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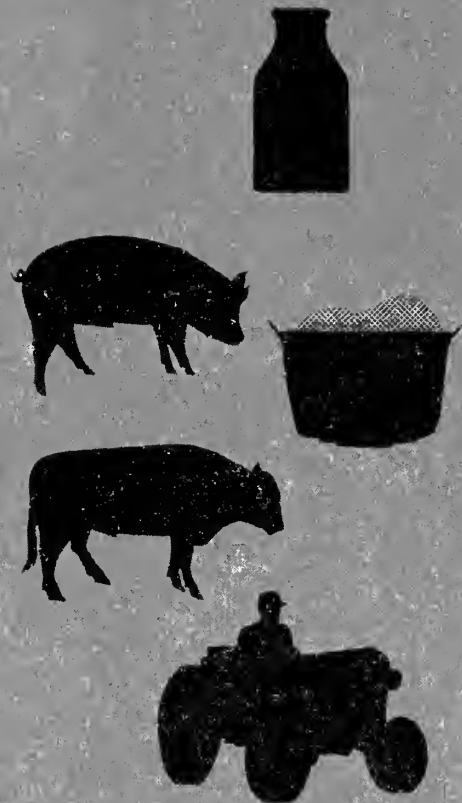
CIRCULAR 915

AGRICULTURE

SUMMARY OF ILLINOIS FARM BUSINESS RECORDS

Commercial Farms:

PRODUCTION
COSTS
INCOME
INVESTMENTS



UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE
COOPERATIVE EXTENSION SERVICE
CIRCULAR 915

Source of Data

This report is based on data obtained from farm business records on 6,200 Illinois farms. It is the 40th in a series of annual summaries of such records obtained from farmers cooperating with the Department of Agricultural Economics and the Illinois Farm Bureau Farm Management Service.

At present about 1 out of every 9 full-time commercial farmers (farmers with \$10,000 or more of gross sales) in Illinois is enrolled in this service. The service has grown steadily, and in 1965 there were 10 associations in 102 counties served by 39 full-time fieldmen. Participation in this farm business analysis service is voluntary, and cooperating farmers pay a fee for the services received.

| <i>Year</i> | <i>Associa- tions</i> | <i>Counties partici- pating</i> | <i>Fieldmen employed</i> | <i>Farmers enrolled</i> |
|-------------|---------------------------|---|------------------------------|-----------------------------|
| 1940..... | 3 | 23 | 3 | 680 |
| 1945..... | 8 | 54 | 9 | 1,830 |
| 1950..... | 8 | 59 | 15 | 2,760 |
| 1955..... | 9 | 89 | 24 | 4,501 |
| 1960..... | 10 | 100 | 33 | 5,494 |
| 1965..... | 10 | 102 | 39 | 6,366 |

Over 95 percent of the 6,200 farms in this report fall within the size of business of Economic Classes I, II, and III, as defined in the 1959 Census of Agriculture. These three classes include farms selling \$10,000 or more of farm products per year.

The segment of Illinois agriculture that includes Economic Class I, II, and III farms is often referred to as "commercial farming." In 1959 commercial farms represented 40 percent of the total number of farms and 63 percent of the land area; they produced 79 percent of the value of products sold from Illinois farms.

Although the record-keeping farms are largely

within the first three economic classes, they are not proportionately distributed among the groups. Farms are identified as Economic Class I if they sell more than \$40,000 worth of products a year. In 1959, the Census of Agriculture identified 5,699 Illinois farms in Economic Class I. Almost one-fourth of these farms were enrolled in the Illinois Farm Bureau Farm Management Service program. There were 38,848 Economic Class III farms in the 1959 Census of Agriculture (farms with sales ranging from \$10,000 to \$19,999); only 3.7 percent of these farms were enrolled in the record-keeping program.

The data presented in this report are group averages identified by size of business, type of farm, and quality of soil found on the farm. Where segments of Illinois agriculture are identified by these criteria, the data from record-keeping farms may be used with reasonable confidence, even though the record-keeping farms as a group do not represent a cross-section of all commercial farms in the state.

The farm management program on which this report is based is designed to aid Illinois farmers in two ways: (1) through the individual farm business analysis provided to the farmers who are active members of the program and (2) through the comprehensive information provided to farm management extension and research workers and other individuals working with and assisting Illinois farmers with the problems resulting from a changing and dynamic agriculture.

This report provides current information on production, costs, income, and investments in the farm business for different groups of farms and farm enterprises. Some specific uses for these data are to provide physical and dollar measures of performance on individual farms, guides for planning farming operations, and data for financial budgeting and planning.

Organization of the Report

Except for a comparison of cost and income changes on selected samples of farms, this report contains annual data for the calendar year 1964, including descriptive facts, inputs or costs, and output or income data about the farms and their livestock enterprises.

The incomes reported in Tables 1 through 3 for four types of farms in northern Illinois and three types in southern Illinois are indicative of the income, costs, and farm earnings experienced in 1964 by selected segments of Illinois farms. Similar data for 1963 and a 10-year average provide a comparison with other years.

Data for all the major livestock enterprises for

1964 are included in Tables 4 through 10. Because a large proportion of the feed grains and roughage produced on Illinois farms is marketed through livestock, the margins of income from livestock enterprises are important in interpreting the economic results of farming operations.

Tables 12 through 16 report costs, returns, financial summaries, investments, land use, and crop yields for several sizes and types of farms in northern and southern Illinois. The definitions of terms and accounting measures that precede these tables will aid in using the data.

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SUMMARY OF ILLINOIS FARM BUSINESS RECORDS, 1964

Farm business trends in 1964

The basic source of income on Illinois farms is crop production. Year-to-year variations in net farm income are related to variable climatic conditions and their effect on crop yields. In 1964, average corn yields for the state as reported by the Illinois Crop Reporting Service were 78 bushels an acre—down 7 bushels an acre from the record yields of 1963.

Rainfall during the growing season was below normal. The southern half of Illinois was adversely affected by an extended dry period in August. According to crop reporting estimates, corn yields for the four southern crop reporting districts ranged from 17 to 20 bushels an acre below 1963 yields.¹ On the other hand, 1964 corn yields in the northern one-third of Illinois were from 2 to 5 bushels above the 1963 yields.

Crop and livestock prices. Another major determinant of change in farm income is the price farmers receive for crop and livestock products. In 1964, market prices received by farm account cooperators for all grain crops were very close to 1963 price levels. Wheat was the only exception, although the drop in market price from 1963 to 1964 was offset in part by direct payments to farmers that participated in the 1964 wheat program.

Market prices for hogs, milk, and eggs in 1964 were very close to 1963 levels. Although average market prices for fed cattle in 1964 were \$1.08 per hundred-weight below the 1963 average, the prices paid for replacement feeder cattle were even lower, about \$3.50 below 1963 levels.

Farming adjustments. The number of farms in Illinois was estimated at 141,000 in 1964. The average number of acres per farm was 213, compared with 176 acres per farm in 1955.¹ In addition to the increase in size of farm, other adjustments are taking place on Illinois farms. Studies of farm records reveal that farmers are using more intensive land-use patterns, increasing the size of livestock enterprises on specialized farms, and eliminating small livestock enterprises on general farms. Even though the size of farm and the sizes of livestock enterprises have increased, the average months of labor per farm has changed very little in the past ten years. The combined effect of increased size of business and the adoption of output-increasing technology has greatly increased total farm production per man.

¹ Illinois Cooperative Crop Reporting Service, Bulletin 65-1.

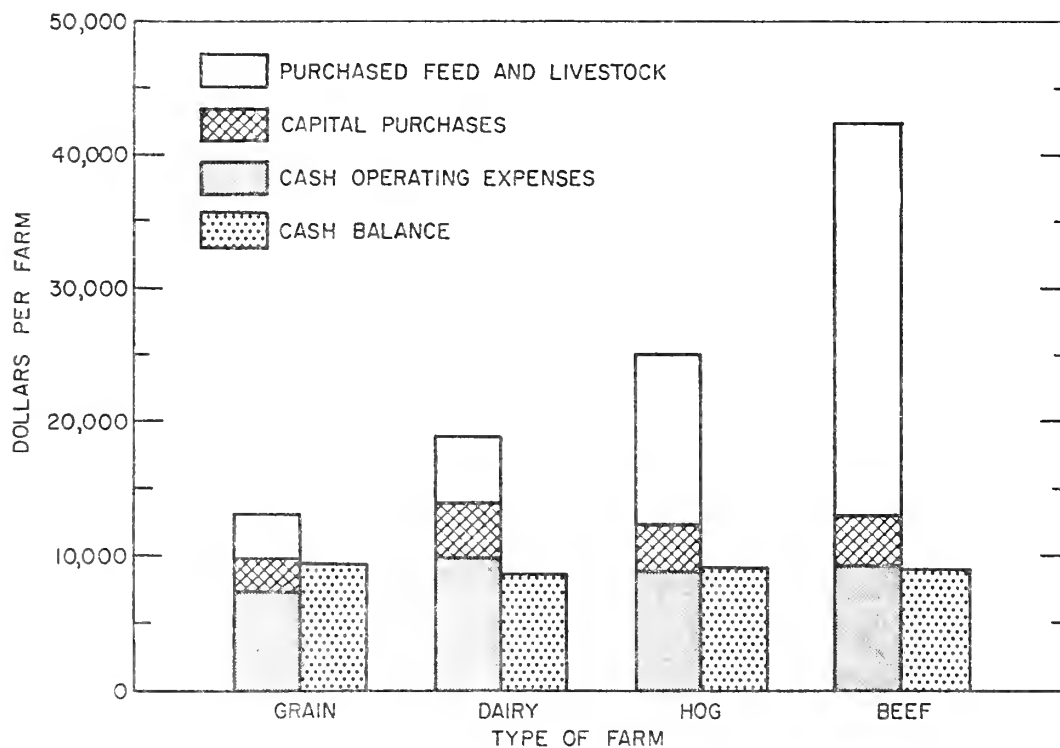
Income changes on Illinois farms

Comparative costs and returns between years and among major types of farming in northern and southern Illinois are reported in Tables 1 to 3. The separation of farms into northern and southern Illinois is based on soil-type regions, and divides the state approximately on an east-west line from Mattoon to Jacksonville. The sample of farms ranged between 180 and 259 acres in size, and averaged about 220 acres. Labor used on farms of this size averaged 14 months on grain farms, 16 months on hog and beef farms, and 20 months on dairy farms. The data in these tables are presented as if the farms were all owner-operated. Landlord and tenant shares of the business were combined where farms were leased.

Size of farm, type of farm, quality of soil, and managerial inputs were held reasonably constant over time by the sampling procedure used in selecting farms within each type of farm. Variations between 1963, 1964, and the 10-year average are due to changes in farm prices and costs, weather, and internal farming adjustments made within each system of farming. The data in these tables are particularly helpful for evaluating changes in farm costs and returns within a particular size and type of farm, and making comparisons between types of farming. The data do not reflect over-all farming adjustments resulting from farm enlargement or major changes in resource use.

The farm and family earning measure includes returns to the farm family for all unpaid labor, interest on invested capital, and managerial inputs used in farming. Changes in value of farm inventories and value of farm products consumed are included as income. Farm and family earnings are calculated by accounting methods that are generally comparable to the accrual method of calculating taxable farm income for the federal income tax. Important differences in accrual income tax accounting methods are the provision for capital gains on livestock sales, and the inclusion of interest paid as a farm expense.

The cash balance figure is the amount taken out of the farm business to pay for living costs, income and social security taxes, interest, and debt repayment and to add to savings. Purchases of new capital investments for the farm business have been included with total cash expenditures. Although the cash balance figure reflects the cash position of the farm business, it is influenced by purchase and sale transactions of feed and livestock, and changes in liabilities and borrowed funds.



Cash expenditures and cash balance on 220-acre farms in northern Illinois, 1964. (Fig. 1)

Table 1. — Average Selected Total Farm Items on Northern Illinois 180-259 Acre Farms

| Items | Grain farms | | | Hog farms | | | Dairy farms | | |
|--|-------------|-----------|-----------------|-----------|----------|-----------------|-------------|----------|-----------------|
| | 1964 | 1963 | 1955-64 average | 1964 | 1963 | 1955-64 average | 1964 | 1963 | 1955-64 average |
| Number of farms..... | 136 | 124 | 124 | 99 | 128 | 125 | 52 | 55 | 51 |
| Total acres..... | 229 | 228 | 226 | 224 | 224 | 221 | 219 | 219 | 218 |
| Soil-productivity rating..... | 81 | 81 | 81 | 77 | 76 | 77 | 71 | 72 | 71 |
| Total cash sales..... | \$24,604 | \$204,034 | \$20,362 | \$39,062 | \$35,110 | \$31,964 | \$28,463 | \$28,530 | \$24,750 |
| Less purchased feed and livestock.. | 3,030 | 3,024 | 3,062 | 13,740 | 13,019 | 12,175 | 4,552 | 5,600 | 4,773 |
| Net cash sales..... | 21,574 | 21,010 | 17,300 | 25,322 | 22,091 | 19,789 | 23,911 | 22,930 | 19,977 |
| Inventory change..... | -555 | 31 | 387 | -1,053 | -648 | 603 | 727 | 46 | 499 |
| Farm products consumed..... | 112 | 113 | 141 | 195 | 179 | 228 | 308 | 273 | 320 |
| Value of farm production..... | 21,131 | 21,154 | 17,828 | 24,464 | 21,622 | 20,620 | 24,946 | 23,249 | 20,796 |
| Cash operating expenses..... | \$ 8,468 | \$ 7,926 | \$ 6,609 | \$10,105 | \$ 9,689 | \$ 8,000 | \$10,732 | \$10,358 | \$ 8,931 |
| Annual depreciation..... | 2,659 | 2,712 | 2,584 | 3,491 | 3,708 | 3,223 | 4,154 | 3,994 | 3,662 |
| Farm and family earnings..... | 10,004 | 10,516 | 8,635 | 10,868 | 8,225 | 9,397 | 10,060 | 8,897 | 8,203 |
| Unpaid labor charge..... | 2,768 | 2,862 | 2,617 | 2,991 | 2,969 | 2,805 | 3,500 | 3,245 | 3,129 |
| Returns to capital and management.. | 7,236 | 7,654 | 6,018 | 7,877 | 5,256 | 6,592 | 6,560 | 5,652 | 5,074 |
| Interest charge on capital..... | 5,913 | 5,559 | 5,088 | 6,271 | 5,874 | 5,298 | 5,926 | 5,731 | 5,085 |
| Management returns..... | 1,323 | 2,095 | 930 | 1,606 | -618 | 1,294 | 634 | -79 | -11 |
| Total cash income ^a | \$24,748 | \$24,129 | \$20,463 | \$39,142 | \$35,156 | \$32,107 | \$28,593 | \$28,709 | \$24,906 |
| Total cash expenditures ^a | 14,100 | 14,140 | 12,024 | 26,908 | 27,064 | 23,557 | 19,644 | 19,306 | 17,541 |
| Cash balance..... | 10,648 | 9,989 | 8,439 | 12,234 | 8,092 | 8,550 | 8,949 | 9,403 | 7,365 |
| FARM INVESTMENT | | | | | | | | | |
| Livestock inventory..... | 4,118 | 4,141 | 3,973 | 13,889 | 13,997 | 11,893 | 12,937 | 13,074 | 11,024 |
| Grain inventory..... | 11,506 | 10,777 | 9,268 | 11,239 | 10,279 | 9,365 | 7,727 | 8,021 | 7,506 |
| Remaining capital cost in: | | | | | | | | | |
| Machinery..... | 5,820 | 5,673 | 5,366 | 7,307 | 6,744 | 6,609 | 8,263 | 7,905 | 7,626 |
| Buildings and fence..... | 10,782 | 9,209 | 10,052 | 15,684 | 15,364 | 12,976 | 21,391 | 20,565 | 17,448 |
| Soil fertility..... | 124 | 175 | 375 | 142 | 206 | 389 | 93 | 225 | 274 |
| Auto..... | 700 | 682 | 695 | 818 | 675 | 740 | 811 | 667 | 687 |
| Value of land (current basis)..... | 106,521 | 100,657 | 90,042 | 95,417 | 87,778 | 79,985 | 84,128 | 80,225 | 71,423 |
| Total farm investment..... | 139,571 | 131,314 | 119,771 | 144,496 | 135,043 | 121,957 | 135,350 | 130,682 | 115,988 |

^a Includes sales or purchases of capital items.

The investment per farm is for January 1 of each year. Physical quantities of grain and livestock are valued at farm market prices. Machinery, buildings, soil fertility, and auto are valued at remaining capital cost; that is, original cost less depreciation charged to date. Land is priced at current values. A basic value is established for each farm, based on a soil productivity rating and is adjusted to a current value each year by using an index of land prices in Illinois.

Figs. 1 and 2 show a summary of the financial transactions for different types of farms in northern and southern Illinois. The dollars represented by the left part of the bar for each type of farm are cash expenditures; the amount to the right represents the cash balance taken out of the farm business.

In comparing financial transactions among types of farms, the basic difference is the extent to which purchase and sale transactions of feed and livestock are involved in the farming operations. On grain farms, for example, purchased feed and livestock made up only 25 percent of the total cash expenditures. On the other extreme, the purchase of feed and livestock on north-

ern Illinois beef-cattle farms represents 69 percent of the total cash expenditures.

The influence of soil quality on volume of business is illustrated by comparing the same types of farms (Figs. 1 and 2). Land area is the same, about 220 acres per farm, but the lower soil productivity in southern Illinois is reflected in the much smaller volume of business for the southern Illinois grain, dairy, and hog farms than for comparable types of farms in northern Illinois. The data presented in these charts summarize five years of financial transactions. Data for different types of farms in 1964, 1963, and the 1955-1964 average are reported in Tables 1, 2, and 3.

Northern Illinois farms

Grain farms. Farm and family earnings on northern Illinois 220-acre grain farms in 1964 were 5 percent below 1963, but 16 percent above the 1955-1964 average (Table 1). Weather was a factor in the change in earnings on grain farms in 1964. Crop yields on northern Illinois grain farms, although below those in 1963, were still above the long-time average.

Cash operating expenses increased by more than \$500 per farm on grain farms. Most of this increase was for the purchase of fertilizer. The total investment per farm in 1964 for this sample of grain farms was over \$139,000. These farms employed an average of 13.5 months of labor.

Hog farms. Farm and family earnings on northern Illinois hog farms increased from \$8,225 in 1963, to \$10,868 in 1964 (Table 1). Crop yields for 1964 in the major hog producing region of west-central Illinois were about equal to 1963 yields. The average market price for hogs in 1964 was \$14.81, compared with \$14.86 per 100 pounds in 1963. The total pounds of pork and beef produced per farm increased by 4 percent in 1964 over 1963.

Cash operating expenses continued to increase in 1964 over 1963, and were 26 percent above the 1955-1964 average. Investment per farm was over \$144,000 in 1964, with 15.9 months of labor employed on this sample of farms.

Hog farms have become more specialized in recent years. The average pounds of pork produced per farm on 220-acre northern Illinois hog farms has doubled since 1951-1952. The increase in size of the hog enterprise was a net addition to the farm business and did not replace other livestock enterprises.

Dairy farms. Farm and family earnings on the sample northern Illinois dairy farms increased from \$8,897 in 1963 to \$10,060 in 1964. The increase in earnings on northern Illinois dairy farms was largely from higher crop yields and a resulting reduction in

Table 2. — Selected Total Farm Items on 180-259 Acre Northern Illinois Beef Farms

| Items | 1964 | 1963 | 1955-64 average |
|--|---------------|--------------|-----------------|
| Number of farms..... | 45 | 50 | 70 |
| Total acres..... | 223 | 225 | 221 |
| Soil-productivity rating..... | 78 | 75 | 76 |
| Total cash sales..... | \$55,959 | \$51,997 | \$45,724 |
| Less purchased feed and livestock..... | 28,793 | 29,858 | 26,280 |
| Net cash sales..... | 27,166 | 22,139 | 19,444 |
| Inventory change..... | -1,394 | -4,631 | 616 |
| Farm products consumed..... | 241 | 245 | 252 |
| Value of farm production..... | 26,013 | 17,753 | 20,312 |
| Cash operating expenses..... | \$10,979 | \$ 9,086 | \$ 8,413 |
| Annual depreciation..... | 4,188 | 4,038 | 3,720 |
| Farm and family earnings..... | 10,846 | 4,629 | 8,179 |
| Unpaid labor charge..... | 2,815 | 2,966 | 2,733 |
| Returns to capital and management..... | 8,031 | 1,663 | 5,446 |
| Interest charge on capital..... | 7,478 | 6,937 | 6,172 |
| Management returns..... | 553 | -5,274 | -726 |
| Total cash income ^a | \$56,015 | \$52,153 | \$46,041 |
| Total cash expenditures ^a | 43,166 | 43,033 | 38,593 |
| Cash balance..... | 12,849 | 9,120 | 7,448 |
| FARM INVESTMENT | | | |
| Livestock inventory..... | 26,949 | 30,164 | 22,186 |
| Grain inventory..... | 12,306 | 11,241 | 10,881 |
| Remaining capital cost in: | | | |
| Machinery..... | 8,072 | 7,388 | 7,202 |
| Buildings and fence..... | 22,555 | 18,000 | 17,171 |
| Soil fertility..... | 151 | 135 | 369 |
| Auto..... | 851 | 708 | 790 |
| Value of land (current basis).... | 98,336 | 88,882 | 81,041 |
| Total farm investment..... | 169,220 | 156,518 | 139,640 |

^a Includes sales or purchases of capital items.

the purchase of livestock feed in 1964. Farm operating costs increased \$534 per farm from 1963 to 1964.

The number of dairy cows per farm averaged 40 cows in 1964, up from 37 cows in 1963, and 16 more than the 24 cows per farm in 1955.

Beef farms. Farm earnings on northern Illinois beef farms recovered from the very low levels experienced in 1963. The farm and family earnings of \$10,846 on 220-acre northern Illinois beef farms was 2.3 times greater than 1963 earnings, and 33 percent above the 1955-1964 average.

Most of the recovery in farm earnings from 1963 to 1964 on northern Illinois beef farms resulted from an increase in total volume of cattle and hogs marketed, a reduction in the dollars spent for purchased feed and livestock, and an improvement in crop yields.

The sum of cash operating expenses and depreciation increased by 21 percent from 1963 to 1964, but was only 10 percent above farm operating costs in 1962. Because of the very low earnings in 1963, beef-cattle farms delayed or reduced cash operating expenses in an attempt to hold expenses in line with reduced net income. With the recovery of net farm income in 1964, farm operating costs increased sharply.

Southern Illinois farms

Grain farms. Farm and family earnings on southern Illinois 220-acre grain farms averaged \$6,388, a drop of \$2,642 per farm below the record income levels in 1963. The 1964 farm earnings, however, were only 1 percent below the 1955-1964 average.

Total value of farm production in 1964 dropped \$3,000 below 1963. Lower crop yields accounted for all of the drop in gross farm income, either through reduced crop sales or lower inventories.

Cash operating expenses in 1964 declined by \$253 per farm from 1963. Southern Illinois grain farmers reduced purchases of capital items from an average of \$3,109 in 1963 to \$2,283 in 1964, evidently in an attempt to maintain a net cash balance in 1964 equal to 1963 levels.

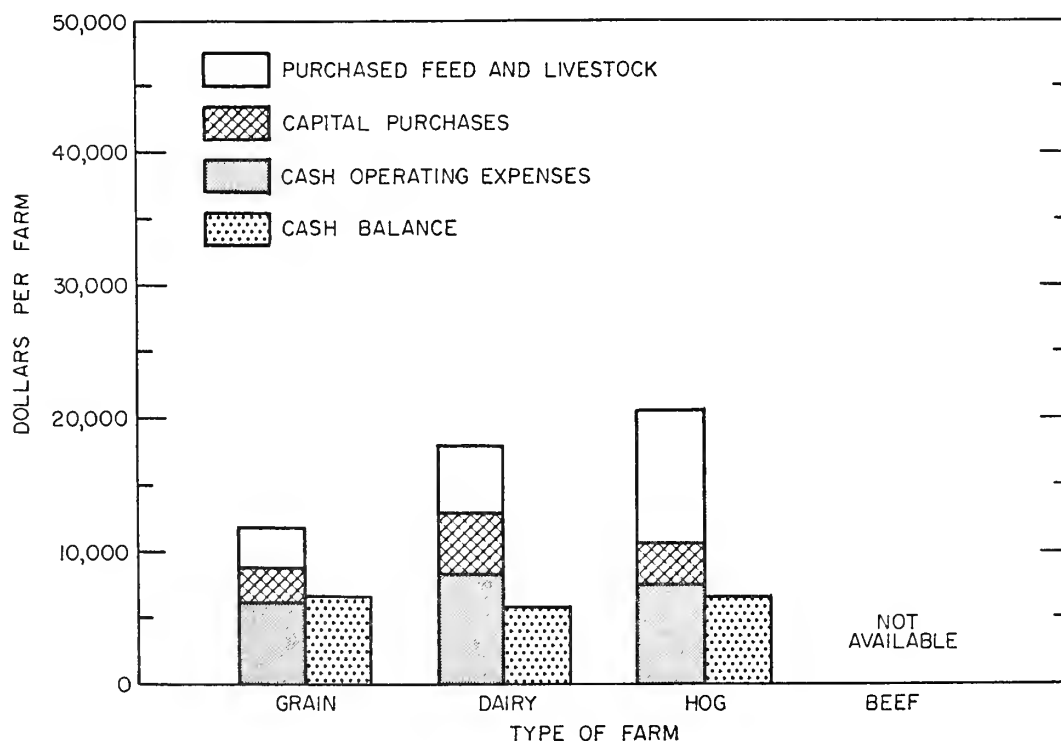
Hog farms. Farm and family earnings on southern Illinois 220-acre hog farms averaged \$6,070 in 1964, only two-thirds as much as in 1963, and 11 percent below the 1955-1964 average.

As was the situation with southern Illinois grain farms, much lower crop yields on hog farms in 1964 reduced cash sales of crops and resulted in a big decrease in value of crop inventories at the end of 1964.

With the downward adjustment in net farm earnings, cash operating expenses also were lower in 1964.

Dairy farms. Farm and family earnings on 220-acre southern Illinois dairy farms in 1964 were \$6,942, 25 percent below the record earnings of \$9,216 in 1963, but only 6 percent below the 1955-1964 average.

The dairy farms had higher net farm earnings in 1964 than either the grain or hog farms. Increased sales of livestock and livestock products was one factor explaining the higher earnings on dairy farms; also, dairy farms with more of their cropland in hay and pasture crops were affected less by dry weather.



Cash expenditures and cash balances on 220-acre farms in southern Illinois, 1964. (Fig. 2)

Table 3.—Average Selected Total Farm Items on Southern Illinois 180-259 Acre Farms

| Items | Grain farms | | | Hog farms | | | Dairy farms | | |
|--|-------------|-------------------|-----------------|-----------|----------|-----------------|-------------|----------|-----------------|
| | 1964 | 1963 ^b | 1955-64 average | 1964 | 1963 | 1955-64 average | 1964 | 1963 | 1955-64 average |
| Number of farms..... | 32 | 30 | 41 | 51 | 26 | 41 | 55 | 25 | 44 |
| Total acres..... | 222 | 219 | 222 | 219 | 227 | 220 | 220 | 217 | 217 |
| Soil-productivity rating..... | 35 | 36 | 38 | 35 | 37 | 36 | 31 | 28 | 31 |
| Total cash sales..... | \$18,834 | \$19,850 | \$15,840 | \$29,993 | \$30,208 | \$23,442 | \$26,855 | \$23,779 | \$20,932 |
| Less purchased feed and livestock.. | 2,548 | 2,840 | 2,651 | 11,226 | 10,747 | 8,758 | 5,900 | 4,765 | 4,570 |
| Net cash sales..... | \$16,286 | \$17,010 | \$13,189 | \$18,767 | \$19,461 | \$14,684 | \$20,955 | \$19,014 | \$16,362 |
| Inventory change..... | -922 | 1,350 | 714 | -2,121 | 1,248 | 709 | -837 | 2,136 | 919 |
| Farm products consumed..... | 160 | 161 | 167 | 150 | 174 | 251 | 330 | 405 | 353 |
| Value of farm production..... | 15,524 | 18,521 | 14,070 | 16,796 | 20,883 | 15,644 | 20,448 | 21,555 | 17,634 |
| Cash operating expenses..... | 6,862 | 7,115 | 5,419 | 8,131 | 8,692 | 6,405 | 9,888 | 8,782 | 7,179 |
| Annual depreciation..... | 2,274 | 2,376 | 2,212 | 2,595 | 2,829 | 2,393 | 3,618 | 3,557 | 3,082 |
| Farm and family earnings..... | 6,388 | 9,030 | 6,439 | 6,070 | 9,362 | 6,846 | 6,942 | 9,216 | 7,373 |
| Unpaid labor charge..... | 2,829 | 2,852 | 2,555 | 3,035 | 3,262 | 2,780 | 3,241 | 3,346 | 3,105 |
| Returns to capital and management.. | 3,559 | 6,178 | 3,884 | 3,035 | 6,100 | 4,066 | 3,701 | 5,870 | 4,268 |
| Interest charge on capital..... | 2,851 | 2,558 | 2,401 | 3,148 | 3,161 | 2,581 | 3,378 | 2,903 | 2,651 |
| Management returns..... | 708 | 3,620 | 1,483 | -113 | 2,939 | 1,485 | 323 | 2,967 | 1,617 |
| Total cash income ^a | \$18,840 | \$19,881 | \$15,959 | \$30,215 | \$30,363 | \$23,542 | \$26,861 | \$23,824 | \$21,018 |
| Total cash expenditures ^a | 11,699 | 12,735 | 10,517 | 21,997 | 23,587 | 18,035 | 19,848 | 18,313 | 15,895 |
| Cash balance..... | 7,141 | 7,146 | 5,442 | 8,218 | 6,776 | 5,507 | 7,013 | 5,511 | 5,123 |
| FARM INVESTMENT | | | | | | | | | |
| Livestock inventory..... | 4,039 | 3,671 | 3,014 | 9,131 | 9,753 | 7,479 | 10,590 | 9,877 | 7,806 |
| Grain inventory..... | 7,711 | 5,989 | 4,833 | 7,269 | 6,092 | 5,152 | 6,520 | 4,540 | 4,359 |
| Remaining capital cost in: | | | | | | | | | |
| Machinery..... | 6,165 | 5,234 | 5,341 | 5,987 | 5,953 | 4,960 | 9,272 | 8,629 | 7,697 |
| Buildings and fence..... | 5,895 | 4,968 | 4,782 | 9,054 | 9,576 | 6,616 | 12,399 | 9,907 | 9,117 |
| Soil fertility..... | 108 | 244 | 389 | 257 | 402 | 468 | 197 | 320 | 386 |
| Auto..... | 519 | 524 | 579 | 577 | 453 | 592 | 636 | 459 | 586 |
| Value of land (current basis)..... | 40,738 | 38,153 | 36,350 | 38,359 | 38,717 | 32,936 | 34,929 | 30,420 | 28,849 |
| Total farm investment..... | 65,175 | 58,783 | 55,288 | 70,634 | 70,946 | 58,203 | 74,543 | 64,152 | 58,800 |

^a Includes sales or purchases of capital items.

^b Revised from data appearing in Cir. 891.

LIVESTOCK ENTERPRISES

Table 4 shows the returns per \$100 feed fed to various livestock enterprises, and the price of corn during each of the past 15 years. Fifteen-year (1950-1964) averages are also shown. The difference between the return figure and \$100 feed cost represents the margin available to pay cash expenses other than feed, labor, depreciation on equipment, and interest on investment, and also to provide for profit.

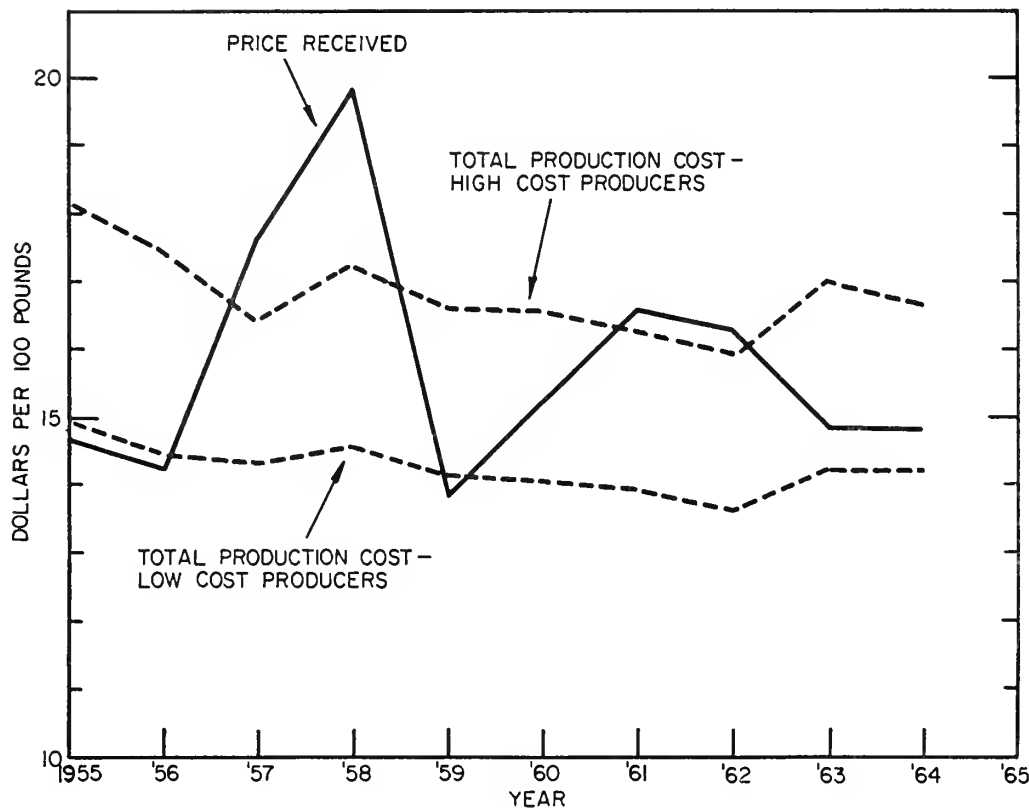
The margin needed to cover non-feed costs varies with the kind of livestock and depends on the proportion of total production costs represented by feed. The 15-year averages represent the approximate level of returns at which farmers have been willing to maintain livestock production. This average may not represent break-even returns on all farms because some farmers may discount market prices for some resources used in producing livestock. If a farmer already has facilities for livestock, he need only cover operating costs to continue production. However, when he views livestock production as a new or long-run enterprise, he

hopes to cover all costs — fixed and variable — or he may not undertake the enterprise.

As individual farmers try to increase profits, they tend to curtail livestock production when returns per \$100 of feed fed are below the 15-year average, and to increase production when returns are above average. This tendency on the part of producers causes supplies of livestock products to fluctuate.

The hog enterprise is the best illustration. Since 1953 the pattern of hog returns has been to exceed the 15-year average for two to three years, and then to fall below for one to two years. This pattern is referred to as the hog cycle and is related to the supply and demand for pork. If this same pattern continues, hog returns in 1965 should be above average.

Feeder-cattle returns were below the 15-year average in five of the past six years. Returns have barely been enough to cover market prices for home-grown feeds and other variable cash costs incurred by the average feeder in this period.



Average price received for all hogs sold compared to the estimated cost of hog production on Illinois record-keeping farms, 1955 to 1964. (Fig. 3)

Unless there is a let-up in the expansion of cattle feeding or a reduction in cattle numbers to bring beef supplies into balance with demand, there may not be much permanent improvement in cattle feeding returns. It is more difficult to identify cyclic income movements over a 15-year period in the beef cattle industry because it is more complex and adjusts more slowly than other livestock enterprises.

Dairy and poultry returns fluctuate less than beef cattle returns from year to year. In both enterprises, 15-year average returns are below the margin needed to cover all fixed and variable costs. The implication

is that these enterprises compete most favorably on farms with plentiful labor, capital, and management resources that have few alternative uses.

The business of raising livestock is very competitive. Average profit margins are very narrow. Large numbers of farmers are willing to stay in business as long as their returns cover only operating costs. Expansion plans involving large investments for new facilities should be based on estimated returns that are high enough to cover all costs. Fluctuations in livestock returns also involve a risk in years when returns are low.

Table 4. — Returns per \$100 Feed Fed to Different Classes of Livestock

| Year | Beef cow herds | Dairy cow herds | Feeder cattle bought | Native sheep raised | Feeder sheep bought | Hogs | Poultry | Yearly price of corn |
|-----------------|----------------|-----------------|----------------------|---------------------|---------------------|------|---------|----------------------|
| 1950..... | 169 | 173 | 170 | 177 | 182 | 152 | 122 | \$1.35 |
| 1951..... | 170 | 187 | 142 | 171 | 111 | 127 | 137 | 1.66 |
| 1952..... | 99 | 175 | 86 | 67 | 44 | 116 | 116 | 1.65 |
| 1953..... | 64 | 147 | 81 | 84 | 113 | 178 | 148 | 1.44 |
| 1954..... | 95 | 141 | 126 | 97 | 119 | 154 | 104 | 1.46 |
| 1955..... | 94 | 168 | 106 | 103 | 100 | 109 | 142 | 1.28 |
| 1956..... | 103 | 177 | 117 | 137 | 108 | 142 | 133 | 1.30 |
| 1957..... | 134 | 189 | 143 | 138 | 113 | 172 | 136 | 1.15 |
| 1958..... | 162 | 199 | 144 | 98 | 47 | 180 | 142 | 1.10 |
| 1959..... | 147 | 191 | 112 | 102 | 61 | 114 | 123 | 1.10 |
| 1960..... | 129 | 200 | 117 | 108 | 122 | 164 | 157 | 1.03 |
| 1961..... | 139 | 196 | 116 | 110 | 108 | 164 | 150 | 1.01 |
| 1962..... | 149 | 190 | 148 | 126 | 112 | 159 | 144 | .98 |
| 1963..... | 117 | 171 | 88 | 126 | 118 | 131 | 141 | 1.11 |
| 1964..... | 107 | 174 | 112 | 124 | 124 | 142 | 141 | 1.12 |
| 1950-64 average | 125 | 179 | 121 | 118 | 105 | 147 | 136 | \$1.25 |

Hog enterprises

The information in Table 5 is based on a sample of 712 farms farrowing ten or more litters per year. Farms were omitted from the sample if the number of hogs purchased exceeded 10 percent of pigs weaned. This eliminated from the sample those farms with combined farrowing and feeder-pig operations. Feeder-pig enterprise information is included in Table 6.

Returns per \$100 feed fed to hogs were \$142 in 1964, only \$5 below the 1950-1964 average. The fluctuation in these returns above and below the 15-year average (\$15 below in 1963) is related to changes in supplies of and demand for pork and to the price of corn. The supply of pork per capita, the average price received per 100 pounds of pork sold, and the average price per bushel of corn fed (see Table 4) were about the same in 1964 as in 1963.

Table 5. — Hog Enterprises, 1964

| Items | All farms | High-return farms | Low-return farms |
|--|-----------|-------------------|------------------|
| Number of farms..... | 712 | 108 | 165 |
| Average per farm | | | |
| Pounds of pork produced.. | 117,196 | 120,249 | 109,739 |
| Total returns..... | \$17,298 | \$18,472 | \$15,576 |
| Value of feed fed..... | 12,167 | 11,105 | 12,801 |
| Returns per \$100 feed fed.. | 142 | 166 | 122 |
| Returns above feed per litter..... | 76 | 108 | 43 |
| Number of litters farrowed | 67 | 68 | 64 |
| Pigs farrowed per litter... | 9.1 | 9.4 | 8.9 |
| Pigs weaned per litter.... | 7.5 | 7.7 | 7.3 |
| Number of pigs weaned... | 502 | 525 | 463 |
| Number that died after weaning..... | 17 | 11 | 19 |
| Pounds of death loss..... | 1,495 | 1,109 | 1,630 |
| Percent of pounds produced..... | 1.3 | .9 | 1.5 |
| Weight per hog sold..... | 236 | 234 | 238 |
| Price received per 100 pounds..... | \$ 14.81 | \$ 15.01 | \$ 14.60 |
| Feed cost per 100 pounds produced..... | 10.38 | 9.24 | 11.66 |
| Feed per 100 pounds produced | | | |
| Farm grains, lb..... | 335 | 290 | 370 |
| Commercial feeds, lb.... | 62 | 60 | 71 |
| Total concentrate, lb.. | 397 | 350 | 441 |
| Pasture (pasture days).. | .8 | .8 | .8 |
| Cost per 100 pounds of commercial feeds..... | \$ 5.76 | \$ 5.57 | \$ 5.82 |
| Cost per 100 pounds of concentrates..... | 2.58 | 2.61 | 2.62 |

Corn produced in 1963 but fed in 1964 was reported to be of excellent quality. This was verified on many farms when bushels of corn delivered to market overran the rated capacity of the storage bins. It is believed that this contributed to a reduction of 12 pounds of farm grains to produce 100 pounds of pork in 1964 as compared with 1963. The 1964 average of 7.5 pigs weaned per litter was the highest ever recorded and boosted weight produced per litter 85 pounds above 1963. The average size of hog enterprise on all record-keeping farms has increased at the rate of about 3 litters per year, from 41 litters (288 pigs weaned) per farm in 1955, to 67 litters (502 pigs weaned) in 1964.

The high-return group of farms (low-cost producers) in Table 5 had returns per \$100 feed fed that ranged from \$160 to \$179, and the low-return group (high-cost producers) ranged from \$110 to \$129. The greatest differences between high- and low-return groups were feed conversions and feed costs per 100 pounds produced.

The high-return farms used 80 pounds less farm grains and 11 pounds less commercial feeds to produce 100 pounds pork than the low-return farms. This saving in feed was equivalent to about 1,718 bushels of corn and 6.6 tons of protein per farm, or about \$2,700.

Other differences show 0.4 more pigs weaned per litter, 0.6 percent lower death loss, and 41 cents per 100 pounds higher selling price for pork sold for the high-return farms. There are wide variations in profits from swine enterprises on individual farms since these same differences between high- and low-return farms occur each year.

The hog enterprise has been a profitable business for the farmers in the high-return group (low-cost producers). Fig. 3 compares the total cost of production of the low-cost producers (high-return group of record-keeping farms) with the average annual price received for all hogs sold on record-keeping farms from 1955 to 1964. Total production costs include feed and non-feed inputs. The actual feed costs incurred on the record-keeping farms were used. Non-feed costs were estimated from detailed cost studies at \$5 per 100 pounds over the 10-year period.

The average price received for all hogs sold was above production costs for the low-cost producers in 7 of the 10 years, and about equal to production costs in 3 years. The price received was above the production costs of high-cost producers 4 out of the 10 years. If this favorable relationship between hog prices and production costs continues in the years ahead, it should encourage increased hog production on Illinois farms.

Feeder-cattle and feeder-pig enterprises

Calendar-year operations for feeder-cattle and feeder-pig enterprises are presented in Table 6. These involve weights and values on partly finished animals purchased in prior years as well as on animals purchased in the current year.

Table 6. — Feeder-Cattle and Feeder-Pig Enterprises, 1964

| Items | Feeder cattle | Feeder pigs |
|--------------------------------------|---------------|-------------|
| Number of farms..... | 413 | 100 |
| Average per farm | | |
| Total pounds produced..... | 72,733 | 64,853 |
| Total returns..... | \$14,866 | \$ 7,698 |
| Value of feed fed..... | 13,249 | 6,323 |
| Returns per \$100 feed fed..... | 112 | 122 |
| Pounds of death loss..... | 1,298 | 1,071 |
| Percent of pounds produced..... | 1.8 | 1.7 |
| Average weight purchased..... | 563 | 52 |
| Price paid per 100 pounds..... | \$ 21.26 | \$ 26.11 |
| Price received per 100 pounds..... | 21.92 | 15.11 |
| Feed cost per 100 pounds produced... | 18.22 | 9.75 |
| Feed per 100 pounds produced | | |
| Grain, lb..... | 538 | 331 |
| Protein and mineral feeds, lb..... | 59 | 52 |
| Total concentrates, lb..... | 597 | 383 |
| Hay, lb..... | 135 | ... |
| Silage, lb..... | 643 | ... |
| Pasture (pasture days)..... | 3 | ... |

Pork produced per farm from feeder-pig enterprises was 64,853 pounds in 1964 (see Table 6), more than two and one-half times the 25,461 pounds produced per farm in 1955. Farmers were not only buying more feeder pigs per farm but healthier pigs. Death loss has dropped steadily the past four years from 2.7 percent of weight produced in 1960, to 1.7 percent in 1964. Returns follow the cyclical pattern of the sow and litter enterprise. Returns per \$100 feed fed averaged \$122 in 1964.

The 72,733 pounds of beef produced per farm in 1964 (Table 6), is 50 percent greater than production in 1958. Returns per \$100 feed fed for feeder-cattle enterprises was \$112 in 1964. This is approaching the past 6-year average return of \$115, but is still at an unprofitable level for the average farmer.

Some adjustments in feeding programs to compensate for the long period of low profit margins are taking place. Weight produced per farm in 1964 was 3.7 percent below 1963. Average weight purchased was down 10 pounds per steer. Price paid for feeders bought in 1964 was \$3.54 per 100 pounds below 1963, while price received for cattle sold in 1964 was down only \$1.08.

Pounds of grain and pounds of hay used per 100 pounds of beef produced have dropped steadily since 1960, from 644 to 538 pounds, and from 182 to 135 pounds respectively, while pounds of silage used has increased steadily from 458 to 643 pounds per 100 pounds of beef produced. Feed costs per 100 pounds produced, however, remains about the same. The shift to the use of more corn silage in the ration reflects attempts by feeders to increase production from existing land by intensifying the crop system and to reduce labor by mechanizing the feeding operation.

These data do not show the wide variation in profits that exist among cattle feeding programs and individual feeders. More farmers are now feeding more than one drove of cattle each year to provide a better utilization of fixed investments in mechanized feedlots. The increase in investments and complexity of the cattle feeding operation makes good records more important than ever to evaluate returns to resources used in cattle feeding.

Dairy enterprises

The minimum size of herd included in this analysis was 10 milk cows. The average size of dairy herd was 35.5 cows in 1964, compared with 21.8 cows per farm on all record-keeping farms in 1955.

Returns per \$100 feed fed to dairy enterprises in

Table 7. — Dairy Cattle Enterprises, 1964

| Items | All farms | Pasture days per animal unit | | |
|---|-----------|------------------------------|----------|----------|
| | | 0 | 1-119 | 120+ |
| Number of farms. | 346 | 54 | 156 | 136 |
| Average per farm | | | | |
| Number of cows in herd. | 35.5 | 45.3 | 35.2 | 31.9 |
| Number of milk cows. | 35.4 | 45.3 | 35.1 | 31.8 |
| Percent of milk cows dry. | 16 | 15 | 16 | 16 |
| Animal units in herd. | 56.7 | 72.0 | 55.9 | 51.6 |
| Pounds of beef produced. | 19,020 | 27,496 | 18,065 | 16,750 |
| Total returns. | \$17,230 | \$23,000 | \$16,887 | \$15,332 |
| Value of feed fed. | 9,880 | 13,862 | 9,671 | 8,540 |
| Returns per \$100 feed fed. | 174 | 166 | 175 | 180 |
| Returns above feed per milk cow. | 208 | 202 | 206 | 214 |
| Total pounds of milk produced. | 409,893 | 541,840 | 399,286 | 369,668 |
| Pounds of milk per milk cow. | 11,579 | 11,961 | 11,376 | 11,625 |
| Pounds of butterfat per milk cow. | 435 | 439 | 438 | 429 |
| Pounds of beef per cow in herd. | 536 | 607 | 515 | 525 |
| Pounds of death loss. | 1,309 | 1,802 | 1,205 | 1,233 |
| Percent of pounds produced. | 6.9 | 6.6 | 6.7 | 7.4 |
| Feed cost per unit ^a | \$ 16.46 | \$ 16.97 | \$ 16.68 | \$ 15.90 |
| Price received for: | | | | |
| 100 lb. milk. | 3.70 | 3.75 | 3.72 | 3.65 |
| 100 lb. beef. | 14.60 | 14.09 | 14.37 | 15.12 |
| Feed per unit of milk and beef, pounds | | | | |
| Grain, lb. | 252 | 270 | 244 | 252 |
| Protein and minerals, lb. | 61 | 64 | 66 | 52 |
| Total concentrates, lb. | 313 | 334 | 310 | 304 |
| Hay and dry roughage, lb. | 359 | 300 | 358 | 396 |
| Hay silage and soilage, lb. | 239 | 491 | 257 | 66 |
| Corn and other silage, lb. | 666 | 828 | 714 | 510 |
| Pasture (pasture days). | 9 | ... | 8 | 15 |
| Pasture days per animal unit. | 91 | ... | 81 | 155 |

^a 1,000 pounds of milk or 100 pounds of beef.

1964 (Table 7) was \$174, \$5 below the 1950-1964 average. Feed costs per 1,000 pounds of milk or 100 pounds of beef produced were 56 cents lower, and price received for milk was 8 cents per 100 pounds higher in 1964 than in 1963. These changes were more than enough to offset the effect of lower beef prices of \$1.30 per 100 pounds.

Dairy farmers have reduced the amount of pasture and increased the amounts of grain and silage fed. Pasture days per unit (1,000 pounds of milk or 100 pounds of beef) remained at 15 days prior to 1959, but since 1960 has declined steadily to 9 days in 1964.

Table 8. — Beef Cow Enterprises, 1964

| Items | All farms | Calves sold | Calves fed out |
|---------------------------------------|-----------|-------------|----------------|
| Number of farms..... | 255 | 101 | 122 |
| Average per farm | | | |
| Number of cows in herd.. | 28.4 | 32.0 | 25.5 |
| Animal units in herd..... | 40.8 | 40.6 | 41.6 |
| Total pounds produced... . | 19,452 | 17,324 | 21,050 |
| Total returns..... | \$ 3,382 | \$ 2,861 | \$ 3,770 |
| Value of feed fed..... | 3,156 | 2,684 | 3,537 |
| Returns per \$100 feed fed | 107 | 107 | 107 |
| Pounds of beef per cow in herd..... | 685 | 542 | 825 |
| Average weight per head sold..... | 739 | 571 | 891 |
| Pounds of death loss..... | 929 | 850 | 919 |
| Percent of pounds produced..... | 4.8 | 4.9 | 4.4 |
| Feed cost per unit ^a | \$ 16.22 | \$ 15.49 | \$ 16.80 |
| Price received per 100 pounds..... | 20.14 | 20.05 | 20.36 |
| Feed per unit of milk and beef | | | |
| Grain, lb..... | 193 | 67 | 273 |
| Protein and mineral feeds, lb..... | 22 | 11 | 27 |
| Total concentrates, lb.. | 215 | 78 | 300 |
| Hay and dry roughage, lb..... | 569 | 675 | 507 |
| Hay silage, lb..... | 34 | 82 | 11 |
| Corn and other silage, lb. | 207 | 166 | 260 |
| Pasture (pasture days).. | 39 | 50 | 32 |
| Pasture days per animal unit..... | 187 | 213 | 162 |

^a 1,000 pounds of milk or 100 pounds of beef.

The dairy herds in Table 7 were divided into three groups: herds with no pasture days per animal unit, 1 to 119 days, and 120 days or more. Each year a few more herds have been adopting the practice of feeding cows in drylot. The size of the dairy herd averaged 45.3 cows on farms with no direct grazing compared with 31.9 cows on farms using a full pasture season.

The main difference among these three groups of dairy herds is the amount of land required per cow to produce roughage. When hay and pasture yields are figured at 150 pasture days and 3 tons per acre respectively, the farms with drylot feeding required only 1.2 acres per cow to produce grass-legume forages, while the farms with over 120 pasture days per animal unit used 2.6 acres. Milk production per cow did not vary greatly, but was highest on the farms with drylot feeding.

Returns above feed cost ranged from \$202 per milk cow on farms using no direct grazing, to \$214 per cow on farms using a full pasture season. Part of the additional costs of harvesting roughage to be fed in drylot are included in the cost of feed. Farmers using the drylot system must relate the higher cost of feed

to the increased returns that may result either from shifting land from pasture to grain crops or from an increase in size of dairy herd on fixed acres of hay and pasture.

Beef-cow herds

The minimum size of a beef-cow herd included in Table 8 was 10 or more cows. Farms with combinations of cow herds and purchased feeder cattle were not included. In addition to an analysis of all farms, Table 8 shows an analysis of farmers with cow herds who sold calves at weaning time, comparing them with those who finished their calves to slaughter weights. The average size of cow herd on all farms has changed little since 1956, ranging from 25 to 28 cows. This reflects the decision of the majority of Illinois farmers to maintain a beef-cow herd as a supplemental enterprise to market nonsalable feeds and labor.

Returns per \$100 feed fed to beef-cow herds in 1964 averaged \$107. This return was the lowest since 1956 and follows the pattern of returns from 1953 to 1955 when cow herds had very low returns following several years of low feeder-cattle returns.

In 1964, farms that sold calves received \$6 per cow above value of feed fed, and farms that sold cattle at slaughter weights received \$9 per cow above value of feed fed. If those who sold slaughter cattle had deducted charges for the added labor, buildings, and capital required, it would have been more profitable to sell calves at weaning than to feed them out.

Poultry enterprises

The minimum size of flock included in Table 9 is 100 hens. The average size of flock, omitting farms with less than 100 hens, has increased from 284 hens in 1954 to 680 in 1964. In the same period, pounds of concentrates per dozen eggs or 1½ pounds of weight produced have declined steadily each year from 7.2 in 1954 to 5.8 pounds in 1964. Eggs per hen increased steadily from 192 to 210 from 1954 to 1959, and have ranged from 213 to 208 eggs per hen since 1960.

Larger flocks received more returns above feed cost per hen than the smaller flocks (see Table 9). Farms with over 2,000 hens had returns above feed cost per hen of \$1.76, compared with only 59 cents on farms with 100-299 hens. This difference may not reflect the actual contribution of poultry laying flocks to farm income, since small flocks may utilize inputs of labor, equipment, and buildings that have limited alternative uses. However, the higher production per hen on the farms with larger flocks indicates better management and a potentially higher return for labor and capital.

Table 9. — Poultry Enterprises, 1964

| Items | All farms | Number of hens per farm | | | |
|---|-----------|-------------------------|----------|-----------|------------|
| | | 101-299 | 300-749 | 750-1,999 | Over 2,000 |
| Number of farms..... | 195 | 104 | 48 | 33 | 10 |
| Average per farm | | | | | |
| Pounds of poultry produced... | 1,691 | 628 | 1,233 | 3,351 | 9,475 |
| Total returns..... | \$ 3,203 | \$ 806 | \$ 2,053 | \$ 6,486 | \$ 22,825 |
| Value of feed fed..... | 2,266 | 695 | 1,611 | 4,594 | 14,066 |
| Returns per \$100 feed fed.... | 141 | 116 | 127 | 141 | 162 |
| Returns above feed cost per hen..... | 1.38 | .59 | 1.00 | 1.49 | 1.76 |
| Average number of hens..... | 680 | 189 | 440 | 1,273 | 4,991 |
| Eggs produced per hen..... | 208 | 184 | 201 | 221 | 210 |
| Percent production..... | 57 | 50 | 55 | 60 | 58 |
| Feed requirement units ^a | 12,939 | 3,314 | 8,214 | 25,676 | 93,674 |
| Feed cost per unit..... | \$.18 | \$.21 | \$.20 | \$.18 | \$.15 |
| Pounds of concentrates per unit..... | 5.8 | 7.1 | 6.4 | 5.6 | 5.2 |
| Cost per 100 pounds of concentrates..... | \$ 3.02 | \$ 2.96 | \$ 3.07 | \$ 3.16 | \$ 2.88 |
| Price per pound sold..... | .07 | .09 | .08 | .07 | .07 |
| Price per dozen eggs sold.... | .31 | .30 | .30 | .32 | .31 |
| Pounds of death loss..... | 418 | 163 | 296 | 977 | 1,803 |

^a One dozen eggs or 1.5 pounds of weight produced.

Sheep enterprises

Sheep production is a minor enterprise on record-keeping farms. The minimum size of enterprise in Table 10 was set at 3 animal units. One animal unit of sheep is defined as 750 pounds of liveweight. The sheep enterprises were divided into native ewe flocks and feeder-lamb operations. Returns per \$100 feed fed in 1964 were \$124 for native flocks and \$124 for feeder sheep. These returns were similar to those received in 1963, and were above the 15-year average of \$118 for native flock and \$105 for feeder sheep.

Table 10. — Sheep Enterprises, 1964

| Items | Native flocks | Feeder sheep |
|---------------------------------------|---------------|--------------|
| Number of farms..... | 97 | 11 |
| Average per farm | | |
| Pounds of wool and mutton produced.. | 3,625 | 16,822 |
| Total returns..... | \$ 705 | \$ 3,421 |
| Value of feed fed..... | 566 | 2,757 |
| Returns per \$100 feed fed..... | 124 | 124 |
| Percent lamb crop..... | 123 | ... |
| Pounds of death loss..... | 531 | 2,964 |
| Percent of pounds produced..... | 14.6 | 17.6 |
| Feed cost per 100 pounds produced.... | \$ 15.61 | \$ 16.33 |
| Price received per 100 pounds..... | 21.80 | 20.93 |
| Price paid for sheep bought..... | ... | 19.58 |
| Feed per 100 pounds produced | | |
| Concentrates, lb..... | 224 | 568 |
| Hay, lb..... | 585 | 129 |
| Silage, lb..... | 33 | ... |
| Pasture (pasture days)..... | 38 | 16 |

DEFINITION OF TERMS AND ACCOUNTING MEASURES

Soil-productivity rating

An average index representing the inherent productivity (low level of management) of all tillable land in the farm. Individual soil types on each farm are assigned an index ranging downward from 100.

Type of farm

Sampling technique. The records in each size group for northern Illinois were sampled to provide a pro-

portional representation of all farms of that size range according to the 1959 census.

Grain farms. Farms where the value of feed fed to livestock was *less* than one-half of the feed and grain returns and value of feed to dairy or poultry was not more than one-sixth of the feed and grain returns.

Hog or beef farms. Farms where the value of feed fed to livestock was *more* than one-half of the feed and grain returns and either hog or beef-cattle enterprises

received more than one-half of the value of feed fed.

Dairy or poultry farms. Farms where the value of feed fed to livestock was more than one-half of feed and grain returns and either dairy or poultry enterprises received more than one-third of the value of feed fed.

Cost items

Value of feed fed. Includes grains priced at the farm average as follows: corn—\$1.12 per bushel; oats—63 cents per bushel; barley—86 cents per bushel; soybeans—\$2.56 per bushel; rye—\$1.13 per bushel; wheat—\$1.65 per bushel. Commercial feeds were priced at actual cost, hay and silage at farm values, and pasture at 13 cents per animal unit pasture day. A pasture day represents an intake of approximately 20 to 25 pounds of dry matter. It has been defined as 16 pounds of total digestible nutrients (TDN) from pasture.

Cash operating expenses. Includes annual cash outlays for non-depreciable items of fertilizer, machinery repairs, machine hire, gas and oil, electricity and telephone, farm share of auto, hired labor, seed and crop expense, taxes, building repairs, livestock and miscellaneous expense, and cash rent, plus annual net depreciation on machinery, buildings, and fertility. It does not include cash outlays for feed and livestock since these have been deducted from gross receipts in computing the value of farm production (adjusted gross receipts).

Table 11. — Average Prices Received and Paid by Farm Record Keepers

| | 1964 | | 1963 | |
|--|-------------------|-------------------|-------------------|-------------------|
| | Northern Illinois | Southern Illinois | Northern Illinois | Southern Illinois |
| Grain prices | | | | |
| Corn, sold..... | \$1.12 | \$1.15 | \$1.14 | \$1.13 |
| Soybeans, sold..... | 2.58 | 2.51 | 2.52 | 2.54 |
| Oats, sold..... | .64 | .68 | .67 | .73 |
| Wheat, sold..... | 1.43 | 1.39 | 1.86 | 1.80 |
| Corn, purchased..... | 1.14 | 1.13 | 1.13 | 1.16 |
| Oats, purchased..... | .65 | .80 | .68 | .82 |
| Livestock prices | | | | |
| Hogs, all weights..... | \$14.81 | | \$14.86 | |
| Fat cattle, all weights.... | 21.92 | | 23.00 | |
| Feeder cattle, all weights, prices paid..... | 21.26 | | 24.80 | |
| Dairy cattle, all weights... | 14.60 | | 15.91 | |
| Sheep, all weights..... | 21.80 | | 19.94 | |
| Poultry..... | .07 | | .08 | |
| Milk..... | 3.70 | | 3.62 | |
| Eggs..... | .31 | | .32 | |

Machinery and equipment. Includes machinery and equipment depreciation, machinery repairs, machine hire, gas and oil, electricity and telephone, and farm share of auto.

Labor. Includes actual hired labor costs plus family and operator's labor charged in 1964 at \$225 and \$215 a month respectively for northern and southern Illinois.

Interest charge on capital. Interest charged at 5 percent on January 1 inventory of remaining capital investment in grain, livestock, machinery, buildings, soil fertility, and farm share of auto, plus 4 percent interest on bare land priced at current land values.

Total nonfeed costs. All cash operating expenses, depreciation, and imputed charges for unpaid labor and interest on capital. Purchased feeds and livestock are omitted.

Value of land (current basis). A basic value on bare land is established for each farm according to the soil-productivity rating. This basic value is adjusted each year according to the index of land prices in Illinois as reported by the USDA.

Return items

Feed and grain returns. The sum of grain and feed sales, value of all feeds fed (except milk), and change in value of feed and grain inventories less the value of feed purchased.

Value of farm production. Total cash sales of products and services, less purchased feed and livestock, plus change in inventory values of grain and livestock, plus value of farm products consumed.

Farm and family earnings. Value of farm production less cash operating expenses and depreciation. This figure includes the return to the farm and family for unpaid labor, interest on invested capital, and returns to management.

Labor and management earnings. Farm and family earnings less the value of family labor and interest charge on capital invested. It is the residual return to operator's labor and management efforts.

Capital and management earnings. Farm and family earnings less a charge for all unpaid (operator and family) labor.

Management returns. The residual surplus left after a charge for unpaid labor and interest charge on capital are deducted from farm and family earnings.

Table 12. — Average Costs, Returns, and Financial Summary by Size and Type of Farm, Northern Illinois, 1964

| | GRAIN FARMS WITH SOIL RATING 76-100 | | | | | GRAIN FARMS WITH SOIL RATING 56-75 | | | | | |
|---|-------------------------------------|----------------|----------------|----------------|---------------|------------------------------------|-----------------|---------------|---------------|---------------|------------|
| | Under 180 33 | 180-259 103 | 260-339 121 | 340-499 146 | 500-649 83 | 650+ 56 | Under 180 20 | 180-259 33 | 260-339 39 | 340-499 80 | 500+ 58 |
| Range in size (total acres)..... | 156 | 228 | 301 | 408 | 559 | 816 | 147 | 232 | 306 | 416 | 643 |
| Number of farms..... | 148 | 214 | 281 | 385 | 518 | 749 | 134 | 212 | 269 | 369 | 540 |
| Size of farm (acres)..... | 86 | 85 | 85 | 85 | 85 | 84 | 68 | 69 | 69 | 69 | 70 |
| Acres of tillable land..... | 43 | 73 | 31 | 31 | 29 | 4 | 41 | 28 | 10 | 26 | 61 |
| Soil rating on tillable land..... | .2 | .6 | .5 | .3 | .2 | .1 | ... | .5 | .4 | 3.2 | 1.7 |
| Hens, number..... | 42 | 75 | 83 | 102 | 184 | 265 | 14 | 63 | 120 | 105 | 179 |
| Dairy cows, number..... | 188 | 240 | 221 | 313 | 344 | 479 | 75 | 233 | 244 | 307 | 416 |
| Beef produced, hundredweight..... | | | | | | | | | | | |
| Pork produced, hundredweight..... | | | | | | | | | | | |
| DOLLAR COSTS PER FARM | | | | | | | | | | | |
| Soil fertility..... | \$ 1,396 | \$ 1,957 | \$ 2,846 | \$ 3,963 | \$ 5,437 | \$ 8,107 | \$ 1,546 | \$ 2,093 | \$ 2,705 | \$ 3,398 | \$ 5,316 |
| Buildings and fence..... | 1,131 | 1,200 | 1,573 | 1,931 | 2,608 | 2,941 | 1,201 | 1,223 | 1,431 | 1,734 | 2,307 |
| Machinery and equipment..... | 3,924 | 4,860 | 5,911 | 7,705 | 10,335 | 13,573 | 3,340 | 4,224 | 6,108 | 7,032 | 9,964 |
| Labor..... | 2,916 | 3,111 | 3,342 | 4,352 | 5,713 | 7,661 | 2,402 | 2,951 | 3,372 | 4,110 | 5,482 |
| Taxes..... | 1,305 | 1,650 | 2,122 | 2,897 | 3,685 | 5,313 | 1,174 | 1,392 | 1,756 | 2,372 | 3,495 |
| Seed expense..... | 403 | 530 | 656 | 927 | 1,322 | 1,816 | 336 | 516 | 623 | 868 | 1,084 |
| Crop expense..... | 326 | 418 | 576 | 1,070 | 1,136 | 1,770 | 261 | 369 | 514 | 710 | 1,107 |
| Livestock and miscellaneous expense..... | 311 | 400 | 412 | 595 | 618 | 796 | 299 | 402 | 396 | 547 | 596 |
| Interest charge on capital..... | 4,441 | 6,234 | 8,103 | 10,864 | 14,558 | 20,401 | 3,389 | 4,911 | 6,413 | 8,533 | 12,561 |
| Total non-feed costs..... | 16,153 | 20,360 | 25,541 | 34,304 | 45,412 | 62,378 | 13,948 | 18,081 | 23,318 | 29,304 | 41,912 |
| Total value of feed fed..... | 2,989 | 4,152 | 3,994 | 5,386 | 7,106 | 9,694 | 1,432 | 3,719 | 4,671 | 6,085 | 7,586 |
| DOLLAR RETURNS PER FARM | | | | | | | | | | | |
| Livestock returns above feed cost..... | \$ 503 | \$ 1,068 | \$ 1,033 | \$ 1,251 | \$ 1,512 | \$ 1,987 | \$ 456 | \$ 1,004 | \$ 1,053 | \$ 2,033 | \$ 2,453 |
| Feed and grain returns..... | 14,151 | 19,856 | 26,750 | 37,126 | 49,271 | 71,785 | 11,300 | 17,034 | 22,806 | 30,510 | 45,870 |
| Other cash income..... | 1,410 | 975 | 1,173 | 1,415 | 1,823 | 2,218 | 1,166 | 694 | 1,467 | 1,366 | 2,038 |
| Total value of farm production..... | 16,064 | 21,899 | 28,956 | 39,792 | 52,606 | 75,990 | 12,922 | 18,732 | 25,326 | 33,909 | 50,361 |
| Management returns..... | -89 | 1,539 | 3,415 | 5,488 | 7,194 | 13,612 | -1,026 | 651 | 2,008 | 4,605 | 8,449 |
| Farm production per \$1.00 of non-feed costs..... | .99 | 1.08 | 1.13 | 1.16 | 1.16 | 1.22 | .93 | 1.04 | 1.09 | 1.16 | 1.20 |
| Farm production per man..... | 14,828 | 19,182 | 23,964 | 25,673 | 26,977 | 29,800 | 14,910 | 17,291 | 20,816 | 22,990 | 26,860 |
| FINANCIAL SUMMARY | | | | | | | | | | | |
| Cash sales of products and services..... | \$18,605 | \$25,469 | \$32,867 | \$44,921 | \$61,919 | \$87,757 | \$14,563 | \$21,903 | \$30,319 | \$39,513 | \$57,846 |
| Sales of capital items..... | 414 | 141 | 181 | 221 | 505 | 204 | 463 | 154 | 381 | 351 | 304 |
| Total cash income..... | 19,019 | 25,610 | 33,048 | 45,142 | 62,424 | 87,961 | 15,026 | 22,057 | 30,700 | 39,864 | 58,150 |
| Purchased livestock..... | 1,613 | 1,241 | 1,594 | 2,193 | 4,475 | 5,160 | 318 | 1,814 | 2,268 | 2,606 | 3,117 |
| Purchased feed..... | 1,038 | 1,740 | 1,965 | 2,480 | 2,749 | 3,689 | 625 | 1,369 | 1,420 | 2,839 | 3,078 |
| Cash operating expenses..... | 6,421 | 8,645 | 10,918 | 15,916 | 21,150 | 29,869 | 6,363 | 7,915 | 10,593 | 13,503 | 19,962 |
| Purchase of capital items..... | 3,815 | 2,833 | 3,603 | 5,547 | 8,243 | 9,600 | 2,168 | 1,882 | 4,735 | 4,563 | 6,969 |
| Total cash expenditures..... | 12,907 | 14,459 | 18,080 | 26,136 | 36,617 | 48,318 | 9,474 | 12,980 | 19,016 | 23,511 | 33,126 |
| Cash balance..... | \$ 6,112 | \$11,151 | \$14,968 | \$19,006 | \$25,807 | \$39,643 | \$ 5,552 | \$ 9,077 | \$11,684 | \$16,353 | \$25,024 |
| Inventory change..... | 51 | -713 | -450 | -561 | -2,229 | -3,061 | -730 | -62 | -1,393 | -280 | -1,426 |
| Capital change..... | 837 | -8 | -265 | 698 | 1,208 | 1,211 | -309 | -800 | 912 | 119 | 647 |
| Farm products consumed..... | 79 | 124 | 98 | 105 | 139 | 143 | 32 | 74 | 88 | 121 | 136 |
| Farm and family earnings..... | 7,079 | 10,554 | 14,351 | 19,248 | 24,925 | 37,936 | 4,545 | 8,289 | 11,291 | 16,313 | 24,381 |
| Labor and management earnings..... | 2,563 | 4,186 | 6,099 | 8,150 | 9,867 | 16,312 | 1,145 | 3,252 | 6,668 | 7,273 | 11,137 |
| Capital and management earnings..... | 4,352 | 7,773 | 11,518 | 16,352 | 21,752 | 34,013 | 2,363 | 5,562 | 8,421 | 13,138 | 21,010 |
| Capital and management earnings per acre..... | 27.90 | 34.09 | 38.27 | 40.09 | 38.91 | 41.68 | 16.07 | 23.97 | 27.52 | 31.58 | 32.67 |

Table 12a. — Average Operating Costs, Investment, and Land Use by Size and Type of Farm, Northern Illinois, 1964

| | GRAIN FARMS WITH SOIL RATING 76-100 | | | | | GRAIN FARMS WITH SOIL RATING 56-75 | | | | | |
|--|-------------------------------------|----------------|----------------|----------------|---------------|------------------------------------|-----------------|---------------|---------------|---------------|------------|
| | Under 180 33 | 180-259 103 | 260-339 121 | 340-499 146 | 500-649 83 | 650+ 56 | Under 180 20 | 180-259 33 | 260-339 39 | 340-499 80 | 500+ 58 |
| Range in size (total acres)..... | 33 | 103 | 121 | 146 | 83 | 56 | 20 | 33 | 39 | 80 | 58 |
| Number of farms..... | 33 | 103 | 121 | 146 | 83 | 56 | 20 | 33 | 39 | 80 | 58 |
| COSTS AND RETURNS PER TILLABLE ACRE | | | | | | | | | | | |
| Soil fertility..... | \$ 9.43 | \$ 9.14 | \$ 10.13 | \$ 10.29 | \$ 10.50 | \$ 10.82 | \$ 11.54 | \$ 9.87 | \$ 10.06 | \$ 9.21 | \$ 9.84 |
| Buildings and fence..... | 7.64 | 5.61 | 5.60 | 5.02 | 5.03 | 3.93 | 8.97 | 5.77 | 5.32 | 4.70 | 4.27 |
| Machinery and equipment..... | 26.51 | 22.71 | 21.04 | 20.01 | 19.95 | 18.12 | 24.93 | 19.92 | 22.70 | 19.06 | 18.45 |
| Labor..... | 19.70 | 14.54 | 11.89 | 11.30 | 11.03 | 10.23 | 17.93 | 13.92 | 11.53 | 11.14 | 10.15 |
| Feed and grain returns..... | 95.61 | 92.78 | 95.20 | 96.43 | 95.12 | 95.84 | 84.33 | 80.35 | 84.78 | 82.68 | 84.94 |
| Total value of farm production..... | 108.54 | 102.33 | 103.05 | 103.36 | 101.56 | 101.45 | 96.43 | 88.36 | 94.14 | 91.89 | 93.25 |
| Total non-feed costs..... | 109.14 | 95.14 | 90.90 | 89.10 | 87.67 | 83.28 | 104.09 | 85.29 | 86.68 | 79.41 | 77.60 |
| Management returns..... | -.60 | 7.19 | 12.15 | 14.26 | 13.89 | 18.17 | -7.66 | 3.07 | 7.46 | 12.48 | 15.65 |
| SELECTED COST ITEMS | | | | | | | | | | | |
| Fertilizer, annual application..... | \$ 1,339 | \$ 1,901 | \$ 2,750 | \$ 3,865 | \$ 5,287 | \$ 7,931 | \$ 1,532 | \$ 2,020 | \$ 2,666 | \$ 3,314 | \$ 5,175 |
| Lime and rock phosphate depreciation.. | 57 | 56 | 96 | 98 | 150 | 176 | 14 | 73 | 39 | 84 | 141 |
| Building repairs and maintenance..... | 261 | 371 | 351 | 542 | 678 | 741 | 366 | 278 | 318 | 524 | 674 |
| Building depreciation..... | 870 | 829 | 1,222 | 1,389 | 1,930 | 2,200 | 835 | 945 | 1,113 | 1,210 | 1,633 |
| Machinery and equipment depreciation | 1,395 | 1,565 | 2,088 | 2,840 | 4,021 | 5,365 | 873 | 1,299 | 1,972 | 2,536 | 3,856 |
| Machinery repairs and supplies..... | 1,871 | 1,110 | 1,397 | 1,811 | 2,489 | 3,477 | 643 | 903 | 1,468 | 1,550 | 2,392 |
| Machinery hire..... | 341 | 585 | 545 | 777 | 854 | 1,048 | 472 | 513 | 729 | 849 | 841 |
| Gasoline and oil..... | 644 | 866 | 1,087 | 1,388 | 1,846 | 2,494 | 626 | 805 | 1,097 | 1,258 | 1,815 |
| Hired labor charge..... | 189 | 330 | 509 | 1,456 | 2,540 | 3,738 | 220 | 224 | 502 | 935 | 2,111 |
| Unpaid labor charge..... | 2,727 | 2,781 | 2,833 | 2,896 | 3,173 | 3,923 | 2,182 | 2,727 | 2,870 | 3,175 | 3,371 |
| Total months of labor..... | 13.0 | 13.7 | 14.5 | 18.6 | 23.4 | 30.6 | 10.4 | 13.0 | 14.6 | 17.7 | 22.5 |
| Months of labor hired..... | .9 | 1.3 | 1.9 | 5.7 | 9.3 | 13.2 | .7 | .8 | 1.8 | 3.6 | 7.6 |
| FARM INVESTMENT | | | | | | | | | | | |
| Livestock inventory..... | \$ 3,238 | \$ 4,352 | \$ 4,459 | \$ 6,190 | \$ 8,964 | \$ 14,291 | \$ 2,424 | \$ 3,387 | \$ 5,762 | \$ 6,943 | \$ 10,568 |
| Grain inventory..... | 8,777 | 12,287 | 16,053 | 21,750 | 29,024 | 40,193 | 6,007 | 9,070 | 11,960 | 16,609 | 23,492 |
| Remaining capital cost in: | | | | | | | | | | | |
| Machinery..... | 4,976 | 5,940 | 8,073 | 10,769 | 13,570 | 18,327 | 4,411 | 5,450 | 7,212 | 9,523 | 14,166 |
| Buildings and fence..... | 8,423 | 11,078 | 15,037 | 18,332 | 23,033 | 28,129 | 10,471 | 9,858 | 12,739 | 14,870 | 17,993 |
| Soil fertility..... | 106 | 118 | 189 | 176 | 269 | 331 | 47 | 139 | 87 | 174 | 325 |
| Auto..... | 707 | 714 | 793 | 880 | 1,175 | 1,249 | 923 | 656 | 814 | 780 | 1,141 |
| Value of land (current basis)..... | 78,241 | 112,749 | 146,815 | 198,946 | 268,897 | 381,882 | 54,376 | 87,082 | 112,118 | 152,192 | 229,417 |
| Total farm investment..... | 104,468 | 147,238 | 191,419 | 257,043 | 344,932 | 484,402 | 78,659 | 115,642 | 150,692 | 201,091 | 297,102 |
| Total farm investment per acre..... | 669.67 | 645.78 | 635.94 | 630.01 | 617.05 | 593.63 | 535.10 | 498.46 | 492.46 | 483.39 | 462.06 |
| PERCENT OF TILLABLE LAND IN | | | | | | | | | | | |
| Corn and corn silage..... | 53.2 | 47.2 | 46.7 | 45.5 | 45.4 | 44.5 | 56.2 | 46.8 | 48.5 | 44.4 | 44.3 |
| Soybeans..... | 20.4 | 26.6 | 28.8 | 30.1 | 30.1 | 32.4 | 16.0 | 20.3 | 23.7 | 24.6 | 27.2 |
| Wheat..... | 4.4 | 6.5 | 7.1 | 7.7 | 7.4 | 7.7 | 4.2 | 7.6 | 7.0 | 7.6 | 7.2 |
| Other small grains..... | 6.7 | 4.1 | 2.8 | 3.2 | 3.7 | 2.3 | 8.5 | 5.6 | 5.3 | 5.3 | 3.7 |
| Diverted acres..... | 5.4 | 6.2 | 7.4 | 6.4 | 7.1 | 6.8 | 5.1 | 7.9 | 6.3 | 8.2 | 9.6 |
| All hay and pasture crops..... | 8.9 | 8.5 | 6.4 | 5.7 | 5.7 | 4.8 | 9.3 | 11.4 | 8.3 | 9.2 | 6.0 |
| CROP YIELDS, bushels per acre | | | | | | | | | | | |
| Corn..... | 103.4 | 99.8 | 101.8 | 105.6 | 104.8 | 106.7 | 92.9 | 87.7 | 88.9 | 90.4 | 92.9 |
| Soybeans..... | 32.2 | 31.2 | 30.9 | 31.0 | 30.9 | 30.9 | 28.1 | 29.9 | 27.9 | 28.9 | 29.0 |
| Wheat..... | 47.2 | 45.8 | 44.7 | 45.9 | 45.2 | 46.3 | 44.3 | 40.9 | 39.0 | 47.5 | 42.5 |
| Oats..... | 54.5 | 58.3 | 58.8 | 59.2 | 60.6 | 63.7 | 53.6 | 60.8 | 35.9 | 49.2 | 50.9 |

Table 13.—Average Costs, Returns, and Financial Summary by Size and Type of Farm, Northern Illinois, 1964

| | HOG FARMS WITH SOIL RATING 76-100 | | | | | HOG FARMS WITH SOIL RATING 56-75 | | | | |
|---|-----------------------------------|---------------|---------------|---------------|------------|----------------------------------|---------------|---------------|---------------|------------|
| | Under 180 52 | 180-259 60 | 260-339 45 | 340-499 32 | 500+ 18 | Under 180 37 | 180-259 39 | 260-339 35 | 340-499 50 | 500+ 32 |
| Range in size (total acres)..... | 148 | 223 | 295 | 408 | 618 | 147 | 227 | 300 | 402 | 677 |
| Number of farms..... | 138 | 205 | 266 | 358 | 517 | 130 | 193 | 249 | 318 | 471 |
| Size of farm (acres)..... | 83 | 82 | 81 | 82 | 82 | 67 | 68 | 67 | 67 | 68 |
| Acres of tillable land..... | 34 | 50 | 19 | 42 | 28 | 87 | 28 | 44 | 44 | 50 |
| Soil rating on tillable land..... | 1.4 | 1.5 | .6 | .2 | .9 | 2.3 | 1.6 | .1 | .5 | 1.1 |
| Hens, number..... | 120 | 208 | 246 | 288 | 561 | 126 | 197 | 191 | 350 | 606 |
| Dairy cows, number..... | 1,380 | 1,461 | 1,751 | 2,102 | 2,487 | 1,066 | 1,256 | 1,604 | 1,890 | 2,624 |
| Beef produced, hundredweight..... | | | | | | | | | | |
| Pork produced, hundredweight..... | | | | | | | | | | |
| DOLLAR COSTS PER FARM | | | | | | | | | | |
| Soil fertility..... | \$ 1,272 | \$ 1,770 | \$ 2,376 | \$ 3,806 | \$ 5,273 | \$ 964 | \$ 1,847 | \$ 2,319 | \$ 3,116 | \$ 5,089 |
| Buildings and fence..... | 1,668 | 1,839 | 2,049 | 2,873 | 4,756 | 1,377 | 2,233 | 1,975 | 2,624 | 3,835 |
| Machinery and equipment..... | 4,515 | 5,680 | 7,052 | 9,072 | 13,148 | 4,062 | 5,127 | 6,796 | 7,912 | 10,574 |
| Labor..... | 3,289 | 3,840 | 4,225 | 5,946 | 7,272 | 3,373 | 3,354 | 3,913 | 5,104 | 7,428 |
| Taxes..... | 1,193 | 1,677 | 1,963 | 2,929 | 3,959 | 990 | 1,395 | 1,625 | 2,063 | 2,967 |
| Seed expense..... | 461 | 602 | 776 | 1,050 | 1,255 | 341 | 526 | 674 | 858 | 1,231 |
| Crop expense..... | 331 | 473 | 685 | 988 | 1,464 | 239 | 420 | 516 | 695 | 1,052 |
| Livestock and miscellaneous expense..... | 1,165 | 1,111 | 1,378 | 1,698 | 2,078 | 836 | 1,061 | 1,064 | 1,426 | 1,771 |
| Interest charge on capital..... | 4,858 | 6,754 | 8,270 | 10,953 | 16,295 | 3,683 | 5,528 | 6,451 | 8,396 | 13,040 |
| Total non-feed costs..... | 18,752 | 23,746 | 28,774 | 39,315 | 55,500 | 15,865 | 21,491 | 25,333 | 32,194 | 46,987 |
| Total value of feed fed..... | 17,301 | 20,075 | 22,773 | 27,518 | 37,550 | 14,805 | 17,069 | 20,357 | 26,685 | 39,628 |
| DOLLAR RETURNS PER FARM | | | | | | | | | | |
| Livestock returns above feed cost..... | \$ 6,218 | \$ 6,173 | \$ 8,123 | \$ 9,002 | \$10,621 | \$ 5,471 | \$ 5,937 | \$ 7,037 | \$ 8,538 | \$10,350 |
| Feed and grain returns..... | 12,598 | 18,633 | 24,586 | 33,665 | 48,638 | 9,950 | 15,773 | 19,966 | 25,958 | 39,787 |
| Other cash income..... | 951 | 891 | 1,227 | 1,456 | 1,641 | 837 | 826 | 1,210 | 1,009 | 2,054 |
| Total value of farm production..... | 19,767 | 25,717 | 33,936 | 44,123 | 60,900 | 16,258 | 22,536 | 28,213 | 35,505 | 52,191 |
| Management returns..... | 1,015 | 1,971 | 5,162 | 4,808 | 5,400 | 393 | 1,045 | 2,880 | 3,311 | 5,204 |
| Farm production per \$1.00 of non-feed costs..... | 1.05 | 1.08 | 1.18 | 1.12 | 1.10 | 1.02 | 1.05 | 1.11 | 1.10 | 1.11 |
| Farm production per man..... | 16,472 | 18,590 | 22,253 | 21,880 | 24,119 | 13,363 | 18,272 | 19,684 | 19,634 | 21,822 |
| FINANCIAL SUMMARY | | | | | | | | | | |
| Cash sales of products and services..... | \$31,835 | \$41,813 | \$48,919 | \$62,830 | \$86,523 | \$25,781 | \$34,829 | \$42,884 | \$52,160 | \$81,861 |
| Sales of capital items..... | 100 | 100 | 75 | 160 | 89 | 157 | 49 | 67 | 254 | 404 |
| Total cash income..... | 31,935 | 41,913 | 48,994 | 62,990 | 86,612 | 25,938 | 34,878 | 42,951 | 52,414 | 82,265 |
| Purchased livestock..... | 2,483 | 5,651 | 5,604 | 6,950 | 10,569 | 2,536 | 3,793 | 3,702 | 5,400 | 12,242 |
| Purchased feed..... | 8,674 | 9,371 | 10,193 | 11,520 | 15,036 | 7,628 | 7,974 | 10,806 | 11,518 | 18,770 |
| Cash operating expenses..... | 8,165 | 10,545 | 13,006 | 19,708 | 27,103 | 6,865 | 9,428 | 11,788 | 15,731 | 23,678 |
| Purchase of capital items..... | 3,331 | 3,271 | 5,344 | 6,707 | 9,590 | 2,274 | 2,743 | 4,834 | 6,202 | 6,336 |
| Total cash expenditures..... | 22,653 | 28,838 | 34,147 | 44,885 | 62,298 | 19,303 | 23,938 | 31,130 | 38,851 | 61,026 |
| Cash balance..... | \$ 9,282 | \$13,075 | \$14,847 | \$18,105 | \$24,314 | \$ 6,635 | \$10,940 | \$11,821 | \$13,563 | \$21,239 |
| Inventory change..... | -1,016 | -1,258 | 598 | -439 | -298 | 480 | -737 | -371 | -22 | 1,066 |
| Capital change..... | 349 | -265 | 981 | 1,236 | 1,436 | -391 | -882 | 736 | 1,362 | -1,015 |
| Farm products consumed..... | 105 | 184 | 216 | 202 | 280 | 161 | 211 | 208 | 285 | 276 |
| Farm and family earnings..... | 8,720 | 11,736 | 16,642 | 19,104 | 25,732 | 6,885 | 9,532 | 12,394 | 15,188 | 21,566 |
| Labor and management earnings..... | 3,702 | 4,605 | 7,860 | 7,501 | 8,075 | 3,053 | 3,719 | 5,548 | 6,006 | 7,890 |
| Capital and management earnings..... | 5,873 | 8,775 | 13,432 | 15,761 | 21,695 | 4,076 | 6,573 | 9,331 | 11,707 | 18,244 |
| Capital and management earnings per acre..... | 39.68 | 39.13 | 45.53 | 38.63 | 35.11 | 27.73 | 28.96 | 31.10 | 29.12 | 26.95 |

Table 13a. — Average Operating Costs, Investment, and Land Use by Size and Type of Farm, Northern Illinois, 1964

| | HOG FARMS WITH SOIL RATING 76-100 | | | | | HOG FARMS WITH SOIL RATING 56-75 | | | | |
|--|-----------------------------------|---------------|---------------|---------------|------------|----------------------------------|---------------|---------------|---------------|------------|
| | Under 180 52 | 180-259 60 | 260-339 45 | 340-499 32 | 500+ 18 | Under 180 37 | 180-259 39 | 260-339 35 | 340-499 50 | 500+ 32 |
| Range in size (total acres)..... | | | | | | | | | | |
| Number of farms..... | | | | | | | | | | |
| COSTS AND RETURNS PER TILLABLE ACRE | | | | | | | | | | |
| Soil fertility..... | \$ 8.59 | \$ 8.63 | \$ 8.93 | \$ 10.63 | \$ 10.20 | \$ 7.42 | \$ 9.57 | \$ 9.31 | \$ 9.80 | \$ 10.80 |
| Buildings and fence..... | 11.27 | 8.97 | 7.70 | 8.03 | 9.20 | 10.59 | 11.57 | 7.93 | 8.25 | 8.14 |
| Machinery and equipment..... | 30.51 | 27.71 | 26.51 | 25.34 | 25.43 | 31.25 | 26.56 | 27.29 | 24.88 | 22.45 |
| Labor..... | 22.22 | 18.73 | 15.88 | 16.61 | 14.06 | 25.95 | 17.38 | 15.71 | 16.05 | 15.77 |
| Feed and grain returns..... | 85.12 | 90.99 | 92.43 | 94.04 | 94.08 | 76.54 | 81.72 | 80.18 | 81.63 | 84.47 |
| Total value of farm production..... | 133.56 | 125.45 | 127.58 | 123.25 | 117.79 | 125.06 | 116.77 | 113.30 | 111.65 | 110.81 |
| Total non-feed costs..... | 126.70 | 115.83 | 108.16 | 109.82 | 107.35 | 122.04 | 111.35 | 101.73 | 101.24 | 99.76 |
| Management returns..... | 6.86 | 9.62 | 19.42 | 13.43 | 10.44 | 3.02 | 5.42 | 11.57 | 10.41 | 11.05 |
| SELECTED COST ITEMS | | | | | | | | | | |
| Fertilizer, annual application..... | \$ 1,217 | \$ 1,693 | \$ 2,310 | \$ 3,708 | \$ 5,173 | \$ 948 | \$ 1,799 | \$ 2,251 | \$ 3,041 | \$ 4,944 |
| Lime and rock phosphate depreciation..... | 55 | 77 | 66 | 98 | 100 | 16 | 48 | 68 | 75 | 145 |
| Building repairs and maintenance..... | 509 | 550 | 590 | 975 | 1,875 | 347 | 660 | 609 | 968 | 1,170 |
| Machinery depreciation..... | 1,159 | 1,289 | 1,459 | 1,898 | 2,881 | 1,030 | 1,573 | 1,366 | 1,656 | 2,665 |
| Machinery and equipment depreciation..... | 1,431 | 1,809 | 2,489 | 3,005 | 4,655 | 1,255 | 1,689 | 2,365 | 2,572 | 3,857 |
| Machinery repairs and supplies..... | 1,033 | 1,359 | 1,749 | 2,408 | 3,105 | 877 | 1,166 | 1,732 | 2,111 | 2,787 |
| Machinery hire..... | 539 | 664 | 614 | 1,021 | 1,396 | 563 | 587 | 762 | 903 | 953 |
| Gasoline and oil..... | 723 | 954 | 1,249 | 1,532 | 2,407 | 653 | 846 | 1,168 | 1,369 | 1,876 |
| Hired labor charge..... | 442 | 829 | 1,015 | 2,603 | 3,235 | 564 | 395 | 850 | 1,623 | 4,106 |
| Unpaid labor charge..... | 2,847 | 3,011 | 3,210 | 3,343 | 4,037 | 2,809 | 2,959 | 3,063 | 3,481 | 3,322 |
| Total months of labor..... | 14.4 | 16.6 | 18.3 | 24.2 | 30.3 | 14.6 | 14.8 | 17.2 | 21.7 | 28.7 |
| Months of labor hired..... | 1.8 | 3.2 | 4.0 | 9.3 | 12.4 | 2.1 | 1.6 | 3.6 | 6.2 | 14.0 |
| FARM INVESTMENT | | | | | | | | | | |
| Livestock inventory..... | \$11,625 | \$14,788 | \$16,456 | \$21,375 | \$31,270 | \$10,056 | \$12,506 | \$13,783 | \$21,219 | \$32,822 |
| Grain inventory..... | 8,542 | 11,843 | 14,458 | 19,811 | 27,536 | 6,537 | 10,310 | 12,286 | 13,627 | 23,311 |
| Remaining capital cost in: | | | | | | | | | | |
| Machinery..... | 5,480 | 7,411 | 8,829 | 11,877 | 16,998 | 4,728 | 7,145 | 8,201 | 9,911 | 14,272 |
| Buildings and fence..... | 13,197 | 15,591 | 17,849 | 18,979 | 36,353 | 10,060 | 15,827 | 14,307 | 17,460 | 26,796 |
| Soil fertility..... | 99 | 173 | 112 | 232 | 174 | 30 | 95 | 122 | 145 | 304 |
| Auto..... | 833 | 835 | 697 | 888 | 913 | 673 | 793 | 731 | 757 | 694 |
| Value of land (current basis)..... | 71,741 | 105,537 | 133,750 | 182,361 | 265,810 | 51,972 | 79,848 | 99,478 | 131,018 | 203,258 |
| Total farm investment..... | 111,517 | 156,178 | 192,151 | 255,523 | 379,054 | 84,056 | 126,524 | 148,908 | 194,137 | 301,457 |
| Total farm investment per acre..... | 753.49 | 700.35 | 651.36 | 626.28 | 613.36 | 571.81 | 557.37 | 496.36 | 482.93 | 445.28 |
| PERCENT OF TILLABLE LAND IN | | | | | | | | | | |
| Corn and corn silage..... | 63.1 | 57.0 | 57.5 | 63.8 | 61.0 | 56.0 | 55.1 | 51.7 | 53.1 | 49.3 |
| Soybeans..... | 4.9 | 13.0 | 11.7 | 10.9 | 9.6 | 4.9 | 9.9 | 16.5 | 13.3 | 15.9 |
| Wheat..... | 5 | 1.8 | 2.7 | 3.4 | 2.8 | 1.6 | 4.6 | 5.6 | 5.4 | 5.2 |
| Other small grains..... | 13.4 | 10.4 | 8.9 | 8.5 | 8.3 | 13.7 | 9.4 | 5.8 | 6.9 | 6.4 |
| Diverted acres..... | 2.3 | 2.2 | 4.5 | 2.2 | 4.5 | 2.7 | 3.6 | 5.2 | 5.1 | 5.8 |
| All hay and pasture crops..... | 15.7 | 14.8 | 13.8 | 11.1 | 12.7 | 20.9 | 17.0 | 15.0 | 15.8 | 16.8 |
| CROP YIELDS, bushels per acre | | | | | | | | | | |
| Corn..... | 99.3 | 99.6 | 100.4 | 96.6 | 98.6 | 87.8 | 86.4 | 87.3 | 90.5 | 92.9 |
| Soybeans..... | 31.7 | 31.8 | 33.2 | 32.0 | 34.7 | 31.5 | 29.4 | 30.4 | 29.6 | 30.1 |
| Wheat..... | 44.8 | 43.3 | 43.9 | 43.6 | 41.9 | 37.3 | 40.7 | 37.8 | 38.0 | 38.6 |
| Oats..... | 62.8 | 62.6 | 59.4 | 57.8 | 64.4 | 52.6 | 51.6 | 59.6 | 53.2 | 52.2 |

Table 14. — Average Costs, Returns, and Financial Summary by Size and Type of Farm, Southern Illinois, 1964

| | GRAIN FARMS WITH SOIL RATING 5-55 | | | | | HOG FARMS WITH SOIL RATING 5-55 | | | | |
|---|-----------------------------------|---------------|---------------|---------------|------------|---------------------------------|---------------|---------------|---------------|------------|
| | 180-259 32 | 260-339 47 | 340-499 91 | 500-649 48 | 650+ 53 | Under 180 19 | 180-259 51 | 260-339 58 | 340-499 74 | 500+ 36 |
| Range in size (total acres)..... | 222 | 301 | 419 | 562 | 904 | 134 | 219 | 298 | 401 | 679 |
| Number of farms..... | 201 | 275 | 356 | 466 | 713 | 111 | 185 | 240 | 310 | 482 |
| Size of farm (acres)..... | 35 | 35 | 33 | 32 | 35 | 32 | 35 | 32 | 32 | 31 |
| Acres of tillable land..... | 61 | 83 | 53 | 83 | 26 | 54 | 58 | 95 | 43 | 84 |
| Soil rating on tillable land..... | .1 | .1 | .1 | 3.7 | 4.0 | .1 | .1 | .1 | .2 | .2 |
| Hens, number..... | 59 | 63 | 92 | 143 | 236 | 58 | 118 | 168 | 181 | 296 |
| Dairy cows, number..... | 297 | 297 | 306 | 348 | 402 | 1,351 | 1,095 | 1,281 | 1,512 | 2,052 |
| Beef produced, hundredweight..... | | | | | | | | | | |
| Pork produced, hundredweight..... | | | | | | | | | | |
| DOLLAR COSTS PER FARM | | | | | | | | | | |
| Soil fertility..... | \$ 1,857 | \$ 2,359 | \$ 3,331 | \$ 4,568 | \$ 6,961 | \$ 1,349 | \$ 2,037 | \$ 2,569 | \$ 3,460 | \$ 5,337 |
| Buildings and fence..... | 821 | 989 | 1,200 | 1,541 | 2,179 | 1,170 | 1,385 | 1,492 | 1,928 | 2,420 |
| Machinery and equipment..... | 4,143 | 5,393 | 6,396 | 8,549 | 12,009 | 4,050 | 4,484 | 5,989 | 7,202 | 9,742 |
| Labor..... | 3,251 | 3,233 | 3,860 | 4,589 | 6,597 | 3,470 | 3,620 | 3,863 | 4,824 | 6,071 |
| Taxes..... | 826 | 1,061 | 1,188 | 1,573 | 2,468 | 604 | 780 | 1,019 | 1,242 | 1,833 |
| Seed expense..... | 424 | 551 | 812 | 902 | 1,425 | 286 | 377 | 562 | 696 | 913 |
| Crop expense..... | 308 | 510 | 593 | 842 | 1,393 | 930 | 204 | 352 | 630 | 965 |
| Livestock and miscellaneous expense..... | 335 | 332 | 449 | 608 | 837 | 930 | 726 | 667 | 1,059 | 1,262 |
| Interest charge on capital..... | 2,851 | 3,674 | 4,360 | 5,872 | 9,145 | 2,320 | 3,148 | 3,796 | 4,899 | 7,002 |
| Total non-feed costs..... | 14,816 | 18,102 | 22,189 | 29,044 | 43,014 | 14,383 | 16,909 | 20,508 | 25,940 | 35,545 |
| Total value of feed fed..... | 4,343 | 4,360 | 4,947 | 7,414 | 9,335 | 15,400 | 13,661 | 16,915 | 19,181 | 26,986 |
| DOLLAR RETURNS PER FARM | | | | | | | | | | |
| Livestock returns above feed cost..... | \$ 1,187 | \$ 1,246 | \$ 1,483 | \$ 1,971 | \$ 2,309 | \$ 6,218 | \$ 4,892 | \$ 5,628 | \$ 6,927 | \$ 9,349 |
| Feed and grain returns..... | 13,722 | 17,783 | 21,883 | 29,368 | 46,339 | 7,100 | 11,002 | 14,287 | 18,450 | 29,400 |
| Other cash income..... | 615 | 959 | 1,280 | 1,575 | 2,521 | 347 | 902 | 1,038 | 1,403 | 1,613 |
| Total value of farm production..... | 15,524 | 19,988 | 24,646 | 32,914 | 51,169 | 13,665 | 16,796 | 20,953 | 26,780 | 40,362 |
| Management returns..... | 708 | 1,886 | 2,457 | 3,870 | 8,155 | -718 | -113 | 445 | 840 | 4,817 |
| Farm production per \$1.00 of non-feed costs..... | 1.05 | 1.10 | 1.11 | 1.13 | 1.19 | .95 | .99 | 1.02 | 1.03 | 1.14 |
| Farm production per man..... | 12,673 | 15,990 | 16,804 | 18,989 | 21,101 | 10,379 | 12,215 | 14,368 | 14,608 | 18,005 |
| FINANCIAL SUMMARY | | | | | | | | | | |
| Cash sales of products and services..... | \$18,834 | \$25,580 | \$30,984 | \$40,881 | \$60,166 | \$28,360 | \$29,993 | \$35,602 | \$42,770 | \$59,774 |
| Sales of capital items..... | 6 | 28 | 137 | 392 | 366 | 586 | 222 | 82 | 87 | 40 |
| Total cash income..... | 18,840 | 25,608 | 31,121 | 41,273 | 60,532 | 28,946 | 30,215 | 35,684 | 42,857 | 59,814 |
| Purchased livestock..... | 855 | 1,555 | 1,698 | 3,897 | 3,945 | 2,275 | 4,022 | 3,574 | 4,112 | 6,188 |
| Purchased feed..... | 1,693 | 1,765 | 2,408 | 2,673 | 2,939 | 10,414 | 7,204 | 9,026 | 9,596 | 13,074 |
| Cash operating expenses..... | 6,862 | 8,622 | 11,417 | 15,108 | 23,091 | 6,975 | 8,131 | 10,364 | 13,669 | 19,446 |
| Purchase of capital items..... | 2,289 | 4,273 | 4,213 | 7,130 | 9,294 | 3,429 | 2,640 | 4,843 | 4,520 | 6,776 |
| Total cash expenditures..... | 11,699 | 16,215 | 19,736 | 28,808 | 39,269 | 23,093 | 21,997 | 27,807 | 31,897 | 45,484 |
| Cash balance..... | \$ 7,141 | \$ 9,393 | \$11,385 | \$12,465 | \$21,263 | \$ 5,853 | \$ 8,218 | \$ 7,877 | \$10,960 | \$14,330 |
| Inventory change..... | -922 | -2,403 | -2,385 | -1,624 | -2,341 | -2,134 | -2,121 | -2,236 | -2,541 | -374 |
| Capital change..... | 9 | 1,193 | 663 | 1,968 | 1,945 | 527 | -177 | 1,354 | 417 | 1,512 |
| Farm products consumed..... | 160 | 131 | 153 | 227 | 228 | 128 | 150 | 187 | 259 | 224 |
| Farm and family earnings..... | 6,388 | 8,314 | 9,816 | 13,036 | 21,095 | 4,374 | 6,070 | 7,182 | 9,095 | 15,692 |
| Labor and management earnings..... | 3,268 | 4,448 | 5,022 | 6,423 | 10,757 | 1,828 | 2,454 | 3,014 | 3,405 | 7,397 |
| Capital and management earnings..... | 3,559 | 5,560 | 6,817 | 9,742 | 17,300 | 1,602 | 3,035 | 4,241 | 5,739 | 11,819 |
| Capital and management earnings per acre..... | 16.03 | 18.47 | 16.27 | 17.33 | 19.14 | 11.96 | 13.86 | 14.23 | 14.31 | 17.41 |

Table 14a. — Average Operating Costs, Investment, and Land Use by Size and Type of Farm, Southern Illinois, 1964

| | GRAIN FARMS WITH SOIL RATING 5-55 | | | | | HOG FARMS WITH SOIL RATING 5-55 | | | | |
|--|-----------------------------------|---------------|---------------|---------------|------------|---------------------------------|---------------|---------------|---------------|------------|
| | 180-259 32 | 260-339 47 | 340-499 91 | 500-649 48 | 650+ 53 | Under 180 19 | 180-259 51 | 260-339 58 | 340-499 74 | 500+ 36 |
| Range in size (total acres)..... | | | | | | | | | | |
| Number of farms..... | | | | | | | | | | |
| COSTS AND RETURNS PER TILLABLE ACRE | | | | | | | | | | |
| Soil fertility..... | 9.24 \$ | 8.58 \$ | 9.36 \$ | 9.80 \$ | 9.76 | 12.15 \$ | 11.01 \$ | 10.70 \$ | 11.16 \$ | 11.07 |
| Buildings and fence..... | 4.08 | 3.60 | 3.37 | 3.31 | 3.06 | 10.54 | 7.49 | 6.22 | 6.22 | 5.02 |
| Machinery and equipment..... | 20.61 | 19.61 | 17.97 | 18.35 | 16.84 | 36.49 | 24.24 | 24.95 | 23.23 | 20.21 |
| Labor..... | 16.17 | 11.76 | 10.84 | 9.85 | 9.25 | 31.26 | 19.57 | 16.10 | 15.56 | 12.60 |
| Feed and grain returns..... | 68.27 | 64.66 | 61.47 | 63.02 | 64.99 | 63.96 | 59.47 | 59.53 | 59.52 | 61.00 |
| Total value of farm production..... | 77.23 | 72.68 | 69.24 | 70.63 | 71.77 | 123.11 | 90.79 | 87.30 | 86.39 | 83.74 |
| Total non-feed costs..... | 73.71 | 65.83 | 62.33 | 62.33 | 60.33 | 129.58 | 91.40 | 85.45 | 83.68 | 73.74 |
| Management returns..... | 3.52 | 6.85 | 6.91 | 8.30 | 11.44 | -6.47 | - .61 | 1.85 | 2.71 | 10.00 |
| SELECTED COST ITEMS | | | | | | | | | | |
| Fertilizer, annual application..... | \$ 1,803 | \$ 2,240 | \$ 3,198 | \$ 4,429 | \$ 6,729 | \$ 1,279 | \$ 1,915 | \$ 2,390 | \$ 3,299 | \$ 5,146 |
| Lime and rock phosphate depreciation..... | 54 | 119 | 133 | 139 | 232 | 70 | 122 | 179 | 161 | 191 |
| Building repairs and maintenance..... | 239 | 364 | 477 | 625 | 842 | 382 | 553 | 585 | 749 | 1,002 |
| Building depreciation..... | 582 | 625 | 723 | 916 | 1,337 | 788 | 832 | 907 | 1,179 | 1,418 |
| Machinery and equipment depreciation..... | 1,489 | 2,112 | 2,308 | 3,455 | 5,091 | 1,230 | 1,442 | 2,112 | 2,445 | 3,310 |
| Machinery repairs and supplies..... | 964 | 1,424 | 1,579 | 2,198 | 2,960 | 915 | 1,102 | 1,616 | 1,833 | 2,851 |
| Machinery hire..... | 422 | 295 | 573 | 519 | 695 | 584 | 528 | 535 | 742 | 805 |
| Gasoline and oil..... | 757 | 950 | 1,221 | 1,535 | 2,305 | 563 | 760 | 994 | 1,327 | 1,699 |
| Hired labor charge..... | 422 | 479 | 861 | 1,295 | 2,802 | 698 | 585 | 922 | 1,468 | 2,198 |
| Unpaid labor charge..... | 2,829 | 2,754 | 2,999 | 3,294 | 3,795 | 2,772 | 3,035 | 2,941 | 3,356 | 3,873 |
| Total months of labor..... | 14.7 | 15.0 | 17.6 | 20.8 | 29.1 | 15.8 | 16.5 | 17.5 | 22.0 | 26.9 |
| Months of labor hired..... | 1.6 | 2.2 | 3.7 | 5.4 | 11.5 | 2.9 | 2.4 | 3.8 | 6.4 | 8.9 |
| FARM INVESTMENT | | | | | | | | | | |
| Livestock inventory..... | \$ 4,039 | \$ 4,333 | \$ 5,443 | \$ 8,405 | \$11,148 | \$ 8,540 | \$ 9,131 | \$11,490 | \$14,119 | \$19,154 |
| Grain inventory..... | 7,711 | 9,765 | 9,976 | 13,997 | 18,570 | 5,833 | 7,269 | 8,881 | 11,001 | 18,118 |
| Remaining capital cost in: | | | | | | | | | | |
| Machinery..... | 6,165 | 8,155 | 9,596 | 13,142 | 19,425 | 5,055 | 5,987 | 7,659 | 10,182 | 12,160 |
| Buildings and fence..... | 5,895 | 6,501 | 7,303 | 8,693 | 14,495 | 8,357 | 9,054 | 8,901 | 12,369 | 13,027 |
| Soil fertility..... | 108 | 259 | 300 | 258 | 553 | 145 | 257 | 385 | 317 | 438 |
| Auto..... | 519 | 615 | 701 | 790 | 918 | 636 | 577 | 595 | 648 | 874 |
| Value of land (current basis)..... | 40,738 | 54,808 | 67,350 | 90,202 | 147,233 | 22,287 | 38,359 | 47,523 | 61,682 | 95,343 |
| Total farm investment..... | 65,175 | 84,436 | 100,669 | 135,487 | 212,342 | 50,853 | 70,634 | 85,434 | 110,318 | 159,114 |
| Total farm investment per acre..... | 293.58 | 280.52 | 240.26 | 241.08 | 234.89 | 379.50 | 322.53 | 286.69 | 275.11 | 234.34 |
| PERCENT OF TILLABLE LAND IN | | | | | | | | | | |
| Corn and corn silage..... | 38.9 | 35.7 | 36.2 | 38.0 | 37.7 | 53.5 | 44.9 | 46.3 | 45.4 | 41.5 |
| Soybeans..... | 32.0 | 36.7 | 33.0 | 30.7 | 26.3 | 12.8 | 20.4 | 24.0 | 22.9 | 21.8 |
| Wheat..... | 16.0 | 15.6 | 15.6 | 16.0 | 16.4 | 13.4 | 14.9 | 14.6 | 16.1 | 15.2 |
| Other small grains..... | 1.1 | .3 | .9 | .8 | .8 | .. | 1.0 | 1.1 | 1.0 | 1.0 |
| Diverted acres..... | 3.8 | 5.1 | 5.4 | 4.4 | 6.5 | 3.3 | 4.4 | 4.3 | 3.7 | 4.5 |
| All hay and pasture crops..... | 6.9 | 5.5 | 7.9 | 9.1 | 10.1 | 16.7 | 13.4 | 9.0 | 9.5 | 14.5 |
| CROP YIELDS, bushels per acre | | | | | | | | | | |
| Corn..... | 70.1 | 67.2 | 64.0 | 69.5 | 70.1 | 62.7 | 57.8 | 59.6 | 58.8 | 70.6 |
| Soybeans..... | 28.4 | 23.1 | 22.4 | 22.4 | 23.3 | 23.0 | 23.4 | 22.0 | 19.8 | 21.5 |
| Wheat..... | 44.2 | 41.9 | 43.8 | 41.2 | 43.5 | 43.0 | 41.4 | 43.0 | 40.9 | 42.1 |
| Oats..... | 55.2 | 58.2 | 51.8 | 37.7 | 40.5 | .. | 51.5 | 46.7 | 52.5 | 35.3 |

Table 15. — Average Costs, Returns, and Financial Summary by Size and Type of Farm, Northern and Southern Illinois, 1964

| | DAIRY FARMS, NORTHERN ILLINOIS, WITH SOIL RATING OF | | | | | DAIRY FARMS, SOUTHERN ILLINOIS, WITH SOIL RATING OF 5-55 | | | | | |
|---|---|-----------|-----------|-----------|-----------|--|-----------|-----------|-----------|-----------|------|
| | 76-100 | 56-75 | 76-100 | 180-259 | 56-75 | 56-100 | 260-339 | 180-259 | 260-339 | 340-499 | 500+ |
| Range in size (total acres)..... | Under 180 | 180-259 | 260-339 | 340-499 | 500+ | Under 180 | 180-259 | 260-339 | 340-499 | 500+ | |
| Number of farms..... | 19 | 38 | 16 | 36 | 27 | 33 | 55 | 30 | 21 | 19 | |
| Size of farm (acres)..... | 149 | 147 | 222 | 218 | 295 | 148 | 220 | 300 | 392 | 675 | |
| Acres of tillable land..... | 145 | 124 | 200 | 183 | 254 | 124 | 187 | 250 | 332 | 508 | |
| Soil rating on tillable land..... | 83 | 67 | 82 | 67 | 70 | 32 | 31 | 27 | 28 | 33 | |
| Hens, number..... | 86 | 62 | 120 | 61 | 190 | 58 | 82 | 56 | 100 | 86 | |
| Dairy cows, number..... | 31.9 | 32.6 | 44.9 | 38.1 | 51.1 | 31.0 | 36.2 | 38.3 | 50.2 | 66.5 | |
| Beef produced, hundredweight..... | ..... | 3 | 8 | 10 | 1 | ..... | 3 | ..... | 29 | 43 | |
| Pork produced, hundredweight..... | 100 | 136 | 85 | 195 | 221 | 89 | 143 | 70 | 97 | 142 | |
| DOLLAR COSTS PER FARM | | | | | | | | | | | |
| Soil fertility..... | \$ 1,086 | \$ 662 | \$ 1,763 | \$ 1,182 | \$ 1,762 | \$ 1,021 | \$ 1,652 | \$ 2,475 | \$ 2,690 | \$ 4,855 | |
| Buildings and fence..... | 1,462 | 1,639 | 2,782 | 2,177 | 2,871 | 1,073 | 1,705 | 1,620 | 2,270 | 3,314 | |
| Machinery and equipment..... | 5,041 | 4,530 | 7,362 | 5,767 | 8,383 | 4,714 | 6,205 | 6,572 | 8,417 | 12,626 | |
| Labor..... | 4,132 | 3,368 | 4,759 | 4,467 | 5,785 | 3,961 | 4,523 | 4,800 | 6,014 | 8,848 | |
| Taxes..... | 1,339 | 1,126 | 1,874 | 1,481 | 2,120 | 314 | 842 | 1,102 | 1,256 | 1,806 | |
| Seed expense..... | 442 | 371 | 606 | 512 | 716 | 314 | 476 | 543 | 710 | 1,249 | |
| Crop expense..... | 140 | 157 | 414 | 253 | 449 | 156 | 216 | 263 | 345 | 752 | |
| Livestock and miscellaneous expense..... | 1,225 | 1,026 | 1,837 | 1,210 | 1,707 | 947 | 1,128 | 1,202 | 1,468 | 2,169 | |
| Interest charge on capital..... | 4,652 | 3,834 | 7,184 | 5,367 | 7,657 | 2,377 | 3,378 | 3,845 | 5,182 | 8,618 | |
| Total non-feed costs..... | 19,519 | 16,713 | 28,581 | 22,416 | 31,450 | 15,187 | 20,125 | 22,422 | 28,352 | 44,237 | |
| Total value of feed fed..... | 10,250 | 10,155 | 14,111 | 12,818 | 18,073 | 9,749 | 12,657 | 11,985 | 15,928 | 25,407 | |
| DOLLAR RETURNS PER FARM | | | | | | | | | | | |
| Livestock returns above feed cost..... | \$ 7,269 | \$ 7,441 | \$ 9,889 | \$ 8,400 | \$ 11,275 | \$ 7,213 | \$ 7,997 | \$ 8,744 | \$ 10,808 | \$ 13,629 | |
| Feed and grain returns..... | 12,246 | 9,640 | 17,468 | 14,143 | 21,248 | 7,452 | 11,654 | 13,330 | 17,711 | 31,221 | |
| Other cash income..... | 619 | 520 | 1,106 | 840 | 1,232 | 650 | 797 | 757 | 1,444 | 1,864 | |
| Total value of farm production..... | 20,134 | 17,601 | 28,463 | 23,383 | 33,755 | 15,315 | 20,448 | 22,831 | 29,963 | 46,714 | |
| Management returns..... | 615 | 888 | -118 | 967 | 2,305 | 128 | 323 | 409 | 1,611 | 2,477 | |
| Farm production per \$1.00 of non-feed costs..... | 1.03 | 1.05 | 1.00 | 1.04 | 1.07 | 1.01 | 1.02 | 1.02 | 1.06 | 1.06 | |
| Farm production per man..... | 13,966 | 14,081 | 17,250 | 14,464 | 16,399 | 10,043 | 12,088 | 12,122 | 13,219 | 15,029 | |
| FINANCIAL SUMMARY | | | | | | | | | | | |
| Cash sales of products and services..... | \$ 24,222 | \$ 19,821 | \$ 32,452 | \$ 26,689 | \$ 39,594 | \$ 19,530 | \$ 26,855 | \$ 27,864 | \$ 37,405 | \$ 58,754 | |
| Sales of capital items..... | 24 | 9 | 254 | 75 | 15 | 53 | 6 | 35 | 103 | 246 | |
| Total cash income..... | 24,246 | 19,830 | 32,706 | 26,764 | 39,609 | 19,583 | 26,861 | 27,899 | 37,508 | 59,000 | |
| Purchased livestock..... | 1,147 | 926 | 599 | 938 | 1,146 | 815 | 1,112 | 986 | 1,677 | 4,392 | |
| Purchased feed..... | 3,924 | 2,429 | 4,157 | 3,523 | 5,115 | 3,795 | 4,788 | 3,719 | 5,443 | 7,663 | |
| Cash operating expenses..... | 8,692 | 6,992 | 12,902 | 9,768 | 14,354 | 6,624 | 9,888 | 11,307 | 13,965 | 23,530 | |
| Purchase of capital items..... | 2,080 | 2,303 | 4,594 | 4,256 | 5,027 | 3,281 | 4,060 | 4,894 | 7,031 | 12,992 | |
| Total cash expenditures..... | 15,843 | 12,650 | 22,252 | 18,485 | 25,642 | 14,515 | 19,848 | 20,906 | 28,116 | 48,577 | |
| Cash balance..... | \$ 8,403 | \$ 7,180 | \$ 10,454 | \$ 8,279 | \$ 13,967 | \$ 5,068 | \$ 7,013 | \$ 6,993 | \$ 9,392 | \$ 10,423 | |
| Inventory change..... | 764 | 876 | 476 | 839 | 90 | 77 | -837 | -634 | -656 | -429 | |
| Capital change..... | -857 | -680 | -794 | 402 | -384 | 632 | 436 | 1,029 | 1,752 | 5,014 | |
| Farm products consumed..... | 219 | 259 | 291 | 318 | 331 | 318 | 330 | 306 | 334 | 444 | |
| Farm and family earnings..... | 8,529 | 7,635 | 10,427 | 9,896 | 14,004 | 6,095 | 6,942 | 7,694 | 10,822 | 15,452 | |
| Labor and management earnings..... | 3,315 | 3,582 | 2,554 | 3,629 | 4,997 | 2,701 | 2,883 | 2,982 | 4,191 | 5,023 | |
| Capital and management earnings..... | 5,267 | 4,722 | 7,066 | 6,334 | 9,962 | 2,505 | 3,701 | 4,254 | 6,793 | 11,095 | |
| Capital and management earnings per acre..... | 35.35 | 32.12 | 31.83 | 29.06 | 33.77 | 16.92 | 16.82 | 14.18 | 17.33 | 16.44 | |

Table 15a. — Average Operating Costs, Investment, and Land Use by Size and Type of Farm, Northern and Southern Illinois, 1964

| | DAIRY FARMS, NORTHERN ILLINOIS, WITH SOIL RATING OF | | | | | | DAIRY FARMS, SOUTHERN ILLINOIS, WITH SOIL RATING OF 5-55 | | | | | | | | | |
|--|---|----------|-----------|----------|----------|----------|--|----------|-----------|----------|----------|----------|----------|----------|------|--|
| | 76-100 | | 56-75 | | 76-100 | | 180-259 | | 56-75 | | 260-339 | | 340-499 | | 500+ | |
| | Under 180 | 180-259 | Under 180 | 180-259 | 16 | 180-259 | 36 | 260-339 | Under 180 | 180-259 | 260-339 | 340-499 | 500+ | 19 | | |
| Range in size (total acres)..... | 19 | 38 | 19 | 38 | 16 | 36 | 27 | 33 | 55 | 30 | 21 | 21 | 19 | 19 | | |
| Number of farms..... | 19 | 38 | 19 | 38 | 16 | 36 | 27 | 33 | 55 | 30 | 21 | 21 | 19 | 19 | | |
| COSTS AND RETURNS PER TILLABLE ACRE | | | | | | | | | | | | | | | | |
| Soil fertility..... | 7.49 | 5.34 | 8.82 | 6.46 | 6.94 | 6.94 | 6.94 | 8.23 | 8.83 | 9.90 | 8.10 | 8.10 | 9.56 | 9.56 | | |
| Buildings and fence..... | 10.08 | 13.22 | 13.91 | 11.90 | 11.30 | 11.30 | 11.30 | 8.65 | 9.12 | 6.48 | 6.84 | 6.84 | 6.52 | 6.52 | | |
| Machinery and equipment..... | 34.76 | 36.53 | 36.81 | 31.51 | 33.00 | 33.00 | 33.00 | 38.02 | 33.18 | 26.29 | 25.35 | 25.35 | 24.85 | 24.85 | | |
| Labor..... | 28.50 | 27.16 | 23.80 | 24.41 | 22.78 | 22.78 | 22.78 | 31.94 | 24.19 | 19.20 | 18.11 | 18.11 | 17.42 | 17.42 | | |
| Feed and grain returns..... | 84.46 | 77.74 | 87.34 | 77.28 | 83.65 | 83.65 | 83.65 | 60.10 | 62.32 | 53.32 | 53.35 | 53.35 | 61.46 | 61.46 | | |
| Total value of farm production..... | 138.86 | 141.94 | 142.32 | 127.78 | 132.89 | 132.89 | 132.89 | 123.51 | 109.35 | 91.33 | 90.25 | 90.25 | 91.96 | 91.96 | | |
| Total non-feed costs..... | 134.61 | 134.78 | 142.91 | 122.49 | 123.82 | 123.82 | 123.82 | 122.48 | 107.62 | 89.69 | 85.40 | 85.40 | 87.08 | 87.08 | | |
| Management returns..... | 4.25 | 7.16 | - .59 | 5.29 | 9.07 | 9.07 | 9.07 | 1.03 | 1.73 | 1.64 | 4.85 | 4.85 | 4.88 | 4.88 | | |
| SELECTED COST ITEMS | | | | | | | | | | | | | | | | |
| Fertilizer, annual application..... | \$ 1,035 | \$ 650 | \$ 1,697 | \$ 1,142 | \$ 1,708 | \$ 1,708 | \$ 1,708 | \$ 930 | \$ 1,551 | \$ 2,290 | \$ 2,550 | \$ 2,550 | \$ 4,606 | \$ 4,606 | | |
| Lime and rock phosphate depreciation..... | 51 | 12 | 66 | 40 | 54 | 54 | 54 | 91 | 101 | 185 | 140 | 140 | 249 | 249 | | |
| Building repairs and maintenance..... | 315 | 506 | 938 | 617 | 841 | 841 | 841 | 366 | 619 | 609 | 838 | 838 | 1,155 | 1,155 | | |
| Building depreciation..... | 1,147 | 1,133 | 1,844 | 1,560 | 2,030 | 2,030 | 2,030 | 707 | 1,086 | 1,011 | 1,432 | 1,432 | 2,159 | 2,159 | | |
| Machinery and equipment depreciation..... | 1,460 | 1,550 | 2,860 | 1,881 | 2,991 | 2,991 | 2,991 | 1,628 | 2,225 | 2,424 | 3,399 | 3,399 | 5,053 | 5,053 | | |
| Machinery repairs and supplies..... | 1,166 | 944 | 1,567 | 1,428 | 2,015 | 2,015 | 2,015 | 1,033 | 1,442 | 1,652 | 2,083 | 2,083 | 3,468 | 3,468 | | |
| Machinery hire..... | 657 | 432 | 617 | 505 | 656 | 656 | 656 | 623 | 694 | 688 | 669 | 669 | 698 | 698 | | |
| Gasoline and oil..... | 810 | 673 | 1,069 | 927 | 1,265 | 1,265 | 1,265 | 622 | 965 | 956 | 1,286 | 1,286 | 2,138 | 2,138 | | |
| Hired labor charge..... | 870 | 455 | 1,398 | 905 | 1,743 | 1,743 | 1,743 | 371 | 1,282 | 1,360 | 1,985 | 1,985 | 4,491 | 4,491 | | |
| Unpaid labor charge..... | 3,262 | 2,913 | 3,361 | 3,562 | 4,042 | 4,042 | 4,042 | 3,590 | 3,241 | 3,440 | 4,029 | 4,029 | 4,357 | 4,357 | | |
| Total months of labor..... | 17.3 | 15.0 | 19.8 | 19.4 | 24.7 | 24.7 | 24.7 | 18.3 | 20.3 | 22.6 | 27.2 | 27.2 | 37.3 | 37.3 | | |
| Months of labor hired..... | 2.8 | 2.0 | 4.8 | 3.5 | 6.7 | 6.7 | 6.7 | 1.6 | 5.2 | 6.6 | 8.5 | 8.5 | 17.0 | 17.0 | | |
| FARM INVESTMENT | | | | | | | | | | | | | | | | |
| Livestock inventory..... | \$ 9,604 | \$ 9,853 | \$15,204 | \$11,930 | \$17,190 | \$17,190 | \$17,190 | \$ 8,803 | \$10,590 | \$10,866 | \$16,654 | \$16,654 | \$26,795 | \$26,795 | | |
| Grain inventory..... | 7,007 | 4,981 | 9,350 | 7,005 | 11,405 | 11,405 | 11,405 | 3,772 | 6,520 | 7,620 | 9,080 | 9,080 | 13,792 | 13,792 | | |
| Remaining capital cost in: | | | | | | | | | | | | | | | | |
| Machinery..... | 4,928 | 5,610 | 11,230 | 6,944 | 12,136 | 12,136 | 12,136 | 7,431 | 9,272 | 11,220 | 14,507 | 14,507 | 22,202 | 22,202 | | |
| Buildings and fence..... | 13,359 | 15,170 | 22,609 | 20,849 | 24,782 | 24,782 | 24,782 | 7,618 | 12,399 | 11,016 | 15,949 | 15,949 | 23,738 | 23,738 | | |
| Soil fertility..... | 108 | 34 | 125 | 78 | 98 | 98 | 98 | 161 | 197 | 417 | 298 | 298 | 569 | 569 | | |
| Auto..... | 910 | 818 | 872 | 785 | 1,025 | 1,025 | 1,025 | 641 | 636 | 731 | 546 | 546 | 877 | 877 | | |
| Value of land (current basis)..... | 71,395 | 50,272 | 105,350 | 74,696 | 108,144 | 108,144 | 108,144 | 23,898 | 34,929 | 43,778 | 58,264 | 58,264 | 105,505 | 105,505 | | |
| Total farm investment..... | 107,311 | 86,738 | 164,740 | 122,287 | 174,780 | 174,780 | 174,780 | 52,324 | 74,543 | 85,648 | 115,298 | 115,298 | 193,478 | 193,478 | | |
| Total farm investment per acre..... | 720.21 | 590.05 | 742.07 | 560.95 | 592.47 | 592.47 | 592.47 | 353.54 | 338.83 | 285.49 | 294.13 | 294.13 | 286.63 | 286.63 | | |
| PERCENT OF TILLABLE LAND IN | | | | | | | | | | | | | | | | |
| Corn and corn silage..... | 44.7 | 39.4 | 46.7 | 46.0 | 41.8 | 41.8 | 41.8 | 35.7 | 37.2 | 35.5 | 33.4 | 33.4 | 40.5 | 40.5 | | |
| Soybeans..... | 6.9 | 1.4 | 4.8 | 3.6 | 8.4 | 8.4 | 8.4 | 7.4 | 15.7 | 15.9 | 20.4 | 20.4 | 18.6 | 18.6 | | |
| Wheat..... | 2.2 | 7.7 | 1.7 | 1.0 | 1.7 | 1.7 | 1.7 | 11.9 | 14.8 | 16.3 | 15.1 | 15.1 | 13.2 | 13.2 | | |
| Other small grains..... | 10.9 | 15.9 | 10.7 | 12.8 | 10.9 | 10.9 | 10.9 | 2.5 | 1.3 | 1.5 | .9 | .9 | 2.0 | 2.0 | | |
| Diverted acres..... | 3.6 | 1.2 | 4.4 | 2.2 | 6.8 | 6.8 | 6.8 | 1.2 | 2.6 | 1.4 | 1.3 | 1.3 | 2.6 | 2.6 | | |
| All hay and pasture crops..... | 27.0 | 41.0 | 30.1 | 33.6 | 28.1 | 28.1 | 28.1 | 40.0 | 27.6 | 28.2 | 26.3 | 26.3 | 21.9 | 21.9 | | |
| CROP YIELDS, bushels per acre | | | | | | | | | | | | | | | | |
| Corn..... | 93.6 | 89.1 | 95.1 | 84.7 | 92.1 | 92.1 | 92.1 | 55.8 | 57.1 | 48.5 | 55.6 | 55.6 | 58.2 | 58.2 | | |
| Soybeans..... | 25.2 | 26.1 | 31.0 | 28.2 | 28.8 | 28.8 | 28.8 | 18.6 | 21.4 | 19.5 | 19.2 | 19.2 | 22.9 | 22.9 | | |
| Wheat..... | 48.5 | 51.9 | 46.4 | 30.0 | 40.6 | 40.6 | 40.6 | 39.7 | 42.3 | 40.7 | 38.2 | 38.2 | 41.4 | 41.4 | | |
| Oats..... | 65.5 | 59.1 | 61.2 | 63.5 | 62.2 | 62.2 | 62.2 | 50.5 | 52.7 | 39.8 | 45.1 | 45.1 | 47.8 | 47.8 | | |

Table 16. — Average Costs, Returns, and Financial Summary by Size and Type of Farm, Northern and Southern Illinois, 1964

| | BEEF CATTLE FARMS, NORTHERN ILLINOIS SOIL RATING 56-100 | | | | | BEEF CATTLE FARMS, SOUTHERN ILLINOIS, SOIL RATING 5-55 | | | POULTRY FARMS, NORTHERN ILL., SOIL RATING 56-100 | |
|---|--|---------------|---------------|---------------|------------|---|---------------|------------|--|--------------|
| | Under 180 16 | 180-259 45 | 260-339 49 | 340-499 51 | 500+ 40 | 260-339 12 | 340-499 15 | 500+ 10 | Under 180 17 | 180-259 9 |
| Range in size (total acres)..... | 155 | 223 | 302 | 418 | 663 | 293 | 415 | 807 | 137 | 229 |
| Number of farms..... | 144 | 202 | 277 | 372 | 561 | 235 | 341 | 633 | 124 | 209 |
| Acres of tillable land..... | 78 | 78 | 79 | 76 | 75 | 32 | 33 | 41 | 76 | 81 |
| Soil rating on tillable land..... | 97 | ..... | 14 | 17 | 23 | 114 | 209 | 21 | 4,381 | 6,467 |
| Hens, number..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 5.9 | ..... |
| Dairy cows, number..... | 665 | 883 | 979 | 1,272 | 2,198 | 774 | 882 | 1,693 | 29 | 19 |
| Beef produced, hundredweight..... | 450 | 608 | 660 | 816 | 1,314 | 763 | 429 | 1,048 | 195 | 316 |
| Pork produced, hundredweight..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| DOLLAR COSTS PER FARM | | | | | | | | | | |
| Soil fertility..... | \$ 1,376 | \$ 2,260 | \$ 2,798 | \$ 3,953 | \$ 6,541 | \$ 2,407 | \$ 4,212 | \$ 8,581 | \$ 874 | \$ 1,770 |
| Buildings and fence..... | 1,881 | 2,289 | 2,759 | 3,991 | 4,722 | 1,709 | 2,363 | 4,339 | 2,013 | 2,072 |
| Machinery and equipment..... | 4,726 | 6,156 | 7,026 | 9,446 | 12,754 | 6,211 | 8,883 | 15,166 | 5,570 | 7,022 |
| Labor..... | 3,015 | 3,696 | 3,915 | 5,790 | 7,911 | 3,968 | 4,761 | 8,608 | 4,573 | 5,596 |
| Taxes..... | 1,308 | 1,730 | 2,349 | 2,851 | 4,338 | 1,276 | 1,460 | 2,830 | 1,090 | 1,656 |
| Seed expense..... | 411 | 623 | 803 | 1,075 | 1,645 | 571 | 661 | 1,154 | 390 | 575 |
| Crop expense..... | 350 | 370 | 636 | 888 | 1,474 | 458 | 709 | 1,530 | 248 | 423 |
| Livestock and miscellaneous expense..... | 685 | 858 | 958 | 1,054 | 1,795 | 728 | 928 | 1,228 | 931 | 1,057 |
| Interest charge on capital..... | 5,488 | 7,478 | 9,481 | 12,714 | 19,140 | 4,757 | 6,177 | 12,455 | 4,628 | 6,920 |
| Total non-feed costs..... | 19,240 | 25,460 | 30,725 | 41,762 | 60,320 | 22,085 | 30,154 | 55,891 | 20,317 | 27,091 |
| Total value of feed fed..... | 16,376 | 22,367 | 25,158 | 32,668 | 54,279 | 22,445 | 21,869 | 44,120 | 17,778 | 22,767 |
| DOLLAR RETURNS PER FARM | | | | | | | | | | |
| Livestock returns above feed cost..... | \$ 3,492 | \$ 4,399 | \$ 4,684 | \$ 5,932 | \$ 8,190 | \$ 3,833 | \$ 3,953 | \$ 8,003 | \$ 9,218 | \$ 13,968 |
| Feed and grain returns..... | 14,784 | 20,536 | 27,365 | 36,359 | 52,978 | 19,248 | 22,185 | 47,656 | 11,180 | 18,781 |
| Other cash income..... | 703 | 1,078 | 1,095 | 1,224 | 1,605 | 954 | 2,504 | 1,385 | 971 | 560 |
| Total value of farm production..... | 18,979 | 26,013 | 33,144 | 43,515 | 62,773 | 22,035 | 28,642 | 57,044 | 21,369 | 33,309 |
| Management returns..... | -261 | 553 | 2,419 | 1,753 | 2,453 | -50 | -1,512 | 1,153 | 1,052 | 6,218 |
| Farm production per \$1.00 of non-feed costs..... | ..... | 1.02 | 1.08 | 1.04 | 1.04 | 1.00 | 1.00 | 1.02 | 1.05 | 1.23 |
| Farm production per man..... | 17,254 | 19,883 | 23,395 | 22,411 | 24,299 | 14,528 | 16,766 | 19,502 | 12,950 | 18,086 |
| FINANCIAL SUMMARY | | | | | | | | | | |
| Cash sales of products and services..... | \$44,224 | \$55,959 | \$67,991 | \$91,435 | \$147,173 | \$56,737 | \$68,732 | \$122,301 | \$40,535 | \$55,427 |
| Sales of capital items..... | 18 | 56 | 76 | 232 | 147 | 30 | 4 | 109 | 3 | 99 |
| Total cash income..... | 44,242 | 56,015 | 68,067 | 91,667 | 147,320 | 56,767 | 68,736 | 122,410 | 40,538 | 55,526 |
| Purchased livestock..... | 14,860 | 20,725 | 21,719 | 35,866 | 46,341 | 20,523 | 25,520 | 52,779 | 5,098 | 6,786 |
| Purchased feed..... | 5,931 | 8,068 | 7,688 | 9,779 | 22,526 | 12,061 | 6,954 | 10,641 | 12,819 | 16,858 |
| Cash operating expenses..... | 7,439 | 10,979 | 13,397 | 18,706 | 28,624 | 10,779 | 15,772 | 29,711 | 8,345 | 12,551 |
| Purchase of capital items..... | 3,116 | 3,394 | 4,213 | 9,190 | 8,219 | 4,539 | 4,912 | 11,392 | 5,182 | 4,384 |
| Total cash expenditures..... | 31,346 | 43,166 | 47,017 | 73,541 | 105,710 | 47,902 | 53,158 | 104,523 | 31,444 | 40,579 |
| Cash balance..... | \$12,896 | \$12,849 | \$21,050 | \$18,126 | \$41,610 | \$ 8,865 | \$15,578 | \$17,887 | \$ 9,094 | \$14,947 |
| Inventory change..... | -4,653 | -1,394 | -5,716 | -2,584 | -15,917 | -2,502 | -7,803 | -2,147 | -1,492 | 1,420 |
| Capital change..... | -403 | -850 | -654 | 1,881 | -428 | 1,037 | -330 | 1,450 | 1,250 | -460 |
| Farm products consumed..... | 199 | 241 | 276 | 309 | 384 | 384 | 187 | 310 | 243 | 106 |
| Farm and family earnings..... | 8,039 | 10,846 | 14,956 | 17,732 | 25,649 | 7,784 | 7,632 | 17,500 | 9,095 | 16,013 |
| Labor and management earnings..... | 2,425 | 3,128 | 5,089 | 4,427 | 5,204 | 2,494 | 1,039 | 3,733 | 3,726 | 8,918 |
| Capital and management earnings..... | 5,227 | 8,031 | 11,900 | 14,467 | 21,593 | 4,707 | 4,665 | 13,608 | 5,680 | 13,138 |
| Capital and management earnings per acre..... | 33.72 | 36.01 | 39.40 | 34.61 | 32.57 | 16.06 | 11.24 | 16.86 | 41.46 | 57.37 |

Table 16a. — Average Operating Costs, Investment, and Land Use by Size and Type of Farm, Northern and Southern Illinois, 1964

| | BEEF CATTLE FARMS, NORTHERN ILLINOIS SOIL RATING 56-100 | | | | BEEF CATTLE FARMS, SOUTHERN ILLINOIS, SOIL RATING 5-55 | | | | POULTRY FARMS, NORTHERN ILL. SOIL RATING 56-100 | |
|--|--|---------------|---------------|---------------|---|---------------|---------------|------------|---|--------------|
| | Under 180 16 | 180-259 45 | 260-339 49 | 340-499 51 | 500+ 40 | 260-339 12 | 340-499 15 | 500+ 10 | Under 180 17 | 180-259 9 |
| Range in size (total acres)..... | | | | | | | | | | |
| Number of farms..... | | | | | | | | | | |
| COSTS AND RETURNS PER TILLABLE ACRE | | | | | | | | | | |
| Soil fertility..... | \$ 9.56 | \$ 11.19 | \$ 10.10 | \$ 10.63 | \$ 11.66 | \$ 10.24 | \$ 12.35 | \$ 13.56 | \$ 7.05 | \$ 8.47 |
| Buildings and fence..... | 13.06 | 11.33 | 9.96 | 10.73 | 8.42 | 7.27 | 6.93 | 6.85 | 16.23 | 9.91 |
| Machinery and equipment..... | 32.82 | 30.48 | 25.36 | 25.39 | 22.73 | 26.43 | 26.05 | 23.96 | 44.92 | 33.60 |
| Labor..... | 20.94 | 18.30 | 14.13 | 15.56 | 14.10 | 16.88 | 13.96 | 13.60 | 36.88 | 26.78 |
| Feed and grain returns..... | 102.67 | 101.66 | 98.79 | 97.74 | 94.43 | 73.40 | 65.06 | 75.28 | 90.16 | 89.86 |
| Total value of farm production..... | 131.80 | 128.78 | 119.65 | 116.98 | 111.89 | 93.77 | 83.99 | 90.12 | 172.33 | 159.37 |
| Total non-feed costs..... | 133.62 | 126.04 | 110.92 | 112.26 | 107.52 | 93.98 | 88.43 | 88.30 | 163.85 | 129.62 |
| Management returns..... | -1.82 | 2.74 | 8.73 | 4.72 | 4.37 | - .21 | -4.44 | 1.82 | 8.48 | 29.75 |
| SELECTED COST ITEMS | | | | | | | | | | |
| Fertilizer, annual application..... | \$ 1,300 | \$ 2,188 | \$ 2,741 | \$ 3,815 | \$ 6,394 | \$ 2,326 | \$ 4,067 | \$ 8,387 | \$ 841 | \$ 1,740 |
| Lime and rock phosphate depreciation..... | 76 | 72 | 57 | 138 | 147 | 81 | 145 | 194 | 33 | 30 |
| Building repairs and maintenance..... | 534 | 501 | 942 | 864 | 1,402 | 721 | 882 | 1,478 | 415 | 352 |
| Machinery and equipment depreciation..... | 1,347 | 1,817 | 2,598 | 3,496 | 4,527 | 2,211 | 3,356 | 6,340 | 1,598 | 1,720 |
| Machinery repairs and supplies..... | 1,819 | 1,501 | 1,514 | 2,417 | 3,344 | 1,452 | 2,437 | 3,563 | 2,066 | 2,715 |
| Machinery hire..... | 441 | 598 | 730 | 702 | 985 | 563 | 787 | 1,167 | 1,048 | 1,214 |
| Gasoline and oil..... | 709 | 1,097 | 1,262 | 1,721 | 2,374 | 1,214 | 1,537 | 2,700 | 731 | 879 |
| Hired labor charge..... | 203 | 881 | 859 | 2,525 | 3,855 | 891 | 1,794 | 4,716 | 1,158 | 2,721 |
| Unpaid labor charge..... | 2,812 | 2,815 | 3,056 | 3,265 | 4,056 | 3,077 | 2,967 | 3,892 | 3,415 | 2,875 |
| Total months of labor..... | 13.2 | 15.7 | 17.0 | 23.3 | 31.0 | 18.2 | 20.5 | 35.1 | 19.8 | 22.1 |
| Months of labor hired..... | .7 | 3.2 | 3.4 | 8.8 | 13.0 | 3.9 | 6.7 | 17.0 | 4.6 | 9.4 |
| FARM INVESTMENT | | | | | | | | | | |
| Livestock inventory..... | \$20,643 | \$26,949 | \$31,954 | \$42,885 | \$79,340 | \$24,864 | \$28,401 | \$52,854 | \$10,194 | \$ 9,655 |
| Grain inventory..... | 9,458 | 12,306 | 16,748 | 20,445 | 31,941 | 12,144 | 12,433 | 28,290 | 7,815 | 11,445 |
| Remaining capital cost in: | | | | | | | | | | |
| Machinery..... | 7,149 | 8,072 | 10,190 | 12,649 | 17,472 | 7,414 | 12,933 | 20,922 | 8,078 | 10,609 |
| Buildings and fence..... | 15,524 | 22,555 | 22,155 | 37,603 | 43,207 | 10,492 | 15,192 | 24,914 | 18,957 | 20,886 |
| Soil fertility..... | 278 | 151 | 138 | 218 | 230 | 135 | 210 | 367 | 94 | 42 |
| Auto..... | 914 | 851 | 933 | 743 | 1,302 | 644 | 937 | 869 | 611 | 708 |
| Value of land (current basis)..... | 69,747 | 98,336 | 134,386 | 174,688 | 261,638 | 49,309 | 66,798 | 151,108 | 58,513 | 106,307 |
| Total farm investment..... | 123,713 | 169,220 | 216,504 | 289,231 | 435,130 | 105,002 | 136,904 | 279,324 | 104,262 | 159,652 |
| Total farm investment per acre..... | 798.15 | 758.83 | 716.90 | 691.94 | 656.30 | 358.37 | 329.89 | 346.13 | 761.04 | 697.17 |
| PERCENT OF TILLABLE LAND IN | | | | | | | | | | |
| Corn and corn silage..... | 62.7 | 61.4 | 58.8 | 65.1 | 60.4 | 40.1 | 46.6 | 51.4 | 54.6 | 63.5 |
| Soybeans..... | 3.1 | 5.6 | 8.1 | 6.5 | 10.1 | 22.7 | 20.4 | 13.4 | 14.8 | 17.3 |
| Wheat..... | .5 | .4 | 1.4 | 1.8 | 3.6 | 16.8 | 16.6 | 14.0 | 2.3 | .4 |
| Other small grains..... | 13.0 | 12.2 | 9.9 | 8.8 | 6.5 | 1.1 | 1.8 | .4 | 12.2 | 5.9 |
| Diverted acres..... | 2.3 | 3.6 | 5.4 | 3.6 | 3.8 | 6.7 | 1.3 | 2.9 | 5.1 | 7.0 |
| All hay and pasture crops..... | 15.2 | 15.9 | 16.0 | 12.8 | 13.8 | 12.4 | 11.6 | 16.4 | 11.0 | 3.0 |
| CROP YIELDS, bushels per acre | | | | | | | | | | |
| Corn..... | 101.5 | 104.0 | 101.2 | 100.2 | 98.3 | 71.7 | 65.3 | 83.3 | 91.5 | 84.4 |
| Soybeans..... | 36.1 | 34.9 | 32.3 | 30.8 | 32.6 | 25.7 | 20.4 | 24.2 | 32.3 | 30.1 |
| Wheat..... | 46.7 | 43.6 | 44.8 | 41.5 | 43.0 | 41.2 | 44.4 | 42.2 | 40.8 | 43.5 |
| Oats..... | 51.7 | 64.2 | 62.5 | 62.1 | 56.2 | 44.7 | 43.5 | .... | 53.3 | 50.5 |

This report results from the cooperation of state and local Farm Bureau Farm Management Associations and staff members of the Department of Agricultural Economics at the University of Illinois. The information is for farmers and workers in farm management extension, teaching, and research and for others assisting Illinois farmers in business analysis. The report supplements work of FBFM fieldmen by providing comparative standards for farmers enrolled in the service.

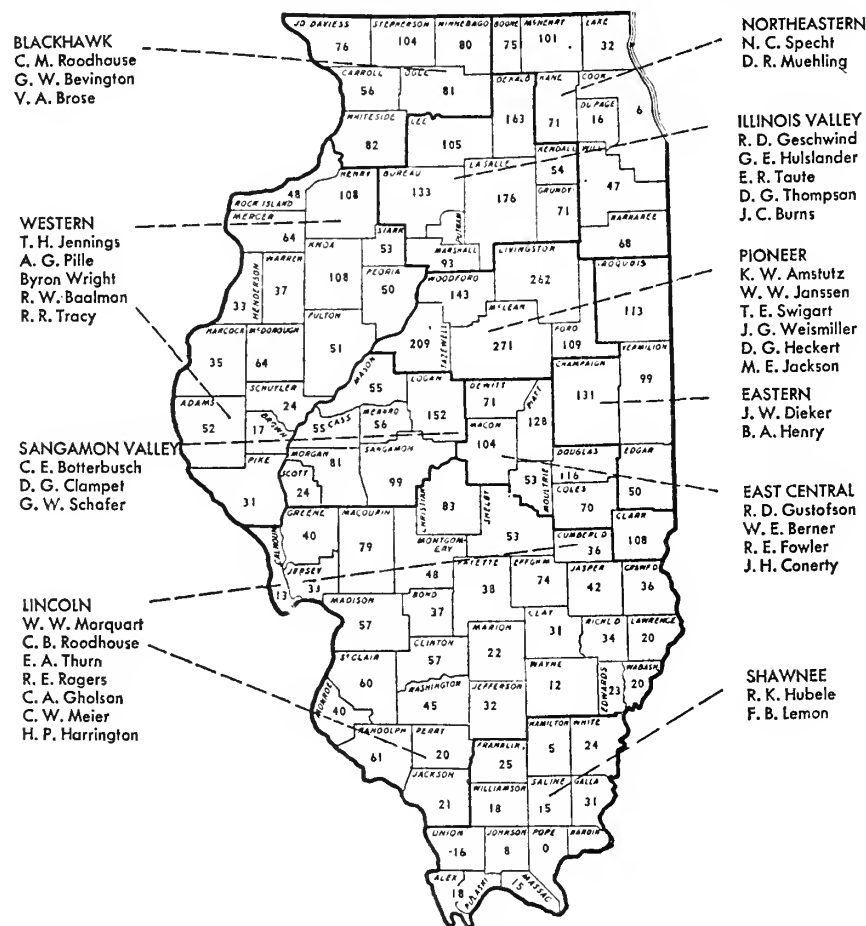
The cooperative effort of the university staff working with 39 fieldmen who are supported largely by fees paid by farmers makes this educational and service program possible. By participating in this program each farmer-cooperator (6,366 reporting this year) increases his chances for successful farm operation and contributes to the improvement of Illinois agriculture.

Each year more farmers are adopting improved production techniques based on studies of their farm records. Many crop farmers now plan for corn yields above 100 bushels per acre. The average dairy farmer has reduced acres of hay and pasture per cow by 17 percent since 1959 by substituting corn silage and increasing forage yields. Farm records are becoming more important for the individual farmer to evaluate his competitive position in the farming business.

We hope that this 40th Annual Report will be used to contribute to more profitable farm operation and a more desirable level of family living.

Harold G. Halcrow, Head
Department of Agricultural Economics

ASSOCIATIONS, FIELDMEN, AND COOPERATORS ENROLLED



Prepared by A. G. Mueller and D. F. Wilken of the Department of Agricultural Economics.





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