Report to the Chairman, Committee on Agriculture, Nutrition, and Forestry, U.S. Senate

June 2001

FARM PROGRAMS

Information on Recipients of Federal Payments

GAO-01-606
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June 15, 2001

The Honorable Tom Harkin
Chairman, Committee on Agriculture, Nutrition, and Forestry
United States Senate

Dear Mr. Chairman:

Payments to farmers under federal farm programs have reached an historic high—over $20 billion in fiscal year 2000. Nearly one-half of U.S. farms are receiving payments for income or price support purposes and/or for engaging in activities such as land conservation. These payments, in total, made up almost one-half of net farm income in fiscal year 2000. Although the payments averaged about $17,000 for the farms receiving them in 1999, the level of assistance can range from a few dollars up to tens of thousands of dollars. Despite this annual influx of billions of federal dollars to the farm sector, the U.S. Department of Agriculture (USDA) reports that the number of farms has been declining about 1 percent per year. According to the census of agriculture, which is conducted every 5 years, the nation had about 1.9 million farms in 1997, down from 2.1 million farms in 1987. This decline, which has occurred partly as a result of consolidation, is most pronounced among small family farms. Moreover, the average age of farm operators continues to increase. For example, the share of farmers under age 35 decreased from 15 percent in 1954 to 8 percent in 1997, while the share of farmers age 55 or older increased from 37 percent to 61 percent.

Concerned that farm payments are not being effectively targeted to aid the survival of small farms and the entry of young people into agriculture, you asked us to (1) determine the distribution of farm payments over the past decade by farm size, operators’ age, state, and crop and (2) identify the major barriers that make it difficult for young people to enter farming.

The following information on the distribution of farm payments by farm size and operators’ age is from our analysis of USDA’s annual surveys of U.S. farm operations. These surveys—called the Agricultural Resource Management Study—include information on crop and livestock production practices and the financial and operating characteristics of farms. The information on payments by crop and state is from USDA’s Program Payments Reporting System, a national database of payments.
made under the Department’s farm programs. (See app. II for a more detailed discussion of the annual surveys and the payments database.)

Results in Brief

In recent years, over 80 percent of farm payments have been made to large- and medium-size farms, while small farms have received less than 20 percent of the payments. For example, in 1999 (the latest year for which data were available), large farms—the 7 percent of farms nationwide with gross agricultural sales of $250,000 or more—received about 45 percent of the payments. The 17 percent of farms that are medium-sized (gross sales between $50,000 and $249,999) received 41 percent of the payments. The remaining 14 percent of the payments was shared by the 76 percent of farms that are small (gross sales under $50,000). (See fig. 1.) Small farms substantially outnumber medium and large farms, but because payments are generally based on volume of production, the average payment of small farms that received payments was much less. In 1999, these small farms, on average, received payments of about $4,141. In contrast, large farms received payments averaging about $64,737, while medium-sized farms received average payments of about $21,943.
This distribution pattern for 1999 was similar to that of the other years over the past decade. However, the portion of the payments that has gone to large farms has increased and the portion to small farms has decreased during the period since 1996 (see fig. 2).
In 1999, farmers under age 35 operated about 6 percent of the farms nationwide and received about 6 percent of farm payments. Those who were ages 35 through 54 operated 46 percent of the farms and received 56 percent of the payments; those ages 55 or older operated the remaining 49 percent of the farms and received the remaining 38 percent of the payments. This pattern was generally consistent over the 9-year period of 1991 through 1999. The percentage of the payments received by farmers under age 35 was fairly constant over the past 3 years, although lower than during the first part of the period. (See fig. 3.) At least some of this decrease can be attributed to the aging of the recipients and the reduced number of younger farmers. Of the farmers receiving payments, the average payment in 1999 of those under age 35 was about $16,544, slightly less than the $16,751 average for those of all ages.
Farm payments are principally directed at producers of eight major crops: wheat, corn, barley, oats, sorghum, rice, cotton, and oilseeds (primarily soybeans). In 1999, corn and wheat accounted for about 64 percent of commodity payments. All states received a portion of these payments. However, six states—Iowa, Illinois, Texas, Kansas, Nebraska, and Minnesota—together received almost half of the payments in 1999.

As the above suggests, large wheat and corn farms run by older operators tend to receive larger farm payments. These farms receive more primarily because most of the major farm programs’ payments are based on historic or current levels of production of the eight crops and, among these crops, corn and wheat have been grown in the greatest quantities. Similarly, the payments are concentrated in the relatively few states due to the fact that the eligible crops have been grown in greater abundance in these areas. Finally, older farmers tend to receive the largest portion of the payments because they are the largest demographic group and operate more of the larger farms. For example, in 1999, about 94,000 farmers between the ages of 35 and 54 had farms with at least 1,000 acres. In contrast, only about 9,000 farmers under the age of 35 had farms of this size.
The major obstacle facing young people who wish to enter farming is the high cost of acquiring the needed assets, principally farmland and farm machinery. Although farm program payments can help beginning farmers once they have started farming, the payments can also present a hurdle because their value is reflected in a higher price to buy or lease the farmland. According to USDA, generally only established farmers are able to acquire farmland that becomes available when farmers retire and sell their land. USDA and many states have programs specifically designed to help those wishing to enter farming. For example, USDA has loan programs to assist beginning farmers to buy land and other assets and to pay operating expenses. Nonetheless, the number of young farmers continues to decline. Some fear that this decline will adversely affect the nation’s food security and the economic well-being of rural communities. However, USDA maintains that the changing makeup of the farm sector will not have a severe effect on the nation’s food supply or rural economies because overall production levels are not dropping and rural communities are now less financially dependent on agriculture than in the past.

We provided USDA’s Farm Service Agency and Economic Research Service with a draft of this report for review and comment. The Farm Service Agency and the Economic Research Service generally agreed with the information presented in the draft and provided some technical and clarifying comments, which we have incorporated as appropriate.

Federal assistance to farmers have been at the heart of federal farm policy since the early 1930s, when the Congress passed the Agricultural Adjustment Act of 1933 as one of the first pieces of New Deal legislation. This assistance began as a means to address the “farm problem,” low and uncertain farm prices and incomes in farm and rural communities. Since then, the Congress has frequently modified or created new farm price and income support mechanisms in response to changing conditions in the farm sector, federal budgetary pressures, and shifts in policy goals. However, the payments’ purpose remains essentially the same today, and many of the program features established in the 1930s and 1940s have been retained.

The most recent farm bill—the Federal Agriculture Improvement and Reform Act of 1996 (the 1996 farm bill)—substantially revised some farm
payment provisions while retaining others. This legislation, which covers fiscal years 1996 through 2002, created production flexibility contract payments\(^1\) to shift toward a more market-oriented farm policy and away from farm income support tied to crop prices and specific planting requirements. Under the 1990 farm bill\(^2\) and others dating back to 1973, USDA made payments to wheat, feed grain (corn, oats, barley, and sorghum), cotton, and rice producers when average market prices for these commodities fell below the target price set by law for each commodity. These “deficiency” payments were based on a farm’s program yield for a particular commodity multiplied by its number of eligible acres times the commodity’s payment rate. Whereas total federal spending on deficiency payments increased when farm prices went down and decreased when prices went up, the total amount of production flexibility contract payments for each fiscal year was fixed at generally declining levels from $5.570 billion for 1996 to $4.008 billion for 2002. In return, producers could continue to receive payments as they did under the old program (using the same eligible acreage and crop yields) but have greater planting flexibility.

In addition to creating production flexibility contract payments, the 1996 farm bill continued several other programs wherein USDA also makes payments to farmers. The marketing assistance loan program is aimed at helping producers with the orderly marketing of their crops. In essence, its provisions effectively guarantee a minimum price or return for the commodities. The 1996 farm bill also continued several programs whose primary purpose is aimed at resource conservation and environmental protection. For example, under the Conservation Reserve Program—the largest of these programs—USDA pays producers to take certain land out of production. Since the 1996 farm bill was enacted, the Congress has also provided substantial emergency assistance in the form of “market loss assistance” payments to help farmers deal with continuing low crop prices and disaster payments for specific natural disasters, such as droughts and floods. (See table 1 for a brief description of and the dollar amount of the major types of payments made under farm programs over the past 3 years.)

\(^1\) These payments are also known as AMTA payments in reference to the Agricultural Market Transition Act, which is title I of the 1996 farm bill and the section that established production flexibility contracts.

Table 1: Major Farm Program Payments

<table>
<thead>
<tr>
<th>Payment type</th>
<th>Description</th>
<th>FY 1998</th>
<th>FY 1999</th>
<th>FY 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production flexibility contract</td>
<td>Producers who, at the time of the 1996 farm bill, had participated in previous farm price and income support programs for wheat, corn, sorghum, barley, oats, rice, and upland cotton could enter into contracts to continue to receive payments. USDA calculates the payments based on the producers’ eligible acreage and yields established for these crops under the previous programs. The amount of these payments was set at a fixed and generally declining level for fiscal years 1996 through 2002. Each crop was assigned a certain share of each fiscal year’s payments. For example, corn’s and wheat’s shares were 46.22 percent and 26.26 percent, respectively. Unlike the earlier programs, producers could plant any crop that they wanted to on these acres, with limitations on growing fruits and vegetables and for compliance with conservation requirements.</td>
<td>$5.7</td>
<td>$5.5</td>
<td>$5.1</td>
</tr>
<tr>
<td>Marketing loan gain/loan deficiency</td>
<td>Soybean, other oilseed, and extra long staple cotton producers and producers of wheat, corn, sorghum, barley, oats, rice, and upland cotton who have a production flexibility contract for at least one of these crops can take out marketing assistance loans. (For crop year 2000, the Congress suspended the requirement for producers to have a production flexibility contract to be eligible for the program.) These loans provide short-term financing to help farmers pay their bills after harvest and spread crop sales over the entire marketing year, when prices may be higher. A producer pledges the crop as collateral and receives a loan based on the crop amount multiplied by a loan rate for each unit of eligible production. Producers can repay the loan’s principal and interest within the loan period (usually 9 months), or they can forfeit the crop to the government when the loan matures and keep the loan principal as payment. Producers of these crops (except for long staple cotton) also have the option to repay the loans at the posted county price—a USDA estimate of the local market price (for cotton and rice, USDA uses the adjusted world price)—and sell the crop on the market. The difference between the loan rate and the posted county price is a marketing loan gain and is considered a cash payment to the producer. To reduce the paperwork and administrative burden of producers taking out marketing assistance loans and repaying them the same day to obtain the market gain, producers can request loan deficiency payments. The rate for these payments is the amount by which the loan rate exceeds the posted county price on the day the request for payment is made. This rate provides an amount equal to the rate available for a marketing loan gain on the same day.</td>
<td>$0.6</td>
<td>$4.4</td>
<td>$8.1</td>
</tr>
<tr>
<td>Market loss assistance</td>
<td>Because of continuing low crop prices, the Congress has, since October 1998, supplemented production flexibility contract payments with emergency payments. The payments have been made using the same formula for distributing production flexibility contracts payments.</td>
<td>$3.0</td>
<td>$11.1</td>
<td></td>
</tr>
</tbody>
</table>
## Dollars in billions

<table>
<thead>
<tr>
<th>Payment type</th>
<th>Description</th>
<th>FY 1998</th>
<th>FY 1999</th>
<th>FY 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop disaster</td>
<td>The Congress has periodically passed legislation to provide emergency payments to producers with major crop losses due to natural disasters and disease. These payments have been for various crops as specified in the applicable appropriation acts.</td>
<td>$1.9</td>
<td>$1.3</td>
<td></td>
</tr>
<tr>
<td>Conservation</td>
<td>Farmers can voluntarily enter into 10- to 15-year contracts with USDA to take highly erodible and environmentally sensitive farmland out of production. The farmers receive an annual per-acre rental payment for the term of the contract. (USDA will also pay up to half of the cost to plant these lands in grass, trees, or other approved vegetation.)</td>
<td>$1.3</td>
<td>$1.3</td>
<td>$1.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$7.6</td>
<td>$16.1</td>
<td>$26.9</td>
</tr>
</tbody>
</table>

Although production flexibility contract payments have been declining since 1996, other assistance has increased farm payments to their highest levels ever. For example, when the 1996 farm bill was passed—and crop prices were high—it was anticipated that marketing assistance loans would facilitate the orderly marketing of farm commodities at little or no cost to the federal government. However, persistent low prices over the past several years have turned the marketing assistance loan program into a major vehicle for farm income support payments. In addition to these payments, the Congress has also provided substantial emergency funding—especially for market loss payments—to help address low prices. As a result, all these payments are playing an increasingly critical role in supporting farmers, as evidenced by the fact that, in fiscal year 2000, the payments accounted for almost half of net farm income.

The 1996 farm bill, as did earlier legislation, generally limits the maximum amount of payments that a “person” can receive in a given year under the farm programs. Various appropriations acts have also included certain payment limits.) Persons for payment limitation purposes may be various things, including an individual, a limited liability partnership or company, a member of a joint operation; a corporation, or a participant in a joint venture. More than one individual may receive payments for a farming operation. However, no individual may receive payments for more than

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3 The payment limitation may be on a fiscal year, crop year, or program year basis, depending on the program.
three entities (partnerships, corporations, etc.) in which he/she holds substantial beneficial interest.⁴ (See table 2.)

<table>
<thead>
<tr>
<th>Type of payment</th>
<th>Payment limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production flexibility contract</td>
<td>$40,000 per person. A total of $80,000 per person for up to 3 entities ($40,000 for the first entity, $20,000 for each of the other two entities).</td>
</tr>
<tr>
<td>Marketing loan gain/loan deficiency</td>
<td>Usually $75,000 per person and $150,000 in total for up to 3 entities. For 1999 and 2000, the Congress raised the limit to $150,000 per person, with a total limit of $300,000 for no more than 3 entities.</td>
</tr>
<tr>
<td>Market loss assistance</td>
<td>Because these payments were supplemental to production flexibility contract payments, their payment limitation was essentially the same. The limitation was adjusted to reflect differences in the amounts of the two types of payments.</td>
</tr>
<tr>
<td>Crop disaster</td>
<td>$80,000 per person.</td>
</tr>
<tr>
<td>Conservation Reserve Program</td>
<td>$50,000 per person.</td>
</tr>
</tbody>
</table>

The large amount of marketing loan gains and loan deficiency payments in 1999 had put many large and even mid-sized farms up against the $75,000 limit for the program’s benefits. When farmers reach the payment limit, they can put the remaining crop under loan and forfeit the stored commodities to settle the loan. Concerned about the federal government’s expense associated with storing and disposing of forfeited commodities, the Congress doubled the payment limit for the 1999 crop. In addition, in February 2000, the Secretary of Agriculture implemented a statutorily authorized commodity certificate program that was also intended to discourage forfeitures, in this case by effectively eliminating payment limits. Under the program, farmers may purchase certificates at the posted county price for up to the quantity of grain or cotton under loan, and then immediately trade the certificates to recover commodities under loan, which can then be sold on the market. The Congress increased the payment limitation again for the 2000 crop, reducing the need for farmers to use certificates.

⁴ If an individual owns 10 percent or more of a corporation or other entity receiving payments, the payment for the individual’s interest will not be paid to the entity unless the individual designates the entity as one of the three for which he/she will receive payments.
USDA also provides considerable other financial assistance to farmers in the form of loans and crop insurance. The Department makes various types of direct and guaranteed loans. Farm ownership loans are available for buying farm real estate and making capital improvements. Farm operating loans are available for purposes such as buying feed, seed, fertilizer, livestock, and farm equipment; paying family living expenses; and, subject to certain restrictions, refinancing existing debt. For fiscal year 2000, USDA was authorized over $5 billion for these loans. Its losses on these loans during fiscal year 2000 totaled about $486 million. USDA also subsidizes farmers’ purchase of insurance to protect against crop losses caused by perils such as drought, floods, and other natural disasters. Premium rates and costs to the government are determined largely by the program’s loss experience. Generally, the higher the crop losses, the higher the premiums in future years. From 1981 through 1998, USDA paid farmers $14.1 billion for insured crop losses, which was partly offset by the premiums that farmers paid.

**Smaller, Less Established Farms Generally Receive Smaller Payments**

Because farm payments have generally been based on the production of major crops or commodities, larger farming operations generally have received larger payments than smaller ones. Similarly, older, more established or experienced farm operators have generally received larger payments than younger, less experienced ones. Operators under age 35 received slightly smaller payments than the average for operators of all ages and several thousand dollars less than operators ages 35 through 54. Although the younger, less experienced operators were spread across all sizes of farms, on average, they had somewhat smaller farms and produced somewhat less of the crops for which payments are generally made. Producers of wheat, feed grains, rice, cotton, and oilseeds have received most of the farm payments because the payments are generally based on the production of these crops. In addition, the bulk of the payments have gone to a relatively small number of states where the production of these crops has been greater. See appendix I for a more detailed discussion on defining farm size and additional analyses of the distribution of farm payments by (1) the number of farm acres operated, (2) the definition of small farms recommended by the National Commission on Small Farms, which was established by the Secretary of Agriculture in 1997 to examine the status of the nation’s small farms, (3) a new typology developed by USDA’s Economic Research Service that is based on a combination of gross agricultural sales and the occupation of the farm’s principal operator, and (4) individual recipients or payees rather than farming operation. These other analyses produce similar results.
Smaller Farms Have Consistently Received Smaller Payments

Smaller farms have consistently received smaller payments than have larger ones, and this gap has widened. Although small farms (those with less than $50,000 in gross agricultural sales) made up about 76 percent of the farms nationwide in 1999, they received about 14 percent of the payments. Their portion of the payments has fluctuated over the 9-year period of 1991 through 1999, increasing from 23 percent in 1991 to a high of 29 percent in 1995 and then generally starting to decline in 1996 to the low of 14 percent in 1999. In contrast, large farms (those with gross agricultural sales of $250,000 or more) made up about 7 percent of the farms, they received about 45 percent of the payments in 1999. Their share of the payments has also fluctuated but generally increased over the 9-year period, especially since 1996. They received from 28 to 32 percent of the payments in the years from 1991 through 1995 and from 35 to 47 percent in the years from 1996 through 1999.

Small farms have collectively received a relatively small portion of farm payments for two principal reasons. First, a smaller percentage of them has received payments. Second, small farms—by generally producing less of the crops on which the payments are based—have received payments that on average are smaller than those received by larger farms.

In 1999, about 31 percent of the small farms received payments, while over 70 percent of the large and medium farms did. The percentage of the farms receiving payments in all three of these size categories has increased since 1991, when about 60 percent of the large and medium farms and about 22 percent of the small farms received payments. (See fig. 4.) Economic Research Service officials told us that a smaller portion of small farms produce commodities eligible for payments, which helps explain these differences in program participation. For example, beef is not one of the commodities for which farm payments are generally made. According to the Economic Research Service officials, beef is the primary commodity of about 40 percent of small farms, compared to 20 percent of medium farms and 10 percent of large ones.
Average payments remained fairly constant in size over the period of 1991 through 1999, except for 3 years—1993, 1998, and 1999—when total payments increased substantially. In these 3 years, the average payment ranged from $39,167 to $64,737 for large farms and from $14,039 to $21,943 for medium farms. In contrast, small farms’ average payment in these years ranged from $3,778 to $5,068, about the same as for the years of lower total payments. In the other 6 years, the average payment ranged from $22,683 to $26,540 for large farms, from $9,037 to $11,240 for medium farms, and from $3,776 to $5,067 for small farms. (See fig. 5.)
Farms that produce more of the crops eligible under the farm programs generally have received larger farm payments. For example in 1999, large farms received 45 percent of the payments, while accounting for 46 percent of the planted acreage and 52 percent of the value of production of the eligible crops. Small farms received 14 percent of the payments and accounted for 10 percent of planted acreage and 8 percent of the value of production. (See fig. 6.)

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5 These data on the planted acreage and value of production of eligible crops, which are from the Agricultural Resource Management Study, do not include minor oilseeds, such as mustard seed and canola. These crops accounted for less than 1 percent of farm payments in 1999.
Collectively, farm operators under 35 years of age have received a small and declining share of farm payments, principally because the number of young operators receiving payments has been small and declining. Nonetheless, the percentage of the payments they received in 1999 was about the same as the percentage of the nation’s farms they operated and their percentage of the acreage planted in the crops eligible for payments. In addition, in 1999, they operated farms of all sizes—similarly to other age groups—and a higher percentage of them received payments. Their average payment of about $16,544 in 1999 was about the same as the average for all farms and higher than the average of $12,973 for operators that were 55 or older.

In 1999, operators under age 35 received about 6 percent of the farm payments compared to 56 percent for operators that were 35 to 54 years old and 38 percent for those who were 55 or older. (See fig. 7.)
As shown in figure 3, the percentage of farm payments that has gone to operators under age 35 has generally declined over the period of 1991 through 1999. At the same time, the percentage to those 35 through 54 years of age generally increased, while the percentage to those ages 55 or older has generally stayed about the same. For example, operators younger than 35 were receiving about 10 percent of the farm payments in the years 1991 through 1993. The percentage then decreased to 6 in 1999.

The number of farms whose principal operator is under age 35 has decreased substantially over the last decade. In 1991, about 9 percent, or 197,151, of the operators were younger than 35. The number of young principal operators declined to 120,612, or about 6 percent, in 1999. (See fig. 8.) In comparison, the number of principal operators who were 55 or older increased from 993,810, or 47 percent, in 1991 to 1,063,233, or about 49 percent, in 1999.

These data somewhat understate the number of young farmers. The Agricultural Resource Management Study survey data are for farms’ principal operators. Other operators, such as a son working for a father, are likely on some of the farms.
Young operators’ percentage of farm payments in 1999 was about the same as their percentage of the farms operated and of the acreage of the eligible crops planted (see fig. 9).
In 1999, 46 percent of the operators under 35 years old received farm payments. This percentage was greater than that of the other age categories. (See fig. 10.) It was also higher than in previous years. During the period of 1991 through 1999, the percentage of young farmers receiving payments was in the 30s each year, except for 27 percent in 1994, 29 percent in 1996, 42 percent in 1993, and the 46 percent in 1999.
The average payment made in 1999 to farms whose principal operator was less than 35 years old was about $16,544, a little less than the average of $16,751 for all farms receiving payments. Their average payment was also several thousand dollars less than the average of $20,898 for those that were age 35 to 54 but more than the average of $12,973 for those 55 or older. (See fig. 11.)
In 1999, young farmers operated farms of all sizes, just like older farmers. For example, operators age 25 to 34 had a percentage of the largest farms equal to or greater than other age groups and a lesser percentage than other age groups of the smallest farms. (See fig. 12.)
For the most part, farmers under age 35 appear to be in a financial position similar to other farmers. For example, according to USDA, about 43 percent of operators from age 25 to 34 were on farms in a favorable financial position, similar to the percentage for other age groups. The percentage of their farms considered to be in a vulnerable financial position was relatively small at 10 percent, although more than twice the average for all farms. (See fig. 13.)
Most Payments Are Made for a Small Number of Crops and to Producers in a Few States

For the 1999 crop year, two crops—corn and wheat—accounted for about 64 percent of the payments under the farm commodity programs. Five crops—corn, wheat, oilseeds (primarily soybeans), cotton, and rice—accounted for almost 93 percent of the payments. (Collectively, these five crops constitute about two-thirds of the value of U.S. production of field and miscellaneous crops and over half of the value of production of all crops, including fruits, nuts, and vegetables.) These payments were made for production flexibility contracts, marketing loan assistance, market

Favorable: These farms have a debt-to-asset ratio of no more than 0.40 and a positive net farm income. They are generally considered financially stable.

Marginal income: These farms' debt-to-asset ratio is no more than 0.40, but they have negative net farm income. Periods of negative income may not pose financial difficulties if the farm is carrying a low debt load and can either borrow against equity or obtain income from off-farm sources.

Marginal solvency: These farms have a debt-to-asset ratio greater than 0.40 and positive net farm income. A high debt to asset ratio may be acceptable if the farm can generate enough income to service its debt and meet other financial obligations.

Vulnerable: These farms' debt-to-asset ratio is greater than 0.40 and they have a negative net farm income. They are generally considered financially unstable.

Figure 13: The Financial Position of Farm Operators of Various Age Groups, 1999
loss, and disaster assistance. As previously discussed, producers with production flexibility contracts do not have to grow the eligible crops to receive payments for them. (See fig. 14.)

![Figure 14: Percentage of Major Farm Program Payments, by Crop, Crop Year 1999](image)

The percentage of the payments that have been made for the different crops has varied from year to year. Nonetheless, the crops receiving the most payments in 1999 have generally received the most payments over the decade. For example, the payments for corn have fluctuated from a low of about 22 percent in 1993 to a high of 54 percent in 1997 but more often the percentage has been in the 40s. Similarly, wheat has ranged from about 17 percent in 1992 to about 37 percent in 1996 but has generally been in the 20s. The major exception has been oilseeds—primarily soybeans—which accounted for very little, if any, of the payments in the years until 1998 and 1999. Oilseeds’ eligibility for payments is generally limited to marketing loan gains and loan deficiency payments. These two
types of payments increased substantially in 1998 and 1999 because of low farm prices. (See fig. 15.)

Figure 15: Percentage of Major Farm Program Payments by Crop, Crop Years 1990-99

Although all states received some commodity payments for crop year 1999, six states—Iowa, Illinois, Texas, Kansas, Nebraska, and Minnesota—each received over a billion dollars in payments. These states collectively accounted for about 48 percent of the total payments. Six other states each received over $500 million in payments. These 12 states together accounted for about 71 percent of the payments. (See table 3.)
Table 3: The Percentage of Major Farm Program Payments Received by the 12 States Receiving the Largest Amounts, Crop Year 1999

<table>
<thead>
<tr>
<th>State</th>
<th>Dollar amount (in $ billions)</th>
<th>Percentage of total payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>$1.59</td>
<td>9.8</td>
</tr>
<tr>
<td>Illinois</td>
<td>1.47</td>
<td>9.0</td>
</tr>
<tr>
<td>Texas</td>
<td>1.24</td>
<td>7.7</td>
</tr>
<tr>
<td>Kansas</td>
<td>1.21</td>
<td>7.5</td>
</tr>
<tr>
<td>Nebraska</td>
<td>1.17</td>
<td>7.2</td>
</tr>
<tr>
<td>Minnesota</td>
<td>1.07</td>
<td>6.6</td>
</tr>
<tr>
<td>Arkansas</td>
<td>0.72</td>
<td>4.4</td>
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<tr>
<td>North Dakota</td>
<td>0.71</td>
<td>4.4</td>
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<tr>
<td>Indiana</td>
<td>0.71</td>
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<tr>
<td>South Dakota</td>
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<tr>
<td>Missouri</td>
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<td>3.2</td>
</tr>
<tr>
<td>Ohio</td>
<td>0.51</td>
<td>3.1</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$11.47</strong></td>
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</tbody>
</table>

The number of young entrants to farming lags far behind that of retiring farmers. For those who want to enter farming, the major obstacle is the cost of acquiring land, machinery, and other needed capital. Although farm program payments can help beginning farmers, the payments can also make it more difficult to get started because their value is reflected in a higher price for the farmland. While USDA and many states have programs intended to help those wishing to enter farming, the number of young farmers continues to decline. Although some fear that this decline will adversely affect the nation’s food security and the economic well-being of rural communities, USDA maintains that it will not likely affect food production or rural economies.

According to USDA, more than 500,000 farmers will retire between 1992 and 2002. In contrast, during this period, only about half as many are expected to enter farming. Being able to afford farmland is the foremost obstacle facing those who wish to enter farming. Even finding available land can be difficult. The turnover of the land is slow and in many areas, expanding suburbs are reducing the amount of farmland available. Due, in part, to its scarcity, acquiring farmland is an expensive proposition. After a sharp downturn in the early 1980s, land values have since rebounded. For example, according to USDA’s National Agricultural Statistics Service, the value of agricultural real estate reached an all-time high of $1,050 per acre as of January 1, 2000. This value is 75 percent above the low-point of $599
reached in early 1987. According to USDA, it takes an average of $500,000 in assets to fully support a farm household. The amount of assets required, according to Economic Research Service officials, can vary based on factors such as the type of farm and the region in which the farm is located.

Farm program payments are helpful to new farmers once they grow eligible crops. On the other hand, the payments can also pose a barrier to prospective farmers wishing to acquire farmland. Once a farmer becomes eligible for payments, the assistance can help in paying off debts, covering operating expenses, acquiring additional land, and providing a financial buffer during periods of low prices and/or production. However, because most payments are tied to production, as we said earlier, a significant amount of the subsidies go to relatively few, large, established operators. Further, the value of the payments causes sellers to ask higher prices or prospective purchasers to bid up the price of the limited farmland on the market. According to USDA, generally only established farmers are able to acquire farmland that becomes available when farmers retire and sell their land. Accordingly, many young farmers acquire farmland from family members through inheritance or as a gift.

The federal government and states have a number of policies and programs that directly or indirectly help beginning farmers. For example, the Agricultural Credit Improvement Act of 1992 created a beginning farmer down-payment farm ownership loan program. Under this program, USDA makes direct and guaranteed operating and ownership loans available to beginning farmers and ranchers. Since the beginning of this program in fiscal year 1994, USDA has made over 38,000 loans totaling $2.9 billion. The act also directed USDA to create Federal-State Beginning Farmer Partnerships. Under these programs, USDA enters into memoranda of understanding with interested states to provide joint financing for beginning farmers and ranchers. According to USDA’s Farm Service Agency, as of May 2000, the Department has entered into agreements with 16 states and has provided $87 million in down-payment farm ownership funds to help more than 2,000 beginning farmers get started in agricultural careers. Although these loans are helpful in getting started, repaying the loans increases the new farmers’ debt and expenses, which make it more difficult for them to earn an adequate income. The Taxpayer Relief Act of 1997 also helped some beginning farmers by making it easier to transfer family farms across generations by reducing estate tax liabilities on farms.
In addition, several states have programs in place to assist new and beginning farmers’ entry into farming. For example, Iowa established the “Farm On Program.” Similarly, Nebraska’s Center for Rural Affairs Land Link project includes a computerized clearinghouse for matching prospective and beginning farmers with landowners willing to help new farmers; educational programs for beginning farmers; and a farm management service that provides specialized services to landowners who want to lease land to beginning farmers. A fund for financing beginning farmers is also being developed. Other farm states have established similar programs.

Despite these policies and programs, USDA anticipates that the imbalance between retiring and beginning farmers may continue over the next decade. Although some fear this imbalance threatens the nation’s food supply and the economic well-being of rural America, USDA maintains that the fewer, larger, more productive farms will provide adequate food supplies. Moreover, USDA maintains that the nonagricultural economy in rural communities has grown steadily and agriculture’s relative importance as a source for jobs and income in rural communities is declining. As a result, rural areas have been able to maintain a constant non-farm share of the population. Nonetheless, farming is a primary source of income and jobs in some areas—especially the low-populated areas of the nation’s heartland. While these areas shared in the nation’s economic growth during the 1990s, they did not fare as well as other rural areas.

Agency Comments

We provided the Farm Service Agency and the Economic Research Service with a draft of this report for review and comment. The Farm Service Agency and the Economic Research Service generally agreed with the information presented. In addition, they provided several technical and clarifying comments that we incorporated into the report as appropriate.

Scope and Methodology

To determine the distribution of payments by farm size and farm operators’ age, we analyzed Agricultural Resource Management Study data provided by Economic Research Service officials for the years 1991 through 1999. USDA’s National Agricultural Statistics Service collects these data for the Economic Research Service through an annual survey of the nation’s farm operations. To determine the distribution of payments by crop and by state, we analyzed information from the Farm Service Agency’s Program Payments Reporting System. We discussed the results with Economic Research Service and Farm Service Agency officials.
To identify the major barriers facing young people to enter farming, we reviewed available literature and interviewed knowledgeable officials of the Economic Research Service and the Farm Service Agency. Through our literature review and interviews, we also identified USDA’s and states’ programs and initiatives aimed at assisting new and beginning farmers. (App. II contains a more detailed discussion of our scope and methodology.)

We performed our work from August 2000 through May 2001 in accordance with generally accepted government auditing standards. We did not independently assess the accuracy and reliability of the ARMS database and the Program Payments Reporting System.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies of this report to the congressional committees with jurisdiction over farm programs; the Honorable Ann M. Veneman, Secretary of Agriculture; the Honorable Mitchell E. Daniels, Jr., Director of the Office of Management and Budget; and other interested parties. We will also make copies available to others on request.

If you have any questions about this report, please contact me at (202) 512-3841. Major contributors to this report are listed in appendix III.

Sincerely yours,

Lawrence J. Dyckman
Director, Natural Resources and Environment
Appendix I: Additional Analyses of the Distribution of Farm Payments

Although the dollar value of gross agricultural sales is widely used, farm size can be expressed in various other ways, such as the number of farm acres operated (planted in crops). In addition, assigning farms to size categories, such as large or small, is somewhat arbitrary and can be done using various definitions or cutoff levels. For example, the National Commission on Small Farms recommends that farms be considered small if they have gross agricultural sales of less than $250,000. Because this definition includes practically all farms—about 93 percent of them in 1999—we further divided the group into small and medium farms, with large farms being those with sales of $250,000 or more. The Economic Research Service has often used $50,000 in sales as the cutoff for defining a small farm and we chose this amount to define small farms for our analysis. We then considered farms with sales of $50,000 to $249,999 to be medium farms. Recognizing that farm size can be defined in other ways, we also analyzed farm payments by (1) the number of farm acres operated, (2) the National Commission on Small Farms’ definition of a small farm, (3) a new farm typology developed by USDA’s Economic Research Service, and (4) the size of payments received by individual recipients or payees. The Economic Research Service’s new farm typology, which is based primarily on farm size (the dollar value of agricultural sales) and the occupation of a farm’s principal operator, is designed to put the diverse farming sector into more homogenous groups than just large and small farms. Payments for a farming operation can be made to more than one individual, and an individual can generally receive payments for his/her interests in up to three entities.

Farm Acres Operated

In 1999, farms of 1,000 or more acres made up about 8 percent of all farms and received about 52 percent of farm payments. Farms ranging in size from 250 acres to 999 acres comprised 20 percent of the farms and received 37 percent of payments. The remaining 72 percent of the farms operated less than 250 acres; they received 11 percent of the payments. The share of the payments received by farms of 1,000 or more acres declined through 1995 and then increased through 1998, before declining to slightly less than their share in 1991. In contrast, the share of the payments received by farms of less than 250 acres increased to their highest level in 1994 and 1995 and then decreased to the approximate levels they experienced in the years 1991 through 1993. (See fig. 16.)
Under the National Commission’s definition, about 93 percent of farms in 1999 were small. As a result of the large number of these farms, they have received most of the farm payments. However, their share of the payments has been decreasing. For example, from 1991 through 1995, they received about 70 percent of the payments. In 1999, their share was about 55 percent. (See fig. 17.)
Appendix I: Additional Analyses of the Distribution of Farm Payments

ERS’ Farm Typology

The Economic Research Service’s new farm typology categorizes the nation’s farms into five groups of small family farms and three groups of other farms (see table 4).
Appendix I: Additional Analyses of the Distribution of Farm Payments

Table 4: Description of ERS’ Farm Typology

<table>
<thead>
<tr>
<th>Type of farms</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small family farm types</td>
<td>Farms with gross agricultural sales of less than $250,000 that are organized as sole proprietorships, partnerships, or family corporations.</td>
</tr>
<tr>
<td>Limited resource</td>
<td>Any small family farm with gross sales less than $100,000, total farm assets less than $150,000, and total operator household income less than $20,000. Limited resource farmers may report their income as from farming, a nonfarm occupation, or retirement.</td>
</tr>
<tr>
<td>Retirement</td>
<td>Small family farms whose operators report that they are retired (excludes limited resource farms operated by retired farmers).</td>
</tr>
<tr>
<td>Residential/lifestyle</td>
<td>Small family farms whose operators report a major occupation other than farming (excludes limited resource farms with operators reporting a nonfarm major occupation).</td>
</tr>
<tr>
<td>Farming occupation/lower sales</td>
<td>Small family farms with sales less than $100,000 whose operators report farming as their major occupation (excludes limited resource farms whose operators report farming as their major occupation).</td>
</tr>
<tr>
<td>Farming occupation/higher sales</td>
<td>Small family farms with sales between $100,000 and $249,999 whose operators report farming as their major occupation.</td>
</tr>
<tr>
<td>Other farm types</td>
<td>Farms that are not small family farms.</td>
</tr>
<tr>
<td>Large family farms</td>
<td>Farms with sales of $250,000 to $499,999.</td>
</tr>
<tr>
<td>Very large family farms</td>
<td>Farms with sales of $500,000 or more.</td>
</tr>
<tr>
<td>Nonfamily farms</td>
<td>Farms organized as nonfamily corporations or cooperatives, as well as farms operated by hired managers.</td>
</tr>
</tbody>
</table>

The mix of farm types in 1999 changed from 1993, the first year for which these data are available by the farm typology. For example, the limited resource, farming occupation/lower sales, and farming occupation/higher sales farm types decreased as a percentage of total farms from the 1993 levels. At the same time, the retirement, residential/lifestyle, large, very large, and nonfamily types increased. The largest increases were in the residential/lifestyle and retirement farms.

The portion of farm payments received by the individual farm types has also changed from the 1993 levels. For example, the percentage of payments received by the large, very large, and nonfamily farm types increased from 1993 and decreased for the other farm types. These farms also experienced substantial increases in the average payment that they received in 1999, when total payments to all farm types were over 50 percent higher than in 1993. The average payment for farms receiving...
payments either went down or increased only slightly for the limited resource, retirement, residential/lifestyle, and farming occupation/lower sales farms. (See table 5.)

<table>
<thead>
<tr>
<th>Farm type</th>
<th>Percentage of farms in 1993</th>
<th>Percentage of farms in 1999</th>
<th>Percentage of payments in 1993</th>
<th>Percentage of payments in 1999</th>
<th>Average payment in 1993 (in dollars)</th>
<th>Average payment in 1999 (in dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited resource</td>
<td>14</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>4,026</td>
<td>3,924</td>
</tr>
<tr>
<td>Retirement</td>
<td>11</td>
<td>14</td>
<td>5</td>
<td>3</td>
<td>7,457</td>
<td>5,061</td>
</tr>
<tr>
<td>Residential/lifestyle</td>
<td>33</td>
<td>43</td>
<td>10</td>
<td>9</td>
<td>5,715</td>
<td>5,016</td>
</tr>
<tr>
<td>Farming occupation/lower sales</td>
<td>25</td>
<td>22</td>
<td>19</td>
<td>15</td>
<td>8,517</td>
<td>8,833</td>
</tr>
<tr>
<td>Farming occupation/higher sales</td>
<td>10</td>
<td>8</td>
<td>31</td>
<td>25</td>
<td>20,268</td>
<td>27,022</td>
</tr>
<tr>
<td>Large</td>
<td>3</td>
<td>4</td>
<td>18</td>
<td>21</td>
<td>34,674</td>
<td>50,790</td>
</tr>
<tr>
<td>Very large</td>
<td>2</td>
<td>3</td>
<td>13</td>
<td>22</td>
<td>50,763</td>
<td>85,208</td>
</tr>
<tr>
<td>Nonfamily</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>17,934</td>
<td>34,128</td>
</tr>
</tbody>
</table>

Over the last decade, a relatively small portion of recipients has received the bulk of farm payments. For example, from 1990 through 1999, 10 percent of the recipients generally accounted for between 49 and 60 percent of farm crop or commodity payments. (See fig. 18.) Moreover, 20 percent of the recipients generally received from about 69 percent to about 79 percent of the payments.
Figure 18: Percentage of Farm Commodity Payments Received by the Top 10 Percent of Recipients
Appendix II: Scope and Methodology

To determine the distribution of farm payments over the past decade by farm size, the age of farm operators, crop, and state, we analyzed data from USDA’s Agriculture Resource Management Study (ARMS) surveys (formerly the Farm Costs and Returns Surveys) and its Program Payments Reporting System (PPRS). The ARMS surveys are USDA’s primary vehicle for collecting data on a wide range of issues about agriculture resource use and costs and farm financial conditions, while the PPRS is its main database on farm program payments.

The ARMS is an annual survey of U.S. farm operations (excluding institutional operations, such as prisons and Indian reservations) in the 48 contiguous states that is designed and administered by USDA’s National Agricultural Statistics Service. The National Agricultural Statistics Service compiles the survey results and transfers them to USDA’s Economic Research Service (ERS) to maintain and analyze. The surveys are carried out through personal interviews of the principal operator of a random sample of farms selected to be representative of farms nationwide. (Landlords, who under certain circumstances may receive farm payments, are not included in the surveys.) Participation in the surveys is voluntary, and all individual responses are confidential. Survey coverage includes the financial and operating characteristics of farms and their crop and livestock production practices in a given year. For example, it includes data on such aspects as acres operated; crop and livestock production; rents paid and received; income from crops and livestock; other farm income, such as government (farm program) payments; off-farm income; production expenses; assets; debt; the farm operator; and the farm household.

At our request, ERS provided us with summary data from the ARMS surveys for 9 years, 1991 through 1999. The data for 2000 will not be available until later in 2001, and data for the years prior to 1991 were not comparable to these years. In 1992, the National Agricultural Statistics Service revised the procedures that it uses to expand the ARMS sample to create national estimates in order to more accurately account for coverage of farms and nonresponses to the survey. The Service used the new procedures to adjust and resummarize the data for 1991, but not for earlier years.

To determine the distribution of farm payments by farm size, we analyzed the ARMS data provided on the amount of government payments that farms received, the dollar value of their gross agricultural sales, the number of farm acres they operated, and how ERS classified them according to its farm typology, which is based, in part, on gross
agricultural sales. As part of our analysis, we also reviewed ARMS data on the percentage of farms receiving payments, average payments per farm, farms’ percentage of the acreage planted and value of production of the crops for which farm program payments are made, payments as a percentage of gross cash income, and farms’ financial position.

To determine the distribution of farm payments by the age of farm operators, we analyzed the ARMS data on the age of the farms’ principal operators and the amount of payments received by their respective farms. This information also included data on the number of farms reporting payments, the percentage of planted acreage and the value of production of crops eligible for farm payments, payments as a percent of gross cash income, average payments, and the farms’ financial position.

The ARMS surveys ask for the amount of payments received by farms under all federal and state agricultural programs. According to ERS staff, very little, if any, farm payments are made by states.

We used the PPRS to determine the distribution of farm payments by crop and state. The PPRS, which is maintained by the Farm Service Agency, contains a record of the individual payments made under the federal agricultural programs. These data include the payee’s name, the amount of the payment, the program, a farm identifier, the farm’s location, and the crop for which the payment was made. Farm Service Agency officials provided us with electronic files of the PPRS data for the last decade, 1990 through 1999. We limited our analysis to the four major farm program payments—(1) production flexibility contract payments (deficiency payments before 1996), (2) marketing loan gain/loan deficiency payments, (3) crop disaster payments, and (4) market loss payments. Payments under the Conservation Reserve Program are based on the number of acres enrolled in the program rather than the production of a crop or commodity.

To identify the major barriers that make it difficult for young people to enter farming, we reviewed available literature and interviewed knowledgeable Farm Service Agency and Economic Research Service officials. Through our review of the literature and our interviews, we also identified various programs and initiatives of USDA and the states to assist new and beginning farmers.
We performed our work from August 2000 through May 2001 in accordance with generally accepted government auditing standards. We did not independently assess the accuracy and reliability of the ARMS or PPRS databases.
## Appendix III: GAO Contacts and Staff

### Acknowledgments

In addition to those named above, Raymond H. Smith, Jr.; Nancy S. Bowser; Mitchell B. Karpman; Arthur L. James, Jr.; and Charles W. Bausell, Jr., made key contributions to this report.

### GAO Contacts

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