase more slowly than total U.S. employment during business cycle upturns and decreases more rapidly during downturns.

Employment growth trends in the nonmetro economy suggest that specializing in agriculture-related industries has been a mixed blessing for many nonmetro residents. With the exception of food and fiber wholesale and retail trade, which depends more on population growth for its performance than on the agricultural economy, agribusiness comprises slow-growth or declining industries, at least in terms of employment.

Total U.S. Employment Expanded During 1975-81

As the national economy expanded during 1975-81, nonmetro economies in general, and agricultural economies in particular, expanded. Total U.S. employment, as well as nonmetro employment in nonagricultural industries, increased rapidly at 2.9 percent per year (table 5). High growth rates in nonagricultural employment were common throughout nonmetro areas. The only glaring exception was the Corn Belt, where nonagricultural employment increased only 1.5 percent per year.

This was also a time of robust growth in agricultural production, especially as international markets absorbed enormous shares of such commodities as U.S. wheat, corn, rice, soybeans, and cotton. Yet, despite dramatic growth in the volume of commodities produced and in profits received during 1975-81, employment growth in the U.S. agricultural sector as a whole averaged only 1.2 percent each year. The U.S. farm sector actually lost 158,000 jobs over this period. Wholesale and retail trade industries exhibited the only robust growth in the food and fiber sector. This was primarily due to population growth and the general rise in income levels throughout the Nation, rather than growth in agricultural industries.

In all regions, employment growth in the food and fiber sector was sluggish compared with nonfarm employment growth during 1975-81. Among each region's agribusiness sectors, the growth rate for wholesale and retail trade employment was always the largest. The farm production sector, however, stood out from the other industry groups. This sector experienced a widespread employment decline of 0.9 percent during 1975-81. Only the most urban region, the Northeast, had less of a decline. In the other agribusiness sectors, the regional spread of growth rates tended to stay around the national average of each sector.

Growth in Nonmetro Employment Slowed in the Early 1980's

The 1981-86 period illustrates two major economic trends in nonmetro America. First, it is clear that the farm problems of the early and middle 1980's significantly affected employment growth in the food and fiber sector. The -1.1 percent annual growth rate for employment in the food and fiber sector during 1981-86 was 2.3 percentage points below the 1975-81 rate. Second, nonmetro growth in nonagricultural jobs slowed to less than half the rate of the earlier period. This reflected the extended lag that nonmetro economies face when the general economy rebounds after a recession. Nonmetro America is typically the first to feel the effects of economic decline and the last to benefit from the subsequent resurgence.

Declines in Employment Growth in Nearly All Agribusiness Sectors

Employment in almost every agribusiness sector declined at the national level in 1981-86. Wholesale and retail trade was the only sector where employment grew, but the growth slowed to almost half of the 1975-81 rate.

The remaining industries, which are more closely tied to agriculture, were hit harder. The rate of decline in farm production employment more than tripled. That decline resulted in a loss of around 430,000 jobs over the 5 years. Perhaps the most dramatic downward shift occurred in U.S. nonmetro agricultural input industries, where minimal employment growth in 1975-81 changed to a sharp decline by 1981-86. The actual number of jobs lost, however, was only a fraction of those lost in farm production.

Decline Widespread in Food and Fiber Employment

Employment declines in the food and fiber sector were widespread throughout nonmetro America, with most employment growth rates far off their pace of 1975-81. Still, when the early 1980's are compared with the late 1970's, it appears that regions that fared best in creating agribusiness jobs during 1975-81 for the most part did best, or not as badly, in 1981-86. In fact, among

the five farm production regions that performed above the national average in food and fiber sector employment growth during 1975-81, four—Northeast, Appalachia, Mountain, and Pacific—were still in that category in 1981-86.

One notable change between the two periods was in farm production. The much heavier employment losses in the farm production sector were felt by nearly all farm production regions, in some much more than others. Consequently, the close grouping of regional

growth rates around the national average during 1975-81 became more dispersed in 1981-86. For example, while farm production employment in the Southeast and Delta regions declined at more than 5 percent per year, the Mountain region declined at an average of only 0.9 percent per year. Three of the farm production regions with high dependence on program commodities (Lake States, Corn Belt, and Northern Plains) shared almost identical rates of decline in farm production employment during 1975-81. They were also grouped closely together in 1981-86.

Table 5—Change in nonmetro employment, by industry and farm production region

During 1975-81, agriculture-related employment increased only 1.2 percent while nonagricultural sector growth increased 2.9 percent. By 1981-86, agriculture-related employment had dropped 2.3 percentage points to -1.1 percent while nonagricultural employment slowed to 1.4 percent.

Region	Agriculture-related employment				Total*	Nonagricultural sector
	Farm sector	Input industries	Processing and marketing industries	Wholesale and retail trade		
<i>Thousands</i>						
1975-81 change :						
United States	-158	22	84	400	414	1,992
<i>Percent</i>						
Annual growth rates:						
United States	-.9	1.6	1.2	5.7	1.2	2.9
Northeast	.3	1.9	-.6	5.0	1.6	2.2
Lake States	-1.0	3.9	.3	5.3	1.0	2.5
Corn Belt	-1.0	-.2	.2	3.6	.4	1.5
Northern Plains	-1.1	2.5	2.0	3.9	.4	2.4
Appalachia	-.9	.5	1.5	6.3	1.3	3.0
Southeast	-1.3	2.4	2.4	7.8	1.8	4.3
Delta	-1.3	.2	2.2	5.7	.8	3.4
Southern Plains	-.8	3.0	.6	6.5	1.0	4.7
Mountain	-.3	3.6	.4	7.4	2.6	4.4
Pacific	-.6	4.2	1.5	7.9	2.3	3.8
<i>Thousands</i>						
1981-86 change:						
United States	-430	-68	-105	253	-354	931
<i>Percent</i>						
Annual growth rates:						
United States	-3.1	-5.3	-1.8	3.2	-1.1	1.4
Northeast	-2.2	-3.1	-3.3	4.8	.3	1.9
Lake States	-2.5	-4.9	.1	2.4	-.7	1.5
Corn Belt	-2.4	-6.5	-2.6	1.4	-1.7	.5
Northern Plains	-2.9	-6.6	.6	.4	-2.0	.2
Appalachia	-3.4	-4.2	-1.3	5.0	-.9	1.4
Southeast	-5.7	-4.9	-2.0	6.3	-1.4	3.0
Delta	-5.4	-4.2	-1.7	3.1	-2.3	1.1
Southern Plains	-3.5	-4.2	-3.4	1.7	-2.2	1.3
Mountain	-.9	-5.2	-1.9	2.5	.2	1.2
Pacific	-1.4	-5.0	1.7	2.5	.2	1.6

*Includes indirect agribusiness.

Commodity Program Crops Increase Net Income to Farmers

In 1988, program commodities accounted for about 21 percent of total U.S. gross cash farm income and they comprised about half of total U.S. farm exports.

For over 50 years, the Federal Government has supported the price of certain agricultural commodities in order to increase net income to farmers. The bulk of government payments target barley, corn, cotton, oats, rice, rye, sorghum, soybeans, and wheat. These program commodities accounted for about 21 percent of total U.S. gross cash farm income in 1988. They also comprised about half of total U.S. farm exports. In export markets, these crops have experienced great volatility, rising dramatically in the 1970's and then falling precipitously in the 1980's before partially recovering late in the decade.

Value of Program Commodities Varies by Region

In 1988, program commodities accounted for 24 percent of the total value of sales (cash receipts) by the farm sector, ranging from about 6 percent in the Northeast to almost 49 percent in the Corn Belt (fig. 3). The three regions with the highest percentages of program commodity sales to total sales (Corn Belt, Delta, and Northern Plains) also accounted for the bulk of national production of program commodities and earned over 60 percent of the cash receipts from program crops (fig. 4). Farmers in the Northeast and Southeast provided relatively little of the Nation's program crops.

The Corn Belt, with almost half of its total value of sales coming from commodity program crops, led all other regions with over \$13 billion in cash receipts (excluding direct government payments) from program crops. However, more than 92 percent of Corn Belt sales came from two crops, corn and soybeans. In fact, sales from each of these crops accounted for more than half of total U.S. sales in those crops. With 32 percent of total value of sales in program commodity sales, the Northern Plains was in second place. Cash receipts generated by program commodity sales were over \$6.4 billion. Nearly 65 percent of this figure came from wheat and corn sales. Northern Plains

wheat accounts for better than one-third of the value of all U.S. wheat sales.

The Delta States, with cash receipts of \$3.5 billion from the sale of program crops, came in third. However, this region does not have a crop for which sales account for a significant percentage of national income for that crop, as was the case in both the Corn Belt (corn and soybeans) and Northern Plains (wheat and corn). Although the Delta region produced less than 10 percent of program crops, 43 percent of the total cash receipts of Delta farmers came from program crops, second only to the Corn Belt in such dependence.

Farm Production Regions and the Commodity Program Crops They Produce

<i>Region</i>	<i>Major program commodities</i>
Northeast	Corn, soybeans, wheat
Lake States	Corn, soybeans, wheat
Corn Belt	Corn, soybeans, wheat
Northern Plains	Wheat, corn, soybeans, sorghum
Appalachia	Soybeans, corn, cotton
Southeast	Cotton, soybeans, corn
Delta	Cotton, soybeans, rice
Southern Plains	Cotton, wheat, sorghum
Mountain	Wheat, barley, cotton
Pacific	Cotton, wheat, barley

Figure 3

Share of cash receipts from program commodities, by region

The Corn Belt and Delta regions had the highest proportion of total cash receipts from program crops in 1988.

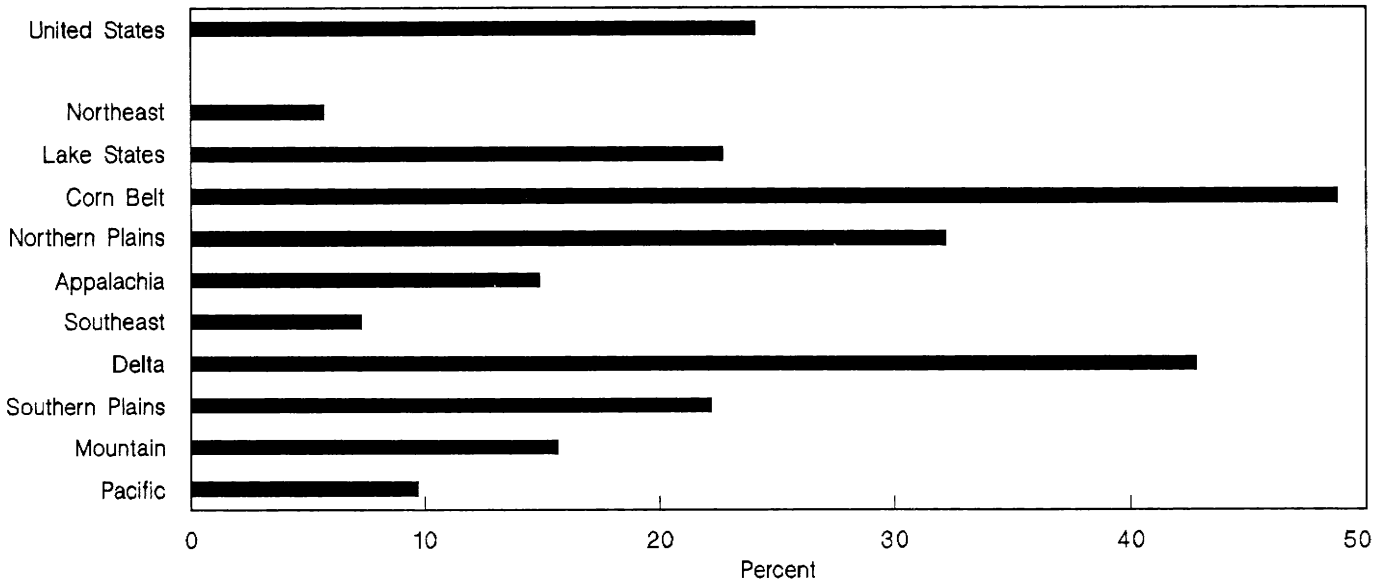
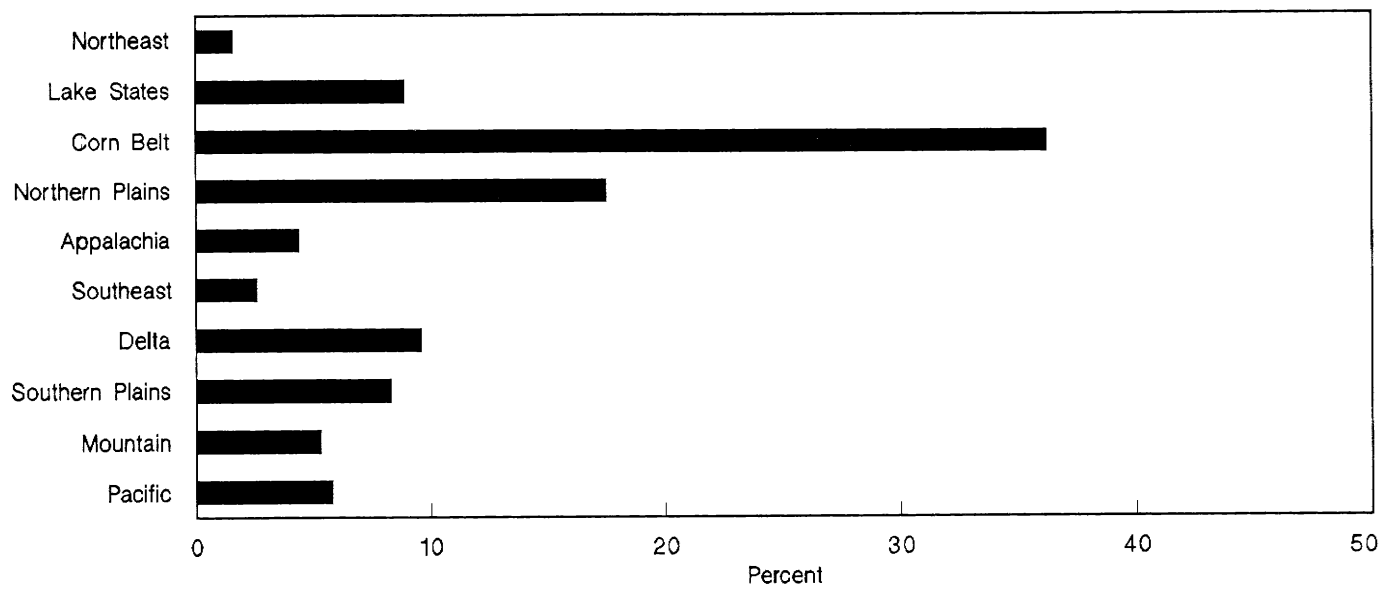


Figure 4

Share of program crop production, by region

Over half of the program crops were grown in the Corn Belt and the Northern Plains.



Government Payments Increased in the 1980's

Government payments to farmers accounted for more than 10 percent of gross farm income in more than one-third of U.S. counties.

Government transfers to farmers (direct payments plus net CCC loans for covered crops) increased significantly during the mid-1980's (fig. 5). In 1986, the peak year, \$20 billion was transferred from the Government to the farm sector, representing 12 percent of gross cash farm income. Because government payments are made for only selected commodities and production is concentrated in specific geographic areas, government payments are a larger component of gross cash farm income in some counties than in others. During the mid-1980's, government payments to farmers accounted for 10 percent or more of gross farm income in more than a third of all U.S. counties and in more than a half of the agribusiness counties.

Counties Receiving Large Payments

We arrayed all counties in the contiguous United States into several groups based on the percentage that government payments were of gross farm income for 1983-86, the latest years for which data was available at the time this study was undertaken (fig. 6). Averaging data for 4 years moderated the effects of annual fluctuations in county farm income associated with weather and other factors.

In 67 counties, government payments contributed one-third or more to gross farm income. There were two concentrations of these counties. The first was located in a narrow band starting in the Red River Valley area in northwest Minnesota and extended west through the North Dakota and northern Montana High Plains. Wheat was the dominant supported crop produced in this area. The second concentration of these counties was in the Texas High Plains. Cotton produced on irrigated land was an important program commodity in this area. Only about 2 percent of all farms were located in these 67 counties, but their farmers received 9.4 percent of all government transfers. Farms in these counties were relatively large with almost two-thirds having 500 acres or more (table 6). Yet, the average value of farm products sold was relatively low. Much of the acreage was in low-yield, dryland wheat production. Agribusiness was an important part of the local economy in these counties. Forty counties were agribusiness counties and, of these, 30 had one-third or more of their employment in farming alone.

In 297 counties, government payments contributed between 20 and 33 percent of gross farm income. Large

concentrations of these counties were found in the Plains areas of Montana and the Dakotas and in western Kansas, Oklahoma, Nebraska, and Texas. Farms in these latter States depended heavily on irrigation for crop production. Other groupings were in the true Mississippi Delta counties where rice, soybeans, and cotton were important crops and in the northwest Palouse, the major U.S. white winter wheat producing area. These 297 counties contained about 8 percent of all U.S. farms and received 28.5 percent of all government payments. Farms were relatively large in these counties with 45 percent having 500 acres or more. Agribusiness was an important source of employment in these counties. Over half were agribusiness counties.

There are 731 counties where 10 to 20 percent of gross farm income came from government farm programs. These counties were contiguous to the two groupings listed above and also dominated the Corn Belt. They contained over one-quarter of all U.S. farms and received 42.2 percent of all government payments. Half of the harvested cropland in these counties was in corn and soybeans. Farms were larger than the U.S. average. Thirty percent of these counties were agribusiness counties with two-thirds of them being so classified on the basis of farm production employment alone.

Figure 5

Government payments' share of gross farm income

In the peak year, 1986, \$20 billion in government payments constituted 12 percent of gross cash farm income.

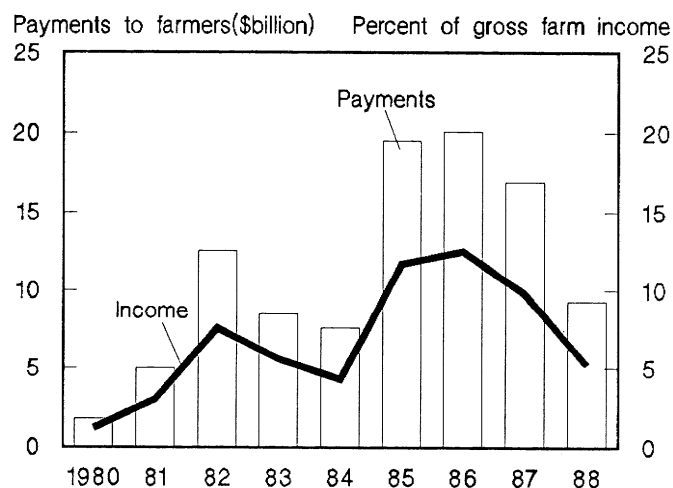
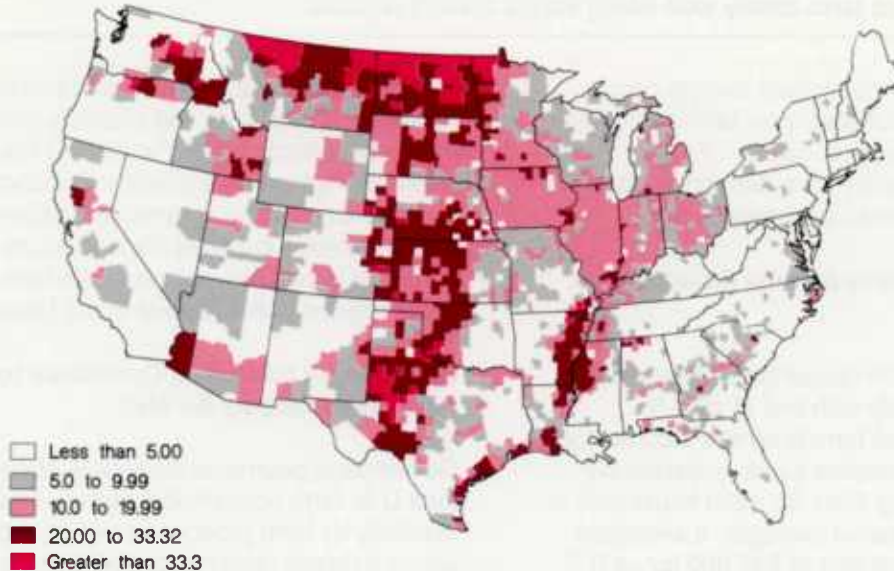


Figure 6

Government payments as a percentage of gross farm income

In only 67 counties did government payments contribute one-third or more to gross farm income during 1983-86.



Percentage ranges represent averages over the 4 years, 1983-86, thereby moderating the annual fluctuations that occur in farm-related income.

Table 6—Dependence on government payments by various elements of the U.S. farm structure, 1987

In 67 counties, government payments contributed more than one-third to gross farm income.

Variables	Unit	United States	Dependence on government programs			
			Government payments as a percent of gross farm income:			
			5.0-9.9	10.0-19.9	20.0-33.3	33.3+
Counties	<i>Number</i>	3,099	624	731	297	67
Agribusiness*	<i>Do</i>	800	146	225	164	40
Farm production**	<i>Do</i>	434	74	141	115	33
Number of farms	<i>Do</i>	2,087,759	476,011	577,490	166,914	38,123
Acres per farm	<i>Do</i>	462	652	713	1,279	1,444
Share of farms by size:						
1-49 acres	<i>Percent</i>	28.5	27.7	22.0	14.7	7.9
50-179 acres	<i>Do</i>	30.9	34.1	27.9	17.6	10.9
180-499 acres	<i>Do</i>	22.9	24.5	27.8	22.7	18.9
500 acres or more	<i>Do</i>	17.7	13.7	22.3	45.0	62.3
Value of land and buildings:						
Average per farm	<i>\$1,000</i>	289	285	340	455	424
Number of irrigated acres:						
Per county	<i>Thousands</i>	15.0	14.5	17.2	35.7	17.3
Per farm	<i>Do</i>	22.2	18.8	21.7	63.5	30.4
Share of harvested cropland from selected crops:						
Corn for grain and seed	<i>Percent</i>	20.8	24.5	28.7	12.8	8.1
Wheat for grain	<i>Do</i>	18.9	8.5	14.0	37.7	51.8
Cotton	<i>Do</i>	3.5	6.2	3.4	2.5	1.5
Soybeans for beans	<i>Do</i>	19.6	33.9	21.2	14.1	5.6
Market value of agricultural products sold:						
Average per farm	<i>\$1,000</i>	65	57	84	95	69
Share of farms with sales of:						
Less than \$10,000	<i>Percent</i>	49.3	50.4	36.6	29.8	24.1
\$10,000-\$49,999	<i>Do</i>	26.1	27.0	30.6	32.0	36.4
\$50,000 or more	<i>Do</i>	24.6	22.6	32.8	38.2	39.5

*One-third or more of county employment is in farm production, agricultural inputs industry, or processing and marketing of agricultural products.

**One-third or more of county employment is in farm production.

Off-Farm Income Versus Government Payments

Off-farm income, not government programs, is most important to farm household well-being. Over half of all U.S. farm household income comes from off-farm sources. The importance of government programs to farm family well-being varies across regions.

Over half of all U.S. farm household income comes from off-farm sources, particularly for families in the South where small farms predominate. Farm households in the Northern Plains depend the most on direct government payments for family living.

Farm Households Achieve Income Equality With All U.S. Households

During 1984-88, U.S. farm households achieved income equality comparable with that of all U.S. households. Because net farm business income fluctuates, farm household income varies substantially from year to year. During 1984-88, farm household income was above the national average. It averaged \$2,600 above the national rate of \$32,800 for all U.S. households.

Growth in nonfarm jobs in rural America has contributed to improved farm household incomes, more so than have commodity programs. During 1984-88, U.S. average annual income for farm households averaged \$35,400, 47 percent of which was derived from off-farm sources (fig. 7). Off-farm income comes from a variety of sources including wages from off-farm jobs, nonfarm self-employment, transfers such as Social Security, and interest, dividends, and rent from nonfarm investments. A recent study¹ shows that about one half of all farm households depend primarily on off-farm income for family living; about 9 out of 10 of these households operate small noncommercial farms with annual farm sales of less than \$40,000.

Relative Proportions of Off-farm Income Vary Substantially Among Farm Production Regions

Off-farm income is most important to farm households in Appalachia, where average farm household income is the lowest. Farm households in the Northern Plains are least dependent on off-farm income and have the lowest average off-farm income of any region. This

reflects, in part, the dearth of off-farm employment opportunities in this vast and sparsely populated region. Farm households in the Pacific and Southeast regions enjoy the highest total household income, due to the predominance of large farms in California and Florida, and are among the least dependent on off-farm income for family living. Nevertheless, off-farm income in these regions is the highest in the United States.

Government Payments Contribute to Farm Household Income As Well

Government payments contribute about 12 percent of total U.S. farm household income. This too varies substantially by farm production region; those regions where average farm household incomes are the lowest rely the least on commodity programs. For example, farmers in the Appalachian region have the lowest average total income among all the regions and their total income lags that of all U.S. households. Yet, only about 5 percent of their total net income comes from government payments. Eighty-five percent of farm household income comes from off-farm sources. The Appalachian region is characterized by the presence of small, part-time farms and rural economies where manufacturing, some of which is agribusiness related, and other economic activities dominate.

Conversely, total household income of farmers in the Northern Plains rivaled that of all U.S. households even during the troubled 1984-88 period for the farm economy. Government payments contributed 1 out of every 3 dollars of net income for these families, about equal in importance to off-farm income. It is in the Northern Plains where agribusiness, primarily farming, most dominates rural economic activity. The Northern Plains is also one of the regions where counties most dependent on commodity programs are most likely to be located.

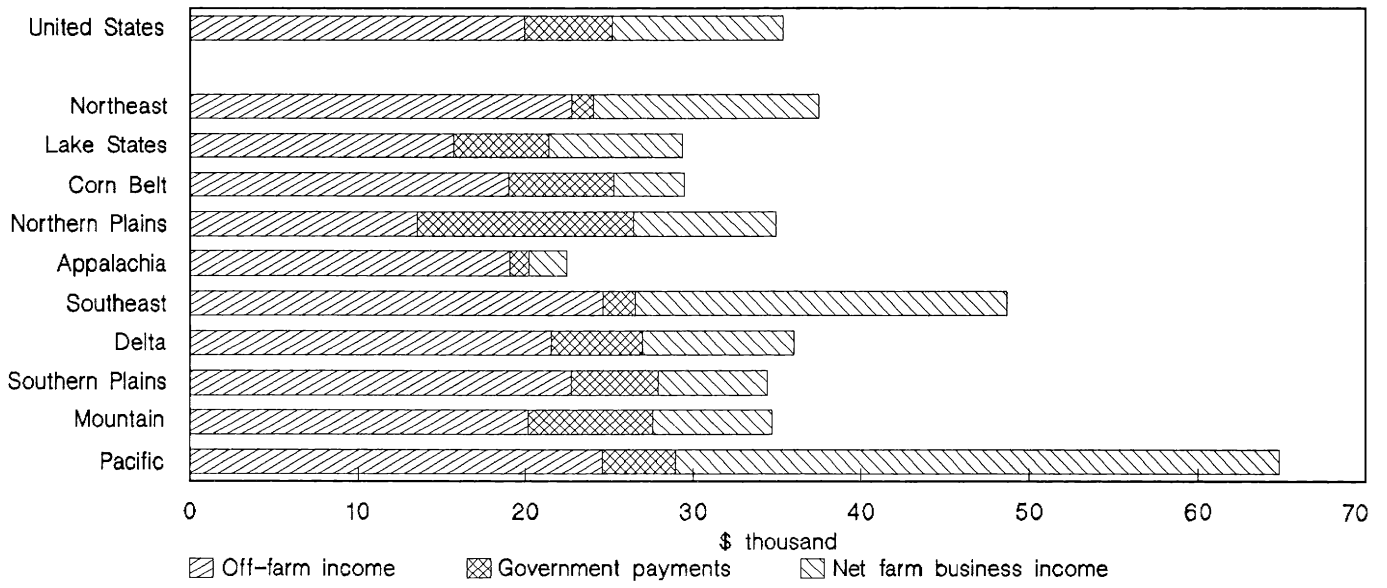
While farm programs may enhance the well-being of some farmers, recent experience suggests that they are not effective in revitalizing troubled rural economies. Farm commodity policy is not synonymous with rural economic development policy.

¹Nora L. Brooks and Donn A. Reimund. *Where Do Farm Households Earn Their Incomes?* AIB-560. U.S. Dept. Agr., Econ. Res. Serv., Feb. 1989.

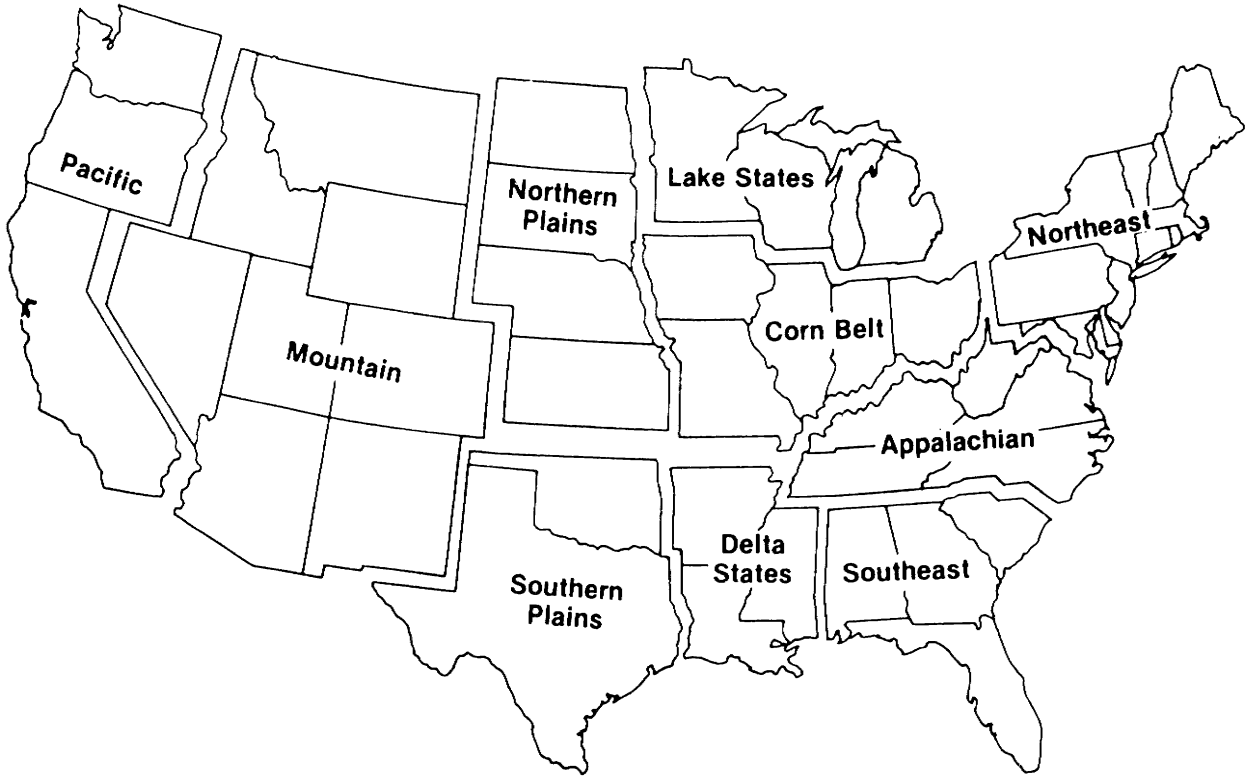
Figure 7

Sources of off-farm income, by region, 1984-88

During 1984-88, U.S. farm household income averaged \$35,400, 47 percent from off-farm sources.



Appendix figure
U.S. farm production regions



Sources of Data

The data in this report came from four sources. Data on employment in the food and fiber sector were obtained from U.S. Department of Commerce. Data on number of farm proprietors and farm wage and salary workers were obtained from U.S. Department of Commerce, Bureau of Economic Analysis. All other employment data were estimated from an enhanced data file derived from the County Business Patterns, Bureau of the Census. County-level data on food and fiber sector employment are not available from other sources. The most recent data available at the time of this study were for 1986.

Data on farm commodity program payments were obtained from U.S. Department of Commerce, Bureau of Economic Analysis, FY 1969-86 Federal Funds County Level Aggregate file. The most recent data available at the time of this study were for FY 1986.

Data on program crops, farm business income, off-farm income, and direct government payments were obtained from *Economic Indicators of the Farm Sector: State Financial Summary, 1988*, Economic Research Service, U.S. Department of Agriculture, ECIFS 8-2, October 1989.

Data on U.S. farm structure were obtained from the U.S. Department of Commerce, Bureau of the Census, Census of Agriculture, 1987.

For more information...

Contact Mindy Petrusis, (202) 786-1526, Economic Research Service, U.S. Department of Agriculture, Room 328, 1301 New York Avenue, NW., Washington, DC 20005-4788.

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