## A financial picture of Colorado agriculture

Part 1
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## **COLORADO STATE UNIVERSITY EXTENSION SERVICE**

Many economic sectors in Colorado have been experiencing financial difficulty over the past several years. What has been the situation in Colorado agriculture? Are farmers' financial problems similar to those of other sectors? Part I of this report examines the level of gross farm sales and family income, while a second report (Part II) focuses on the level of farm indebtedness and the borrowing/credit record of Colorado farmers.

Farm operators were asked, "What was your average gross income from farm sales over the past three years?" A three-year average was used to reduce the impact of a marked variation in gross sales from one year to the next. To illustrate, farm sales were significantly lower in 1981 than they had been in the two previous years.

The average yearly gross farm sales of Colorado farm operators from 1979 through 1981 was \$37,000. However, fewer than half of the farms reported sales in excess of \$30,000.

The 1982 Colorado survey data were compared to those of the 1978 agricultural census. See Table 1. Comparisons between the two time periods show several differences. A smaller percentage of farms reported sales less than \$2,500 and a larger percent reported sales about \$100,000.

Table 1: A comparison of gross farm sales, 1978 and 1982 (percent).

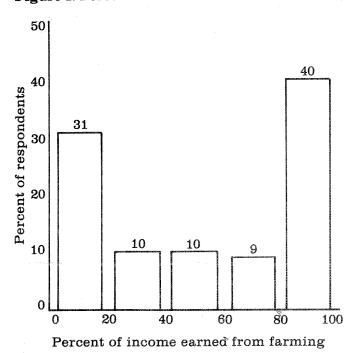
Gross farm sales	1978 Agricultural census (29,544 farms)	1982 Colorado survey (1,050 farms)
Less than \$2,500	24%	13%
\$2,500 to \$9,999	22	16
\$10,000 to \$99,999	41	48
\$100,000 to \$199,999	7	11
\$200,000 to \$499,999	4	7
\$500,000 or more	2	4

The interpretation of these results must be tempered, however, by two factors. First, real differences in gross farm income may not have occurred at all. Inflation may have reduced, or even totally negated, any effect which the higher levels of sales may have had. Second, the agricultural census and the Colorado survey used different time periods—the former for 1978, the latter a yearly average over the last three years.

Gross farm sales do not represent the total income farm operators receive. Many farm families earn income from off-farm employment. Farmers were asked, "For the same period of time (last three years) what was the average percentage of your family's total income from farming?" Figure 1 shows that nearly one-third of the respondents indicated less than 20 percent of their total income came from farm sales. Most farmers, however, earn more than half of their income from farming. In fact, 40 percent earned over 80 percent from farming.

The financial health of farm families is best reflected by examining total family income, including both farm and non-farm income, before taxes. Farmers were asked, "Which of the following categories comes closest to your average annual family income before taxes over the last three years? Please include income from all sources." The average total family income

Figure 1: Percent of income earned from farming.



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over the three-year period was \$22,500. Fifty percent of the families in the survey had incomes of \$21,400 (median) or less. These figures are similar to those for the state as a whole: Median family income for 1980 was \$21,484 (U.S. Census: Colorado, 1980). Figure 2 shows the distribution of average total family income.

## Farm Finances and Selected Characteristics

What factors are related to the three income variables used in the study-farm sales, family income and percent income from farming? The study looked at three factors-farm size, employment of farm operator and ownership structure of farm.

As one might expect, large farms had significantly larger gross farm sales than small farms. For example, for farms of 2,000 acres or more, 71 percent had farm sales of at least \$50,000. whereas only seven percent of the farms this size had less than \$10,000 in farm sales. Similarly, a proportionately higher percent of the total farm income from large farms was derived from

farming. On the other hand, total family income was not related to farm size. Those averaging less than \$15,000 a year were as likely to come from large farms as they were from small farms.

When full-time farmers were compared to part-time farmers or those working off-the-farm full time, full-time farmers had higher gross farm sales (58 percent compared to 32 percent for parttime farmers and only nine percent for those working full-time off the farm). Likewise, fulltime farmers earned a much greater percentage of their total family income from farming than did either part-time farmers or those working off-thefarm full time. Sixty-three percent of the full-time farmers earned at least 80 percent of their total family income from farming, compared to 21 percent of the part-time farmers and less than three percent of those working full-time off the farm.

But amount of time worked on the farm appeared to have little relationship with total family income. For example, part-time farmers and those working off the farm full-time were just as likely to have higher total family incomes than were full-time farmers. Among those families with total incomes of at least \$30,000, 30 percent farm full-time, 29 percent part-time and 37 percent worked full-time off the farm.

Ownership pattern was related to two of the three income variables, gross farm sales and percent of total income from farming. Corporations and partnerships had a higher level of gross farm sales than did individual farm operators. Likewise, 58 percent of corporation owned farms and 48 percent of partnerships earned at least 80 percent of their total family income from farming, compared to 37 percent of the individual farm operators.

Type of ownership was not significantly related, however, to total family income. To illustrate, 39 percent of corporate owned farms earned from \$15,000 to \$30,000, compared to 35 percent for partnerships and 36 percent for individual owned farms. These differences are not significant.

In summary, farm size, employment structure and ownership pattern were related to gross farm sales and percent of total family income derived from farming. These three variables were not correlated, however, with total family income.

## The Sample

Mail questionnaires were sent to 2,520 randomly selected Colorado farm operators. Of the 2,129 delivered questionnaires, 1,123 were returned for a response rate of about 53 percent. The study's margin of error is three percent.

More information on the methods and data from this study are available from the authors.

