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## SUMMARY OF ILLINOIS FARM BUSINESS RECORDS

## Commercial Farmes: PRODUCTION costs INCOME <br> INVESTMENTS



## Source of Data

This report is based on data obtained from farm business records on 6,300 Illinois farms. It is the 41 st 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 10 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 1966 there were 10 associations in 102 counties served by 40 full-time fieldmen. Participation in this farm business analysis service is voluntary, and cooperating farmers pay a fee for the services received.

The development since 1940 is shown by the following figures:


Over 98 percent of the 6,300 farms in this report fall within the size of business of Economic Class I, II, and III as defined in the 1964 Census of Agriculture. These three classes include farms selling $\$ 10,000$ or more of farm products a year.

The segment of Illinois agriculture that includes Economic Class I, II, and III farms is often referred to as "commercial farming." In 1964, there were 68,322 farms in Illinois with more than $\$ 10,000$ of product sales. These farms represent 52 percent of the total number of farms and produce a very high proportion of the products sold from Illinois farms.

Although the record-keeping farms in this report are largely within the first three economic classes, they
are not proportionately distributed among the groups. Farms are identified as Economic Class I farms if they sell more than $\$ 40,000$ worth of products a year. In 1964, the Census of Agriculture identified 9,984 Illinois farms as Economic Class I farms. Over one-fourth, 26 percent, of these farms were enrolled in the Illinois Farm Bureau Farm Management Service. In 11 out of 102 counties, over 50 percent of the Economic Class I farms were enrolled. There were 32,881 Economic Class III farms in the 1964 Census of Agriculture (farms with sales ranging from $\$ 10,000$ to $\$ 19,999$ ). Only 694 , or 2.1 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 others working with and assisting Illinois farmers with their problems.

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 annnal data for the calendar year 1965, 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 1965 by selected segments of Illinois farms. Similar data for 1964 and a 10 -year average provide a comparison with other years.

Data for all the major livestock enterprises for

1965 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.

## SUMMARY OF ILLINOIS FARM BUSINESS RECORDS, 1965

## Farm business trends in 1965

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 1965 average corn yields for the state as reported by the Illinois Crop Reporting Service were 92 bushels an acre, up 14 bushels from the 1964 yields and 7 bushels above the previous high of 85 bushels an acre in 1963.

Soybean yields in 1965 averaged 29 bushels an acre, up 4 bushels from 1964 and only $1 / 2$ bushel below the previous high in 1963.

Rainfall during the growing season was favorable for crop production in all areas of the state, although hail and wind damage in August and September affected crops harvested in the northern part of Illinois.

Crop and livestock prices. Another major determinant of change in farm income is the price farmers receive for crop and livestock products. In 1965 market prices received by farm account cooperators for all grain crops were very close to 1964 price levels. Market prices for all classes of livestock in 1965 were above price levels in 1964. The biggest increase occurred in the price of hogs, which increased from $\$ 14.81$ per 100 pounds in 1964 to $\$ 20.68$ in 1965. There was little change in the prices received for livestock products; both milk and egg prices in 1965 were close to the 1964 levels.

Farming adjustments. According to the 1964 Census of Agriculture, the number of farms in Illinois was estimated at 132,821 farms. The average number of acres per farm was 226 , compared with 196 acres per farm in 1959. 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.

## Income changes on Illinois farms

Comparative costs and returns between years and among major types of farming in northern and south-
ern 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 montls 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 1964, 1965, 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 earnings 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.

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


Returns to unpaid labor and management on 180- to 259 -acre farms, northern Illinois (left) and southern Illinois (right).
(Fig. 1)

Table 1.-Average Selected Total Farm Items on 180-259 Acre Northern Illinois Grain, Hog, and Dairy Farms

| Items | Grain farms |  |  | Hog farms |  |  | Dairy farms |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1965 | 1964 | $\begin{aligned} & \text { 1956-65 } \\ & \text { average } \end{aligned}$ | 1965 | 1964 | 1956-65 a verage | 1965 | 1964 | 1956-65 average |
| Number of farms.. | 99 | 136 | 124 | 100 | 99 | 122 | 60 | 52 | 52 |
| Total acres. Soil-productivity rating | $\begin{array}{r} 228 \\ 79 \end{array}$ | $\begin{array}{r} 229 \\ 81 \end{array}$ | $\begin{array}{r} 227 \\ 80 \end{array}$ | 223 | $224$ | $\begin{array}{r} 222 \\ 77 \end{array}$ | $\begin{array}{r} 214 \\ 70 \end{array}$ | 219 71 | $\begin{array}{r} 217 \\ 71 \end{array}$ |
| Total cash sales...... | \$25,432 | \$24,604 | \$21, 235 | \$42,931 | \$39,062 | \$33,718 | \$29,301 | \$28,463 | \$25,895 |
| Less purchased feed | 3,754 | 3,030 | 3,215 | 13,716 | 13,740 | 12,608 | 5,352 | 4,552 | 5,002 |
| Net cash sales. | 21,678 | 21,574 | 18,020 | 29,215 | 25,322 | 21,110 | 23,949 | 23,911 | 20,893 |
| Inventory change | 3,423 | -555 | 800 | 6,903 | -1,053 | 1,645 | 1,029 | 727 | 771 |
| Farm products consumed | 128 | 112 | 133 | 202 | 195 | 1, 221 | 1,315 | 308 | 318 |
| Value of farm production. | 25,229 | 21,131 | 18,953 | 36,320 | 24,464 | 22,976 | 25,293 | 24,946 | 21,982 |
| Cash operating expenses | \$ 9,152 | \$ 8,468 | \$ 6,988 | \$11,555 | \$10,105 | \$ 8,501 | \$10,889 | \$10,732 | \$ 9,333 |
| Annual depreciation. | 2,879 | 2,659 | 2,627 | 3,764 | 3,491 | 3,307 | 4,316 | 4,154 | 3,801 |
| Farm and family earnings | 13,198 | 10,004 | 9,338 | 21,001 | 10,868 | 11,168 | 10,088 | 10,060 | 8,848 |
| Unpaid labor charge. . . . . . . . . . . . . . | 3,124 | 2,768 | 2,682 | 3,306 | 2,991 | 2,881 | 3,669 | 3,500 | 3,223 |
| Returns to capital and management. . . | 10,074 | 7,236 | 6,656 | 17,695 | 7,877 | 8,287 | 6,419 | 6,560 | 5,625 |
| Interest charge on capital. . . . . . . . . . | 5,911 | 5,913 | 5,228 | 6,457 | 6,271 | 5,473 | 6,034 | 5,926 | 5,265 |
| Management returns. | 4,163 | 1,323 | 1,428 | 11,238 | 1,606 | 2,814 | 385 | 634 | 360 |
| Total cash income ${ }^{\text {a }}$. | \$25,580 | \$24,748 | \$21,345 | \$43,065 | \$39,142 | \$33,851 | \$29,430 | \$28,593 | \$26,021 |
| Total cash expenditures ${ }^{\text {a }}$ | 17,499 | 14,100 | 12,793 | 30,506 | 26,908 | 24,729 | 20,950 | 19,644 | 18,284 |
| Cash balance. | 8,081 | 10,648 | 8,552 | 12,559 | 12,234 | 9,122 | 8,480 | 8,949 | 7,737 |
| FARM INVESTMENT |  |  |  |  |  |  |  |  |  |
| Livestock inventory. | 3,809 | 4,118 | 4,010 | 12,870 | 13,889 | 12,108 | 13,021 | 12,937 | 11,513 |
| Grain inventory. | 10,542 | 11,506 | 9,389 | 10,977 | 11,239 | 9,488 | 8,696 | 7,727 | 7,575 |
| Remaining capital cost in: |  |  |  |  |  |  |  |  |  |
| Machinery | 6,073 | 5,820 | 5,409 | 7,616 | 7,307 | 6,685 | 8,798 | 8,263 | 7,865 |
| Buildings and fence. | 10,005 | 10,782 | 10,081 | 15,879 | 15,684 | 13,366 | 21,581 | 21,391 | 18,318 |
| Soil fertility. . | 67 | 124 | , 334 | -103 | -142 | +346 | - 95 | 21,93 | - 245 |
| Auto....... | 677 | 700 | 691 | 872 | ${ }^{818}$ | \% 750 | 686 | 811 | 671 |
| Value of land (current basis). | 108,828 | 106,521 | 93,303 | 101,017 | 95,417 | 83,390 | 84,767 | 84,128 | 73,910 |
| Total farm investment. | 140,001 | 139,571 | $\overline{123,217}$ | 149,334 | $\overline{144,496}$ | $\overline{126,133}$ | $\overline{137,644}$ | 135,350 | $\overline{120,097}$ |

[^0]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.

Variations in farm income for grain, hog, and dairy farms in northern and southern Illinois are shown in Figure 1. The measure of net income is "returns to unpaid labor and management" and after deducting an interest charge on investment from farm and family earnings represents the margin left as payment for unpaid labor and a return to management.

Net income on hog farms has fluctuated over a wider range than incomes on either dairy or grain farms. A large proportion of the gross sales on hog farms is received from the sale of hogs. Hog prices were at low points in the hog-price cycle in 1959 and again in 1963. On the other hand, hog prices in 1965 were high and are reflected in record high net income figures on hog farms for that year.

Weather also causes variations in net farm income. For example, in 1964 southern Illinois experienced a summer drouth that sharply reduced crop yields. The effect of yields on net income is indicated by the drop in returns to unpaid labor and management on southern Illinois grain, hog, and dairy farms in 1964 (Figure 1).

## Northern Illinois Farms

Grain farms. Farm and family earnings on northern Illinois 220 -acre grain farms in 1965 were $\$ 13,198$ compared with $\$ 10,004$ in 1964. Most of the increase in net income on grain farms was reflected in a greater quantity of farm grains on inventory at the end of the year. Favorable crop-growing weather and the resulting increase in crop yields were largely responsible for the increase in net farm income on grain farms in 1965. Cash operating expenses increased by $\$ 684$ per farm. Investment in new capital items exceeded the depreciation charged against capital investment by nearly $\$ 2,000$ per farm in 1965 . With favorable net farm incomes in 1965, farmers added to their investment in machinery and buildings.

Hog farms. Farm and family earnings on 220acre northern Illinois hog farms nearly doubled in 1965 over 1964. In 1965 , the earnings were $\$ 21,001$, compared with $\$ 10,868$ in 1964 and a ten-year average (1956-1965) of $\$ 11,168$.

Livestock sales increased by about $\$ 4,500$ per farm. Increases in inventory values of grain and livestock were $\$ 6,903$, most of which was represented by higher prices for livestock.

The total weight of pork produced per farm in 1965 was down 10,500 pounds or 7.6 percent below the 1964 weight, although hog farms have become more specialized in recent years. The reduction in total pounds of pork produced contributed to lower market supplies and higher hog prices during 1965.

Dairy farms. Farm and family earnings on 220acre northern Illinois dairy farms in 1965 were $\$ 10,088$, up only $\$ 28$ above net earnings in 1964. Although there was little increase in net farm earnings from 1964 to 1965, the 1965 figure was 14 percent above the 1956-1965 average.

The number of dairy cows per farm averaged 39.4 cows in 1965, no change from 1964.

Beef farms. Farm and family earnings on 220acre northern Illinois beef farms in 1965 averaged $\$ 18,795$, an increase from $\$ 10,846$ in 1964 and $\$ 4,629$ in 1963. Livestock sales increased by nearly $\$ 12,000$ in 1965 from 1964, grain sales were $\$ 2,200$ lower, and purchased feed and livestock increased by $\$ 7,416$. Inventory values of grain and livestock increased by $\$ 4,506$ per farm, from January 1 to December 31, 1965.

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

| Items | 1965 | 1964 | 1956-65 average |
| :---: | :---: | :---: | :---: |
| Number of farms. | 45 | 45 | 62 |
| Total acres | 222 | 223 | 221 |
| Soil-productivity rating. | 77 | 78 | 76 |
| Total cash sales..... | \$65,003 | \$55,959 | \$48,950 |
| Less purchased feed and livestock. | 36,109 | 28,793 | 28,042 |
| Net cash sales. | \$28,894 | \$27,166 | \$20,908 |
| Inventory change | 6,669 | -1,394 | 1,526 |
| Farm products consumed. | 290 | 241 | 253 |
| Value of farm production. | 35,853 | 26,013 | 22,687 |
| Cash operating expenses. | 12,345 | 10,979 | 8,957 |
| Annual depreciation. | 4,713 | 4,188 | 3,879 |
| Farm and family earnings. | 18,795 | 10,846 | 9,851 |
| Unpaid labor charge | 3,386 | 2,815 | 2,826 |
| Returns to capital and management. . . . . . | 15,409 | 8,031 | 7,025 |
| Interest charge on capital | 7,795 | 7,478 | 6,433 |
| Management returns. | 7,614 | 553 | 592 |
| Total cash income ${ }^{\text {a }}$. | \$65,617 | \$56,015 | \$49,305 |
| Total cash expenditures ${ }^{\text {a }}$ | 55,774 | 43,166 | 41,270 |
| Cash balance.......... | 9,843 | 12,849 | 8,035 |
| FARM INVESTMENT |  |  |  |
| Livestock inventory | 27,547 | 26,949 | 23,393 |
| Grain inventory. | 14,305 | 12,306 | 11,214 |
| Remaining capital cost in: |  |  |  |
| Machinery........ | 8,011 24,083 | r 82,072 | 7,310 18,163 |
| Soil fertility.... | -169 | 22,151 | - 331 |
| Auto | 898 | 851 | 797 |
| Value of land (current basis) | 101,120 | 98,336 | 84,302 |
| Total farm investment... | 176,133 | 169,220 | 145,510 |

[^1]The combination of higher prices for hogs and cattle in 1965 and higher crop yields contributed to the sharp increase in net earnings on northern Illinois beef cattle farms. Expenditures for purchased feed and livestock also increased from 1964 to 1965. With higher net farm incomes, cash operating expenses and investment in new capital items increased sharply in 1965.

## Southern Illinois Farms

Grain farms. Farm and family earnings on southern Illinois 220 -acre grain farms averaged $\$ 9,263$ in 1965, an increase of $\$ 2,875$ above 1964 earnings. Most of the increase in net farm income on southern Illinois grain farms was reflected in a build-up of grain and livestock inventories. Total value of farm production in 1965 was $\$ 3,289$ higher than in 1964 and about equal to the 1963 figure.

Hog farms. Farm and family earnings on southern Illinois 220 -acre hog farms averaged $\$ 15,362$, two
and a half times the 1964 earnings of $\$ 6,070$ and $\$ 7,248$ above the $1956-1965$ average of $\$ 8,114$. As in northern Illinois, higher crop yields and sharply higher prices for hogs combined to produce record levels of income on hog farms in southern Illinois.

Dairy farms. Farm and family earnings on 220acre southern Illinois dairy farms in 1965 were $\$ 12,447$, an increase from $\$ 6,942$ in 1964. The 1956-1965 average earnings on southern Illinois dairy farms were $\$ 8,182$ compared with the $\$ 12,447$ in 1965 . Total value of grain and livestock inventories sharply increased on dairy farms. Higher crop yields in 1965 contributed to the build-up in grain inventories; increased prices for hogs and cattle contributed to the increase in value of livestock inventories.

Over the ten-year period (1956-1965) livestock systems of farming in southern Illinois have averaged greater net farm incomes than grain farms. Hog and dairy farms have had nearly equal income levels of $\$ 8,100$ to $\$ 8,200$ per farm for the ten-year period.

Table 3. - Average Selected Total Farm Items on 180-259 Acre Southern Illinois Grain, Hog, and Dairy Farms

| Items | Grain farms |  |  | Hog farms |  |  | Dairy farms |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1965 | 1964 | 1956-65 average | 1965 | 1964 | 1956-65 average | 1965 | 1964 | 1956-65 average |
| Number of farms. | 45 | 32 | 40 | 41 | 51 | 42 | 40 | 55 | 44 |
| Total acres | 223 | 222 | 222 | 218 | 219 | 221 | 220 | 220 | 217 |
| Soil-productivity rating. | 33 | 35 | 37 | 35 | 35 | 36 | 32 | 31 | 31 |
| Total cash sales. | \$18,946 | \$18,834 | \$16,452 | \$33,059 | \$29,993 | \$25,239 | \$27,626 | \$26,855 | \$22,350 |
| Less purchased feed and livestock | 2,434 | 2,548 | 2,632 | 10,931 | 11,226 | 9,285 | 5,552 | 5,900 | 4,798 |
| Net cash sales | \$16,512 | \$16,286 | \$13,820 | \$22,128 | \$18,767 | \$15,954 | \$22,074 | \$20,955 | \$17,552 |
| Inventory change | 2,165 | -922 | 778 | 5,653 | -2,121 | 1,309 | 3,536 | -837 | 1,186 |
| Farm products consumed. | 136 | 160 | 158 | 202 | 150 | 244 | 355 | 330 | 351 |
| Value of farm production. | 18,813 | 15,524 | 14,756 | 27,983 | 16,796 | 17,507 | 25,965 | 20,448 | 19,089 |
| Cash operating expenses. | 7,031 | 6,862 | 5,697 | 9,392 | 8,131 | 6,881 | 9,767 | 9,888 | 7,686 |
| Annual depreciation. | 2,519 | 2,274 | 2,247 | 3,229 | 2,595 | 2,512 | 3,751 | 3,618 | 3,221 |
| Farm and family earnings. | 9,263 | 6,388 | 6,812 | 15,362 | 6,070 | 8,114 | 12,447 | 6,942 | 8,182 |
| Unpaid labor charge. | 3,003 | 2,829 | 2,621 | 3,296 | 3,035 | 2,883 | 3,601 | 3,241 | 3,182 |
| Returns to capital and management | 6,260 | 3,559 | 4,191 | 12,066 | 3,035 | 5,231 | 8,846 | 3,701 | 5,000 |
| Interest charge on capital. . . . . | 2,761 | 2,851 | 2,461 | 3,005 | 3,148 | 2,664 | 3,488 | 3,378 | 2,797 |
| Management returns. | 3,499 | 708 | 1,730 | 9,061 | -113 | 2,567 | 5,358 | 323 | 2,203 |
| Total cash income ${ }^{\text {s }}$. | \$18,968 | \$18,840 | \$16,571 | \$33,085 | \$30,215 | \$25,336 | \$27,901 | \$26,861 | \$22,458 |
| Total cash expenditures ${ }^{\text {a }}$ | 12,512 | 11,699 | 10,818 | 25,311 | 21,997 | 19,381 | 20,984 | 19,848 | 16,858 |
| Cash balance. | 6,456 | 7,141 | 5,753 | 7,774 | 8,218 | 5,955 | 6,917 | 7,013 | 5,600 |
| FARM INVESTMENT |  |  |  |  |  |  |  |  |  |
| Livestock inventory. | 3,112 | 4,039 | 3,062 | 8,751 | 9,131 | 7,781 | 10,688 | 10,590 | 8,344 |
| Grain inventory. | 6,338 | 7,711 | 5,141 | 5,460 | 7,269 | 5,319 | 5,288 | 6,520 | 4,602 |
| Remaining capital cost in: |  |  |  |  |  |  |  |  |  |
| Machinery. | 6,420 | 6,165 | 5,476 | 5,817 | 5,987 | 5,105 | 9,551 | 9,272 | 8,057 |
| Buildings and fence | 5,575 | 5,895 | 4,831 | 7,773 | 9,054 | 6,837 | 12,488 | 12,399 | 9,678 |
| Soil fertility. | 113 | 108 | 338 | 131 | 257 | 429 | 153 | 197 | 351 |
| Auto.................. | 468 | 519 | 561 | 639 | + 577 | 5485 | . 634 | - 636 | -581 |
| Value of land (current basis). | 41,495 | 40,738 | 37,263 | 39,406 | 38,359 | 34,040 | 38,690 | 34,929 | 30,403 |
| Total farm investment | 63,521 | 65,175 | 56,672 | 67,977 | 70,634 | 60,096 | 77,492 | 74,543 | 62,016 |

[^2]
## 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 (19511965) 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.

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 pigs | Hogs | Poultry | Yearly price of corn |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1951 | 170 | 187 | 142 | 171 |  | 127 | 137 | \$1.66 |
| 1952 | 99 | 175 | 86 | 67 |  | 116 | 116 | 1.65 |
| 1953 | 64 | 147 | 81 | 84 |  | 178 | 148 | 1.44 |
| 1954 | 95 | 141 | 126 | 97 |  | 154 | 104 | 1.46 |
| 1955 | 94 | 168 | 106 | 103 | 95 | 109 | 142 | 1.28 |
| 1956 | 103 | 177 | 117 | 137 | 129 | 142 | 133 | 1.30 |
| 1957 | 134 | 189 | 143 | 138 | 149 | 172 | 136 | 1.15 |
| 1958 | 162 | 199 | 144 | 98 | 144 | 180 | 142 | 1.10 |
| 1959 | 147 | 191 | 112 | 102 | 92 | 114 | 123 | 1.10 |
| 1960 | 129 | 200 | 117 | 108 | 143 | 164 | 157 | 1.03 |
| 1961 | 139 | 196 | 116 | 110 | 132 | 164 | 150 | 1.01 |
| 1962 | 149 | 190 | 148 | 126 | 129 | 159 | 144 | 98 |
| 1963 | 117 | 171 | 88 | 126 | 108 | 131 | 141 | 1.11 |
| 1964 | 107 | 174 | 112 | 124 | 122 | 142 | 141 | 1.12 |
| 1965 | 127 | 174 | 151 | 143 | 176 | 210 | 143 | 1.15 |
| $\begin{gathered} \text { 1951-65 } \\ \text { aver. } \end{gathered}$ | 122 | 179 | 119 | 116 | $129{ }^{\text {a }}$ | 151 | 137 | \$1.24 |

${ }^{\text {a }}$ Eleven-year average.

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. Present strong demand and short supply of hogs continuing through most of 1966 should give above-average returns in 1966.

Feeder cattle returns were below the 15 -year average in five of the past seven years. Except for 1962 and 1965, the average cattle feeder has had to justify any profits on the basis that some of his feed, buildings, or labor had no alternative uses.

Feeder cattle returns vary greatly from year to year. Long-run average returns shown here indicate the cattle feeding business is very competitive. Aboveaverage skills are needed in buying, selling, and feeding to meet competition of other uses for time and money on farms feeding cattle. 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.

## Hog enterprises

The information in Table 5 is based on a sample of 734 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. Feederpig enterprise information is included in Table 6.

Table 5. - Hog Enterprises, 1965

| Items | All farms | Highreturn farms | Lowreturn farms |
| :---: | :---: | :---: | :---: |
| Number of farms. | 734 | 76 | 88 |
| Average per farm |  |  |  |
| Pounds of pork produced. | 120,465 | 152,354 | 97,670 |
| Total returns........... | \$27,727 | \$36,559 | \$21,300 |
| Value of feed fed | \$13,222 | \$14,723 | \$12,396 |
| Returns per $\$ 100$ feed fed. . \$ 210 \$ 248 \$ 172 |  |  |  |
| Returns above feed per litter. | \$ 204 | \$ 245 | 151 |
| Number of litters farrowed | 71 | 89 | 59 |
| Pigs farrowed per litter. | 9.2 | 9.5 | 8.8 |
| Pigs weaned per litter. | 7.4 | 7.7 | 7.0 |
| Number of pigs weaned. | 525 | 686 | 410 |
| Number that died after weaning. | 17 | 21 | 15 |
| Death loss, percent of pounds produced. | 1.2 | 1.1 | 1.4 |
| Weight per hog sold. | 235 | 233 | 240 |
| Price received per 100 pounds. | \$ 20.68 | \$ 21.62 | \$ 20.24 |
| Feed cost per 100 pounds produced. | \$ 10.98 | \$ 9.66 | \$ 12.69 |
| Feed per 100 pounds produced |  |  |  |
| Farm grains, lb.. | 337 | 305 | 383 |
| Commercial feeds, lb..... | 70 | 61 | 84 |
| Total concentrates, 1 l . | 407 | 366 | 467 |
| Pasture (pasture days)... | . 9 | . 8 | 1.1 |
| Cost per 100 pounds of |  |  |  |
| Cost per 100 pounds of concentrates. | \$ 2.67 | \$ 2.61 | \$ 2.68 |

Returns per $\$ 100$ feed fed to hogs were $\$ 210$ in in 1965. This was a $\$ 68$ increase over 1964 , and was the highest single-year increase on record. The previous highest increase was $\$ 62$ from 1952 to 1953 . Returns have also dropped this much in one year, as shown by the drop from $\$ 180$ per $\$ 100$ feed fed to hogs for 1958 to $\$ 114$ for 1959 . The fluctuation in these returns above and below the 15 -year average is related to changes in supplies of and demand for pork and to the price of corn. In 1965 the supply of pork per capita was down 10 percent from 1964, the average price per 100 pounds of pork sold was up 40 percent, and the average price per bushel of corn fed (see Table 4) was up 3 percent.

The experience of the 1959 price drop along with hog prices in the $\$ 14$ to $\$ 16$ range from 1959 to 1964 (six years) did not provide much incentive for increasing hog production. While returns above feed per litter of $\$ 204$ in 1965 were double the last six-year average of $\$ 107$, five out of the past six years were below this average.

Feed cost per 100 pounds produced has never varied more than 65 cents in the past six years, but
pounds of concentrates per 100 pounds produced have been dropping at the rate of about 1 percent every three years. The average size of hog enterprise on all record-keeping farms has been increasing at the rate of about 3 litters per year, from 41 litters ( 299 pigs weaned) per farm in 1956 to 71 litters ( 525 pigs weaned) in 1965.

The high-return group of farms had returns per $\$ 100$ feed fed that ranged from $\$ 240$ to $\$ 269$, and returns for the low-return group ranged from $\$ 160$ to $\$ 179$. Most of the differences between high- and lowreturn groups were caused by differences in feed conversions and in feed costs per 100 pounds produced.

The high-return farms used 78 pounds less farm grains and 13 pounds less commercial feeds to produce 100 pounds pork than the low-return farms. This saving in feed was equivalent to about 1,678 bushels of corn and 7.8 tons of protein per farm, or about $\$ 2,350$. Other differences show 0.7 more pigs weaned per litter, 0.3 percent lower death loss, and $\$ 1.38$ 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 very profitable business for the farmers in the high-return group and a moderately profitable business for the average hog producer. If nonfeed costs are estimated from detailed cost studies at $\$ 5$ per 100 pounds over the past ten years, the high-return farmer sold his hogs at $\$ 2.48$ more per hundred pounds than his total cost. The average producer received 99 cents more per hundred pounds than his total cost. Assuming the low-return group would have had the same $\$ 5$ per 100 pounds nonfeed cost, it would have received 60 cents less than its total cost of production.

If the relationship between hog prices and production costs continues to be favorable enough in the years ahead to compete with returns from selling cash grain, it should encourage increased hog production on many Illinois farms.

## Feeder-cattle and feeder-pig enterprises

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

Pork produced per farm from feeder-pig enterprises was 79,488 pounds in 1965 (see Table 6), more

Table 6. - Feeder-Cattle and Feeder-Pig Enterprises, 1965

| Items | Feeder cattle | Feeder pigs |
| :---: | :---: | :---: |
| Number of farms. | 419 | 74 |
| Average per farm |  |  |
| Total pounds produced. | 78,424 | 79,488 |
| Total returns. | \$21,943 | \$15,617 |
| Value of feed fed. | \$14,501 | \$8,875 |
| Returns per \$100 feed fed. | \$ 151 | \$ 176 |
| Death loss, percent of pounds produced | 2.1 | 1.8 |
| Average weight purchased............. | 554 | 58 |
| Price paid per 100 pounds. | \$ 24.16 | \$ 31.96 |
| Price received per 100 pounds. | \$ 24.73 | \$ 20.96 |
| Feed per 100 pounds produced |  |  |
|  |  |  |
| Grain, lb.. | 549 | 355 |
| Protein and mineral feeds, 1 l | 59 | 74 |
| Total concentrates, lb............ | 608 | 429 |
| Hay, lb... . . . . . . . . . . | 122 | ... |
| Silage, lb. | 605 |  |
| Pasture (pasture days) | 3 | $\ldots$ |

than two times the 35,041 pounds produced per farm in 1956. Farmers were not only buying more feeder pigs per farm but healthier pigs. Death loss has dropped steadily the past five years from 2.7 percent of weight produced in 1960, to 1.8 percent in 1965. Returns follow the cyclical pattern of the sow and litter enterprise. Returns per $\$ 100$ feed fed averaged $\$ 176$ in 1965.

The 78,424 pounds of beef produced per farm in 1965 (Table 6) is 78 percent greater than the average production per farm for 1956-1958. Returns per $\$ 100$ feed fed for feeder-cattle enterprises were $\$ 151$ in 1965. Although the 1965 returns were good, the sixyear average returns per $\$ 100$ feed fed of $\$ 122$ are still below the return needed to pay all nonfeed costs.

Prices paid for feeders bought were $\$ 2.90$ per 100 pounds higher during 1965 than in 1964, while prices received for cattle sold in 1965 were $\$ 2.81$ higher. Average weight purchased was down 9 pounds per steer but selling weights were higher. Pounds of beef produced per farm in 1965 was 7.7 percent higher than in 1964. Beef produced per farm has followed an upward trend since 1956 of about 3,000 pounds a year with more than this in years of favorable outlook and less in years of unfavorable outlook.

Pounds of grain and pounds of hay used per 100 pounds of beef produced has dropped steadily since 1960, from 644 to 549 pounds, and from 182 to 122 pounds respectively, while pounds of silage used has increased steadily from 458 to 605 pounds per 100 pounds of beef produced. Feed costs per 100 pounds
produced, however, remains about the same. Variations from the past six-year average have not exceeded 65 cents. 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 exists among cattle feeding programs and individual feeders. Since 1960 prices paid for feeders have varied as much as $\$ 3.18$ per 100 pounds from the past

Table 7. - Dairy Cattle Enterprises, 1965

| Items | All farms | Pasture days per animal unit |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 0 | 1-119 | $120+$ |
| Number of farms. . | 342 | 59 | 125 | 158 |
| Average per farm |  |  |  |  |
| Number of cows in herd | 36.6 | 42.5 | 41.6 | 30.5 |
| Number of milk cows. | 36.5 | 42.4 | 35.5 | 25.6 |
| Percent of milk cows dry. | 15 | 14 | 15 | 16 |
| Animal units in herd. . | 60.4 | 74.4 | 68.3 | 49.0 |
| Pounds of beef |  |  |  |  |
| Total returns, | \$18,468 | \$22,315 | \$21,627 | \$14,532 |
| Value of feed fed. | \$10,600 | \$13,170 | \$12,372 | \$ 8,238 |
| Returns per $\$ 100$ feed fed................. | \$ 174 | \$ 169 | \$ 175 | \$ 176 |
| Returns above feed per milk cow...... | \$ 216 | \$ 216 | \$ 222 | \$ 207 |
| Total pounds of milk produced | 425,448 | 518,307 | 492,117 | 338,028 |
| Pounds of milk per milk cow. . . . . | 11,656 | 12,224 | 11,830 | 11,119 |
| Pounds of butterfat per milk cow. | 431 | 447 | 436 | 415 |
| Pounds of beef per cow in herd. .. | 501 | 524 | 505 | 484 |
| Death loss, percent of pounds produced... | 7.0 | 7.1 | 6.0 | 8.1 |
| Feed cost per unit ${ }^{\text {a }}$. . . | \$ 17.41 | \$ 17.77 | \$ 17.62 | \$ 16.96 |
| Price received for: |  |  |  |  |
| 100 lb . milk. | \$ 3.77 | \$ 3.74 | 4 \$ 3.84 | \$ 3.70 |
| 100 lb . beef. | \$ 15.51 | \$ 15.73 | \$ 15.53 | \$ 15.36 |
| Feed per unit of milk and beef, |  |  |  |  |
| Grain, lb... | 255 | 260 | 250 | 259 |
| Protein and minerals, lb. | 64 | 64 | 67 | 60 |
| Total concentrates, lb.. | 319 | 324 | 317 | 319 |
| Hay and dry roughage, lb..... | 338 | 546 | 305 | 384 |
| Hay silage and soilage, lb....... . | 317 | 410 | 354 | 78 |
| Corn and other silage, lb.. | 666 | 758 | 803 | 456 |
| Pasture (pasture days). . . . . . . . . | 8 | ... | 6 | 16 |
| Pasture days per animal unit. ...... | 84 | . . | 59 | 160 |

[^3]

Number of cows per herd on record-keeping farms and total milk cows on all Illinois farms, 1955-1965.
(Fig. 2)
six-year average while prices received have varied by as much as $\$ 1.97$ per 100 pounds sold from the past six-year average. 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 36.6 cows in 1965, compared with 23.5 cows per farm on record-keeping farms in 1956. (Figure 2).

The rate of increase in the size of dairy herds since 1956 has been a little more than one cow per year. Total number of milk cows in Illinois has been declining steadily at the rate of about 4 percent a year in this same period (Figure 2), but total pounds of milk produced in the state has been declining only about 2 percent a year. While there are 42 percent fewer milk cows in the state than 10 years ago, the remaining cows are in herds that are 56 percent larger and that produce 26 percent more milk per cow.

Returns per $\$ 100$ feed fed to dairy enterprises in 1965 were the same as in 1964. Slightly higher milk
and beef prices offset the 95 cents higher feed costs per 1,000 pounds of milk or 100 pounds of beef produced (Table 7).

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 have declined steadily to 8 days in 1965 .

The dairy herds in Table 7 were divided into three groups: herds with no pasture days per animal unit, those with 1 to 119 days, and those with 120 days or more. Each year a few more herds have been adopting the practice of feeding cows in drylot. Dairy herds averaged 42.5 cows on farms with no direct grazing compared with 30.5 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 pasture and hay yields are figured at 150 pasture days and 3 tons per acre respectively, the farms with drylot feeding required only 1.8 acres per cow to produce grass-legume forages, while the farms with over 120 pasture days per animal unit used 2.8 acres. Additional roughage was obtained through corn silage on the no-grazing farms. Milk production per cow was highest on the farms with drylot feeding. Part of the additional cost of harvesting

Table 8. - Beef Cow Enterprises, 1965

| Items | All farms | Calves sold | Calves fed out |
| :---: | :---: | :---: | :---: |
| Number of farms. | 271 | 117 | 121 |
| Average per farm |  |  |  |
| Number of cows in herd. | 28.7 | 28.4 | 26.5 |
| Animal units in herd. | 42.8 | 38.6 | 42.8 |
| Total pounds produced. | 18,700 | 14,736 | 20,737 |
| Total returns.... | \$ 4,075 | \$ 3,082 | \$ 4,681 |
| Value of feed fed. | \$ 3,208 | \$ 2,419 | \$ 3,613 |
| Returns per $\$ 100$ feed fed. | \$ 127 | \$ 127 | \$ 130 |
| Pounds of beef per cow in herd. | 653 | 519 | 783 |
| Average weight per head sold. | 733 | 593 | 872 |
| Death loss, percent of pounds produced. | 5.0 | 5.9 | 4.7 |
| Feed cost per unit ${ }^{\text {a }}$. | \$ 17.16 | \$ 16.42 | \$ 17.42 |
| Price received per 100 pounds. | \$ 21.72 | \$ 21.03 | \$ 21.75 |
| Feed per unit of milk and beef |  |  |  |
| Grain, lb.. | 199 | 76 | 270 |
| Protein and mineral feeds, lb.. . . . | 27 | 22 | 29 |
| Total concentrates, lb. Hay and dry roughage, lb. | 226 | 98 | 299 |
|  | 550 | 633 | 504 |
| Hay silage, lb.. Corn and other silage, lb. | 76 | 44 | 90 |
|  | 187 | 159 | 221 |
| Pasture (pasture days) Pasture days per animal unit. | 44 | 55 | 37 |
|  | 192 | 210 | 179 |

a 1,000 pounds of milk or 100 pounds of beef.
roughage to be fed in drylot is 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, from an increase in size of dairy herd on fixed acres of hay and pasture, or from higher production per cow.

## 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 1965 averaged $\$ 127$. Increased beef prices during 1965 and higher feeder calf prices during the last half of the year started cow-herd returns upward from the low level of 1964.

In 1965, farms that sold calves received $\$ 23$ per cow above value of feed fed, and farms that sold cattle at slaughter weights received $\$ 40$ per cow above value of feed fed. This is the first year since 1962 that those who sold slaughter cattle received higher returns

Table 9. - Poultry Enterprises, 1965

| Items | All farms | Number of hens per farm |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 100-299 | 300-999 | 1,000-1,999 | Over 2,000 |
| Number of farms. | 175 | 90 | 51 | 25 | 9 |
| Average per farm |  |  |  |  |  |
| Pounds of poultry produced. | 1,518 | 501 | 1,114 | 3,586 | 8,236 |
| Total returns. | \$ 3,469 | \$ 807 | \$ 2,183 | \$ 7,050 | \$ 27,431 |
| Value of feed fed. | \$ 2,432 | \$ 668 | \$ 1,701 | \$ 4,994 | \$ 17, 088 |
| Returns per $\$ 100$ feed fed. | \$ 143 | \$ 121 | \$ 128 | \$ 141 | \$ 161 |
| Returns above feed cost per hen. | \$ 1.42 | \$ . 75 | \$ . 94 | \$ 1.41 | \$ 1.93 |
| Average number of hens. | 728 | 185 | 514 | 1,454 | 5,361 |
| Eggs produced per hen. . | 212 | 188 | 188 | 210 | 234 |
| Percent production.... | 58 | 52 | 52 | 58 | 64 |
| Feed requirement units ${ }^{\text {a }}$. | 13,869 | 3,234 | 8,796 | 27,895 | 110,004 |
| Feed cost per unit. . . . . . . . | \$ .18 | \$ .21 | \$ 19 | \$ . 18 | \$. 16 |
| Pounds of concentrates per unit..... | 5.6 | 6.7 | 6.3 | 5.4 | 5.1 |
| Cost per 100 pounds of concentrates | \$ 3.14 | \$ 3.07 | \$3.08 | \$ 3.31 | \$ 3.06 |
| Price per pound sold. | \$ . 07 | \$ . 10 | \$ . 09 | \$ . 06 | \$ . 07 |
| Price per dozen eggs sold. | \$ ${ }^{\text {¢ }}$. 31 | \$ ${ }^{\text {d }} .29$ | \$ ${ }^{\text {d }} .30$ | \$ ${ }^{\text {. }} 32$ | \$. 32 |
| Pounds of death loss... | 650 | 153 | 351 | 914 | 2,487 |

${ }^{\text {a }}$ One dozen eggs or 1.5 pounds of weight produced.
to apply against the added costs for labor, buildings, and capital required 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 304 hens in 1956 to 728 in 1965. In the same period, pounds of concentrates per dozen eggs or $11 / 2$ pounds of weight produced have declined steadily each year from 7.0 in 1956 to 5.6 pounds in 1965. Eggs per hen increased steadily from 197 to 210 from 1956 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 (Table 9). Farms with over 2,000 hens had returns above feed cost per hen of $\$ 1.93$, compared with only 75 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.

## Sheep enterprises

Sheep production is a minor enterprise on recordkeeping 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 1965 were $\$ 143$ for native flocks and $\$ 99$ for feeder sheep. Pounds of wool and mutton produced per farm have remained fairly constant for the past ten years. The majority of Illinois farmers who keep sheep do so as a supplemental enterprise to market nonsalable feeds and labor.

Table 10. - Sheep Enterprises, 1965

| Items | Native flocks | Feeder sheep |
| :---: | :---: | :---: |
| Number of farms. | 124 | 6 |
| Average per farm |  |  |
| Pounds of wool and mutton produced. | 3,841 | 19,566 |
| Total returns. | \$907 | \$4,250 |
| Value of feed fed. | \$ 636 | \$4,282 |
| Returns per $\$ 100$ feed fed | \$ 143 | \$ 99 |
| Percent lamb crop. | 121 |  |
| Death loss, percent of pounds produced. | 13.5 | 30.3 |
| Feed cost per 100 pounds produced. | \$ 16.56 | \$ 21.88 |
| Price received per 100 pounds. | \$ 25.11 | \$ 23.11 |
| Price paid for sheep bought. | \$ 26.51 | \$ 23.51 |
| Feed per 100 pounds produced |  |  |
| Concentrates, lb. | 270 | 755 |
| Hay, lb.. | 500 | 148 |
| Silage, lb. | 6 | 128 |
| Pasture (pasture days) | 41 | 21 |

## 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 proportional 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 - $\$ 1.15$ per bushel; oats -66 cents per bushel; barley - 89 cents per bushel; soybeans - $\$ 2.67$ per bushel; rye - $\$ 1.07$ per bushel; wheat - $\$ 1.40$ 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).

Machinery and equipment. Includes machinery and equipment depreciation, machinery repairs, machine

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

|  | 1965 |  | 1964 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Northern Illinois | Southern Illinois | Northern Illinois | Southern Illinois |
| Grain prices |  |  |  |  |
| Corn, sold. | \$1.13 | \$1.15 | \$1.12 | \$1.15 |
| Soybeans, sold. | 2.59 | 2.46 | 2.58 | 2.51 |
| Oats, sold..... | . 68 |  | . 64 | . 68 |
| Wheat, sold. . | 1.40 | 1.32 | 1.43 | 1.39 |
| Corn, purchased. | 1.19 | 1.18 | 1.14 | 1.13 |
| Oats, purchased. | . 69 |  | . 65 | . 80 |
| Livestock prices |  |  |  |  |
| Hogs, all weights. | \$20.68 |  | \$14.81 |  |
| Fat cattle, all weights. . | 24.73 |  | 21.92 |  |
| Feeder cattle, all weights, prices paid. | 24.16 |  | 21.26 |  |
| Dairy cattle, all weights. | 15.51 |  | 14.60 |  |
| Sheep, all weights....... | 25.11 |  | 21.80 |  |
| Poultry. | 3. 77 |  | 3.07 |  |
| Milk. |  |  | . 31 |  |
| Eggs. | . 31 |  |  |  |

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 1965 at $\$ 250$ and $\$ 235$ 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 of Grain Farms by Size and Soil Rating, Northern Illinois, 1965

|  | GRAIN FARMS WITH SOIL RATING 76-100 |  |  |  |  |  | GRAIN FARMS WITH SOIL RATING 56-75 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Range in size (total acres) <br> Number of farms. | $\text { Under } 180$ | $\begin{gathered} 180-259 \\ 93 \end{gathered}$ | $\begin{gathered} 260-339 \\ 123 \end{gathered}$ | $\begin{gathered} 340-499 \\ 163 \end{gathered}$ | $\begin{gathered} 500-649 \\ 98 \end{gathered}$ | $\begin{gathered} 650+ \\ 70 \end{gathered}$ | $\begin{gathered} \text { Under } 180 \end{gathered}$ | $\begin{gathered} 180-259 \\ 37 \end{gathered}$ | $\begin{gathered} 260-339 \\ 43 \end{gathered}$ | $\begin{gathered} 340-499 \\ 70 \end{gathered}$ | $\begin{gathered} 500+ \\ 59 \end{gathered}$ |
| Size of farm. | 155 | 229 | 305 | 420 | 567 | 807 | 133 | 227 | 305 | 411 | 696 |
| Acres of tillable land | 146 | 217 | 288 | 388 | 523 | 741 | 124 | 209 | 279 | 359 | 590 |
| Soil rating on tillable land | 86 | 85 | 85 | 84 | 85 | 84 | 73 | 68 | 69 | 68 | 68 |
| Hens, number............ | 30 | 61 | 40 | 24 | 3 | 4 | 49 | 17 | 44 | 8 | 57 |
| Dairy cows, number. |  | . 5 | 2 | . 3 |  | 25.5 |  | 6 | ${ }^{.} 7$ | 1.1 | 1.5 |
| Beef produced, hundredweight | 15 | 53 | 74 | 99 | 188 | 254 | 63 | 81 | 110 | ${ }_{3}^{162}$ | 206 |
| Pork produced, hundredweight | 175 | 245 | 252 | 230 | 429 | 579 | 106 | 228 | 153 | 355 | 524 |
| DOLLAR COSTS PER FARM |  |  |  |  |  |  |  |  |  |  |  |
| Soil fertility.. . . ${ }_{\text {Buildings }}$ | \$ 1,476 | \$ 2,236 | $\$ 3,113$ 1,739 | $\$ 4,862$ 1,899 | \$ 6,564 | \$ 9,928 | \$ 1,294 | \$ 2,215 | \$ 2,846 | \$ 3,807 | \$ 6,915 |
| Machinery and equipmen | 4,075 | 4,966 | 6,420 | 8,009 | 11,613 | 15,066 | 3,649 | 5,059 | 5,809 | 7,771 | 12,477 |
| Labor............. . | 3,364 | 3,406 | 3,677 | 4,688 | 6,173 | 8,306 | 3,108 | 3,402 | 3,547 | 4,164 | 7,165 |
| Taxes. | 1,290 | 1,666 | 2,245 | 2,946 | 3,673 | 5,236 | 1,096 | 1,521 | 2,031 | 2,518 | 3,742 |
| Seed expense | 388 | 596 | 750 | 951 | 1,346 | 2,037 | 327 | 518 | 649 | 965 | 1,578 |
| Crop expense | 419 | 643 | 939 | 1,192 | 1,437 | 2,660 | 367 | 597 | 770 | 1,016 | 1,784 |
| Livestock and miscellaneous expense | 298 | 493 | 444 | 477 | 840 | 897 | 420 | 377 | 400 | ${ }^{615}$ | 849 |
| Interest charge on capital. | 4,566 | 6,456 | 8,665 | 11,217 | 15,225 | 21,466 | 3,389 | 5,000 | 6,810 | 8,799 | 14,304 |
| Total non-feed costs. | 17,156 | 21,799 | 27,992 | 36,241 | 49,548 | 69,386 | 14,698 | 19,837 | $\overline{24,482}$ | 31,625 | 51,745 |
| Total value of feed fed | 2,190 | 4,135 | 4,425 | 4,711 | 8,263 | 10,943 | 2,488 | 4,064 | 3,878 | 7,374 | 10,679 |
| DOLLAR RETURNS PER FARM | \$ 2,392 | \$ 3,351 | \$ 3,558 | \$ 3,095 | \$ 6,302 | \$ 8,886 | \$ 2,033 | \$ 3,694 | \$ 2,311 | \$ 5,702 | \$ 8,114 |
| Feed and grain returns.......... | 14,875 | +21,977 | -29,326 | 39,616 | 53,655 | 78,483 | 11,338 | 19,339 | 25,678 | 32,662 | 57,947 |
| Other cash income... | - 919 | + 720 | 1,087 | 1,320 | 1,634 | 2,364 | 459 | 822 | 1,190 | 1,246 | 2,088 |
| Total value of farm production | 18,186 | 26,048 | 33,971 | 44,031 | 61,591 | 89,733 | 13,830 | 23,855 | $\overline{29,179}$ | 39,610 | 68,149 |
| Management returns. | 1,030 | 4,249 | 5,979 | 7,790 | 12,043 | 20,347 | -868 | 4,018 | 4,697 | 7,985 | 16,404 |
| Farm production per $\$ 1.00$ of non-feed costs. | 1.06 | 1.19 | 1.21 | 1.21 | 1.24 | 1.29 | 94 | 1.20 | 1.19 | 1.25 | 1.32 |
| Farm production per man. | 16,409 | 23,154 | 27,922 | 29,032 | 31,451 | 34,961 | 13,384 | 21,362 | 25,010 | 29,161 | 30,629 |
| FINANCIAL SUMMARY Cash sales of products and services. | \$18,308 | \$26,243 | \$36,273 | \$44,328 | \$60,119 | \$88,995 | \$15,420 | \$24,072 | \$28,668 | \$43,365 | \$69,336 |
| Sales of capital items. | 55 | 176 | 252 | 241 | 499 | 422 |  | 104 | 103 | 217 | 402 |
| Total cash income | 18,363 | $\overline{26,419}$ | 36,525 | 44,569 | 60,618 | $\overline{89,417}$ | 15,420 | $\stackrel{\text { 24,176 }}{ }$ | 28,771 | $\overline{43,582}$ | 69,738 |
| Purchased livestock | 804 | 1,653 | 2,618 | 1,522 | 4,082 | 7,833 | 1,573 | 1,953 | 2,272 | 3,811 | 6,253 |
| Purchased feed. | 1,031 | 2,184 | 2,030 | 2,052 | 3,770 | 3,730 | 1,289 | 1,663 | 1,215 | 3,684 | 4,231 |
| Cash operating expenses | 6,827 | 9,340 | 12,259 | 17,081 | 23,362 | 34,025 | 6,402 | 8,836 | 10,872 | 14,720 | 25,734 |
| Purchase of capital items. | 3,524 | 4,420 | 5,067 | 6,277 | 11,504 | 13,286 | 1,374 | 4,883 | 3,780 | 6,251 | 10,578 |
| Total cash expenditures. | 12,186 | 17,597 | 21,974 | 26,932 | 42,718 | 58,874 | 10,638 | 17,335 | 18,139 | 28,466 | 46,796 |
| Cash balance. | \$ 6,177 | \$8,822 | \$14,551 | \$17,637 | \$17,900 | \$30,543 | \$ 4,782 | \$ 6,841 | \$10,632 | \$15,116 | \$22,942 |
| Inventory change | 1,680 | 3,527 | 2,239 | 3,167 | 9,170 | 12,111 | 1,213 | 3,252 | 3,863 | 3,583 | 9,157 |
| Capital change. | 818 | 1,374 | 842 | 1,247 | 3,729 | 3,210 | -604 | 1,886 | 56 | 1,257 | 2,365 |
| Farm products consumed. | 33 | 115 | 107 | 110 | 154 | 190 | 59 | 147 | 135 | 157 | 140 |
| Farm and family earnings. | 8,708 | 13,838 | 17,739 | $\overline{22,161}$ | 30,953 | 46,054 | 5,450 | 12,126 | 14,686 | $\overline{20,113}$ | 34,604 |
| Labor and management earnings. | 3,941 | 7,229 | 8,956 | 10,785 | 15,043 | 23,329 | 1,989 | 6,957 | 7,601 | 10,921 | 19,370 |
| Capital and management earnings | 5,596 | 10,705 | 14,644 | 19,007 | 27,268 | 41,813 | 2,521 | 9,018 | 11,507 | 16,784 | 30,708 |
| Capital and management earnings per acre. | 36.10 | 46.75 | 48.01 | 45.25 | 48.09 | 51.81 | 18.95 | 39.73 | 37.73 | 40.84 | 44.12 |

Table 12a. - Average Operating Costs, Investments, and Land Use of Grain Farms by Size and Soil Rating, Northern Illinois, 1965

|  | GRAIN FARMS WITH SOIL RATING 76-100 |  |  |  |  |  | GRAIN | N FARMS | WITH SOIL | RATING | 56-75 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Range in size (total acres) Number of farms. | $\begin{gathered} \text { Under } 180 \\ 28 \end{gathered}$ | $\begin{gathered} 180-259 \\ 93 \end{gathered}$ | $\begin{gathered} 260-339 \\ 123 \end{gathered}$ | $\begin{gathered} 340-499 \\ 163 \end{gathered}$ | $\begin{gathered} 500-649 \\ 98 \end{gathered}$ | $\begin{gathered} 650+ \\ 70 \end{gathered}$ | $\begin{aligned} & \text { Under } 180 \\ & 14 \end{aligned}$ | $\begin{gathered} 180-259 \\ 37 \end{gathered}$ | $\begin{gathered} 260-339 \\ 43 \end{gathered}$ | $\begin{gathered} 340-499 \\ 70 \end{gathered}$ | $\begin{gathered} 500+ \\ 59 \end{gathered}$ |
| COSTS AND RETURNS PER TILLABLE ACRE |  |  |  |  |  |  |  |  |  |  |  |
| Soil fertility. | \$ 10.11 | \$ 10.30 | \$ 10.81 | \$ 12.53 | \$ 12.55 | \$ 13.40 | \$ 10.44 | \$ 10.60 | \$ 10.20 | \$ 10.60 | \$ 11.72 |
| Buildings and fence | 8.77 | 6.16 | 6.04 | 4.89 | 5.12 | 5.11 | 8.45 | 5.49 | 5.81 | 5.49 | 4.97 |
| Machinery and equipmen | 27.91 | 22.88 | 22.29 | 20.64 | 22.20 | 20.33 | 29.43 | 24.21 | 20.82 | 21.65 | 21.15 |
| Labor. | 23.04 | 15.70 | 12.77 | 12.08 | 11.80 | 11.21 | 25.06 | 16.28 | 12.71 | 11.60 | 12.14 |
| Value of feed fed | 15.00 | 19.06 | 15.36 | 12.14 | 15.80 | 14.77 | 20.06 | 19.44 | 13.90 | 20.54 | 18.10 |
| Livestock returns above feed cost. | 16.38 | 15.44 | 12.35 | 7.98 | 12.05 | 11.99 | 16.40 | 17.67 | 8.28 | 15.88 | 13.75 |
| Feed and grain returns. | 101.88 | 101.28 | 101.83 | 102.10 | 102.59 | 105.91 | 91.44 | 92.53 | 92.04 | 90.98 | 98.22 |
| Total value of farm production | 124.56 | 120.04 | 117.95 | 113.48 | 117.76 | 121.10 | 111.53 | 114.14 | 104.58 | 110.33 | 115.51 |
| Total non-feed costs. | $\underline{117.51}$ | 100.46 | 97.19 | 93.40 | 94.74 | 93.64 | 118.53 | 94.92 | 87.75 | 88.09 | 87.71 |
| Management returns. | 7.05 | 19.58 | 20.76 | 20.08 | 23.02 | 27.46 | $-7.00$ | 19.22 | 16.83 | 22.24 | 27.80 |
| SELECTED COST ITEMS |  |  |  |  |  |  |  |  |  |  |  |
| Fertilizer, annual application....... | \$ 1,440 | \$ 2,200 | \$ 3,049 | \$ 4,781 | \$ 6,466 | \$ 9,829 | \$ 1,276 | \$ 2,179 | \$ 2,808 | \$ 3,710 | \$ 6,860 |
| Lime and rock phosphate depreciation | 36 | 36 | 64 | -81 | ( 98 | -99 | -1, 18 | - 36 | - 38 | - 97 | \$ 6,85 |
| Building repairs and maintenance. | 372 | 408 | 441 | 481 | 771 | 1,166 | 331 | 352 | 513 | 614 | 882 |
| Building depreciation.... | 908 | 929 | 1,298 | 1,418 | 1,906 | 2,624 | 717 | 796 | 1,107 | 1,356 | 2,049 |
| Machinery and equipment depreciation | 1,505 | 1,647 | 2,320 | 2,999 | 4,842 | 6,509 | 943 | 1,837 | 2,158 | 3,015 | 5,283 |
| Machinery repairs and supplies.. | 830 | 1,128 | 1,453 | 1,896 | 2,648 | 3,620 | 639 | 1,056 | 1,216 | 1,703 | 3,002 |
| Gasoline and oil. | 722 | 881 | 1,149 | 1,483 | 1940 1,994 | 1,174 | 673 | 507 | 524 | 813 | 828 |
| Unpaid labor charge | 3,112 | 3,133 | 3,095 | 1,483 | 3,685 | 2,471 | 658 2,929 | 961 3,108 | 1,081 | 1,324 3,329 | 2,192 |
| Hired labor charge. | 252 | 273 | 582 | 1,534 | 2,488 | 4,065 | 179 | , 294 | ${ }^{1} 368$ | 835 | 3,269 |
| Total months of labor | 13.3 | 13.5 | 14.6 | 18.2 | 23.5 | 30.8 | 12.4 | 13.4 | 14.0 | 16.3 | 26.7 |
| Months of labor hired | . 8 | . 9 | 2.2 | 5.6 | 8.7 | 13.8 | . 7 | 1.0 | 1.3 | 2.9 | 11.1 |
| FARM INVESTMENT |  |  |  |  |  |  |  |  |  |  |  |
| Livestock inventory. | \$ 2,361 | \$ 3,569 | \$ 4,769 | \$ 5,298 | \$ 7,927 | \$12,779 | \$ 2,535 | \$ 4,211 | \$ 5,252 | \$ 8,153 | \$11,358 |
| Grain inventory.......... | 8,484 | 11,647 | 16,132 | 19,646 | 26,108 | 38,345 | 6,208 | 8,692 | 11,233 | 15,855 | 25,234 |
| Remaining capital cost in: |  |  |  |  |  |  |  |  |  |  |  |
| Machinery........ | 4,804 9,827 | 5,934 10,538 | r 8 15,661 | 11,068 | 15,721 | 21,033 | 3,547 | 6,306 | 8,742 11,968 | 10,382 | 17,949 |
| Soil fertility.. . . . | ${ }^{\text {, }} 104$ | 10,538 | 15,075 | $\begin{array}{r}17,656 \\ \hline 185\end{array}$ | 23,012 | 33,521 | 8,957 43 | 9,113 61 | 11,968 | 16, 182 | 21,618 |
| Auto....... | 574 | 756 | 773 | 833 | 1,126 | 1,113 | 814 | 544 | 842 | 857 | 1,018 |
| Value of land (current basis) | 81,465 | 120,752 | 159,680 | 212,081 | 288,032 | 402,959 | 57,094 | 88,849 | 122,620 | 155,380 | 260,984 |
| Total farm investment. | 107,619 | 153,266 | 205,235 | 266,767 | $\overline{362,106}$ | 509,921 | 79,198 | $\overline{117,776}$ | 160,722 | 207,062 | 338,278 |
| Total farm investment per acre | 694.32 | 669.28 | 672.90 | $\bigcirc 635.16$ | , 638.63 | ${ }_{631.87}$ | $\bigcirc 595.47$ | ${ }^{518.84}$ | . 526.96 | , 503.80 | -486.03 |
| PERCENT OF TILLABLE LAND IN |  |  |  |  |  |  |  |  |  |  |  |
| Corn and corn silage | 54.6 | 51.4 | 51.1 | 51.8 | 49.0 | 54.1 | 54.4 | 55.3 | 46.5 | 48.5 | 51.1 |
| Soybeans. | 23.5 | 29.2 | 30.4 | 29.5 | 31.4 | 29.7 | 24.7 | 20.6 | 28.9 | 27.8 | 27.0 |
| Wheat. . . . . . . . | 4.5 | 4.3 | 4.8 | 4.6 | 5.4 | 5.0 | 4.3 | 4.0 | 5.9 | 3.8 | 5.7 |
| Other small grains | 4.0 | 2.3 | 2.3 | 2.3 | 2.5 | 1.5 | 1.7 | 3.7 | 3.9 | 2.7 | 2.5 |
| Diverted acres. | 4.7 | 5.3 | 6.1 | 6.3 | 6.8 | 5.2 | 5.1 | 6.0 | 7.4 | 8.7 | 7.9 |
| All hay and pasture crops. | 8.1 | 7.0 | 5.2 | 5.4 | 4.5 | 4.2 | 9.7 | 10.2 | 7.2 | 8.5 | 5.5 |
| CROP YIELDS, bushels per acre |  |  |  |  |  |  |  |  |  |  |  |
| Corn. | 114.2 | 113.7 | 114.3 | 116.5 | 117.6 | 116.5 | 101.1 | 106.2 | 106.2 | 104.6 | 107.1 |
| Soybeans | 35.8 | 36.1 | 35.0 | 34.5 | 35.0 | 34.9 | 34.1 | 34.5 | 34.1 | 33.6 | 33.4 |
| Wheat. | 41.4 | 42.6 | 45.8 | 41.0 | 43.4 | 41.3 | 28.7 | 34.6 | 36.8 | 35.9 | 40.0 |
| Oats. | 68.9 | 64.4 | 71.2 | 71.9 | 74.4 | 79.6 | 55.4 | 68.5 | 64.2 | 58.9 | 69.0 |

Table 13. - Average Costs, Returns, and Financial Summary of Hog Farms by Size and Soil Rating, Northern Illinois, 1965

|  | HOG FARMS WITH SOIL RATING 76-100 |  |  |  |  | HOG FARMS WITH SOIL RATING 56-75 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Range in size (total acres) Number of farms.......... | $\begin{gathered} \text { Under } 180 \\ 41 \end{gathered}$ | $\begin{gathered} 180-259 \\ 60 \end{gathered}$ | $\begin{gathered} 260-339 \\ 54 \end{gathered}$ | $\begin{gathered} 340-499 \\ 34 \end{gathered}$ | $\begin{gathered} 500+ \\ 14 \end{gathered}$ | $\begin{gathered} \text { Under } 180 \\ \end{gathered}$ | $\begin{gathered} 180-259 \\ 40 \end{gathered}$ | $\begin{gathered} 260-339 \\ 40 \end{gathered}$ | $\begin{gathered} 340-499 \\ 47 \end{gathered}$ | $\begin{gathered} 500+ \\ 26 \end{gathered}$ |
| Size of farm | 146 | 224 | 300 | 405 | 669 | 151 | 221 | 298 | 409 | 607 |
| Acres of tillable land | 135 | 206 | 271 | 363 | 550 | 133 | 187 | 240 | 320 | 445 |
| Soil rating on tillable lan | 83 | 83 | 81 | 82 | 82 | 66 | 68 | 67 | 67 | 68 |
| Hens, number. | 36 | 63 | 51 | 68 | 31 | 58 | 51 | 34 | 54 | 24 |
| Dairy cows, number | . 3 | 1.0 | 4 | 1.2 |  | 2 | 2.6 | 8 | 1.4 |  |
| Beef produced, hundredweight. | 108 | 182 | 231 | 435 | 644 | 100 | 171 | 203 | 310 | 613 |
| Pork produced, hundredweight. | 1,393 | 1,359 | 1,823 | 1,858 | 2,594 | 1,078 | 1,150 | 1,481 | 1,754 | 2,478 |
| DOLLAR COSTS PER FARM |  |  |  |  |  |  |  |  |  |  |
| Soil fertility. | \$ 1,370 | \$ 2,532 | \$ 3,286 | \$ 4, 842 | \$ 8,252 | \$ 1,320 | \$ 2,382 | \$ 2,801 | \$ 3,941 | \$ 4,789 |
| Buildings and fence | 1,943 | 2,016 | 2,735 | 3,113 | 6,161 | 1,497 | 1,801 | 2,358 | 2,988 | 4,743 |
| Machinery and equipm | 5,125 | 6,392 | 8,034 | 10,634 | 16,035 | 4,308 | 5,848 | 7,285 | 9,400 | 11,746 |
| Labor............... | 3,842 | 4,092 | 4,834 | 6,166 | 9,406 | 3,508 | 3,858 | 4,317 | 5,743 | 7,766 |
| Taxes | 1,249 | 1,763 | 2,151 | 2,928 | 4,531 | 1,041 | 1,429 | 1,722 | 2,142 | 2,891 |
| Seed expense | 454 | 711 | 814 | 1,171 | 1,818 | 402 | 564 | 674 | 821 | 1,351 |
| Crop expense. | 448 | 654 | 992 | 1,244 | 2,755 | 361 | 511 | 797 | 928 | 1,082 |
| Livestock and miscellaneous expe | 1,295 | 1,158 | 1,671 | 1,794 | 2,587 | 841 | 1,193 | 1,125 | 1,421 | 2,072 |
| Interest charge on capital. | 5,037 | 7,089 | 9,197 | 11,778 | 18,745 | 3,807 | 5,508 | 6,764 | 8,790 | 13,162 |
| Total non-feed costs. | $\overline{20,763}$ | $\overline{26,407}$ | $\overline{33,714}$ | 43,670 | 70,290 | 17,085 | $\overline{23,094}$ | 27,843 | 36,174 | 49,602 |
| Total value of feed fed | 17,363 | 19,253 | 26,123 | 29,618 | 40,669 | 14,675 | 16,771 | 19,998 | 27,002 | 38,736 |
| DOLLAR RETURNS PER FARM |  |  |  |  |  |  |  |  |  |  |
| Livestock returns above feed cost.... | \$18,464 | \$18,231 | \$22,930 | \$24,650 | \$34,602 | \$13,416 | \$16,079 | \$20,642 | \$22,818 | \$35,564 |
| Feed and grain returns. | 12,988 | 19,310 | 26,245 | 36,136 | 56,990 | 11,057 | 16,390 | 20,749 | 27,439 | 38,227 |
| Other cash income. | 896 | 878 | 1,289 | 1,313 | 2,768 | 491 | 702 | 1,146 | 1,145 | 1,658 |
| Total value of farm production | $\overline{32,348}$ | 38,419 | $\overline{50,464}$ | 62,099 | 94,360 | $\overline{24,964}$ | 33,171 | 42,537 | 51,402 | 75,449 |
| Management returns. | 11,585 | 12,012 | 16,750 | 18,429 | 24,070 | 7,879 | 10,077 | 14,694 | 15,228 | 25,847 |
| Farm production per $\$ 1.00$ of non-feed costs. | 1.56 | 1.45 | 1.50 | 1.42 | 1.34 | 1.46 | 1.44 | 1.53 | 1.42 | 1.52 |
| Farm production per man. | 25,878 | 28,284 | 33,457 | 31,576 | 34,417 | 21,708 | 26,362 | 31,124 | 28,690 | 32,335 |
| FINANCIAL SUMMARY |  |  |  |  |  |  |  |  |  |  |
| Cash sales of products and services. | \$39,107 | \$45,305 | \$61,142 | \$76,980 | \$114,371 | \$31,310 | \$39,371 | \$49,468 | \$62,881 | \$92,811 |
| Sales of capital items. | $\begin{array}{r}72 \\ \hline\end{array}$ | 50 | 215 | 199 | 391 | 52 | 259 | 352 | 59 | 48 |
| Total cash income. | $\overline{39,179}$ | 45,355 | 61,357 | 77,179 | $\overline{114,762}$ | 31,362 | $\overline{39,630}$ | $\overline{49,820}$ | $\overline{62,940}$ | 92,859 |
| Purchased livestock | 4,231 | 4,608 | 5,819 | 11,366 | 16,459 | 2,982 | 5,422 | 4,142 | 7,384 | 13,453 |
| Purchased feed. | 9,067 | 9,072 | 12,760 | 14,516 | 19,264 | 7,595 | 8,348 | 11,223 | 13,531 | 20,840 |
| Cash operating expenses. | 9,157 | 11,977 | 15,785 | 21,464 | 36,322 | 7,705 | 10,920 | 13,190 | 17,888 | 24,579 |
| Purchase of capital items | 5,126 | 5,255 | 8,186 | 10,065 | 17,587 | 2,533 | 5,207 | 6,914 | 9,888 | 10,058 |
| Total cash expenditures. | 27,581 | 30,912 | 42,550 | 57,411 | 89,632 | 20,815 | 29,897 | 35,469 | 48,691 | 68,930 |
| Cash balance. | \$11,598 | \$14,443 | \$18,807 | \$19,768 | \$25,130 | \$10,547 | \$ 9,733 | \$14,351 | \$14,249 | \$23,929 |
| Inventory change | 6,433 | 6,606 | 7,696 | 10,682 | 15,362 | 4,129 | 7,347 | 8,170 | 9,165 | 16,579 |
| Capital change. | 1,607 | 1,208 | 2,621 | 3,206 | 6,580 | -32 | 1,532 | 2,054 | 4,131 | 2,005 |
| Farm products consumed. | 106 | 188 | 205 | 319 | 350 | 102 | 223 | 264 | 271 | 352 |
| Farm and family earnings. | $\overline{19,744}$ | 22,445 | 29,329 | 33,975 | $\overline{47,422}$ | $\overline{14,746}$ | 18,835 | 24,839 | 27,816 | 42,865 |
| Labor and management earnings. | 14,555 | 14,995 | 19,729 | 21,410 | 27,070 | 10,789 | 13,065 | 17,675 | 18,217 | 28,837 |
| Capital and management earnings. | 16,622 | 19,101 | 25,947 | 30,207 | 42,815 | 11,686 | 15,585 | 21,458 | 24,018 | 39,009 |
| Capital and management earnings per acre. | 113.85 | 85.27 | 86.49 | 74.59 | 64.00 | 77.39 | 70.52 | 72.01 | 58.72 | 64.27 |

Table 13a. - Average Operating Costs, Investments, and Land Use of Hog Farms by Size and Soil Rating, Northern Illinois, 1965

|  | HOG FARMS WITH SOIL RATING 76-100 |  |  |  |  | HOG FARMS WITH SOIL RATING 56-75 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Range in size (total acres) Number of farms........ | $\begin{gathered} \text { Under } 180 \\ 41 \end{gathered}$ | $\begin{gathered} 180-259 \\ 60 \end{gathered}$ | $\begin{gathered} 260-339 \\ 54 \end{gathered}$ | $\begin{gathered} 340-499 \\ 34 \end{gathered}$ | $\begin{gathered} 500+ \\ 14 \end{gathered}$ | $\begin{gathered} \text { Under } 180 \\ 25 \end{gathered}$ | $\begin{gathered} 180-259 \\ 40 \end{gathered}$ | $\begin{gathered} 260-339 \\ 40 \end{gathered}$ | $\begin{gathered} 340-499 \\ 47 \end{gathered}$ | $\underset{26}{500+}$ |
| COSTS AND RETURNS PER TILLABLE ACRE |  |  |  |  |  |  |  |  |  |  |
| Soil fertility. | \$ 10.15 | \$ 12.29 | \$ 12.12 | \$ 13.34 | \$ 15.00 | \$ 9.92 | \$ 12.74 | \$ 11.67 | \$ 12.32 | \$ 10.76 |
| Buildings and fence. | 14.39 | 9.79 | 10.09 | 8.58 | 11.20 | 11.26 | 9.63 | 9.83 | 9.34 | 10.66 |
| Machinery and equipment | 37.96 | 31.03 | 29.65 | 29.29 | 29.15 | 32.39 | 31.27 | 30.35 | 29.37 | 26.40 |
| Labor. | 28.46 | 19.86 | 17.84 | 16.99 | 17.10 | 26.38 | 20.63 | 17.99 | 17.95 | 17.45 |
| Value of feed fed | 128.61 | 93.46 | 96.39 | 81.59 | 73.94 | 110.34 | 89.68 | 83.32 | 84.38 | 87.05 |
| Livestock returns above feed cost | 136.77 | 88.50 | 84.61 | 67.91 | 62.91 | 100.87 | 85.98 | 86.01 | 71.31 | 79.92 |
| Feed and grain returns. | 96.21 | 93.74 | 96.84 | 99.55 | 103.62 | 83.14 | 87.65 | 86.45 | 85.75 | 85.90 |
| Total value of farm production. | 239.61 | 186.50 | 186.21 | 171.07 | 171.56 | 187.70 | 177.39 | 177.24 | 160.63 | 169.55 |
| Total non-feed costs. | 153.80 | 128.19 | 124.40 | 120.30 | 127.80 | 128.46 | 123.50 | 116.01 | 113.04 | 111.47 |
| Management returns. | 85.81 | 58.31 | 61.81 | 50.77 | 43.76 | 59.24 | 53.89 | 61.23 | 47.59 | 58.08 |
| SELECTED COST ITEMS |  |  |  |  |  |  |  |  |  |  |
| Fertilizer, annual application. | \$ 1,336 | \$ 2,467 | \$ 3,251 | \$ 4,728 | \$ 8,207 | \$ 1,299 | \$ 2,354 | \$ 2,781 | \$ 3,851 | \$ 4,704 |
| Lime and rock phosphate depreciation | 34 | 65 | 35 | 114 | , 45 | 21 | 28 | 20 | , 90 | , 85 |
| Building repairs and maintenance. | 620 | 609 | 799 | 949 | 2,222 | 487 | 662 | 870 | 1,112 | 1,352 |
| Building depreciation. | 1,323 | 1,407 | 1,936 | 2,164 | 3,939 | 1,010 | 1,139 | 1,488 | 1,876 | 3,391 |
| Machinery and equipment depreciation. | 1,830 | 2,229 | 3,084 | 3,977 | 6,080 | 1,261 | 1,963 | 2,738 | 3,435 | 4,249 |
| Machinery repairs and supplies. | 1,080 | 1,432 | 1,839 | 2,433 | 3,891 | 912 | 1,221 | 1,693 | 2,585 | 3,219 |
| Machinery hire. | 611 | 806 | 804 | 1,248 | 1,859 | 678 | 841 | 901 | 790 | 1,116 |
| Gasoline and oil | 715 | 942 | 1,244 | 1,661 | 2,337 | 705 | 932 | 1,155 | 1,560 | 2,002 |
| Unpaid labor charge | 3,122 | 3,344 | 3,382 | 3,768 | 4,607 | 3,060 | 3,250 | 3,381 | 3,798 | 3,856 |
| Hired labor charge | 720 | 748 | 1,452 | 2,398 | 4,799 | 448 | 608 | 936 | 1,945 | 3,910 |
| Total months of labor | 15.0 | 16.3 | 18.1 | 23.6 | 32.9 | 13.8 | 15.1 | 16.4 | 21.5 | 28.0 |
| Months of labor hired | 2.5 | 2.9 | 4.6 | 8.5 | 14.5 | 1.6 | 2.1 | 2.9 | 6.3 | 12.6 |
| FARM INVESTMENT |  |  |  |  |  |  |  |  |  |  |
| Livestock inventory. | \$10,616 | \$13,542 | \$16,953 | \$23,794 | \$34,916 | \$ 9,554 | \$11,862 | \$15,566 | \$20,963 | \$32,380 |
| Grain inventory | 8,629 | 11,574 | 16,249 | 18,967 | 30,956 | 7,145 | 10,081 | 11,444 | 14,258 | 21,614 |
| Remaining capital cost in: |  |  |  |  |  |  |  |  |  |  |
| Machinery. | 6,439 | 7,854 | 10,787 | 13,335 | 21,319 | 4,188 | 7,258 | 7,978 | 10,354 | 14,003 |
| Buildings and fence | 14,231 | 17,130 | 22,214 | 23,085 | 42,198 | 9,508 | 14,002 | 16,316 | 19,808 | 31,810 |
| Soil fertility. | 82 | 133 | 80 | 257 | 96 | 35 | 59 | 51 | 212 | 197 |
| Auto. | 565 | 910 | 858 | 1,005 | 1,467 | 661 | 815 | 708 | 895 | 884 |
| Value of land (current basis) | 75,219 | 113,303 | 145,991 | 193,908 | 304,950 | 56,324 | 82,588 | 104,014 | 136,649 | 202,936 |
| Total farm investment. | 115,781 | 164,446 | 213,132 | 274,351 | 435,902 | 87,415 | 126,665 | 156,077 | 203,139 | 303,824 |
| Total farm investment per acre | 793.02 | 734.13 | 710.44 | 677.41 | 651.57 | 578.91 | 573.14 | 523.75 | 496.67 | 500.53 |
| PERCENT OF TILLABLE LAND IN |  |  |  |  |  |  |  |  |  |  |
| Corn and corn silage | 65.5 | 63.0 | 60.5 | 62.0 | 67.3 | 64.9 | 62.3 | 54.1 | 53.8 | 52.7 |
| Soybeans. | 7.4 | 9.4 | 12.6 | 11.3 | 11.7 | 4.9 | 10.2 | 14.8 | 15.2 | 16.1 |
| Wheat. | 2 | 7 | 1.9 | 1.4 | . 5 | 7 | 2.2 | 4.4 | 6.1 | 5.2 |
| Other small grains. | 10.5 | 11.1 | 8.1 | 8.9 | 6.1 | 12.4 | 8.2 | 6.3 | 5.5 | 6.4 |
| Diverted acres. | 3.1 | 1.7 | 4.8 | 3.5 | 5.4 | 1.7 | 2.4 | 5.4 | 3.5 | 3.6 |
| All hay and pasture crops. | 13.3 | 13.8 | 11.9 | 12.6 | 9.0 | 15.4 | 14.6 | 14.9 | 15.4 | 15.3 |
| CROP YIELDS, bushels per acre |  |  |  |  |  |  |  |  |  |  |
| Corn. | 107.3 | 106.5 | 107.0 | 109.3 | 108.4 | 95.8 | 101.0 | 100.1 | 102.1 | 101.9 |
| Soybeans | 34.4 | 33.8 | 37.0 | 36.5 | 36.8 | 32.7 | 33.5 | 32.8 | 34.8 | 33.1 |
| Wheat. |  | 32.5 | 39.2 | 40.0 |  | 40.5 | 28.6 | 32.9 | 32.3 | 38.2 |
| Oats. | 75.3 | 72.6 | 75.8 | 73.2 | 72.9 | 69.2 | 65.1 | 67.2 | 56.0 | 57.3 |

Table 14. - Average Costs, Returns, and Financial Summary of Grain and Hog Farms by Size and Soil Rating, Southern Illinois, 1965

|  | GRAIN FARMS WITH SOIL RATING 5-55 |  |  |  |  | HOG FARMS WITH SOIL RATING 5-55 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Range in size (total acres) <br> Number of farms. | $\begin{gathered} 180-259 \\ 45 \end{gathered}$ | $\begin{gathered} 260-339 \\ 57 \end{gathered}$ | $\begin{gathered} 340-499 \\ 103 \end{gathered}$ | $\begin{gathered} 500-649 \\ 39 \end{gathered}$ | $\underset{55}{650+}$ | $\text { Under } 180$ | $\begin{gathered} 180-259 \\ 41 \end{gathered}$ | $\begin{gathered} 260-339 \\ 47 \end{gathered}$ | $\begin{gathered} 340-499 \\ 54 \end{gathered}$ | $\begin{gathered} 500+ \\ 40 \end{gathered}$ |
| Size of farm. | 223 | 300 | 418 | 551 | 874 | 140 | 218 | 295 | 408 | 717 |
| Acres of tillable land. | 202 | 270 | 352 | 474 | 693 | 123 | 177 | 235 | 313 | 528 |
| Soil rating on tillable land | 33 | 35 | 32 | 33 | 35 | 33 | 35 | 31 | 32 | 31 |
| Hens, number. | 95 | 47 | 74 | 123 | 82 | 43 | 81 | 106 | 42 | 73 |
| Dairy cows, number | 1.2 | 3.3 | 2.4 | 3.5 | 3.5 | 1.3 | 1.4 | 7 | 6 | 6 |
| Beef produced, hundredweight | 52 | 57 | 86 | 107 | 220 | 54 | 106 | 87 | 218 | 304 |
| Pork produced, hundredweight | 183 | 218 | 313 | 386 | 481 | 1,112 | 1,019 | 1,310 | 1,601 | 2,118 |
| DOLLAR COSTS PER FARM |  |  |  |  |  |  |  |  |  |  |
| Soil fertility. | \$ 2,020 | \$ 2,592 | \$ 3,225 | \$ 5,656 | \$ 7,501 | \$ 1,828 | \$ 2,123 | \$ 2,665 | \$ 3,786 | \$ 6,309 |
| Buildings and fence. | 854 | 1,001 | 1,323 | 1,439 | 2,531 | 1,246 | 1,513 | 1,622 | 2,160 | 2,918 |
| Machinery and equipment | 4,424 | 6,029 | 6,982 | 9,724 | 13,142 | 4,662 | 5,679 | 6,458 | 8,591 | 12,203 |
| Labor. | 3,368 | 3,523 | 4,151 | 5,138 | 6,777 | 4,222 | 4,097 | 4,155 | 5,114 | 6,944 |
| Taxes. | 803 | 1,056 | 1,346 | 1,658 | 2,448 | 626 | 834 | 938 | 1,255 | 1,962 |
| Seed expense | 404 | 653 | 714 | 961 | 1,617 | 295 | 466 | 538 | 837 | 1,135 |
| Crop expense. | 357 | 563 | 663 | 1,076 | 1,579 | 254 | 439 | 543 | 854 | 1,338 |
| Livestock and miscellaneous expense | 323 | 406 | 547 | 571 | 858 | 880 | 766 | 804 | 1,214 | 1,273 |
| Interest charge on capital. | 2,761 | 3,581 | 4,478 | 6,071 | 9,304 | 2,459 | 3,005 | 3,590 | 4,975 | 7,565 |
| Total non-feed costs. | 15,314 | $\overline{19,404}$ | 23,429 | $\overline{32,294}$ | 45,757 | 16,472 | 18,922 | 21,313 | 28,786 | 41,647 |
| Total value of feed fed | 3,534 | 4,574 | 5,929 | 7,527 | 10,251 | 13,951 | 13,654 | 16,677 | 21,555 | 29,725 |
| DOLLAR RETURNS PER FARM |  |  |  |  |  |  |  |  |  |  |
| Livestock returns above feed cost. | \$ 2,900 | \$ 3,699 | \$ 4,848 | \$ 6,168 | \$ 8,177 | \$15,227 | \$13,661 | \$16,509 | \$21,614 | \$28,492 |
| Feed and grain returns. | 15,320 | 20,690 | 24,860 | 35,550 | 53,810 | 9,126 | 13,403 | 16,185 | 23,281 | 36,774 |
| Other cash income.. | 593 | , 894 | 1,194 | 1,561 | 2,521 | , 877 | -919 | -985 | 1,104 | 1,811 |
| Total value of farm production. | 18,813 | $\overline{25,283}$ | 30,902 | 43,279 | $\overline{64,508}$ | $\overline{25,230}$ | 27,983 | $\overline{33,679}$ | 45,999 | 67,077 |
| Management returns....... | 3,499 | 5,879 | 7,473 | 10,985 | 18,751 | 8,758 | 9,061 | 12,366 | 17,213 | 25,430 |
| Farm production per \$1.00 of non-feed costs. | 1.23 | 1.30 | 1.32 | 1.34 | 1.41 | 1.53 | 1.48 | 1.58 | 1.60 | 1.61 |
| Farm production per man | 15,787 | 20,500 | 21,312 | 25,334 | 27,946 | 17,202 | 19,637 | 23,227 | 26,796 | 28,442 |
| FINANCIAL SUMMARY |  |  |  |  |  |  |  |  |  |  |
| Cash sales of products and services. | \$18,946 | \$25,495 | \$31,439 | \$42,924 | \$65,318 | \$32,058 | \$33,059 | \$40,342 | \$53,732 | \$75,506 |
| Sales of capital items. | 22 | 177 | 246 | - 92 | +6543 | - 93 | - 26 | +68 | +51 81 | , 515 |
| Total cash income. | 18,968 | 25,672 | 31,685 | 43,016 | 65,661 | 32,151 | 33,085 | 40,410 | 53,813 | $\overline{76,021}$ |
| Purchased livestock. | 1,190 | 1,494 | 1,819 | 3,137 | 6,007 | 2,702 | 2,556 | 2,918 | 5,597 | 8,550 |
| Purchased feed. | 1,244 | 1,571 | 2,330 | 2,955 | 3,531 | 10,227 | 8,375 | 10,889 | 13,301 | 15,527 |
| Cash operating expenses. | 7,031 | 9,376 | 11,587 | 17,909 | 24,606 | 7,816 | 9,392 | 10,974 | 15,730 | 22,714 |
| Purchase of capital items. | 3,047 | 4,741 | 5,875 | 6,474 | 10,129 | 3,160 | 4,988 | 5,718 | 6,846 | 11,906 |
| Total cash expenditures. | 12,512 | 17,182 | 21,611 | 30,475 | 44,273 | 23,905 | 25,311 | 30,499 | $\overline{41,474}$ | 58,697 |
| Cash balance. | \$ 6,456 | \$ 8,490 | \$10,074 | \$12,541 | \$21,388 | \$ 8,246 | \$ 7,774 | \$ 9,911 | \$12,339 | \$17,324 |
| Inventory change | 2,165 | 2,700 | 3,441 | 6,257 | 8,472 | 5,923 | 5,653 | 6,943 | 10,909 | 15,359 |
| Capital change. | 506 | 1,159 | 1,574 | 1,316 | 2,279 | 473 | 1,733 | 2,116 | 2,071 | 4,247 |
| Farm products consumed | 136 | 153 | 171 | 190 | 255 | 178 | 202 | 201 | 256 | 289 |
| Farm and family earnings. | 9,263 | 12,502 | 15,260 | 20,304 | 32,394 | $\overline{14,820}$ | 15,362 | 19,171 | 25,575 | $\overline{37,219}$ |
| Labor and management earnings | 6,262 | 8,602 | 10,238 | 13,775 | 21,563 | 11,500 | 11,853 | 15,130 | 20,000 | 28,226 |
| Capital and management earnings | 6,260 | 9,460 | 11,951 | 17,056 | 28,055 | 11,217 | 12,066 | 15,956 | 22,188 | 32,995 |
| Capital and management earnings per acre | 28.07 | 31.53 | 28.59 | 30.95 | 32.10 | 80.12 | 25.35 | - 54.09 | 22, 54.38 | 46.02 |

Table 14a. - Average Operating Costs, Investments, and Land Use of Grain and Hog Farms by Size and Soil Rating, Southern Illinois, 1965

|  | GRAIN FARMS WITH SOIL RATING 5-55 |  |  |  |  | HOG FARMS WITH SOIL RATING 5-55 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Range in size (total acres). Number of farms. . . . . . | $\begin{gathered} 180-259 \\ 45 \end{gathered}$ | $\begin{gathered} 260-339 \\ 57 \end{gathered}$ | $\begin{gathered} 340-499 \\ 103 \end{gathered}$ | $\begin{gathered} 500-649 \\ 39 \end{gathered}$ | $\underset{55}{650+}$ | $\begin{gathered} \text { Under } 180 \\ 18 \end{gathered}$ | $\begin{gathered} 180-259 \\ 41 \end{gathered}$ | $\begin{gathered} 260-339 \\ 47 \end{gathered}$ | $\begin{gathered} 340-499 \\ 54 \end{gathered}$ | $\begin{gathered} 500+ \\ 40+ \end{gathered}$ |
| COSTS AND RETURNS PER TILLA Soil fertility. | \$ 10.00 | \$ 9.60 | \$ 9.16 | \$ 11.93 | \$ 10.82 | \$ 14.86 | \$ 11.99 | \$ 11.34 | \$ 12.10 | \$ 11.95 |
| Buildings and fence | 4.23 | 3.71 | 3.76 | 3.04 | 3.65 | 10.13 | 8.55 | \$ 6.90 | 6.90 | 5.53 |
| Machinery and equipment | 21.90 | 22.33 | 19.84 | 20.51 | 18.96 | 37.90 | 32.08 | 27.48 | 27.45 | 23.11 |
| Labor. | 16.67 | 13.05 | 11.79 | 10.84 | 9.78 | 34.33 | 23.15 | 17.68 | 16.34 | 13.15 |
| Value of feed fed | 17.50 | 16.94 | 16.84 | 15.88 | 14.79 | 113.42 | 77.14 | 70.97 | 68.87 | 56.30 |
| Livestock returns above feed cost. | 14.35 | 13.70 | 13.77 | 13.01 | 11.80 | 123.80 | 77.18 | 70.25 | 69.05 | 53.96 |
| Feed and grain returns. | 75.84 | 76.63 | 70.63 | 75.00 | 77.65 | 74.20 | 75.72 | 68.87 | 74.38 | 69.65 |
| Total value of farm production | 93.13 | 93.64 | 87.79 | 91.31 | 93.08 | 205.12 | 158.10 | 143.31 | 146.96 | 127.04 |
| Total non-feed costs. . . . . . . . | 75.81 | 71.87 | 66.56 | 68.13 | 66.03 | $\underline{133.92}$ | 106.90 | 90.69 | 91.97 | 78.88 |
| Management returns. | 17.32 | 21.77 | $\overline{21.23}$ | 23.18 | 27.05 | 71.20 | 51.20 | 52.62 | 54.99 | 48.16 |
| SELECTED COST ITEMS |  |  |  |  |  |  |  |  |  |  |
| Fertilizer, annual application........ | \$ 1,966 | \$ 2,492 | \$ 3,118 | \$ 5,544 | \$ 7,256 | \$ 1,777 | \$ 2,059 | \$ 2,535 | \$ 3,642 | \$ 6, 186 |
| Lime and rock phosphate depreciation. | 54 | 100 | 107 | 112 | 245 | 51 | 64 | 130 | 144 | 123 |
| Building repair and maintenance. | 291 | 393 | 495 | 499 | 1,074 | 374 | 569 | 692 | 988 | 1,159 |
| Building depreciation. | 563 | 608 | 828 | 940 | 1,457 | 872 | 944 | 930 | 1,172 | 1,759 |
| Machinery and equipment depreciation. | 1,714 | 2,470 | 2,873 | 3,754 | 5,418 | 1,488 | 1,987 | 2,237 | 3,125 | 4,868 |
| Machinery repairs and supplies..... | 959 | 1,509 | 1,638 | 2,583 | 3,345 | 1,328 | 1,334 | 1,688 | 2,344 | 3,179 |
| Machinery hire. | 407 | 418 | 523 | 663 | 1,037 | 439 | 698 | 721 | 729 | 956 |
| Gasoline and oil | 736 | 957 | 1,214 | 1,818 | 2,232 | 712 | 837 | 1,054 | 1,460 | 1,974 |
| Unpaid labor charge | 3,003 | 3,042 | 3,309 | 3,248 | 4,339 | 3,603 | 3,296 | 3,215 | 3,387 | 4,224 |
| Hired labor charge. | 365 | 481 | 842 | 1,890 | 2,438 | 619 | 801 | 940 | 1,727 | 2,720 |
| Total months of labor | 14.3 | 14.8 | 17.4 | 20.5 | 27.7 | 17.6 | 17.1 | 17.4 | 20.6 | 28.3 |
| Months of labor hired | 1.5 | 1.9 | 3.3 | 6.7 | 9.2 | 2.2 | 3.1 | 3.7 | 6.2 | 10.4 |
| FARM INVESTMENT |  |  |  |  |  |  |  |  |  |  |
| Livestock inventory. | \$ 3,112 | \$ 3,922 | \$ 5,299 | \$ 6,689 | \$11,354 | \$ 7,616 | \$ 8,751 | \$ 9,977 | \$14,667 | \$21,193 |
| Grain inventory... . . . . . | 6,338 | 7,093 | 7,474 | 11,346 | 16,300 | 4,682 | 5,460 | 7,007 | 9,212 | 13,829 |
| Remaining capital cost in: |  |  |  |  |  |  |  |  |  |  |
| Machinery. | 6,420 | 9,031 | 10,705 | 13,737 | 19,974 | 6,089 | 5,817 | 7,916 | 10,644 | 13,817 |
| Buildings and fence | 5,575 | 5,726 | 8,159 | 9,667 | 14,344 | 8,057 | 7,773 | 8,004 | 11,116 | 14,275 |
| Soil fertility. . | 113 | 227 | 262 | 325 | -550 | 108 | 131 | , 262 | - 282 | - 258 |
| Auto. | 468 | 658 | 696 | 747 | 1,055 | 603 | 639 | 602 | 719 | 1,023 |
| Value of land (current basis) | 41,495 | 56,205 | 71,215 | 98,643 | 153,126 | 27,510 | 39,406 | 47,532 | 66,069 | 108,639 |
| Total farm investment. | 63,521 | 82,862 | $\overline{103,810}$ | 141,154 | 216,703 | 54,665 | 67,977 | 81,300 | 112,709 | 173,034 |
| Total farm investment per acre. | 284.85 | 276.21 | 248.35 | 256.18 | 247.94 | 390.46 | 311.82 | 275.59 | 276.25 | 241.33 |
| PERCENT OF TILLABLE LAND IN |  |  |  |  |  |  |  |  |  |  |
| Corn and corn silage | 37.1 | 36.3 | 36.5 | 44.9 | 41.1 | 52.7 | 47.4 | 47.6 | 47.4 | 42.4 |
| Soybeans. | 32.0 | 33.7 | 33.5 | 27.9 | 27.9 | 19.3 | 21.6 | 26.5 | 22.0 | 20.5 |
| Wheat. . . . . . | 17.0 | 14.1 | 15.2 | 12.8 | 15.2 | 15.3 | 12.4 | 12.9 | 13.0 | 15.3 |
| Other small grains | . 5 | 7 | . 7 | 5 | . 4 | 1.2 | . 8 | 1.0 | . 6 | 1.6 |
| Diverted acres. | 5.1 | 6.7 | 6.4 | 6.7 | 5.8 | 1.8 | 4.1 | 4.1 | 4.8 | 4.4 |
| All hay and pasture crops. | 8.0 | 8.1 | 7.3 | 6.6 | 8.6 | 9.5 | 13.1 | 7.2 | 11.6 | 14.9 |
| CROP YIELDS, bushels per acre |  |  |  |  |  |  |  |  |  |  |
| Corn | 90.9 | 95.2 | 87.4 | 88.0 | 98.1 | 83.1 | 90.4 | 81.7 | 87.5 | 101.8 |
| Soybeans. | 29.3 | 28.7 | 26.2 | 26.2 | 27.8 | 29.5 | 31.0 | 25.5 | 28.6 | 27.3 |
| Wheat. | 43.8 | 42.9 | 41.9 | 41.1 | 43.4 | 42.3 | 42.5 | 40.3 | 42.1 | 40.5 |
| Oats. | 80.7 | 49.9 | 58.8 | 47.5 | 63.2 | 46.0 | 56.4 | 52.3 | 45.8 | 37.5 |

Table 15. - Average Costs, Returns, and Financial Summary of Dairy Farms by Size and Soil Rating, Northern and Southern Illinois, 1965

Table 15a. - Average Operating Costs, Investments, and Land Use of Dairy Farms by Size and Soil Rating, Northern and Southern Illinois, 1965

|  | DAIRY FARMS, NORTHERN ILLINOIS, WITH SOIL RATING OF |  |  |  |  | DAIRY FARMS, SOUTHERN ILLINOIS, WITH SOIL RATING OF |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 76-100 | 56-75 | 76-100 | 56-75 | 56-100 | 5-55 |  |  |  |  |
| Range in size (total acres). Number of farms........ | Under 180 |  | 180-259 |  | $\begin{gathered} 260-339 \\ 20 \end{gathered}$ | $\begin{gathered} \text { Under } 180 \\ 34 \end{gathered}$ | $\begin{gathered} 180-259 \\ 40 \end{gathered}$ | $\begin{gathered} 260-339 \\ 23 \end{gathered}$ | $\begin{gathered} 340-499 \\ 19 \end{gathered}$ | $\begin{gathered} 500+ \\ 18 \end{gathered}$ |
| COSTS AND RETURNS PER TILLABLE ACRE |  |  |  |  |  |  |  |  |  |  |
| Soil fertility. . . . . . . . . . . . . . . . . . . . | \$ 8.82 | \$ 7.09 | \$ 7.66 | \$ 6.44 | \$ 7.29 | \$ 8.83 | \$ 8.84 | \$ 9.17 | \$ 9.71 | \$ 9.36 |
| Buildings and fence | 11.29 | 15.72 | 13.42 | 13.27 | 12.66 | 9.96 | 9.06 | 7.01 | 7.04 | 6.28 |
| Machinery and equipmen | 39.82 | 38.81 | 39.37 | 34.11 | 35.62 | 39.71 | 33.86 | 27.35 | 27.44 | 26.82 |
| Labor. | 30.37 | 29.12 | 25.04 | 24.61 | 25.71 | 33.21 | 24.43 | 20.21 | 19.41 | 17.97 |
| Value of feed fed | 80.91 | 89.34 | 73.73 | 75.78 | 75.01 | 82.08 | 67.86 | 51.62 | 50.13 | 48.90 |
| Livestock returns above feed cost | 56.89 | 71.76 | 52.87 | 52.04 | 52.22 | 60.94 | 56.99 | 38.09 | 36.41 | 33.94 |
| Feed and grain returns. | 90.29 | 77.34 | 88.74 | 77.22 | 85.86 | 75.85 | 77.70 | 64.85 | 72.63 | 63.97 |
| Total value of farm production. | 152.49 | 153.43 | 144.91 | 133.76 | 141.73 | 142.06 | 138.85 | 107.40 | 113.38 | 102.35 |
| Total non-feed costs. | 151.26 | 146.20 | 145.91 | $\underline{130.69}$ | 133.07 | 128.27 | 110.20 | 92.54 | 93.44 | 89.20 |
| Management returns. | 1.23 | 7.23 | -1.00 | 3.07 | 8.66 | 13.79 | 28.65 | 14.86 | 19.94 | 13.15 |
| SELECTED COST ITEMS |  |  |  |  |  |  |  |  |  |  |
| Fertilizer, annual application. | \$ 1,145 | \$ 891 | \$ 1,391 | \$ 1,169 | \$ 1,868 | \$ 1,048 | \$ 1,555 | \$ 2,149 | \$ 2,864 | \$ 4,460 |
| Lime and rock phosphate depreciation | 28 | 17 | 87 | 10 | , 6 | - 74 | 98 | 108 | 126 | 219 |
| Building repairs and maintenance. | 355 | 595 | 843 | 804 | 1,133 | 426 | 609 | 672 | 721 | 892 |
| Building depreciation. . . . . . . . . . | 1,147 | 1,417 | 1,748 | 1,625 | 2,120 | 839 | 1,086 | 1,052 | 1,446 | 2,248 |
| Machinery and equipment depreciation | 1,822 | 1,764 | 3,052 | 2,137 | 3,354 | 1,748 | 2,357 | 2,621 | 3,274 | 5,531 |
| Machinery repairs and supplies. | 1,186 | 1,035 | 1,541 | 1,398 | 2,196 | 1,162 | 1,552 | 1,628 | 2,411 | 3,099 |
| Machinery hire. | 726 | 480 | 589 | 664 | 899 | 566 | 616 | 537 | 566 | 1,070 |
| Gasoline and oil. | 726 | 710 | 1,129 | 950 | 1,260 | 707 | 915 | 996 | 1,268 | 2,226 |
| Unpaid labor charge | 3,238 | 3,310 | 3,724 | 3,651 | 4,019 | 3,725 | 3,601 | 3,576 | 3,871 | 5,118 |
| Hired labor charge. | 801 | 418 | 1,109 | 853 | 2,589 | 493 | 968 | 1,395 | 2,108 | 3,868 |
| Total months of labor | 15.2 | 14.9 | 18.9 | 18.2 | 24.0 | 17.8 | 19.5 | 21.9 | 25.4 | 35.4 |
| Months of labor hired. | 2.2 | 1.6 | 4.0 | 3.6 | 7.9 | 1.9 | 4.2 | 6.6 | 9.1 | 13.6 |
| FARM INVESTMENT |  |  |  |  |  |  |  |  |  |  |
| Livestock inventory. | \$ 9,286 | \$10,743 | \$13,657 | \$12,828 | \$18,088 | \$ 8,973 | \$10,688 | \$11,014 | \$15,664 | \$23,988 |
| Grain inventory. | 7,800 | 5,899 | 10,458 | 8,159 | 11,054 | 3,414 | 5,288 | 5,601 | 8,038 | 11,571 |
| Remaining capital cost in: |  |  |  |  |  |  |  |  |  |  |
| Machinery. . . . . | 6,358 | 6,298 | 10,906 | 8,156 | 12,608 | 7,392 | 9,551 | 9,913 | 12,845 | 23,228 |
| Buildings and fence | 14,028 | 17,244 | 21,339 | 21,654 | 26,226 | 9,136 | 12,488 | 11,296 | 14,430 | 26,385 |
| Soil fertility. | 47 | 52 | 349 | 18 | 12 | 151 | 153 | , 253 | 291 | , 365 |
| Auto....... | 601 | 706 | 795 | 653 | 781 | 728 | 634 | 847 | 409 | 853 |
| Value of land (current basis) | 73,986 | 54,203 | 104,593 | 78,733 | 116,533 | 25,729 | 38,690 | 44,845 | 62,075 | 100,504 |
| Total farm investment. | 112,106 | 95,145 | 162,097 | 130,201 | 185,302 | 55,523 | 77,492 | 83,769 | 113,752 | 186,894 |
| Total farm investment per acre | 778.51 | 625.95 | 764.61 | 605.59 | 636.78 | 382.92 | 352.24 | 282.05 | 297.00 | 284.90 |
| PERCENT OF TILLABLE LAND IN |  |  |  |  |  |  |  |  |  |  |
| Corn and corn silage. | 52.0 | 44.8 | 47.5 | 45.4 | 43.6 | 38.1 | 39.4 | 32.1 | 35.6 | 41.1 |
| Soybeans. | 9.0 | 1.4 | 4.8 | 4.3 | 7.4 | 7.0 | 15.1 | 19.3 | 21.1 | 19.4 |
| Wheat. | 1.0 | . 1 |  | . 4 | . 7 | 12.2 | 13.3 | 13.2 | 12.3 | 15.5 |
| Other small grains | 8.8 | 13.5 | 9.2 | 13.5 | 11.3 | 4.0 | 1.4 | 1.0 | 1.1 | 1.7 |
| Diverted acres. | 2.0 | 1.6 | 3.4 | 4.3 | 6.1 | 1.5 | 2.2 | 2.9 | 4.0 | 2.8 |
| All hay and pasture crops. | 27.2 | 37.6 | 30.0 | 31.7 | 30.7 | 36.7 | 27.8 | 29.7 | 24.2 | 19.3 |
| CROP YIELDS, bushels per acre |  |  |  |  |  |  |  |  |  |  |
| Corn............................. . | 103.9 | 85.9 | 99.7 | 88.2 | 99.6 | 77.6 | 83.2 | 83.1 | 91.3 | 70.5 |
| Soybeans. | 35.2 | 30.5 | 35.2 | 27.5 | 27.4 | 28.6 | 27.5 | 24.6 | 24.4 | 25.6 |
| Wheat. | 41.6 |  |  |  | 41.7 | 41.9 | 42.4 | 39.3 | 39.3 | 36.6 |
| Oats. | 74.8 | 68.9 | 67.0 | 66.8 | 61.1 | 45.9 | 68.8 | 55.5 | 44.2 | 41.0 |

Table 16. - Average Costs, Returns, and Financial Summary of Beef Cattle and Poultry Farms by Size and Soil Rating, Northern and Southern Illinois, 1965

|  | BEEF CATTLE FARMS, NORTHERN ILLINOISSOIL RATING$56-100$ |  |  |  |  | BEEF CATTLE FARMS, SOUTHERN ILLINOIS SOIL RATING 5-55 |  |  |  | POULTRY FARMS, NORTHERN ILL. SOIL RATING 56-100 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Range in size (total acres) Number of farms. | $\begin{gathered} \text { Under } 180 \\ 15 \end{gathered}$ | $\begin{gathered} 180-259 \\ 45 \end{gathered}$ | $\begin{gathered} 260-339 \\ 52 \end{gathered}$ | $\begin{gathered} 340-499 \\ 53 \end{gathered}$ | $\begin{gathered} 500+ \\ 52+ \end{gathered}$ | $\begin{gathered} 180-259 \\ 12 \end{gathered}$ | $\begin{gathered} 260-339 \\ 12 \end{gathered}$ | $\begin{gathered} 340-499 \\ 12 \end{gathered}$ | $500+$ | $\begin{gathered} \text { Under } 180 \\ 11 \end{gathered}$ | $\frac{180-259}{7}$ |
| Size of farm | 158 | 222 | 301 | 409 | 664 | 220 | 290 | 419 | 720 | 140 | 236 |
| Acres of tillable land | 146 | 201 | 268 | 359 | 565 | 191 | 240 | 320 | 493 | 129 | 217 |
| Soil rating on tillable land | 76 | 77 | 76 | 75 | 75 | 28 | 32 | 31 | 36 | 81 | 84 |
| Hens, number. | 151 | 31 | 41 | 43 | 6 | 181 | 157 | 144 |  | 4,514 | 5,842 |
| Dairy cows, number |  |  |  |  |  |  |  |  | 2.6 |  |  |
| Beef produced, hundredweight | 600 | 934 | 974 | 1,237 | 1,993 | 451 | 702 | 705 | 1,055 | 59 | 24 |
| Pork produced, hundredweight | 280 | 568 | 628 | 776 | 1,108 | 376 | 570 | 413 | 699 | 192 | 418 |
| DOLLAR COSTS PER FARM |  |  |  |  |  |  |  |  |  |  |  |
| Soil fertility. | \$ 1,573 | \$ 2,472 | \$ 3,448 | \$ 4,665 | \$ 7,730 | \$ 2,061 | \$ 2,688 | \$ 3,981 | \$ 5,433 | \$ 1,159 | \$ 3,089 |
| Buildings and fence | 2,300 | 2,928 | 3,066 | 3,978 | 5,564 | 1,454 | 1,611 | 1,731 | 2,935 | 2,326 | 2,163 |
| Machinery and equipment | 5,408 | 6,664 | 8,683 | 10,068 | 14,627 | 5,167 | 6,771 | 7,840 | 11,841 | 5,602 | 8,625 |
| Labor. | 3,403 | 4,034 | 4,741 | 5,954 | 9,548 | 3,846 | 4,481 | 4,067 | 7,256 | 5,455 | 6,862 |
| Taxes | 1,396 | 1,830 | 2,266 | 2,800 | 4,398 | 964 | 1,226 | 1,411 | 2,121 | 1,219 | 1,936 |
| Seed expense | 504 | 781 | 870 | 1,195 | 1,639 | 521 | 604 | 762 | 1,061 | 386 | 802 |
| Crop expense | 557 | 735 | 851 | 1,289 | 1,634 | 244 | 594 | 926 | 865 | 247 | 794 |
| Livestock and miscellaneous expense | 523 | 1,000 | 909 | 1,256 | 1,864 | 446 | 809 | 800 | 1,336 | 907 | 1,017 |
| Interest charge on capital | 5,360 | 7,795 | 9,318 | 12,307 | 19,022 | 3,609 | 4,530 | 5,137 | 9,064 | 5,210 | 7,572 |
| Total non-feed costs. | 21,024 | 28,239 | 34,152 | $\overline{43,512}$ | 66,026 | 18,312 | 23,314 | 26,655 | 41,912 | 22,511 | 32,860 |
| Total value of feed fed | 14,126 | 24,061 | 26,410 | 33,097 | 49,171 | 14,143 | 20,401 | 18,108 | 28,952 | 18,613 | 24,635 |
| DOLLAR RETURNS PER FARM |  |  |  |  |  |  |  |  |  |  |  |
| Livestock returns above feed cost. | \$ 9,336 | \$15,232 | \$15,647 | \$20,305 | \$29,241 | \$ 6,280 | \$13,865 | \$11,648 | \$15,087 | \$12,473 | \$15,837 |
| Feed and grain returns. | 13,051 | 19,871 | 26,352 | 34,394 | 53,608 | 14,256 | 18,293 | 24,551 | 34,588 | 12,001 | 21,815 |
| Other cash income. | 632 | 750 | 1,113 | 1,306 | 1,804 | 670 | 770 | 1,275 | 1,224 | 731 | 833 |
| Total value of farm production. | 23,019 | 35,853 | 43,112 | 56,005 | 84,653 | 21,206 | 32,928 | 37,474 | 50,899 | 25,205 | 38,485 |
| Management returns. | 1,995 | 7,614 | 8,960 | 12,493 | 18,627 | 2,894 | 9,614 | 10,819 | 8,987 | 2,694 | 5,625 |
| Farm production per $\$ 1.00$ of non-feed costs. | 1.09 | 1.27 | 1.26 | 1.29 | 1.28 | 1.16 | 1.41 | 1.41 | 1.21 | 1.12 | 1.17 |
| Farm production per man | 20,311 | 27,230 | 28,270 | 30,272 | 30,876 | 16,004 | 21,359 | 26,609 | 20,566 | 14,402 | 17,970 |
| FINANCIAL SUMMARY <br> Cash sales of products and services <br> Sales of capital items | \$40,102 | \$65,003 | \$70,914 | $\$ 94,379$ 107 | $\$ 140,989$ 1,770 | $\$ 38,389$ 68 | \$60,183 | \$50,243 | $\$ 81,709$ 128 | $\$ 41,825$ 20 | \$58,367 |
| Total cash income | $\overline{40,108}$ | $\overline{65,617}$ | $\overline{71,151}$ | $\overline{94,486}$ | $1 \overline{42,759}$ | 38,457 | $\overline{60,196}$ | 50,296 | 81,837 | 41,845 | 59,333 |
| Purchased livestock | 16,395 | 26,937 | 24,087 | 34,582 | 51,907 | 14,025 | 20,210 | 17,152 | 25,642 | 6,412 | 5,456 |
| Purchased feed. | 5,631 | 9,172 | 10,136 | 11,984 | 18,726 | 6,494 | 11,105 | 7,209 | 10,549 | 12,931 | 16,827 |
| Cash operating expenses. | 8,006 | 12,345 | 15,550 | 20,410 | 33,111 | 8,116 | 11,168 | 13,638 | 22,441 | 9,405 | 16,355 |
| Purchase of capital items. | 6,241 | 7,320 | 9,921 | 10,679 | 13,354 | 5,489 | 7,187 | 7,348 | 10,393 | 3,049 | 8,905 |
| Total cash expenditures. | 36,273 | $\overline{55,774}$ | $\overline{59,694}$ | 77,655 | 117 ,098 | $\overline{34,124}$ | 49,670 | 45,347 | 69,025 | 31,797 | 47,543 |
| Cash balance | \$ 3,835 | \$ 9,843 | \$11,457 | \$16,831 | \$25,661 | \$ 4,333 | \$10,526 | \$ 4,949 | \$12,812 | \$10,048 | \$11,790 |
| Inventory change | 4,673 | 6,669 | 6,158 | 7,862 | 13,905 | 3,071 | 3,728 | 11,288 | 5,084 | 2,576 | 2,228 |
| Capital change. | 1,844 | 1,993 | 3,847 | 3,429 | 1,770 | 2,144 | 3,024 | 2,666 | 3,563 | -1,208 | 3,167 |
| Farm products consumed. | 270 | 290 | 263 | 330 | 392 | 265 | 332 | 304 | 297 | 147 | 173 |
| Farm and family earnings. | 10,622 | 18,795 | 21,725 | 28,452 | 41,728 | 9,813 | 17,610 | 19,207 | 21,756 | 11,563 | 17,358 |
| Labor and management earnings | 4,978 | 10,603 | 11,951 | 15,484 | 21,627 | 5,636 | 12,394 | 13,640 | 11,807 | 5,694 | 8,536 |
| Capital and management earnings | 7,355 | 15,409 | 18,278 | 24,800 | 37,649 | 6,503 | 14,144 | 15,956 | 18,051 | 7,904 | 13,197 |
| Capital and management earnings per acre. | 46.55 | 69.41 | 60.72 | 60.64 | 56.70 | 29.56 | 48.77 | 38.08 | 25.07 | 56.46 | 55.92 |

by Size and Soil Rating, Northern and Southern Illinois, 1965

|  | 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 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Range in size (total acres) Number of farms. | $\begin{gathered} \text { Under } 180 \\ 15 \end{gathered}$ | $\begin{gathered} 180-259 \\ 45 \end{gathered}$ | $\begin{gathered} 260-339 \\ 52 \end{gathered}$ | $\begin{gathered} 340-499 \\ 53 \end{gathered}$ | $\begin{gathered} 500+ \\ 52 \end{gathered}$ | $\begin{gathered} 180-259 \\ 12 \end{gathered}$ | $\begin{gathered} 260-339 \\ 12 \end{gathered}$ | $\begin{gathered} 340-499 \\ 12 \end{gathered}$ | $\frac{500+}{17}$ | $\begin{gathered} \text { Under } 180 \\ 11 \end{gathered}$ | $\begin{gathered} 180-259 \\ 7 \end{gathered}$ |
| COSTS AND RETURNS PER TILLABLE ACRE |  |  |  |  |  |  |  |  |  |  |  |
| Soil fertility. | \$ 10.77 | \$ 12.30 | \$ 12.87 | \$ 12.99 | \$ 13.68 | \$ 10.79 | \$ 11.20 | \$ 12.44 | \$ 11.02 | \$ 8.98 | \$ 14.24 |
| Buildings and fence | 15.75 | 14.57 | 11.44 | 11.08 | 9.85 | 7.61 | 6.71 | 5.41 | 5.95 | 18.03 | 9.97 |
| Machinery and equipmen | 37.04 | 33.15 | 32.40 | 28.04 | 25.89 | 27.05 | 28.21 | 24.50 | 24.02 | 43.43 | 39.75 |
| Labor. | 23.31 | 20.07 | 17.69 | 16.58 | 16.90 | 20.14 | 18.67 | 12.71 | 14.72 | 42.29 | 31.62 |
| Value of feed fed | 96.75 | 119.71 | 98.54 | 92.19 | 87.03 | 74.05 | 85.00 | 56.59 | 58.73 | 144.29 | 113.53 |
| Livestock returns above feed cost. | 63.95 | 75.78 | 58.38 | 56.56 | 51.75 | 32.88 | 57.77 | 36.40 | 30.60 | 96.69 | 72.98 |
| Feed and grain returns.............. | 89.39 | 98.86 | 98.33 | 95.80 | 94.88 | 74.64 | 76.22 | 76.72 | 70.16 | 93.03 | 100.53 |
| Total value of farm production. | 157.66 | 178.37 | 160.87 | 156.00 | 149.83 | 111.03 | 137.20 | 117.11 | 103.24 | 195.39 | 177.35 |
| Total non-feed costs. | 144.00 | 140.49 | 127.43 | 121.20 | 116.86 | 95.87 | 97.14 | 83.30 | 85.01 | 174.50 | 151.43 |
| Management returns. | 13.66 | 37.88 | 33.44 | 34.80 | 32.97 | 15.16 | 40.06 | 33.81 | 18.23 | 20.89 | 25.92 |
| SELECTED COST ITEMS |  |  |  |  |  |  |  |  |  |  |  |
| Fertilizer, annual application. | \$ 1,498 | \$ 2,411 | \$ 3,380 | \$ 4,495 | \$ 7,603 | \$ 1,897 | \$ 2,559 | \$ 3,724 | \$ 5,092 | \$ 1,112 | \$ 3,045 |
| Lime and rock phosphate depreciation.. | 75 | 61 | 68 | 170 | 127 | 164 | 129 | 257 | , 341 | \$1,47 | 44 |
| Building repairs and maintenance..... | 663 | 902 | 938 | 1,234 | 1,689 | 430 | 547 | 628 | 1,139 | 567 | 681 |
| Building depreciation. | 1,637 | 2,026 | 2,128 | 2,744 | 3,875 | 1,024 | 1,064 | 1,103 | 1,796 | 1,759 | 1,482 |
| Machinery and equipment depreciation | 2,422 | 2,303 | 3,288 | 3,936 | 5,369 | 1,946 | 2,731 | 2,995 | 4,247 | 2,169 | 2,889 |
| Machinery repairs and supplies. | 1,010 | 1,583 | 2,096 | 2,505 | 4,188 | 1,160 | 1,579 | 1,848 | 3,426 | 890 | 1,682 |
| Machinery hire. | 512 | 672 | 859 | 817 | 1,135 | 565 | 498 | 750 | 986 | 644 | 1,248 |
| Gasoline and oil. . . | 720 | 1,150 | 1,453 | 1,713 | 2,458 | 975 | 1,152 | 1,424 | 2,035 | 855 | 1,059 |
| Unpaid labor charge | 3,267 | 3,386 | 3,447 | 3,652 | 4,079 | 3,310 | 3,466 | 3,251 | 3,705 | 3,659 | 4,161 |
| Hired labor charge. . | 136 | 648 | 1,294 | 2,302 | 5,469 | 536 | 1,015 | 816 | 3,551 | 1,796 | 2,701 |
| Total months of labor | 13.6 | 15.8 | 18.3 | 22.2 | 32.9 | 15.9 | 18.5 | 16.9 | 29.7 | 21.0 | 25.7 |
| Months of labor hired. | . 5 | 2.3 | 4.5 | 7.6 | 16.6 | 1.8 | 3.7 | 3.1 | 14.0 | 6.4 | 9.1 |
| FARM INVESTMENT |  |  |  |  |  |  |  |  |  |  |  |
| Livestock inventory. | \$16,709 | \$27,547 | \$28,814 | \$38,170 | \$54,737 | \$18,446 | \$20,813 | \$20,133 | \$38,881 | \$ 9,104 | \$ 8,847 |
| Grain inventory. | 9,602 | 14,305 | 16,141 | 21,213 | 31,656 | 6,330 | 9,356 | 8,455 | 14,108 | 9,264 | 11,628 |
| Remaining capital cost in: |  |  |  |  |  |  |  |  |  |  |  |
| Machinery....... | 7,431 | 8,011 | 10,192 | 13,131 | 18,964 | 8,234 | 8,790 | 11,387 | 15,621 | 8,220 | 10,318 |
| Buildings and fence | 14,721 | 24,083 | 23,543 | 30,207 | 52,649 | 10,043 | 8,972 | 11,358 | 16,766 | 20,786 | 23,005 |
| Soil fertility | 217 | 169 | 179 | 403 | 283 | 393 | 382 | 472 | 666 | 125 | 141 |
| Auto.................. | 739 | 898 | 788 | 735 | 995 | 489 | 762 | 493 | 706 | 517 | 772 |
| Value of land (current basis) | 72,248 | 101,120 | 133,358 | 177,847 | 276,451 | 35,319 | 51,905 | 63,050 | 118,167 | 70,228 | 120,911 |
| Total farm investment. | 121,667 | 176,133 | 213,015 | 281,706 | 435,735 | 79,254 | 100,980 | 115,348 | 204,915 | 118,244 | 175,622 |
| Total farm investment per acre | 770.04 | 793.39 | 707.69 | 688.77 | 656.23 | 360.25 | 348.21 | 275.29 | 284.60 | 844.60 | 744.16 |
| PERCENT OF TILLABLE LAND IN |  |  |  |  |  |  |  |  |  |  |  |
| Corn and corn silage. | 63.4 | 66.7 | 62.9 | 66.0 | 59.5 | 42.7 | 47.8 | 45.0 | 38.0 | 54.0 | 65.4 |
| Soybeans. | 1.0 | 3.9 | 9.1 | 7.4 | 10.7 | 19.1 | 16.4 | 20.0 | 17.6 | 20.5 | 13.5 |
| Wheat. |  | 3 | . 3 | 7 | 3.0 | 15.1 | 11.9 | 16.4 | 13.5 | 7 | 4 |
| Other small grains | 14.4 | 9.7 | 8.0 | 7.2 | 6.0 | 2.0 |  | 1.3 | . 5 | 7.6 | 4.7 |
| Diverted acres. | 1.8 | 3.3 | 4.5 | 5.0 | 6.4 | 4.7 | 4.4 | 3.6 | 9.0 | 5.9 | 9.7 |
| All hay and pasture crops. | 18.3 | 14.6 | 15.0 | 12.6 | 13.2 | 16.2 | 18.9 | 12.7 | 21.1 | 11.2 | 6.3 |
| CROP YIELDS, bushels per acre |  |  |  |  |  |  |  |  |  |  |  |
| Corn. | 103.8 | 103.8 | 106.7 | 100.9 | 103.7 | 91.7 | 88.6 | 91.0 | 91.5 | 105.1 | 107.2 |
| Soybeans. | 35.4 | 36.3 | 38.8 | 34.8 | 36.2 | 24.9 | 24.9 | 27.5 | 26.0 | 37.0 | 31.9 |
| Wheat. |  | 40.4 | 40.9 | 39.2 | 36.4 | 40.7 | 45.1 | 43.4 | 41.0 | 54.5 | 27.3 |
| Oats. | 58.9 | 78.3 | 71.5 | 72.1 | 68.6 | 30.1 | . | . | . | 70.5 | 71.2 |

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 40 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 ( 6,484 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 110 bushels per acre. Since 1956 the average hog enterprise has increased in size by 3 litters per year and the average dairy enterprise by 1 cow per year by substituting capital for labor. Farm records are becoming more important for the individual farmer to evaluate his competitive position in the farming business.

We hope that this 41st Annual Report will be used to contribute to more profitable farm operation and a more desirable level of family living.

Harold G. Halcrow, Head<br>Department of Agricultural Economics

## ASSOCIATIONS, FIELDMEN, AND COOPERATORS ENROLLED



Prepared by A. G. Mueller, D. F. Wilken, and R. P. Kesler of the Department of Agricultural Economics


[^0]:    ${ }^{a}$ Includes sales or purchases of capital items.

[^1]:    ${ }^{\text {a }}$ Includes sales or purchases of capital items.

[^2]:    ${ }^{\text {a }}$ Includes sales or purchases of capital items.

[^3]:    ${ }^{\text {a }} 1,000$ pounds of milk or 100 pounds of beef.

