



UNIVERSITY OF ILLINOIS BRARY AT URBANA-CHAMPAIGN AGRICULTURE Digitized by the Internet Archive in 2011 with funding from University of Illinois Urbana-Champaign

http://www.archive.org/details/summaryofillinoi941muel



# SUMMARY OF ILLINOIS FARM BUSINESS RECORDS

Commercial Farms:

PRODUCTION COSTS INCOME INVESTMENTS

UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE COOPERATIVE EXTENSION SERVICE CIRCULAR 941

## Source of Data

This report is based on data obtained from farm business records on 6,300 Illinois farms. It is the 41st 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:

Year	A ssocia- tions	partici- pating	Fieldmen employed	Farmers enrolled
1940	3	23	3	680
1945	8	54	9	1,830
1950	8	59	15	2,760
1955	9	89	24	4,501
1960	10	100	33	5,494
1966	10	102	40	6.484

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 annual 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  $\frac{1}{2}$  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 southern Illinois are reported in Tables 1 to 3. The separation of farms into northern and southern Illinois is based on soil-type regions, and divides the state approximately on an east-west line from Mattoon to Jacksonville. The sample of farms ranged between 180 and 259 acres in size, and averaged about 220 acres. Labor used on farms of this size averaged 14 months on grain farms, 16 months on hog and beef farms, and 20 months on dairy farms. The data in these tables are presented as if the farms were all owner-operated. Landlord and tenant shares of the business were combined where farms were leased.

Size of farm, type of farm, quality of soil, and managerial inputs were held reasonably constant over time by the sampling procedure used in selecting farms within each type of farm. Variations between 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 18	80-259 Acre Northern	Illinois Grain,	Hog, and Dairy Farms
--------------------------------	------------------	----------------------	-----------------	----------------------

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

<sup>a</sup> Includes sales or purchases of capital items.

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 Soil-productivity rating Total cash sales Less purchased feed and livestock	222 77 \$65,003 36 109	223 78 \$55,959 28 703	221 76 \$48,950 28,042
Net cash sales.         Inventory change.         Farm products consumed.         Value of farm production.	$ \frac{36,103}{\$28,894} \\ 6,669 \\ \underline{290} \\ \overline{35,853} $	$     \begin{array}{r}         28,793 \\         \hline         $27,166 \\         -1,394 \\         \underline{241} \\         \underline{26,013}     \end{array} $	$     \begin{array}{r}         28,042 \\         \$20,908 \\         1,526 \\         253 \\         \hline         22,687     \end{array} $
Cash operating expenses Annual depreciation Farm and family earnings	12,345 4,713 18,795	10,979 4,188 10,846	8,957 3,879 9,851
Unpaid labor charge Returns to capital and management Interest charge on capital Management returns	3,386 15,409 7,795 7,614	2,815 8,031 7,478 553	2,826 7,025 6,433 592
Total cash income <sup>a</sup> Total cash expenditures <sup>a</sup> Cash balance	\$65,617 55,774 9,843	$\frac{\$56,015}{43,166}\\12,849$	$\frac{\$49,305}{41,270}\\ \$,035$
FARM INVESTMENT Livestock inventory Grain inventory Remaining capital cost in: Machinery Buildings and fence	27,547 14,305 8,011 24,083	26,949 12,306 8,072	23,393 11,214 7,310 18,163
Soil fertility Auto Value of land (current basis) Total farm investment	$ \begin{array}{r}     169 \\     898 \\     101,120 \\     176,133 \end{array} $	$ \begin{array}{r}     12,333 \\     151 \\     851 \\     98,336 \\     \overline{169,220} \end{array} $	$     \begin{array}{r}       331 \\       797 \\       \underline{84,302} \\       145,510     \end{array} $

<sup>a</sup> Includes sales or purchases of capital items.

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

		Grain farms		Hog farms			Dairy farms		
Items	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 Soil-productivity rating	223 33	222 35	222 37	218 35	219 35	221 36	220 32	220 31	217 31
Total cash sales Less purchased feed and livestock	\$18,946 2,434	\$18,834 2,548	\$16,452 2,632	\$33,059 10,931	\$29,993 11,226	\$25,239 9,285	\$27,626 5,552	\$26,855 5,900	\$22,350 4,798
Net cash sales Inventory change Farm products consumed Value of farm production	\$16,512 2,165 136 18,813	\$16,286 -922 160 15,524	\$13,820 778 <u>158</u> 14,756	$ \begin{array}{r} \$22,128\\ 5,653\\ \underline{202}\\ \hline 27,983 \end{array} $		\$15,954 1,309 244 17,507	$ \begin{array}{r} \$22,074\\ 3,536\\ \underline{355}\\ \hline 25,965\end{array} $		\$17,552 1,186 <u>351</u> 19,089
Cash operating expenses Annual depreciation Farm and family earnings	7,031 2,519 9,263	6,862 2,274 6,388	5,697 2,247 6,812	9,392 3,229 15,362	8,131 2,595 6,070	6,881 2,512 8,114	9,7673,75112,447	9,888 3,618 6,942	7,686 3,221 <b>8,182</b>
Unpaid labor charge Returns to capital and management Interest charge on capital Management returns	3,003 6,260 2,761 3,499	2,829 3,559 2,851 708	2,621 4,191 2,461 1,730	3,296 12,066 3,005 9,061	3,035 3,035 3,148 -113	2,883 5,231 2,664 2,567	3,601 8,846 3,488 5,358	3,241 3,701 3,378 323	3,182 5,000 2,797 2,203
Total cash income <sup>a</sup> Total cash expenditures <sup>a</sup> Cash balance	\$18,968 12,512 6,456	\$18,840 11,699 7,141	\$16,571 10,818 5,753	\$33,085 25,311 7,774	\$30,215 21,997 8,218	\$25,336 <u>19,381</u> <u>5,955</u>	$\frac{\$27,901}{20,984}$ ${6,917}$	\$26,861 19,848 7,013	$     \begin{array}{r}       \$22,458 \\       \underline{16,858} \\       \underline{5,600}     \end{array} $
FARM INVESTMENT Livestock inventory Grain inventory	3,112 6,338	4,039 7,711	3,062 5,141	8,751 5,460	9,131 7,269	7,781 5,319	10,688 5,288	10,590 6,520	8,344 4,602
Remaining capital cost in: Machinery Buildings and fence Soil fertility Auto Value of land (current basis) Total farm investment.	$\begin{array}{r} 6,420 \\ 5,575 \\ 113 \\ 468 \\ 41,495 \\ \hline 63,521 \end{array}$	$\begin{array}{r} 6,165\\ 5,895\\ 108\\ 519\\ 40,738\\ \hline 65,175\end{array}$	5,4764,83133856137,26356,672	$5,8177,77313163939,406\overline{67,977}$	5,987 9,054 257 577 <u>38,359</u> 70,634	5,1056,83742958534,04060,096	9,551 12,488 153 634 <u>38,690</u> 77,492	$9,272 \\ 12,399 \\ 197 \\ 636 \\ 34,929 \\ 74,543$	8,057 9,678 351 581 30,403 62,016

<sup>a</sup> Includes sales or purchases of capital items.

## 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 (1951-1965) 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	Poul- try	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
1951-65 aver.	122	179	119	116	129ª	151	137	\$1.24

<sup>a</sup> 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	Enter	orises,	1965
---------	------	-----	-------	---------	------

Items	All farms	High- return farms	Low- return farms
Number of farms	734	76	88
Average per farm Pounds of pork produced Total returns Value of feed fed Returns per \$100 feed fed Returns above feed per	120,465 \$27,727 \$13,222 \$210	152,354 \$36,559 \$14,723 \$248	97,670 \$21,300 \$12,396 \$ 172
Number of litters farrowed Pigs farrowed per litter Pigs weaned per litter Number of pigs weaned Number that died after weaning Death loss, percent of pounds produced Weight per hog sold	\$ 204 71 9.2 7.4 525 17 1.2 235	\$ 245 89 9.5 7.7 686 21 1.1 233	\$ 151 59 8.8 7.0 410 15 1.4 240
Price received per 100 pounds Feed cost per 100 pounds produced Feed per 100 pounds produced	\$20.68 \$10.98	\$21.62 \$9.66	\$ 20.24 \$ 12.69
Farm grains, lb Commercial feeds, lb Total concentrates, lb. Pasture (pasture days) Cost per 100 pounds of commercial feeds Cost per 100 pounds of concentrates	337 70 407 .9 \$ 5.62 \$ 2.67	305 61 366 .8 \$ 5.36 \$ 2.61	383 84 467 1.1 \$ 5.54 \$ 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 farmTotal pounds produced.Total returns.Value of feed fed.Returns per \$100 feed fed.Death loss, percent of pounds producedAverage weight purchased.Price paid per 100 pounds.Price received per 100 pounds.Feed cost per 100 pounds produced.Feed per 100 pounds producedGrain, lb.Protein and mineral feeds, lb.Hay, lb.Silage, lb.Pasture (pasture days).	$\begin{array}{c} 78,424\\\$21,943\\\$14,501\\\$&151\\\$&2.1\\554\\\$&24.16\\\$&24.73\\\$&18.49\\59\\608\\122\\605\\3\end{array}$	79,488 \$15,617 \$ 8,875 \$ 176 \$ 1.8 \$ 31.96 \$ 20.96 \$ 11.16 355 74 429 

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

· · · · · · · · · · · · · · · · · · ·						
Itema	A 11 6	Pasture days per animal unit				
Items	All larms	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	$\hat{7}\hat{4}$ 4	68 3	40 0		
runnar units in nerg.	00.1	, , , ,	00.0	17.0		
Pounds of beef						
produced	18,347	22,282	21,004	14,777		
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	,,	F J	,,	, .,		
fed	\$ 174	\$ 169	\$ 175	\$ 176		
Returns above feed	<i>v</i> 111	<b>v</b> 107	φ 110	ψ 170		
por mills cow	\$ 216	\$ 216	\$ 222	\$ 207		
per mik cow	φ 210	$\varphi$ 210	$\varphi$ $222$	$\varphi = 201$		
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	,	,	,	,		
por mills cow	131	117	136	415		
per mik cow	451	447	450	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 <sup>a</sup>	\$ 17 41	\$ 17 77	\$ 17 60	8 16 96		
Price received for:	φ 17.11	φ 17.77	φ 17.01	\$ \$ 10.70		
100 lb mills	\$ 2 77	\$ 2 74	\$ 2.9/	1 \$ 2.70		
100 lb, haaf	φ <u>5.77</u> φ 1ε ε1	φ J.14 φ 15 72	φ <u></u>	τ φ 5.70 2 φ 15 76		
F 100 ID. Deer	\$ 15.51	\$ 15.75	\$ 15.55	5 \$ 15.50		
Feed per unit of milk						
and beet,		0.40	250	250		
Grain, Ib	255	260	250	259		
Protein and miner-						
als, lb	64	64	67	60		
Total concen-						
trates, lb	319	324	317	319		
Hay and dry						
roughage, lb.	338	546	305	384		
Hay silage and		010				
soilage lb	317	410	354	78		
Corn and other	517	110	001	10		
	666	759	802	156		
Brature (no sture)	000	130	005	400		
rasture (pasture	0		6	16		
days)	ð	•••	0	10		
Pasture days per	~ .		= 0	4.40		
animal unit	84	· • •	59	160		

<sup>a</sup> 1,000 pounds of milk or 100 pounds of beef.



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	Calves
Ttems		sold	ted out
Number of farms	271	117	121
Average per farm			
Number of cows in herd Animal units in herd	$\begin{array}{c} 28.7\\ 42.8\end{array}$	$\begin{array}{c} 28.4\\ 38.6\end{array}$	$\begin{array}{c} 26.5\\ 42.8\end{array}$
Total pounds produced Total returns Value of feed fed Returns per \$100 feed fed	18,700 \$ 4,075 \$ 3,208 \$ 127	14,736 \$ 3,082 \$ 2,419 \$ 127	20,737 \$ 4,681 \$ 3,613 \$ 130
Pounds of beef per cow in herd	653	519	783
Sold	733	593	872
pounds produced Feed cost per unit <sup>a</sup> Price received per 100	5.0 \$ 17.16	5.9 \$ 16.42	4.7 \$ 17.42
pounds	\$ 21.72	\$ 21.03	\$ 21.75
beef Grain, 1b Protein and mineral	199	76	270
feeds, lb Total concentrates, lb.	27 226	22 98	29 299
Hay and dry roughage, lb	550	633	504
Hay silage, lb Corn and other silage,	76	44	90
lb	187	159	221
Pasture days per animal unit	192	210	179

<sup>a</sup> 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

T.	A 11 C		Number of	hens per farm	
ltems	All farms	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 <sup>a</sup>	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	\$.31	\$ .29	\$.30	\$.32	\$.32
Pounds of death loss	650	153	351	914	2,487

Table 9. — Poultry Enterprises, 1965

<sup>a</sup> 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  $1\frac{1}{2}$  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         Total returns         Value of feed fed         Returns per \$100 feed fed	3,841 \$907 \$636 \$143	19,566 \$4,250 \$4,282 \$ 99
Percent lamb crop Death loss, percent of pounds produced Feed cost per 100 pounds produced Price received per 100 pounds Price paid for sheep bought	121 13.5 \$ 16.56 \$ 25.11 \$ 26.51	30.3 \$ 21.88 \$ 23.11 \$ 23.51
Feed per 100 pounds produced Concentrates, lb Hay, lb Silage, lb Pasture (pasture days)	270 500 6 41	755 148 128 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 Rec	eived and Paid
by Farm Record Keep	pers

	19	65	19	64
	Northern Illinois	Southern Illinois	Northern Illinois	Southern Illinois
Grain prices				
Corn, sold Soybeans, sold Oats, sold Wheat, sold Corn, purchased Oats, purchased	. \$1.13 . 2.59 68 . 1.40 . 1.19 69	\$1.15 2.46  1.32 1.18	\$1.12 2.58 .64 1.43 1.14 .65	\$1.15 2.51 .68 1.39 1.13 .80
Livestock prices				
Hogs, all weights Fat cattle, all weights Feeder cattle, all weights,	. \$20 . 24	.68 .73	\$14 21	.81 .92
prices paid Dairy cattle, all weights. Sheep, all weights Poultry Milk. Eggs.	. 24 . 15 . 25 . 3	.16 .51 .11 .07 .77 .31	21 14 21 3	.26 .60 .80 .07 .70 .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.

	6-75	500 + 59	696 590 57 57	$206 \\ 524 $	6, 015 2, 031 12, 477	$\frac{7}{3}, \frac{165}{742}$	1,784 849 14.304	$\frac{51,745}{10,679}$	\$ 8,114 57,947 2,088	$\frac{-,}{68,149}$ 16,404	30,629	\$69,336	$\frac{402}{69,738}$	$6,253 \\ 4,231$	25,734 10,578 46 796	522,942 9,157	$^{2,303}$	$\frac{34,604}{19,370}$	44.12
	RATING 5	340-499 70	411 359 68 8	$1.1 \\ 162 \\ 355 $	\$ 3,807 1,970 7,771	4,164 2,518 965	1,016 615 8,799	$\frac{31,625}{7,374}$	\$ 5,702 32,662 1,246	$\frac{39,610}{7,985}$	1.25 29,161	\$43,365 \$	$\frac{211}{43,582}$	3,811 $3,684$	$\frac{14,720}{6,251}$	\$15,116 \$3,583	157	$20,113 \\10,921 \\16,784$	40.84
	VITH SOIL	260–339 43	305 279 69 44	110 153	$\begin{array}{c} \$ & 2 \\ 1 \\ 5 \\ 8 \\ 8 \\ 8 \\ 9 \\ 8 \\ 9 \\ 9 \\ 9 \\ 9 \\ 9$	$\frac{3}{2}, \frac{547}{031}$	$770 \\ 400 \\ 6.810$	$\frac{24,482}{3,878}$	\$ 2,311 25,678 1 190	$\frac{29,179}{4,697}$	1.19 25,010	\$28,668	$\frac{103}{28,771}$	$2,272 \\ 1,215$	10,872 3,780 18 130	\$10,632 3,863	30 135	$     \begin{array}{r}       14,686 \\       7,601 \\       11,507 \\     \end{array} $	37.73
ò	N FARMS V	180-259 37	227 209 68 17	.0 81 228	$\begin{array}{c} \$ & 2 \\ 1 \\ 1 \\ 5 \\ 059 \\ 059 \\ 059 \\ 059 \\ 059 \\ 059 \\ 059 \\ 059 \\ 059 \\ 059 \\ 050$	3,402 1,521 518	377 5.000	$\frac{19,837}{4,064}$	$\begin{array}{c} \$ & 3,694 \\ 19,339 \\ 822 \\ 822 \\ \end{array}$	$\frac{23,855}{4,018}$	1.20 21,362	\$24,072	$\frac{104}{24,176}$	1,953 1,663	8,836 4,883 17 335	\$ 6,841 3,252	1,000 147	$   \begin{array}{r}     12,126 \\     6,957 \\     0,018   \end{array} $	39.73
	GRAII	Under 180 14	$133 \\ 124 \\ 73 \\ 49$	63.106	$\begin{array}{c} \$ 1,294 \\ 1,048 \\ 3.649 \end{array}$	$\frac{3}{1,096}$ ,108 1,096 327	$367 \\ 420 \\ 3.389$	$\frac{14,698}{2,488}$	$\begin{array}{c} \$ & 2,033 \\ 11,338 \\ 459 \end{array}$	$\frac{13,830}{-868}$	.94 13 <b>,</b> 384	\$15,420	15,420	1,573 1,289	6,402 1,374 10,638	\$ 4,782 1,213	00+ 59	5,450 1,989 2,521	18.95
•		650+ 70	807 741 84 4	254 579	\$ 9,928 3,790 15,066	8,306 5,236 2,037	2,660 897 21.466	69,386 10,943	\$ 8,886 78,483 7.364	$\frac{2}{89}, 733}{20, 347}$	1.29 34,961	\$88,995	$\frac{422}{89,417}$	7,833 3,730	34,025 13,286 58 874	\$30,543 \$30,543 12,111	3,210 190	$\frac{46,054}{23,329}$	51.81
	ING 76-100	500-649 98	567 523 85 3	$188 \\ 429$	\$ 6,564 2,677 11,613	6,173 3,673 1,346	1,437 840 15.225	$\frac{49,548}{8,263}$	\$ 6,302 53,655 1,634	$\frac{12,001}{61,591}$	1.24 31,451	\$60,119	$\frac{499}{60,618}$	$\frac{4}{3},082$	23,362 11,504 42,718	\$17,900 9,170	3,129 154	$\frac{30,953}{15,043}$	48.09
•	SOIL RAT	340-499 163	420 388 84 24	.99 230	\$ 4,862 1,899 8,009	2,946 2,946 951	1,192 $477$ $11,217$	$\frac{36,241}{4,711}$	\$ 3,095 39,616 1 320	$\frac{1,020}{44,031}$	29,032	\$44,328	$\frac{241}{44,569}$	$1,522 \\ 2,052$	$\frac{17,081}{6,277}$	\$17,637 \$17,637 3,167	1,24/110	$\begin{array}{c} 22,161 \\ 10,785 \\ 10,007 \\ \end{array}$	45.25
	RMS WITH	260-339 123	305 305 85 40	$^{-2}_{252}$	\$ 3,113 1,739 6,420	3,677 2,245 750	939 444 8.665	$\frac{27,992}{4,425}$	\$ 3,558 29,326 1 087	$\frac{1,00}{33,971}$	27.922	\$36,273	$\frac{252}{36,525}$	2,618 2,030	$\frac{12,259}{5,067}$	\$14,551 \$14,551 2,239	842 107	17,739 8,956 14,644	48.01
	GRAIN FA	180–259 93	229 217 85 61	.5 53 245	\$ 2,236 1,337 4,966	3,406 1,666	643 493 6,456	$\frac{21,799}{4,135}$	\$ 3,351 21,977	$\frac{26,048}{4,249}$	23.154	\$26,243	$\frac{176}{26,419}$	1,653 2.184	$\frac{9}{4}, \frac{340}{420}$	\$ 8,822	1,3/4 115	13,838 7,229 10,705	10,705 ) 46.75
		Under 180 28	155 146 86 30	$^{15}_{175}$	\$ 1,476 1,280 4 075	3,364 1,290 388	419 298 298	$\frac{17,156}{2,190}$	\$ 2,392 14,875 010	$\frac{18,186}{1,030}$	10.409	\$18,308	$\frac{55}{18,363}$	$804 \\ 1.031$	6,827 3,524 12,186	\$ 6,177 \$ 6,177 1,680	818 33	8,708 3,941 5,506	36.10
		Range in size (total acres)	size of farm. Acres of tillable land. Soil rating on tillable land. Jens, number	Dairy cows, number Seef produced, hundredweight Pork produced, hundredweight	OOLLAR COSTS PER FARM Soil fertility	abor	Top expense	fotal non-feed costs.	OOLLAR RETURNS PER FARM Jivestock returns above feed cost	Total value of farm production	Tarm production per \$1.00 of non-feed costs	AINANCIAL SUMMARY	bales of capital items	<sup>2</sup> urchased livestock	Cash operating expenses.	Cotal cash experiments	Capital change	Farm and family earnings	Capital and management carmings Capital and management carnings per acre

Table 12.- Average Costs, Returns, and Financial Summary of Grain Farms by Size and Soil Rating, Northern Illinois, 1965

1 abie 12a Average C	perating	JOSTS, INVEST	rments, an	a Land US	e or Grain	Farms by S	ize and Soil I	Katıng, No	rthern 11111	01S, 1965	
	_	GRAIN FAR	MS WITH	SOIL RAT	FING 76–100		GRAIN	I FARMS	WITH SOIL	RATING 5	6-75
Range in size (total acres)Number of farms	Under 180 28	180–259 93	260 - 339 123	340-499 163	500-649 98	650+ 70	Under 180 14	$\frac{180-259}{37}$	260–339 43	340-499 70	500+59
COSTS AND RETURNS PER TILLABLE ACRE											
Soil fertility	\$ 10.11 8.77	$\begin{array}{c} \$ 10.30 \\ 6.16 \\ \end{array}$	\$ 10.81 6.04	\$ 12.53 4.89	\$ 12.55 5.12	\$ 13.40 5.11	\$ 10.44 8.45	\$ 10.60 5.49	\$ 10.20 5.81	\$ 10.60 5.49	\$ 11.72 4.97
Machinery and equipment Labor Value of feed fed	27.91 23.04 15.00	15.70 $15.70$	12.29 12.77 15.36	20.64 12.08 12.14	22.20 11.80 15.80	20.33 11.21 14.77	29.43 25.06 20.06	24.21 16.28 19.44	20.82 12.71 13.90	21.65 11.60 20.54	21.15 12.14 18.10
Livestock returns above feed cost Feed and grain returns	16.38 101.88	$\begin{array}{c} 15.44\\101.28\end{array}$	12.35 101.83	7.98 102.10	12.05 102.59	11.99 105.91	16.40 91.44	17.67 92.53	8.28 92.04	15.88 90.98	13.75 98.22
Total value of farm production Total non-feed costs	124.56 117.51 7.05	$\frac{120.04}{100.46}$	$\frac{117.95}{97.19}$	$\frac{113.48}{93.40}$	$\frac{117.76}{94.74}$	$\frac{121.10}{93.64}$	$\frac{111.53}{118.53}$	$\frac{114.14}{94.92}$	$\frac{104.58}{87.75}$	$\frac{110.33}{88.09}$	$\frac{115.51}{87.71}$
SELECTED COST ITEMS Fertilizer, annual application Lime and rock phosphate depreciation Building repairs and maintenance	\$ 1,440 36 372	\$ 2,200 36 408	\$ 3,049 64 441	\$ 4,781 81 481		\$ 9,829 99 1 166	\$ 1,276 331	\$ 2,179 36 357	\$ 2,808 38 513	\$ 3,710 97 614	\$ 6,860 887 887
Building depreciation Machinery and equipment depreciation Machinery repairs and supplies	$\frac{908}{208}$ 1,505 830	$     \begin{array}{c}       929 \\       1,647 \\       1,128     \end{array} $	1,298 2,320 1,453	$1,418 \\ 2,999 \\ 1,896$	1,906 $4,842$ $2,648$	2,624 6,509 3,620	717 943 639	1,837 1,837 1,056	1,107 2,158 1,216	1,356 3,015 1,703	2,049 5,283 3,002
Machinery hire	364 722 3 112	578 861 3 133	666 1,149 3,005	796 1,483 15 $4$	940 1,994 3,685	1,174 2,477 2,11	673 658 2 020	2 108	$\frac{524}{1,081}$	1,324	2,192
Hired labor charge. Total months of labor	252 13.3 .8	273 13.5 .9	582 14.6 2.2	1,534 18.2 5.6	2,488 23.5 8.7	4,065 30.8 13.8	2,929 179 12.4	2,100 294 13.4 1.0	3,179 368 14.0 1.3	3,329 835 16.3 2.9	3,590 3,269 26.7 11.1
FARM INVESTMENT Livestock inventory	\$ 2,361 8,484	\$ 3,569 \$	\$ 4,769 16,132	\$ 5,298 19,646	\$ 7,927 26,108	\$12,779 38,345	\$ 2,535 6,208	\$ 4,211 8,692	\$ 5,252 11,233	\$ 8,153 15,855	\$11,358 25,234
Kemaınıng capıtal cost ın: Machinery Buildings and fence	$4,804 \\ 9,827$	5,934 10,538	$^{8,661}_{15,075}$	11,068 17,656	15,721 23,012	21,033 33,521	3,547 8,957	6,306 9,113	$^{8,742}_{11,968}$	10,382 16,182	17,949 21,618
Soil fertility.	104 574 01 165	700 756 130 752	145 773 150 600	185 833 833	1,126	171	43 814	61 544 00 242	65 842	253 857	117 1,018
Total farm investment pasis)	$\frac{01,403}{107,619}$	$\frac{120,132}{153,266}$	$\frac{129,000}{205,235}$ 672.90	$\frac{212,001}{266,767}$ 635.16	$\frac{200,032}{362,106}$	$\frac{402,939}{509,921}$	$\frac{51,094}{79,198}$	$\frac{38,349}{117,776}$	$\frac{122,020}{160,722}$	207,062 503 80	$\frac{200,984}{338,278}$
PERCENT OF TILLABLE LAND IN	54.6	51.4	51.1	51.8	49.0	54.1	54.4	55.3	46.5	48.5	51.1
boybeans	23.5	29.2 4.3	30.4 4.8	29.5 4.6	31.4 5.4	29.7 5.0	24.7	20.6 4.0	28.9 5.9	27.8 3.8	27.0
Other small grains Diverted acres All hav and nathre crons	4.0 4.7 8	2.3	2.3 6.1	2.3 6.3	6.8 7 8 7 8 7	2.2.2	5.1	3.7		8.77	2.01
CROP YIELDS, bushels per acre	1		4	# •	C. H	1.1	1.6	7.01	7.1	0.0	с. С
Corn. Soybeans. Wheat.	$114.2 \\ 35.8 \\ 41.4 \\ $	113.7 36.1 42.6	114.3 35.0 45.8	116.5 34.5 41.0	117.6 35.0 43.4	116.5 34.9 41.3	$   \begin{array}{c}     101.1 \\     34.1 \\     28.7 \\   \end{array} $	106.2 34.5 34.6	106.2 34.1 36.8	104.6 33.6 35.9	107.1 33.4 40.0
Dats	68.9	64.4	71.2	71.9	74.4	79.6	55.4	68.5	64.2	58.9	69.0

Table 12a

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

Taulo 13a 11 Clage Operating		11111110 <sup>,</sup> 41		- 9011 10 0			1011 (911110)		COCT 6010	
	HOG	FARMS W	/ITH SOIL	RATING 70	5-100	HOG	FARMS W	ITH SOIL	RATING 56	-75
Range in size (total acres)	Under 180 41	$180-259 \\ 60$	260–339 54	340-499 34	500+14	Under 180 25	$\substack{180-259\\40}$	260-339 40	340-499 47	500 + 26
COSTS AND RETURNS PER TILLABLE ACRE Soil fertility	\$ 10.15 14.39 37.96 28.46 128.61	$\begin{array}{c} \$ & 12.29 \\ 9.79 \\ 31.03 \\ 19.86 \\ 93.46 \end{array}$	\$ 12.12 \$ 10.09 29.65 17.84 96.39	$\begin{array}{c} \$ 13.34 \\ \$ .58 \\ 8.58 \\ 29.29 \\ 16.99 \\ 81.59 \end{array}$	\$ 15.00 11.20 29.15 17.10 73.94	$\begin{array}{c} \$ & 9.92 \\ 11.26 \\ 32.39 \\ 26.38 \\ 110.34 \end{array}$	$\begin{array}{c} \$ & 12.74 \\ 9.63 \\ 31.27 \\ 20.63 \\ 89.68 \end{array}$	$\begin{array}{c} \$ 11.67 \\ 9.83 \\ 9.83 \\ 30.35 \\ 17.99 \\ 83.32 \\ 83.32 \end{array}$	\$ 12.32 9.34 29.37 17.95 84.38	\$ 10.76 10.66 26.40 17.45 87.05
Livestock returns above feed cost	$136.77 \\ 96.21$	$88.50 \\ 93.74$	$84.61 \\ 96.84$	67.91 99.55	62.91 103.62	100.87 83.14	85.98 87.65	86.01 86.45	71.31 85.75	$79.92 \\ 85.90$
Total value of farm production Total non-feed costs	$\frac{239.61}{153.80}$	$\frac{186.50}{128.19}$	$\frac{186.21}{124.40}$	$\frac{171.07}{120.30}$	$\frac{171.56}{127.80}$	$\frac{187.70}{128.46}$	$\frac{177.39}{123.50}$	$\frac{177.24}{116.01}$	$\frac{160.63}{113.04}$	$\frac{169.55}{111.47}$
SELECTED COST ITEMS Fertilizer, annual application Lime and rock phosphate depreciation Building repairs and maintenance Building depreciation Machinery and equipment depreciation	$\begin{array}{c} \$ 1,336\\ 34\\ 620\\ 1,323\\ 12830 \end{array}$	$\begin{array}{c} \$ & 2,467 \\ & 65 \\ & 609 \\ & 1,407 \\ & 2.229 \end{array}$	$\begin{array}{c} \$ & 3,251 \\ & 35 \\ & 799 \\ & 1,936 \\ & 3,084 \end{array}$	$\begin{array}{c} \$ 4,728 \\ 114 \\ 949 \\ 2,164 \\ 3.977 \\ \end{array}$	$\begin{array}{c} \$ 8,207\\ 45\\ 2,222\\ 3,939\\ 6.080 \end{array}$	$\begin{array}{c} \$ 1,299 \\ 21 \\ 487 \\ 1,010 \\ 1.261 \end{array}$	$\begin{array}{c} \$ & 2,354 \\ & 28 \\ & 662 \\ & 1,139 \\ & 1.963 \end{array}$	$\begin{array}{c} \$ & 2,781 \\ & 2,20 \\ & 870 \\ & 2,738 \\ & 2,738 \end{array}$	\$ 3,851 90 1,112 3.435	$\begin{array}{c} \$ 4,704 \\ 85 \\ 1,352 \\ 3,391 \\ 4.249 \end{array}$
Machinery repairs and supplies. Machinery hire. Gasoline and oil. Unpaid labor charge. Hired labor charge.	3,122 720 720 720	$\frac{1}{1},\frac{432}{432}$ 942 3,344 748 16 2	1,839 1,839 1,244 1,244 1,452 1,452	2,433 1,248 1,661 2,398 2,398	$\begin{array}{c} 3,891\\ 1,859\\ 4,607\\ 4,799\\ 2,29\\ 2,29\\ 2,29\\ 2,29\\ 0\\ 2,29\\ 0\\ 2,29\\ 0\\ 2,29\\ 0\\ 2,29\\ 0\\ 0\\ 1\\ 2,29\\ 0\\ 0\\ 1\\ 2\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\$	3,060 448 148	$ \begin{array}{c} 1,221\\ 841\\ 932\\ 3,250\\ 608\\ 151 \end{array} $	1,693 1,155 3,381 936 15	2,585 1,560 3,798 1,945 245	3,219 1,116 3,856 3,910 2,910
Months of labor hired	2.5	2.9	4.6 4.6	8.5 8.5	14.5	1.6 1.6	2.1	2.9 2.9	6.3 6.3	12.6
LIVESTOCK INVENTORY	\$10,010 8,629	\$13,542 11,574	\$10,249 16,249	\$23,194 18,967	\$34,910 30,956	\$ 9,554 7,145	511,802 10,081	\$15,500 11,444	\$20,903 14,258	21,614
Machiney Buildings and fence Soil fertility	6,439 14,231 82	$     \begin{array}{c}       7,854 \\       17,130 \\       133     \end{array}   $	10,787 22,214 80	13,335 23,085 257	$21,319 \\ 42,198 \\ 96$	4,188     9,508     35	$^{7,258}_{14,002}$	7,978 16,316 51	$10,354 \\ 19,808 \\ 212$	14,003 31,810 197
Auto	$\frac{565}{75,219}$ $\frac{115,781}{793}$	$\frac{910}{164,446}$	$\frac{858}{145,991}$ $\frac{213,132}{710}$	$\frac{1,005}{193,908}$ $\frac{193,908}{274,351}$	$\frac{1,467}{304,950}$ $\frac{304,950}{435,902}$	$\frac{661}{87,415}$	$\begin{array}{r} 815\\82,588\\126,665\\573&14\end{array}$	$\frac{708}{156,077}$	895 136,649 203,139 496,67	884 202,936 303,824 500,53
PERCENT OF TILLABLE LAND IN Corn and corn silage Sovbeau	65.5 7.4	63.0 9.4	60.5 12.6	62.0 11.3	67.3 11.7	64.9 4.9	62.3 10.2	54.1 14.8	53.8 15.2	52.7 16.1
Wheat	10.5 3.1 13.3	1111 117 138	1.9 8.1 1.9	1.4 3.5 12.6	956 0 0	12.4 11.7 15.4	2.2 8.2 14.6	4.4 6.3 14.9	6.1 3.5 15.4	5.2 3.6 15.3
CROP YIELDS, bushels per acre Corn Soybeans. Wheat	107.3 34.4 75.3	106.5 33.8 32.5 72.6	107.0 37.0 39.2 75.8	109.3 36.5 40.0 73.2	108.4 36.8 72.9	95.8 32.7 40.5 69.2	101.0 33.5 28.6 65.1	$\begin{array}{c} 100.1 \\ 32.8 \\ 32.9 \\ 67.2 \end{array}$	$\begin{array}{c} 102.1\\ 34.8\\ 32.3\\ 56.0 \end{array}$	$\begin{array}{c} 101.9\\ 33.1\\ 38.2\\ 57.3\end{array}$

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

.

 $\checkmark$ 

0	GRA	IN FARMS	WITH SOI	L RATING	5-55	OH	G FARMS V	VITH SOIL	RATING 5	-55
Range in size (total acres)	180–259 45	260-339 57	340-499 103	500–649 39	650+ 55	Under 18( 18	) 180–259 41	260-339 47	340-499 54	500+ $40$
Size of farm	223 202 33 95	300 270 35 47	418 352 32 74	551 474 33 123	874 693 35 82	140 123 33 43	218 177 35 81	295 235 31 106	408 313 32 42	717 528 31 73
Daury cows, number	$\begin{array}{c}1.2\\52\\183\end{array}$	$\begin{array}{c} 3.3\\57\\218\end{array}$	$\begin{array}{c} 2.4\\ 86\\ 313 \end{array}$	$\begin{array}{c} 3.5\\107\\386\end{array}$	$\begin{array}{c}3.5\\220\\481\end{array}$	$1.3 \\ 54 \\ 1,112$	1.4 $106$ $1,019$	$^{.7}_{1,310}$	$^{218}_{1,601}$	$304 \\ 2,118$
DOLLAR COSTS PER FARM Soil fertility	$\begin{array}{c} \$ 2,020 \\ 854 \\ 4,424 \\ 3,368 \\ 3,368 \end{array}$	$\begin{array}{c} \$ & 2,592 \\ 1,001 \\ 6,029 \\ 3,523 \\ 3,523 \end{array}$	\$ 3,225 1,323 6,982 4,151	\$ 5,656 1,439 9,724 5,138	$\begin{array}{c} \$ 7,501\\ 2,531\\ 13,142\\ 6,777 \end{array}$	$\begin{array}{c} \$ & 1,828 \\ 1,246 \\ 4,662 \\ 4,222 \end{array}$	$\begin{array}{c} \$ & 2,123 \\ 1,513 \\ 5,679 \\ 4,097 \end{array}$	\$ 2,665 1,622 6,458 4,155	\$ 3,786 2,160 8,591 5,114	\$ 6,309 2,918 12,203 6,944
l axes	803 404 357 323 751	1,050 563 406 2,563 2,63	1,346 714 663 547	1,658 1,076 571 571	$ \begin{array}{c} 2,448\\ 1,617\\ 1,579\\ 858\\ 22\\ 22\\ 22\\ 22\\ 22\\ 22\\ 22\\ 22\\ 22\\ 2$	626 295 880 880	834 466 766 205	938 543 804 202	1,255 837 854 1,214	1,962 1,135 1,338 1,273
Interest charge on capital	$\frac{2}{15}, \frac{101}{314}$	$\frac{3,361}{19,404}$	$\frac{4,4/8}{23,429}$ 5,929	$\frac{0,0.1}{32,294}$	$\frac{9,304}{45,757}$ 10,251	$\frac{2,459}{16,472}$ 13,951	$\frac{3,005}{18,922}$ 13,654	$\frac{3,590}{21,313}$ 16,677	$\frac{4,975}{28,786}$	$\frac{7,565}{41,647}$ 29,725
DOLLAR RETURNS PER FARM Livestock returns above feed cost Feed and grain returns Other cash income	$\begin{array}{c} \$ & 2,900 \\ 15,320 \\ 593 \end{array}$	$\begin{array}{c} \$ & 3,699 \\ 20,690 \\ 894 \end{array}$	\$ 4,848 24,860 1 104	\$ 6,168 35,550 1 561	\$ 8,177 53,810 2,521	\$15,227 9,126 877	\$13,661 13,403 010	\$16,509 16,185 085	\$21,614 23,281	\$28,492 36,774 1 811
Total value of farm production	$\frac{18,813}{3,499}$	$\frac{25,283}{5,879}$	$\frac{1}{30,902}$	$\frac{1}{43}, \frac{501}{279}$ 10,985	$\frac{2}{64}, \frac{521}{508}$ 18, 751	$\frac{25,230}{8,758}$	$\frac{27,983}{9,061}$	$\frac{33,679}{12,366}$	$\frac{1}{45,999}$	$\frac{1,011}{67,077}$ 25,430
Farm production per \$1.00 of non-feed costs	15,787	$20,500^{1.30}$	1.32 21,312	1.34 25,334	1.41 27,946	17,202	10,637	23,227	1.60 26,796	1.61 28,442
FINANCIAL SUMMARY Cash sales of products and services	\$18,946 22 18,968	\$25,495 <u>177</u> 25 672	31,439 246 31 685	$\frac{342}{92},924$	\$65,318 343 65 661	\$32,058 93 37 151	$\frac{$33,059}{26}$	\$40,342 $\frac{68}{68}$	\$53,732 81 53 813	\$75,506 $\overline{515}$
Purchased livestock Purchased feed Cash operating expenses Purchase of capital items Total cash expenditures	$\begin{array}{c}1,190\\1,244\\7,031\\3,047\\12,512\end{array}$	$\begin{array}{c} 1,494\\ 1,571\\ 9,376\\ 4,741\\ \overline{17,182} \end{array}$	$\begin{array}{c} 1,819\\ 2,330\\ 11,587\\ \overline{5,875}\\ 21,611\end{array}$	3,137 2,955 17,909 6,474 30,475	$\begin{array}{c} 6,007\\ 6,007\\ 3,531\\ 24,606\\ 10,129\\ 44,273\end{array}$	$\begin{array}{c} 2,702\\ 2,702\\ 7,816\\ 3,160\\ \overline{23,905}\end{array}$	$\begin{array}{c} 2,556\\ 2,556\\ 9,392\\ 4,988\\ 25,311\\ \end{array}$	$\begin{array}{c} 2,918\\ 2,918\\ 10,974\\ \overline{5,718}\\ \overline{30,499}\\ \end{array}$	$\begin{array}{c} 5,597\\ 5,597\\ 113,301\\ 15,730\\ 6,846\\ \overline{41,474}\end{array}$	8,550 8,550 15,527 22,714 11,906 58,697
Cash balance	\$ 6,456 2,165 506 136	\$ 8,490 2,700 1,159 153	\$10,074     3,441     1,574     171	\$12, 541 6, 257 1, 316 190	$\begin{array}{c} \$21,388\\ 8,472\\ 2,279\\ 255\end{array}$	\$ 8,246 5,923 178 178	\$ 7,774 5,653 1,733 202	$\begin{array}{c} \$ 9,911 \\ 6,943 \\ 2,116 \\ 201 \end{array}$		117,324 15,359 4,247 289
Farm and family earningsLabor and management earnings Capital and management earnings Capital and management earnings per acre	9,263 6,262 6,260 28.07	$     \begin{array}{r}         12,502 \\         8,602 \\         9,460 \\         31.53     \end{array} $	$\frac{15,260}{10,238}$ $\frac{11,951}{28.59}$	$\frac{20,304}{13,775}$ 17,056 30.95	$\frac{32,394}{21,563}$ $\frac{32,055}{32.10}$	$\frac{14,820}{11,500}$ $\frac{11,217}{80.11}$	115,362 111,853 12,066 55.35	$   \begin{array}{r}     19,171 \\     15,130 \\     15,956 \\     54.09   \end{array} $	$\frac{25,575}{20,000}$ 22,188 22,188 54.38	$\frac{37,219}{28,226}$ 32,995 46.02

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

	GRAI	N FARMS	WITH SOI	L RATING	5-55	HOG	FARMS W	VITH SOIL	RATING 5	-55
Range in size (total acres)	180–259 45	260–339 57	340-499 103	500-649 39	650+ 55	Under 180 18	$180-259 \\ 41$	260–339 47	340–499 54	500+
COSTS AND RETURNS PER TILLABLE ACRE Soil fertility	\$ 10.00 \$ 10.00 21.90 16.67 17.50	\$ 9.60 3.71 22.33 13.05 16.94	\$ 9.16 3.76 19.84 11.79 16.84	\$ 11.93 3.04 20.51 10.84 15.88	\$ 10.82 3.65 18.96 9.78 14.79	$\begin{array}{c} \$ \ 14.86 \\ 10.13 \\ 37.90 \\ 34.33 \\ 113.42 \end{array}$	\$ 11.99 \$ 55 32.08 23.15 77.14	\$ 11.34 6.90 27.48 17.68 70.97	\$ 12.10 \$ 6.90 27.45 16.34 68.87	\$ 11.95 5.53 23.11 13.15 56.30
Livestock returns above feed cost Feed and grain returns Total value of farm production Total non-feed costs	$\begin{array}{c} 14.35\\75.84\\93.13\\75.81\end{array}$	13.70 76.63 93.64 71.87	13.77 70.63 87.79 66.56	13.01 75.00 91.31 68.13	11.80 77.65 93.08 66.03	$\begin{array}{c} 123.80\\74.20\\205.12\\133.92\end{array}$	$\begin{array}{c} 77.18\\ 75.72\\ 158.10\\ 106.90\end{array}$	70.25 68.87 143.31 90.69	69.05 74.38 146.96 91.97	53.96 69.65 127.04 78.88
Management returns	17.32	21.77	21.23	23.18	27.05	71.20	51.20	52.62	54.99	48.16
SELECTED COST ITEMS Fertilizer, annual application Lime and rock phosphate depreciation Building repair and maintenance. Building depreciation Machinery and equipment depreciation Machinery hire. Casoline and oil Unpaid labor charge. Total months of labor Total months of labor hired.	\$ 1,966 251 251 1,714 407 3,003 3,003 14.3 115	$\begin{smallmatrix} & 2,492\\ & 100\\ & 393\\ & 393\\ & 508\\ & 1,509\\ & 1,509\\ & 1,509\\ & 1,509\\ & 1,509\\ & 1,509\\ & 3,042\\ & 3,042\\ & 1,9\\ & 1.9\\ & 1.9\end{smallmatrix}$	$\begin{array}{c} \$ 3,118\\ 107\\ 495\\ 2,828\\ 1,638\\ 1,533\\ 3,309\\ 17.4\\ 3.3\\ 3.3\end{array}$	$\begin{array}{c} \$ 5,544\\ 112\\ 449\\ 449\\ 2,754\\ 2,553\\ 1,818\\ 1,818\\ 1,800\\ 6.7\\ 6.7\end{array}$	\$ 7,256 1,074 1,074 5,418 5,418 2,345 2,232 2,438 2,438 2,438 2,232 2,2,	\$ 1,777 51 374 872 1,488 1,488 1,488 1,328 3,603 3,603 3,603 2.2	\$ 2,059 64 569 569 1,987 1,334 1,334 837 3,296 3.1 3.1	$\begin{array}{c} \$ & 2,535 \\ & 2,535 \\ & 692 \\ & 692 \\ & 692 \\ & 692 \\ & 533 \\ & 1,024 \\ & 1,024 \\ & 3,215 \\ & 3,215 \\ & 3,215 \\ & 3,215 \\ & 3,77 \\ $	<pre>\$ 3,642 \$ 3,642 1,172 3,125 2,3344 1,420 3,387 1,727 6.2</pre>	<pre>\$ 6,186 1,159 1,1759 3,1868 3,1868 3,1779 2,720 2,720 10.4</pre>
FARM INVESTMENT Livestock inventory Grain inventory	\$ 3,112 6,338	3,922 7,093	\$ 5,299 7,474		\$11,354 16,300	\$ 7,616 4,682	\$ 8,751 5,460	\$ 9,977 7,007	\$14,667 9,212	21,193 13,829
Nemaning capital cost in. Machinery	$\begin{array}{c} 6,420\\ 5,575\\ 113\\ 468\\ \underline{41,495}\\ \underline{63,521}\\ 284\\ 85\end{array}$	$\begin{array}{c} 9,031\\ 5,726\\ 5,726\\ 658\\ 82,205\\ 82,862\\ 276,21\end{array}$	$\begin{array}{c} 10,705\\ 8,159\\ 2.62\\ 696\\ 71,215\\ 103,810\\ 248,35\\ 248,35\end{array}$	$\begin{array}{c} 13,737\\9,667\\325\\747\\98,643\\\underline{141,154}\\154\end{array}$	$19,974 \\ 14,344 \\ 550 \\ 1,055 \\ 153,126 \\ 216,703 \\ 247 94$	$\begin{array}{r} 6,089\\ 8,057\\ 108\\ 603\\ \overline{54,665}\\ \overline{54,665}\\ 300\ 46\end{array}$	$\begin{array}{c} 5,817\\7,773\\639\\639\\\overline{67,977}\\311\\87\end{array}$	$\begin{array}{c} 7,916\\ 8,004\\ 262\\ 602\\ 602\\ 81,300\\ \overline{81},300\\ 775\\ 50\end{array}$	$\begin{array}{c} 10,644\\11,116\\282\\719\\66,069\\112,709\\75\\95\end{array}$	$\begin{array}{c} 13,817\\ 14,275\\ 258\\ 1,023\\ 108,639\\ 173,034\\ 241&33\end{array}$
PERCENT OF TILLABLE LAND IN Corn and corn silage Soybeans Wheat Other small grains Diverted acres All hay and pasture crops	37.1 32.0 17.0 5.1 8.0	36.3 33.7 14.1 6.7 8.1	36.5 33.5 15.2 7.3 7.3	44.9 27.9 12.8 6.7 6.7 6.6	41.1 15.2 5.8 8.6 8.6	52.7 15.3 1.8 1.8 9.5	47.4 21.6 12.4 4.1 .8 13.1	47.6 26.5 12.9 1.0 7.2	47.4 22.0 13.0 13.0 4.8 4.8	20.5 15.3 14.9 14.9
CROP YIELDS, bushels per acre Corn Soybeans Wheat	90.9 29.3 80.7	95.2 28.7 42.9 49.9	87.4 26.2 41.9 58.8	88.0 26.2 41.1 47.5	98.1 27.8 43.4 63.2	83.1 29.5 42.3 46.0	90.4 31.0 56.4	81.7 25.5 40.3 52.3	87.5 28.6 42.1 45.8	101.8 27.3 40.5 37.5

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

		•		•		5				
	DAI	RY FARMS WITH 3	, NORTHEI	RN ILLING NG OF	DIS,	DAI	RY FARMS WITH 3	, SOUTHER	NG OF	lS,
	76-100	56-75	76-100	56-75	56-100			5-55		
Range in size (total acres)	Unde 20	r 180 46	180- 14	-259 46	260–339 20	Under 180 34	$180-259 \\ 40$	260–339 23	340-499 19	500+18
Size of farm. Acres of tillable land. Soil rating on tillable land. Hens, number	144 133 84 124 27 5	152 128 65 33 9	212 193 82 44 8	215 183 66 37 7	291 257 70 102 50 8	145 127 33 53 34 0	220 187 32 81 37 9	297 246 33 40 7	383 308 30 86 47 6	656 500 29 106 68 1
Beef produced, hundredweight. Pork produced, hundredweight. DOLLAR COSTS PER FARM	191	6 144	9 64	31 193	238	25	120	103	19	12
Soil fertility. Buildings and fence. Machinery and equipment.	$\begin{array}{c} \$ 1,173\\ 1,502\\ 5,296\\ 7,020\\ 7,020\\ 020\\ 020\\ 020\\ 020\\ 020\\ 020\\ 020\\$	\$ 908 2,012 4,968	\$ 1,478 2,591 7,599	\$ 1,179 2,429 6,243	\$ 1,874 3,253 9,155	\$ 1,122 1,265 5,043 218	\$ 1,653 1,695 6,332	\$ 2,257 1,724 6,729	\$ 2,990 2,167 8,452 5070	$\begin{array}{c} \$ 4,679 \\ 3,140 \\ 13,411 \\ 0.006 \\ 0.00$
Taxes	1,324 404 227	1,197 431 200	1,795 668	1,575 575 221	2,175 826 522	<sup>4</sup> , <sup>210</sup> 650 320	454 2007 454 200	1,194 608 608	1,352 789 500	1,995 1,126 757
Crop expense	1,193 4,865 70,118	1,046 4,215 18 713	$\frac{1}{1,692}$ $\frac{1}{7,058}$ $\frac{78}{161}$	1,293 5,723 73 $017$	1,675 8,100 31,100	$\frac{133}{998}$ $\frac{2,519}{16,200}$	1,191 3,488 3,607	1,306 3,740 77,765	$\frac{1,473}{5,067}$	2,158 8,340 14,600
Total multipled foots	10,761	11,436	14,229	13,868	19,278	10,424	12,689	12,699	15,441	24,449
DOLLAR RETURNS PER FARM Livestock returns above feed cost Feed and grain returns	\$ 7,566 12,009 706	\$ 9,185 9,899 555	\$10,203 17,128 636	\$ 9,524 14,132 822	\$13,419 22,067 938	$\begin{array}{c} \$ & 7,740 \\ 9,633 \\ 668 \end{array}$	\$10,658 14,530 777	$\begin{array}{c} \$ & 9, 370 \\ 15, 952 \\ 1, 098 \end{array}$	\$11,214 22,370 1,338	16,972 31,984 2,221
Total value of farm production	$\frac{20,281}{163}$	19,639 926	$\frac{27,967}{-194}$	$\frac{24,478}{561}$	36,424 2,225	$\frac{18,041}{1,751}$	$\frac{25,965}{5,358}$	$\frac{26,420}{3,655}$	$\frac{34,922}{6,144}$	$\frac{51,177}{6,575}$
Farm production per \$1.00 of non-feed costs Farm production per man	$\begin{smallmatrix}&1.01\\16,012\end{smallmatrix}$	$\substack{15,829\\15,829}$	.99 17,756	$\begin{smallmatrix}&1.02\\16,139\end{smallmatrix}$	18,212	12,162	15,978	14,477	16,499	17,348
FINANCIAL SUMMARY Cash sales of products and services Sales of capital items	\$25,984 44	\$22,455	\$32,088 170	\$28,453	\$39,426 270	\$20,903 17	\$27,626 275	\$29,420 24	\$38,431 164	\$57,690 218
Total cash income	26,028	22,554	32,258	28,570	39,696	20,920	27,901	29,444	38,595	57,908
Purchased livestock Purchased feed Cash operating expenses Purchase of capital items	1,336 5,150 8,823 2,691	2,954 7,702 3,037	2,081 3,523 12,153 6,366	1,782 3,493 10,504 4,206	1,4054,50516,2357,203	$\begin{array}{c} 740\\ 4,315\\ 7,201\\ 3,338\end{array}$	$922 \\ 9,767 \\ 5,665 \\ 5,665 \\ 9$	1,3504,76911,4546,567	2,554 4,716 14,836 7,078	2,878 8,483 22,772 10,982
Total cash expenditures Cash balance	18,000 \$ 8,028 568	14,566 \$ 7,988 730	24,123 \$ 8,135 1,189	19,985 \$ 8,585 980	29,348 \$10,348 2,589	15,594 \$ 5,326 1,932	20,984 \$ 6,917 3,536	$\begin{array}{c} 24,140 \\ \$ 5,304 \\ 2,744 \end{array}$	29,184 \$ 9,411 3,457	45,115 \$12,793 4,367
Capital change	-545 215	-548 281	970 294	50 320	1,088 319	476 261	1,639 355	2,548	1,910 304	2,392 $481$
Farm and family earnings Labor and management earnings Capital and management earnings Capital and management earnings per acre			$\begin{array}{c} 10,588\\ 2,770\\ 6,864\\ 32.38\end{array}$	9,935 3,556 6,284 29.23	14,3445,20010,32535.48	7,995 4,509 4,270 29.45	$\frac{12}{8},\frac{447}{846}$ 8,149 8,846 40.21	$   \begin{array}{r}     10,971 \\     6,311 \\     7,395 \\     24.90 \\   \end{array} $	$15,082 \\ 8,964 \\ 11,211 \\ 29.27 \\ 29.27$	$20,033 \\ 9,356 \\ 14,915 \\ 22.74$

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

	DAI	RY FARMS WITH	S, NORTHE	IRN ILLING	olis,	DAI	RY FARMS WITH S	SOUTHER	NG OF	S,
	76-100	56-75	76-100	56-75	56-100			5-55		
Range in size (total acres)Number of farms	Under 20	180 46	14	-259 46	260–339 20	Under 180 34	$180-259 \\ 40$	260–339 23	340-499 19	500+ 18
COSTS AND RETURNS PER TILLABLE ACRE Soil fertility. Buildings and fence. Machinery and equipment. Value of feed fed.	\$ 82 11.29 39.82 30.37 80.91	\$ 7.09 15.72 38.81 29.12 89.34	\$ 7.66 13.42 39.37 25.04 73.73	\$ 6.44 13.27 34.11 24.61 75.78	\$ 7.29 12.66 35.62 25.71 75.01	\$ 8.83 9.96 39.71 33.21 82.08	\$ 8.84 9.06 33.86 24.43 67.86	\$ 9.17 7.01 27.35 20.21 51.62	\$ 9.71 \$ 7.04 27.44 19.41 50.13	\$ 9.36 6.28 26.82 17.97 48.90
Livestock returns above feed cost Feed and grain returns	56.89 90.29	71.76 77.34	52.87 88.74	52.0 <del>4</del> 77.22	52.2285.86	60.94 75.85	56.99 77.70	38.09 64.85	36.41 72.63	$33.94 \\ 63.97$
Total value of farm production Total non-feed costs	$\frac{152.49}{151.26}$	$\frac{153.43}{146.20}$	$\frac{144.91}{145.91}$	$\frac{133.76}{130.69}$	$\frac{141.73}{133.07}$	$\frac{142.06}{128.27}$	$\frac{138.85}{110.20}$	$\frac{107.40}{92.54}$	$\frac{113.38}{93.44}$	$\frac{102.35}{89.20}$
SELECTED COST ITEMS Fertilizer, annual application Lime and rock phosphate depreciation Building repairs and maintenance. Building depreciation. Machinery and equipment depreciation. Machinery repairs and supplies. Machinery hire. Casoline and oil. Unpaid labor charge. Total months of labor.		<pre>\$ 891 17 595 17 595 17 764 1,035 710 3,310 3,310 3,310 3,310 14.9 14.9</pre>	\$ 1,391 843 843 1,748 3,552 1,748 1,541 1,541 1,541 1,589 1,129 1,109 4.0	$ \begin{array}{c} \$ 1,169\\ 1,625\\ 1,625\\ 1,625\\ 1,398\\ 1,398\\ 3,651\\ 3.651\\ 3.6\\ 3.6 \end{array} $	\$ 1,868 1,133 2,120 2,120 2,196 1,260 2,589 2,589 2,589 7.9	$\begin{array}{c} \$ 1,048\\ \$ 1,048\\ 1,748\\ 1,748\\ 1,748\\ 3,725\\ 3,725\\ 17.8\\ 17.8\\ 17.8\end{array}$	$\begin{array}{c} \$ 1,555\\ 98\\ 009\\ 1,086\\ 1,552\\ 1,552\\ 1,552\\ 3,601\\ 3,601\\ 19.5\\ 4.2\\ 4.2 \end{array}$	<pre>\$ 2,149     108     108     108     108     1,052     1,052     1,528     3,576     1,395     6.6</pre>	\$ 2,864 126 126 126 126 2,441 2,446 1,256 2,411 2,871 2,108 2,108 2,108	<pre>&amp; 4,460 219 219 219 2248 2,248 2,531 2,531 2,226 2,226 2,226 2,118 3,868 13.6 13.6</pre>
FARM INVESTMENT Livestock inventory Grain inventory	\$ 9,286 7,800	\$10,7435,899	\$13,657 10,458	\$12,828 8,159	\$18,088 11,054	\$ 8,973 3,414	\$10,688 5,288	\$11,014 5,601	\$15,664 8,038	\$23,988 11,571
Machinery	$\begin{array}{c} 6,358\\ 14,028\\ 47\\ 601\\ 73,986\\ 112,106\\ 778,51\end{array}$	$\begin{array}{c} 6,298\\ 17,244\\ 52\\ 706\\ \overline{95,145}\\ \overline{95,145}\\ 625.95\end{array}$	$\begin{array}{c} 10,906\\ 21,339\\ 349\\ 795\\ 104,593\\ 162,097\\ 764.61\end{array}$	$\begin{array}{c} 8,156\\21,654\\18\\653\\78,733\\\overline{130,201}\\605,59\end{array}$	$\begin{array}{c}12,608\\26,226\\781\\781\\116,533\\\overline{185,302}\\636,78\end{array}$	$\begin{array}{c} 7,392\\ 9,136\\ 151\\ 728\\ \overline{}\\ \overline{}\\ \overline{}\\ \overline{}\\ \overline{}\\ \overline{}\\ 22\\ 22\\ 22\\ 22\\ 22\\ 22\\ 22\\ 22\\ 22\\ $	$\begin{array}{c} 9,551\\ 12,488\\ 15,3\\ 634\\ 38,690\\ \overline{77},492\\ \overline{77},352.24\end{array}$	$\begin{array}{c} 9,913\\ 11,296\\ 253\\ 847\\ 847\\ 847\\ \overline{83,769}\\ \overline{83,769}\\ 282,05\end{array}$	$\begin{array}{c} 12,845\\ 14,430\\ 291\\ 409\\ 62,075\\ 113,752\\ 297,00 \end{array}$	23,228 26,385 365 365 853 853 100,504 186,894 284,90
PERCENT OF TILLABLE LAND IN Corn and corn silage Soybeans	22.0 9.0 1.0 8.8 27.2 27.2	$\begin{array}{c} 44.8 \\ 1.4 \\ 13.5 \\ 37.6 \end{array}$	47.5 4.8 9.2 30.0	45.4 4.3 13.5 1.7 31.7	43.6 7.4 11.3 6.1	38.1 7.0 4.0 36.7 36.7	39.4 15.1 13.3 27.2 27.8	32.1 19.3 13.2 1.0 29.7 29.7	35.6 21:1 12:3 1.1 24:0 24:2	41.1 19.4 15.5 1.7 2.8 19.3
CROP YIELDS, bushels per acre Corn	$103.9 \\ 35.2 \\ 41.6 \\ 74.8$	85.9 30.5 68.9	99.7 35.2 67.0	88.2 27.5 66.8	99.6 27.4 41.7 61.1	77.6 28.6 41.9 45.9	83.2 27.5 42.4 68.8	83.1 24.6 39.3 55.5	$\begin{array}{c} 91.3\\ 24.4\\ 39.3\\ 44.2\end{array}$	70.5 25.6 36.6 41.0

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

1 abic 10. 11 (1 abic 60.0) 1/(min	, mint = prim				- (			011 (G			COCT (STOTI
	BEEF C	ATTLE FA SOIL	RMS, NOR RATING 5	THERN II 6-100	TINOIS	BEEF C ILL	INOIS SOII	RMS, SOU	THERN 5–55	POULTRY NORTHEI SOIL RATI	FARMS, NN ILL. NG 56-100
Range in size (total acres) Number of farms	Under 180 15	180-259 45	260–339 52	340-499 53	500+ 52	180–259 12	260-339 12	340-499 12	$\frac{500+}{17}$	Under 180 11	$\frac{180-259}{7}$
Size of farm	158 146 76	222 201 31	301 268 76 41	409 359 75 43	664 565 75 6	220 191 28 181	290 240 32 157	419 320 31 144	720 493 36	140 129 81 4 514	236 217 84 5 842
Dairy cows, number	 600 280	$\begin{array}{c} & 1\\ 934\\ 568\end{array}$	974 628	1,237. 3 776	1,993 91,108	451 376	702 570	705 413	1,055 699	59.4 192	24 24 418
DOLLAR COSTS PER FARM Soil fertility Buildings and fence Machinery and equipment	$\begin{array}{c} \$ 1,573\\ 2,300\\ 5,408\\ 3,403\end{array}$	\$ 2,472 2,928 6,664 4,034	\$ 3,448 3,066 8,683 4,741	$\begin{array}{c} \$ & 4,665\\ 3,978\\ 10,068\\ 5,954\end{array}$	$\begin{array}{c} \$ & 7,730\\ 5,564\\ 14,627\\ 9,548 \end{array}$	$\begin{array}{c} \$ 2,061 \\ 1,454 \\ 5,167 \\ 3,846 \end{array}$	$\begin{array}{c} \$ & 2,688 \\ 1,611 \\ 6,771 \\ 4,481 \end{array}$	$\begin{array}{c} \$ & 3,981 \\ 1,731 \\ 7,840 \\ 4,067 \end{array}$	$\begin{array}{c} \$ 5,433\\ 2,935\\ 11,841\\ 7,256 \end{array}$	$\begin{array}{c} \$ 1,159\\ 2,326\\ 5,602\\ 5,455\end{array}$	$\begin{array}{c} \$ & 3,089\\ 2,163\\ 8,625\\ 6,862\end{array}$
Taxes	1,396 504 523 523	1,830 781 735 735 735 735 735	2,266 870 909 218 0,218	2,800 1,195 1,289 1,256 207	$\begin{array}{c} 4,398\\1,639\\1,634\\1,864\\10,002\\\end{array}$	964 521 244 446 246	1,226 504 809 1,226 594 809	1,411 762 926 800 5137	2,121 1,061 865 1,336	1,219 386 247 907	1,936 802 794 7,572
Interest charge on capital Total non-feed costs Total value of feed fed	$\frac{5,300}{21,024}$ 14,126	28, 239 24, 061	$\frac{9,310}{34,152}$ 26,410	$\frac{12}{43}, \frac{500}{512}$	$\frac{19,022}{66,026}$ 49,171	$\frac{3,009}{18,312}$	$\frac{4}{23}, \frac{314}{314}$	$\frac{3,137}{26,655}$	$\frac{9,004}{41,912}$ 28,952	$\frac{3,210}{22,511}$ 18,613	<u>32,860</u> 24,635
DOLLAR RETURNS PER FARM Livestock returns above feed cost Feed and grain returns	\$ 9,336 13,051 632	\$15,232 19,871 750	\$15,647     26,352     1,113	20,305 34,394 1,306	$\begin{array}{c} \$29,241\\ 53,608\\ 1,804\end{array}$	$\begin{array}{c} \$ \ 6,280 \\ 14,256 \\ 670 \end{array}$	13,865 18,293 770	$\begin{array}{c} \$11, 648\\ 24, 551\\ 1, 275\end{array}$	\$15,087 34,588 1,224	\$12,473 12,001 731	$\begin{array}{c} \$15, \$37\\ 21, \$15\\ \$33\end{array}$
Total value of farm production Management returns	23,0191,995	35,8537,614	$^{43}_{8,960}$	56,005 12,493	84,653 $18,627$	21,206 2,894	32,9289,614	37,474 $10,819$	50,899 8,987	25,205 $2,694$	38,485 5,625
Farm production per \$1.00 of non-feed costs	20,311	27,230	$28,270^{1.26}$	30,272	30,876	1.16 16,004	21,359	26,609	20 <b>,</b> 566	14,402	17,970
FINANCIAL SUMMARY Cash sales of products and services Sales of capital items	$\frac{40,102}{6}$	865,003 614 $\overline{65,617}$	$\frac{570,914}{237}$ 71,151	\$94,379 107 94,486	8140,989 1,770 142,759	\$38,389 68 38,457	\$60,183 13 $\overline{60,196}$	\$50,243 53 50,296	\$81,709 128 81,837		358,367 966 59,333
Purchased livestock.	16,3955,6318,0066,24126,272	$\begin{array}{c} 26,937\\ 9,172\\ 12,345\\ 7,320\\ \overline{}\\ 7,320\\ \overline{}\\ \phantom{$	$\begin{array}{c} 24,087\\ 10,136\\ 15,550\\ 9,921\\ \overline{50,604} \end{array}$	$\begin{array}{c} 34,582\\11,984\\20,410\\10,679\\77,655\end{array}$	51,907 18,726 33,111 13,354 117,008	14,0256,4948,1165,48924,124	$\begin{array}{c} 20,210\\11,105\\7,187\\7,187\\70,570\end{array}$	$\begin{array}{c} 17,152\\7,209\\13,638\\7,348\\75&247\end{array}$	25,642 10,549 22,441 10,393	$\begin{array}{c} 6,412\\ 12,931\\ 9,405\\ 3,049\\ 21,707\\ \end{array}$	$\begin{array}{c} 5,456\\ 16,827\\ 16,355\\ 8,905\\ \end{array}$
Cash balance Inventory change Capital change	\$ 3,835 <b>4,</b> 673 1,844 270	\$ 9,843 6,669 1,993 290	3, 11, 457 6, 158 3, 847 263	\$16,831 7,862 3,429 330	\$25,661 \$25,661 13,905 1,770 392	$\begin{array}{c} x, z, z,$	\$10,526 \$10,526 3,728 3,024	\$ 4,949 \$ 4,949 2,666 304	$\begin{array}{c} 5,025\\ 5,084\\ 3,563\\ 297\end{array}$	$\begin{array}{c} 1, 1, 1, 2, 2, 576 \\ 2, 576 \\ -1, 208 \\ 147 \end{array}$	$\begin{array}{c} 1, 1, 2 \\ 1, 1, 790 \\ 2, 228 \\ 3, 167 \\ 173 \end{array}$
Farm and family earnings Labor and management earnings	$\frac{10,622}{7,355}$	18,795 10,603 15,409	$\frac{21,725}{11,951}$ 18,278	$\frac{28}{15},\frac{452}{484}$ 24,800	$\frac{41,728}{21,627}$ 37,649	9,813 5,636 6,503	$\frac{17,610}{12,394}$	$\frac{19}{13}, \frac{207}{640}$ 15,956	$\frac{21,756}{11,807}$ 18,051	$\frac{11,563}{5,694}$	$\frac{17,358}{8,536}$
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

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

	BEEF (	CATTLE F/	ARMS, NOR RATING 5	THERN IL 6-100	TINOIS	BEEF (	CATTLE F/	ARMS, SOU' , RATING	THERN 5-55	POULTRY NORTHE SOIL RATI	FARMS, NN ILL. VG 56-100
Range in size (total acres)	Under 180 15	180–259 45	260–339 52	340-499 53	500 + 52	$180-259 \\ 12$	260–339 12	340-499 12	500+17	Under 180 11	$\frac{180-259}{7}$
COSTS AND RETURNS PER TILLABLE ACRE											
Soil fertility.	\$ 10.77 15.75	\$ 12.30 14.57	\$ 12.87 11.44	<b>\$</b> 12.99 11.08	\$ 13.68 9.85	\$ 10.79 7.61	\$ 11.20 6.71	\$ 12.44 5.41	\$ 11.02 5.95	\$ 8.98 18.03	
Machinery and equipment.	37.04	33.15	32.40	28.04	25.89	27.05	28.21	24.50	24.02	43.43	39.75
Value of feed fed	96.75	119.71	98.54	92.19	87.03	74.05	85.00	56.59	58.73	44.29 144.29	113.53
Livestock returns above feed cost Feed and grain returns	63.95 89.39	75.78 98.86	$58.38 \\ 98.33$	56.56 95.80	$\begin{array}{c} 51.75\\ 94.88 \end{array}$	32.88 74.64	57.77 76.22	36.40 76.72	30.60 70.16	96.69 93.03	72.98 100.53
Total value of farm production	157.66 144.00	178.37 140.49	160.87 127.43	$156.00 \\ 121.20$	149.83 116.86	$111.03 \\ 95.87$	$137.20\\97.14$	$117.11 \\ 83.30$	103.24 85.01	195.39 174.50	177.35 151.43
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 Building repairs and maintenance	75 663	61 902	$68 \\ 938$	1,234	$127 \\ 1,689$	$164 \\ 430$	129 547	257 628	341 1,139	47 567	44 681
Building depreciationBuilding depreciation	1,637	2,026	2,128	2,744	3,875	1,024	1,064	1,103	1,796	1,759	1,482
Machinery repairs and supplies	1,010	1,583	2,096	2,505	4,188	1, 160	1,579	1,848	3,426	$^{2,109}_{890}$	$^{2,009}_{1,682}$
Machinery hire.	512 720	$672 \\ 1,150$	859 1,453	817 1,713	$1,135 \\ 2,458$	565 975	$^{498}_{1.152}$	$750 \\ 1.424$	$\frac{986}{2.035}$	644 855	1,248 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
Total months of labor	13.6	15.8	18.3	22.2	32.9 16.6	15.9	18.5	16.9 3.1	29.7 14.0	21.0	25.7
FARM INVESTMENT											
Livestock inventory	\$16,709 $9,602$	\$27,547 14,305	\$28,81416,141	$$38,170\\21,213$	\$54,737 31,656	\$18,446 6,330	\$20,813 9,356	\$20,133 8,455	\$38,881 14,108	$$9,104\\9,264$	\$ 8,847 11,628
Kemanning capital cost in: Machinery	7 431	8 011	10 107	13 131	18 064	8 734	0 70U	11 287	15 631	0110	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
Solt fertility	217	109 898	179	403 735	285 995	395 489	$382 \\ 762$	472 493	666 706	125 517	141 772
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
Lotal farm investment Total farm investment per acre	121,667 770.04	176, 133 793, 39	213,015 707.69	281,706 688.77	435,735 656.23	79,254 360.25	100,980 348.21	115,348 275.29	204,915 284.60	118,244 844.60	175,622 744.16
PERCENT OF TILLABLE LAND IN	V 63				1 (1	1					
Corn and corn suage.	1.0	3.9	02.9 9.1	00.0	10.7	42.7	47.8 16.4	45.0 20.0	$\frac{38.0}{17.6}$	24.0	05.4 13.5
Wheat Other small orains	 14 A	. 3	с. 3 С	L. L	3.0	15.1	11.9	16.4	13.5	7.7	4.1
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	10.2 0	10.2 0	1007	0.001	1 007	ı č	00	0			c 10
Soybeans	35.4	36.3	100.7 38.8	34.8 34.8	36.2	91.7 24.9	88.0 24.9	27.5	26.0	37.0	31.9
Wheat	58.9	40.4 78.3	40.9	39.2 72.1	36.4 68.6	40.7	45.1	43.4	41.0	54.5 70.5	27.3 71.2
					> • > >	• • • • • • • • • • • • • • • • • • • •	•	•	•••	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

Table 16a. — Average Operating Costs, Investments, and Land Use of Beef Cattle and Poultry Farms by Size and Soil Rating, Northern and Southern Illinois, 1965

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.





#### ASSOCIATIONS, FIELDMEN, AND COOPERATORS ENROLLED

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

Urbano, Illinois

August, 1966

Cooperative Extension Work in Agriculture and Home Economics: University of Illinois, College of Agriculture, and the United States Department of Agriculture cooperating. JOHN B. CLAAR, Director. Acts approved by Congress May 8 and June 30, 1914.







