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WHERE HAVE ALL THE FARMERS GONE — OR HAVE THEY?

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Most Americans would readily concede that the number of farmers in the nation has experienced rapid decline in the past decade. In Minnesota alone, for example, the number of farmers reported by the agricultural census declined from 145,639 in 1959 to 110,747 in the 1969 enumeration. These drastic changes in farm numbers have led many to believe that the opportunities for engaging in production agriculture have sharply diminished and that the agricultural resources are being concentrated in the hands of but a few "super" farmers.

Important to the interpretation of the sharp decline in farm numbers is the definition used to describe the characteristics of a farm. Reports of farm numbers are based on agricultural census definitions of a farm. The census counts farms and farmers using the following scheme: "Places of less than 10 acres were counted if the sales of agricultural products amounted or normally would amount to at least \$250. Places of 10 acres or more were counted as farms if the rate of agricultural products for the year amounted or normally would amount to at least \$50."¹

When planning programs in agricultural education or when studying the impact of programs already in existence, the census definition falls short of differentiating those who make their living or a substantial part of their living as farmers from workers in other occupations. The census

definition of a farm must be modified to allow the planners and evaluators of vocational education to identify clientele for whom educational efforts should be directed and to determine if the educational needs of target groups have indeed been met.

Who is a "farmer"?

The authors chose to redefine a farmer before examining the question of "Where have all the farmers gone?" This definition is based upon the arbitrary decision that the minimum level of family income for the Minnesota family must be at or near \$5,000 per year if the family is to enjoy a very modest level of living. Recognizing that family income can be derived from both farm and non-farm sources, the proposed definition will restrict the term "farmer" to those persons who derive half or more of the needed family income from operation of a farm.

Using these restrictions — a minimum income level of \$5,000, half or more of which comes from the farm — the proposed definition now identifies as farmers those who are reported to have made farm sales of \$10,000 or more, in order to provide the \$2,500 farm share of family income necessary to meet the minimum income restrictions (one-half of \$5,000).

Choosing \$10,000 as the minimum sales level is based on studies of farm types which indicate that the costs of producing a dollar of farm sales for the period 1968-1971 on Minnesota farms varied from \$.64 on small dairy farms to as much as \$.96 on farms with hogs-beef cattle as major enterprises. Recognizing the tendency of smaller farms to be more conservative in spending habits, a \$.75 level was chosen as a reasonable approximation of the cost of producing a dollar of farm sales. Thus it would require an income from farm sales of \$10,000 to

supply the \$2,500 family income needed to satisfy our definition of a farmer.

It is recognized that the assumptions made in selecting farms with gross farm sales of \$10,000 or more may exclude from the farm count some farms of smaller gross income that are supplying more than half of the income for family living. Small farms with highly specialized production enterprises may realize more than 25 percent of their gross income as net income. By the same token, some farms with greater than \$10,000 gross sales fail to realize the \$2,500 in net farm income needed to qualify for the authors' definition of a farm. An assumption that an equal number of farms would be in each of the circumstances described has been made in order to examine the changes in farm numbers.

Farms identified by the authors' definition account for a major proportion of the total production agricultural resources devoted to the production of food and fiber. While this definition includes only 48.6 percent of the farms reported in the census of agriculture, it represents 67.5 percent of all harvested crop land and 86.7 percent of the income derived from the sale of agricultural products.²

highly significant. Farm prices for the enumeration period for the 1969 census were only 8 percent above the average 1957-1959 price level for agricultural products.⁴ This 8 percent rise in price levels falls far short of accounting for the increase of 29 percent in the number of farms meeting the definition criteria.

What are some characteristics of farmers?

A good overview of what farmers are like and the kinds of business farmers manage can be obtained by looking at a profile of some key characteristics. (See Table 2.)⁵ First, what are the farmers themselves like? Eighty percent are between 35 and 64 years of age with an average near 45, which means that at least one-half of them will still have 20 years in the business of farming. Seventy percent of farmers do not work off the farm — they are full-time farmers and depend on the farm business for their livelihood. In terms of farm tenure or ownership, about 45 percent of farmers own the land they manage while 41 percent rent additional land and 14 percent rent all of their land. Therefore, renting additional land resources is not an uncommon practice for farmers as defined in this paper. Eighty-six percent of farmers operate an individually owned or family farm. Corporation owned farms account for less than one percent of the farmers.

A look at the businesses farmers manage indicates that the average farm size is about 360 acres, which is larger than one might have expected. About 85 percent of the businesses sell between \$10,000 and \$40,000 worth of products. Of total sales, 70 percent of the farmers disbursed between \$5,000 and \$50,000 for production expenses. These sales were generated by combining management with farms valued at \$40,000 to \$500,000 for 78 percent of the farmers and machinery and equipment valued at \$5,000 to \$50,000 on about 85 percent of the farms. About twice as many dollars of income were generated from sales of livestock, poultry

TABLE 1.
CHANGES IN
NUMBERS OF FARMERS, 1959-1969
FARMS WITH FARM SALES OF
\$10,000 OR MORE.³

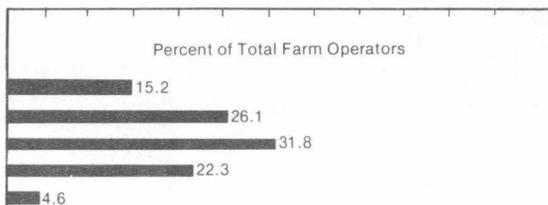
Value of Farm Product Sales	1959	1964	1969
\$100,000 or more	2,330	537	1,229
\$40,000 to 99,999	—	2,901	6,086
\$20,000 to 39,999	7,503	11,384	19,509
\$10,000 to 19,999	28,428	31,410	27,081
Total	38,261	46,232	53,905

Table 1 reflects an average growth rate of about 1,500 farms per year during the period studied. While it is true that the effects of inflation within the economy have not been accounted for, the gain in the number of farms of a sales volume large enough to meet the definition proposed for a farmer is

TABLE 2.
CHARACTERISTICS OF FARMS
WITH FARM SALES OF \$10,000
OR MORE IN 1969.

Farm operators by age:

- Under 35 years
- 35 to 44 years
- 45 to 54 years
- 55 to 64 years
- 65 years and older



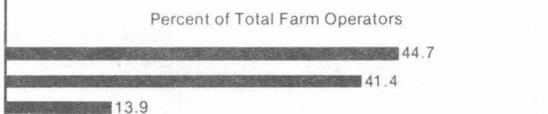
Farm operators working off their farms:

- None
- 1 to 49 days
- 50 to 99 days
- 100 days or more



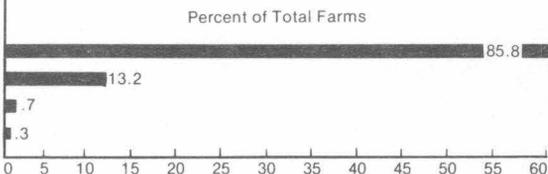
Farm operators by tenure:

- Full owners
- Part owners
- Tenants



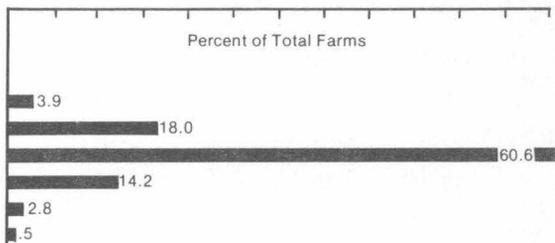
Farms by type of organization:

- Individual or family
- Partnership
- Corporation including family owned
- Other



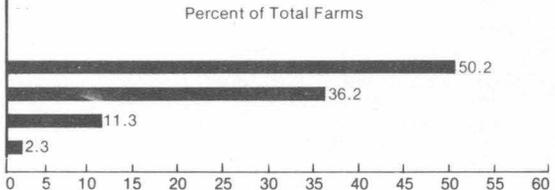
Farms by size:

- 1 to 99 acres
- 100 to 179 acres
- 180 to 499 acres
- 500 to 999 acres
- 1000 to 1999 acres
- 2000 acres and over

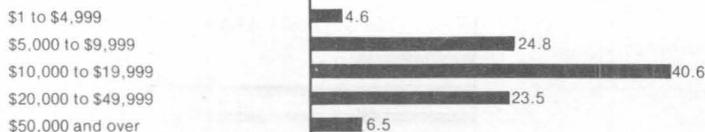


Farms by value of agriculture products sold:

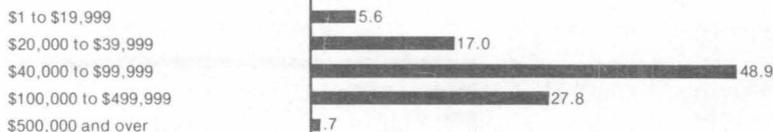
- \$10,000 to 19,999
- \$20,000 to \$39,999
- \$40,000 to \$99,999
- \$100,000 and over



Farms by amount of total production expenses:



Farms by value of farm:



Sources of farm income:

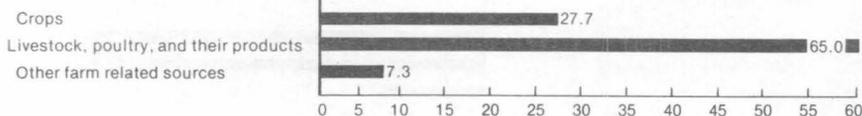
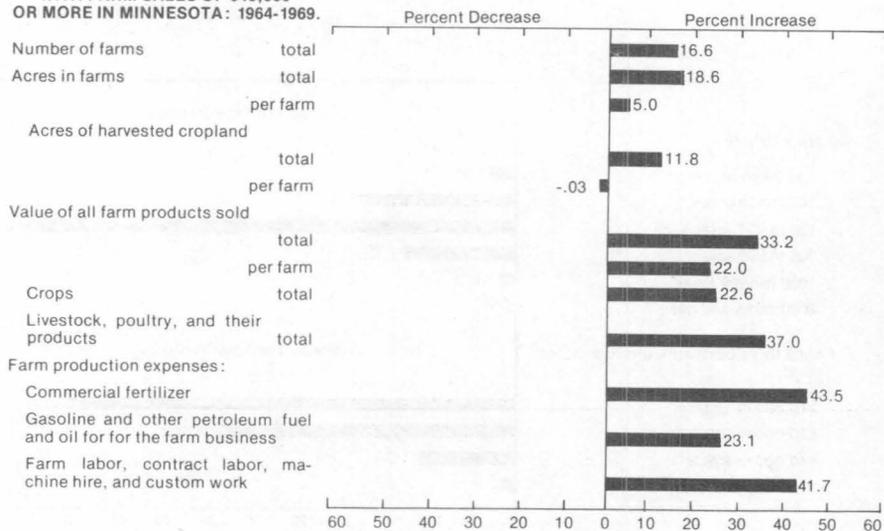


TABLE 3.
CHANGES IN FARMS
WITH FARM SALES OF \$10,000
OR MORE IN MINNESOTA: 1964-1969.



and their products (65 percent) as compared to crops (28 percent).

In summary, most farmers are family farmers who work at farming full-time and who have a considerable number of years left in the business of farming. These farmers handle cash flows counted in five figures and resources counted in six. They are, in fact, managers of sizeable businesses.

How have farmers been changing?

Some indication of change in farm businesses can be gleaned by comparing farmers in 1964 and 1969 — a five year spread and the most recent data available. (See Table 3.)⁶ The number of farmers increased by about 17 percent or roughly three percent each year. Average farm size and crop land harvested stayed fairly stable between 1964 and 1969 (an increase of five percent and decrease of .03 percent respectively). Therefore the increase in total acres in farms and crop land harvested (18.6 and 11.6 respectively) was caused mainly by the increase in number of farmers with gross sales of \$10,000 or more. The value of farm products increased by one-third during the five year period. This is an important figure since it relates to the volume of activity in communities supplying services to farmers and processing and distributing farm products. This increased need for service and dependency on technology is borne out by the changes in selected farm production expenses such as commercial fertilizer, gasoline and petroleum, and hired farm labor. Using the proposed definition of a farmer and the 1964 and 1969 census data as a reference point, farmers are not only increasing in number (at a rate of about 17 percent between 1964 and 1969) but the volume of their business is also increasing (22 percent between 1964 and 1969), based upon per farm increases in farm sales.

Where have all the farmers gone?

The previous paragraphs have entertained the thesis that farmers have not gone anywhere. A more appropriate

question would be, "Where have all the farmers come from?"

A more important question, however, is what impact does this change in farm numbers have on the decisions that program planners and evaluators must make? An obvious conclusion is that the opportunities for one to engage in production agriculture on a scale that will provide at least a minimum family living are increasing instead of declining. This fact is made more evident when one considers the decline in family size and the resulting increase in the probability that an economic sized farm business will become available as a viable alternative occupational choice for a young man raised on a farm.

As farms increase in size and complexity, the nature of educational preparation for a farming occupation may also need revision. The increased interest in both high school and post-secondary vocational agriculture is a natural response to the recognition of the increased demands for training in agricultural technology as preparation for a career in production agriculture.

Educational planners and evaluators should be alert to the educational characteristics of the agricultural clientele. To rely upon the census description of the age of farmers will only lead them astray. The farmer of today's agriculture is not the man of twilight years as the census would suggest. He is, in fact, a businessman in the prime of his business career. Twenty good years of production before normal retirement remain for the

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average farmer. These are twenty years in which opportunity for upgrading adult education must be provided. And for the younger half of the farm operator population, the demands for sound programs of vocational agriculture for adults will be even more intense. Educators are generally aware that those who need education and have more of it, are those who demand still more to keep up with the demands of their employment. As men and women with higher and higher levels of education become engaged in production agriculture, the demand for continuing education can be expected to increase instead of decline.

It is likely that the rural communities and particularly the small rural town merchant, will find little solace in the revelation that the number of farmers is on the increase. Vacant store fronts and declining business activity are stark reminders that small farmers, excluded by the authors' definition, are indeed important members of the community. It is with this group of small or part-time farmers that the rapid decline in farm numbers is taking its toll.

But agriculture must look upon its changing character as a challenge and an opportunity — a challenge to preserve and enhance those qualities of farm life and rural living that hold an attraction to rural town and farm dwellers, and an opportunity to provide full-time production agricultural employment to those who possess the technological skills, the management ability and the personal desire for self-direction, that they may do their part "in that inspiring task."

We are now engaging in a year of unprecedented prosperity for most types of farm businesses. It is again a year when the Bureau of the Census will enumerate the nature and characteristics of American agriculture. The results of that enumeration will not be available for many months as the long and arduous process of analyzing the results of the census data takes place. It may be well to speculate, while one awaits the report, on how the nature of the farm business has changed during

the intervening five years since the last census. It may be equally worthy to assess the educational programs available for training in the many agricultural occupations to determine if they have indeed kept pace with changing occupational demands.

It is doubtful that the definition of a farm suggested in this paper will be adequate to describe a farmer in the 1974 economy. The income required for a minimum level of living, the net return on farm sales, and the volume of sales required to produce a minimum increase level will all be subject to careful review. In spite of these reconsiderations, one conclusion will be evident. Minnesota agriculture is a dynamic industry with growing opportunities for young men and women to become engaged in producing the food and fiber upon which so much of the world depends.

FOOTNOTES

- 1 **1969 Census of Agriculture**, Part 15, Minnesota: Section 1, Summary Data; p. V.
- 2 *Ibid.*
- 3 *Ibid.*, 1959, 1964, 1969.
- 4 **The World Book Year Book**, 1969, Field Enterprises Educational Corporation, Chicago.
- 5 Data presented in Table 2 and discussed in this section were taken from the **1969 Census of Agriculture** for Minnesota and include only farms with farm product sales of \$10,000 or more.
- 6 Data presented in Table 3 and discussed in this section were taken from the **1964 and 1969 Census of Agriculture** for Minnesota and include only farms with farm products sales of \$10,000 or more.