Ohio Farm Household Longitudinal Study\*

Department of Agricultural Economics and Rural Sociology The Ohio State University ESO 1501, August 1, 1988

#### Ohio Farm Household Income

The Ohio Farm Longitudinal Study is analyzing the financial performance and farm management practices of approximately 900 farm households over several years. March to May, farmers in the sample are contacted by telephone and asked to share information about their households and businesses. This report and others following it will summarize the information gathered in spring, 1988. Financial data also was collected during the same period last year, which allows comparisons to be made between farms' 1987 financial performance and that of a year earlier.

Farm households in the sample are representative of the 70,000-80,000 households operating farms in Ohio. They were randomly selected from the population of those operating farms and fully depict the range of conditions existing on Ohio farms. Approximately 675 of the 900 households have participated in the study during both 1987 and 1988, and about 225 of the households interviewed last year were replaced in 1988 by other randomly selected households.

This report focuses on farm household income and sources of this income. The general picture that emerges in this summary is that (a) net farm income improved slightly during 1987; (b) for the "average" farm household, income from off the farm continued to be a major source of household income; and (c) for the "commercial" farm, the farm business generated the major share of household income.

# Size Distribution of Ohio Farms

Ohio has numerous part-time farmers who operate relatively small farms and earn most of their household income off the farm. These part-time farmers strongly influence the characteristics of the "average" farm household, which lumps together all house-

holds in the sample. In this discussion, farms are separated into sales classes to depict conditions (Table 1). Also, "average" and "commercial" farm households are discussed. The "commercial" farms are defined as those farm households producing \$100,000 or more in gross farm sales. These commercial farms comprise only about 17 percent of all farms, but they produce nearly two-thirds of the state's farm products.

#### Net Farm Income

In 1987, net farm income totaled \$7,300 for the "average" farm household and \$34,800 for the "commercial" farm household (Table 2). Net farm income is calculated by adding all farm receipts, subtracting expenses including depreciation, and adjusting for inventory changes. It is the return to all resources owned by the family that contributed to the farm operation. It includes returns to unpaid family and operator labor and to management, returns to owned capital, as well as profit. For farms in the largest sales class (annual sales of \$500,000 and more), net farm income is relatively large, but it includes returns to a sizable amount two or more of unpaid labor and capital: full time unpaid family members as well as a return to an average of \$1 million in farm eauity.

For the "average" farm household, net farm income in 1987 was up from about \$5,900 in 1986; for the "commercial" farm, 1987 net farm income was up from the 1986 total of \$32,400.

### Off-Farm Income

For the "average" farm household, offfarm income sources provide about \$25,200 annually or about 75 percent of all household income. Obviously, the "average" farm

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views farming as only a supplementary income source. However, for "commercial" farm households, which are responsible for producing two-thirds of the state's farm products, off-farm income totals about \$15,000 or only 30 percent of all household income. Off-farm income includes all wages and salaries earned off the farm, self employment income, social security payments, interest income, rental payments, unemployment insurance, and public assistance benefits.

A substantial share of this off-farm income comes from wages and salaries earned by farm operators and their spouses. For "average" farm households, nearly one-half of the operators work off the farm, and 44 percent of married operators' spouses also work off the farm (Figure 1). In "commercial" farm households, few operators work off the farm, but about 40 percent of married operators' spouses work off the farm.

Thus, the off-farm income difference between the "average" and "commercial" farm households is mostly due to operator off-farm work. On the larger commercial farm, the operator devotes nearly all labor to farming and mostly forgoes off-farm wages. On the average farm, the operator's and spouse's off farm employment is the most important source of household income, and farming typically supplements (but sometimes detracts from) household income.

## Summary

The picture that emerges from 1987 farm household income data is that 1987 was a better year than 1986. Incomes from both farm and off-farm sources were up. Farm operators and spouses continued to use off-farm employment opportunities to provide most household income; however, commercial farm families, upon which Ohio depends for most of its agricultural production, were able to earn most of their household income from the farming operation.

## Impact of Drought on Farm Household Income

The trends that emerge from this analysis show rising income and reduced financial stress from 1986 to 1987. However. Ohio has suffered through severe drought from spring until mid-July. Undoubtedly, farm household income will decline this year as a result of reduced yields, higher feed costs, and culling of Higher crop prices and government drought assistance programs promise to soften the drought induced impacts. Preliminary projections of the impact of the drought on these 900 farm operations indicate that net farm income will be down substantially for 1988. Household income may be down as much as 50 percent for the "commercial" farms and 25 percent for the "average" farm.



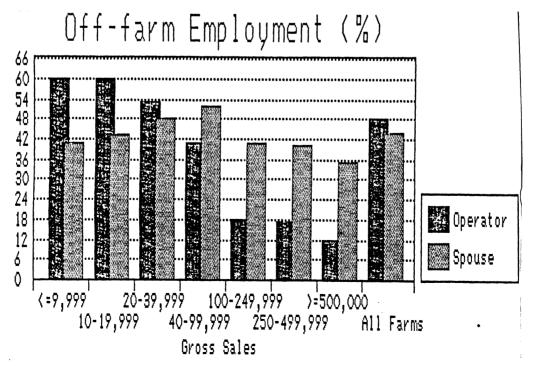


Table 1. Ohio Farm Households: Farm Numbers and Farm Sales Distributions, by Sales Class, 1987.

Sales Class	Farm Numbers (Percent of Total)	Farm Product Sales (Percent of Total)	Gross Sales per Farm (\$)	
Less than \$10,000	31.9	2.3	3,970	
10-19,999	15.0	3.9	14,270	
20-39,999	16.0	8.4	28,910	
40-99,999	20.2	23.3	63,880	
100-249,999	13.6	38.0	154,510	
250-499,999	2.9	18.1	345,875	
500,000 and greater	0.5	6.0	657,940	
All Farms				
("Average")	100.0	100.0	55,270	
Farms with \$100,000 more in gross sales	•			
("Commercial")	17.0	62.1	201,970	

Table 2. Ohio Farm Households: Net Farm Income, Off-Farm Income, and Total Household Income per Household.

Sales Class	Net	Farm	Non-Far	m Income	Total H	<b>lousehold</b>		
	Income	Income per Farm		per Farm		Income per Farm		
	1986	1987	1986	1987	1986	1987		
	\$1,000							
Less than \$10,000	-2.1	-2.5	24.0	31.4	21.9	28.9		
10-19,999	-2.6	-2.2	23.5	26.1	20.9	23.9		
20-39,999	-1.2	5.4	23.4	30.9	22.2	36.4		
40-99,999	8.5	7.9	18.7	19.0	27.2	26.9		
100-249,999	26.0	25.7	18.0	12.8	44.0	38.5		
250-499,999	43.7	61.4	18.1	24.5	61.8	85.9		
500,000 and greater	140.7	127.8	19.1	17.9	159.8	145.7		
All Farms								
("Average")	5.9	7.3	21.8	25.2	27.7	32.5		
Farms with \$100,000 and more in gross sales								
("Commercial")	32.4	34.8	18.1	15.0	50.5	49.7		