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Management Factors that Influence Farm Profits in Southwest Illinois

A study based on records
from more than a hundred farms in the wheat
and dairy area neighboring St. Louis.

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most profitable crops at a low cost. The farm is a well-balanced unit, requiring no feed purchases except supplementary feeds to make a better balanced ration.

SUMMARY

This bulletin aims to analyze and measure the important management factors that have caused wide differences in income among farms in the dairy and wheat area of Illinois neighboring St. Louis, known as farming-type Area 7 and including the greater part of Madison, Bond, Clinton, St. Clair, Washington, Monroe, and Randolph counties.

The farms in the area are small, family-sized farms operated without much hired labor. They average about 130 acres, according to the 1930 Census. The farms included in this study average about 165 acres.

While the soils of the area in general are not so highly productive as those of some other areas of Illinois, under good management they are capable of producing better crop yields than many operators are obtaining.

Winter wheat has occupied about 40 percent of the crop land in recent years, corn about 20 percent. The land adjacent to small streams is cut into hills and valleys suited only to permanent bluegrass pasture.

Milk production has about doubled in the past twenty-five years, displacing hog and sheep production to quite an extent. About 80 percent of the whole milk used in St. Louis is produced in Illinois and most of it in this area. Livestock raising, aside from the production of milk and poultry, is of minor importance. Only enough pigs are raised and fattened to supply meat for the family or to sell to neighbors for butchering.

Among a group of 114 farms studied, the 23 most profitable earned in 1927, a normal crop year, 9.4 percent on an average capital investment of \$19,430; the 23 least profitable failed by 2.6 to earn anything on an average capital investment of \$14,474. (*Pages 419-20*)

In terms of "labor and management wage," the most profitable farms earned \$1,463; the least profitable failed by \$538 to have anything for their labor and management. In terms of "net income from investment and management" the most profitable had a return of \$1,834; the least profitable were short \$372 of realizing anything. (*Pages 419-20*)

What were the important management factors that influenced these differences in earnings? The results of this study show that the factor of first importance was the larger volume of business which the most profitable farms developed. This was obtained thru higher acre-yields

of crops, the planting of a larger proportion of the crop land to the higher-profit crops, and the carrying of more livestock and livestock of better grades. Better utilization of labor and power, and more conservative expenditures for buildings and equipment considering volume of business, were also factors in causing the difference in earnings.

1. *Larger Volume of Business.* With only 11 percent more expense, the most profitable farms handled 174 percent more business than the least profitable farms. Volume of business is of special importance in this area, where farms often contain less than 100 acres and where the soil is not naturally highly productive. (Pages 420-22)

2. *Higher Acre-Yields.* Wheat yielded 6.8 bushels more an acre in 1927 on the most profitable farms than on the least; corn 19.3 bushels more, oats 5 bushels more, and hay 1,200 pounds more. These higher yields lowered unit costs. (Pages 422-25)

3. *Larger Proportion of Higher-Profit Crops.* The most profitable farms had 32 percent of their crop area in corn, the least profitable 20 percent. While the least profitable farms had the largest proportion of wheat in the rotation, their lower yields destroyed any advantage they might have reaped from this arrangement. The most profitable farms had only 11 percent of the crop area in oats; the least profitable farms had 15 percent. The most profitable farms had 5 percent of their crop area in alfalfa, the least profitable 3 percent. The least profitable farms had more of their area in timothy than in any other hay crop in spite of the fact that the crop was yielding only 1.1 tons an acre and that there is practically no justification for continuing to raise the crop at all in this area. (Pages 425-31)

4. *Marketing Crops Thru Livestock.* The 23 most profitable farms sold \$2,574 worth of livestock and livestock products; the 23 least profitable, \$1,299. The most profitable carried 26.2 percent more productive livestock than the least profitable. They had an investment of \$9.50 an acre in productive livestock, the least profitable \$5.76 an acre. A large part of the difference in income from livestock occurred in receipts from hogs, which were \$844 on the most profitable farms and \$186 on the least profitable; and in receipts from dairy products, which were \$992 on the most profitable farms and \$519 on the least profitable. (Tables 9 and 13, and pages 431-36)

5. *Better Grades of Livestock.* On the 23 most profitable farms the livestock enterprises returned \$167 per animal unit, on the least profitable farms \$106. For every \$100 invested in livestock, the most profitable farms sold \$43 more livestock and livestock products than the least profitable group. This was one of the most important single

causes for the differences in incomes between the two groups of farms. (Pages 436-38)

6. *Utilizing Labor to Better Advantage.* While the most profitable farms had a labor cost of \$6.48 an acre, and the least profitable only \$5.53, the most profitable farms used their labor to better advantage. Their accounts showed an average cost of \$27 in hired and family labor for every \$100 of income; the least profitable farms had a labor cost more than twice as large—\$67 to \$100 each of income. (Page 438). The layout of fields and buildings, the way in which crops are combined in rotations, and the way in which livestock are fitted into the farm scheme, are recognized as important factors affecting labor costs. (Pages 446-48)

7. *Keeping Down Power and Machinery Costs.* Power and machinery costs were 44 cents an acre higher on the most profitable farms than on the least profitable, but they were smaller in relation to income on the most profitable farms. An intensive study of 18 Clinton county farms revealed a range of 6 to 18 cents as the hour-cost of horse labor on the different farms, 62 cents to \$2.86 as the hour-cost of a two-plow tractor. On the farm with the lowest labor cost the horses average 957 work hours each a year, at a cost per horse for feed and care of \$60.76. On the farm with the highest cost the horses averaged only 445 work hours each and cost \$136.34 each. (Pages 439-44)

8. *Buildings and Equipment.* For buildings and fences and other miscellaneous equipment the most profitable farms had a charge of \$3.46 an acre, the least profitable \$2.72 an acre (page 446); but the gross receipts on the most profitable farms were three times as large per acre as those on the least profitable farms. (Table 2, page 420)

Diversification of Crops and Adjustment to Market Conditions. Altho it is a matter of common observation that diversification of crops is a good form of insurance against a bad growing season or an adverse market for any individual crop, and that certain adjustments to market conditions are profitable in the long run and others are not, it was not possible in the present study to make any exact measurement of the financial advantages accruing from these management factors. (Pages 448-51)

Importance of Balanced Farming. If the most profitable and least profitable farms had each averaged 165.4 acres, the average of all 114, their net incomes would have differed by \$2,332, owing to differences in management mentioned above and to other unmeasured factors. Further analysis indicates that the farms that earned the highest re-

turns on their capital were those that excelled in the greatest number of good management factors—not those that excelled in some one or two particulars and fell far short in others. In other words, *it was balanced farming that made profitable farming.* (Pages 452-55)

That balanced farming does not mean adherence to some particular system of farming is indicated by the fact that among the most profitable farms five very different systems were represented—general farming, cash grain, dairy and wheat, poultry, and general livestock. (Pages 455-60)

Since good balance is the primary consideration in profitable farming, it is suggested that farmers in this area direct their attention to improving the efficiency of the enterprises in which they are weak, and increasing the size of the enterprises in which they are efficient, rather than place their principal efforts on further improving the enterprises in which they are already reasonably efficient.