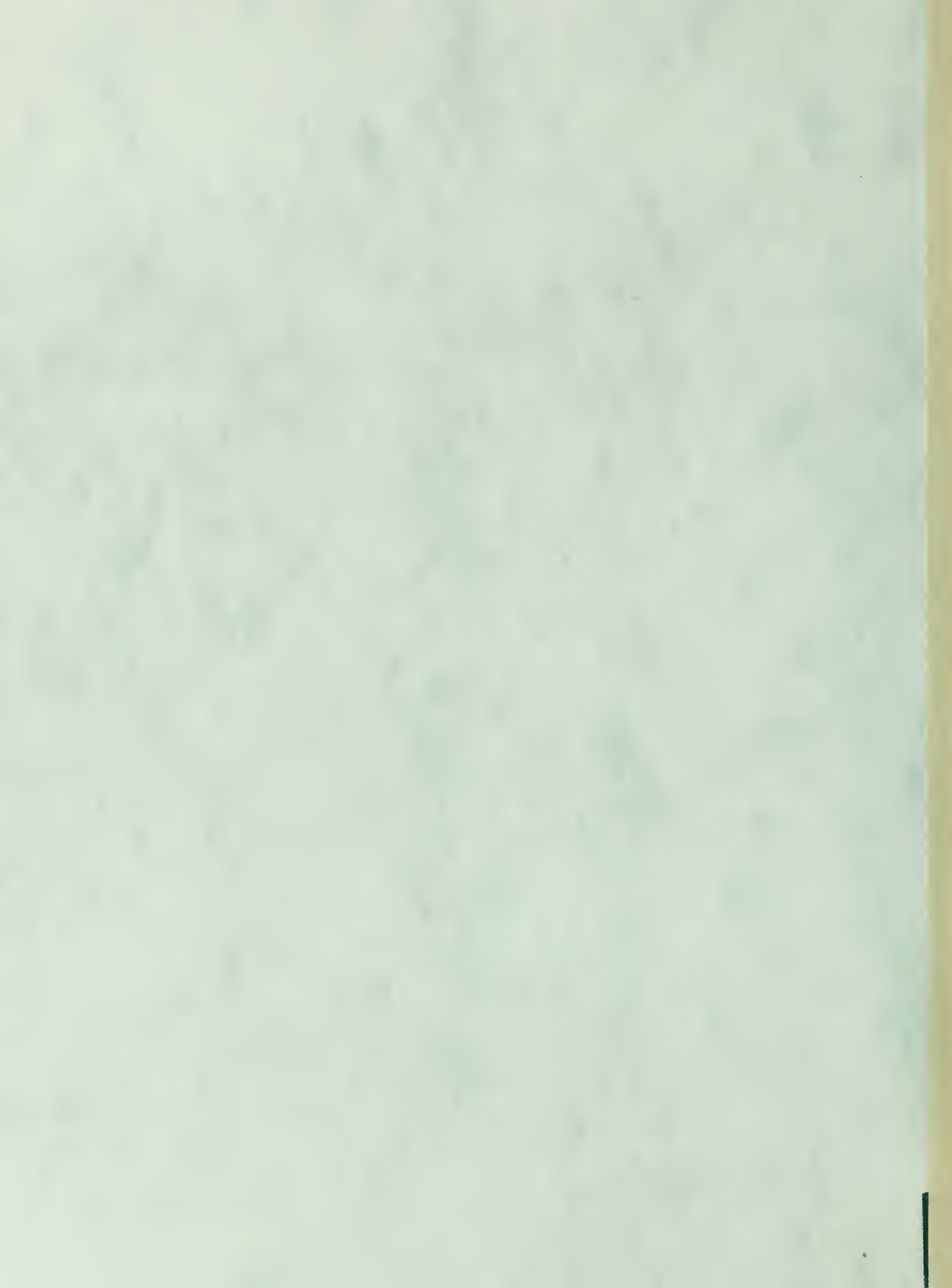


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SUMMARY OF ILLINOIS FARM BUSINESS RECORDS



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:

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

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SUMMARY OF ILLINOIS FARM BUSINESS RECORDS, 1965

Farm business trends in 1965

The basic source of income on Illinois farms is crop production. Year-to-year variations in net farm income are related to variable climatic conditions and their effect on crop yields. In 1965 average corn yields for the state as reported by the Illinois Crop Reporting Service were 92 bushels an acre, up 14 bushels from the 1964 yields and 7 bushels above the previous high of 85 bushels an acre in 1963.

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

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

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

Farming adjustments. According to the 1964 Census of Agriculture, the number of farms in Illinois was estimated at 132,821 farms. The average number of acres per farm was 226, compared with 196 acres per farm in 1959. In addition to the increase in size of farm, other adjustments are taking place on Illinois farms. Studies of farm records reveal that farmers are using more intensive land-use patterns, increasing the size of livestock enterprises on specialized farms, and eliminating small livestock enterprises on general farms. Even though the size of farm and the sizes of livestock enterprises have increased, the average months of labor per farm has changed very little in the past ten years. The combined effect of increased size of business and the adoption of output-increasing technology has greatly increased total farm production per man.

Income changes on Illinois farms

Comparative costs and returns between years and among major types of farming in northern and south-

ern Illinois are reported in Tables 1 to 3. The separation of farms into northern and southern Illinois is based on soil-type regions, and divides the state approximately on an east-west line from Mattoon to Jacksonville. The sample of farms ranged between 180 and 259 acres in size, and averaged about 220 acres. Labor used on farms of this size averaged 14 months on grain farms, 16 months on hog and beef farms, and 20 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.

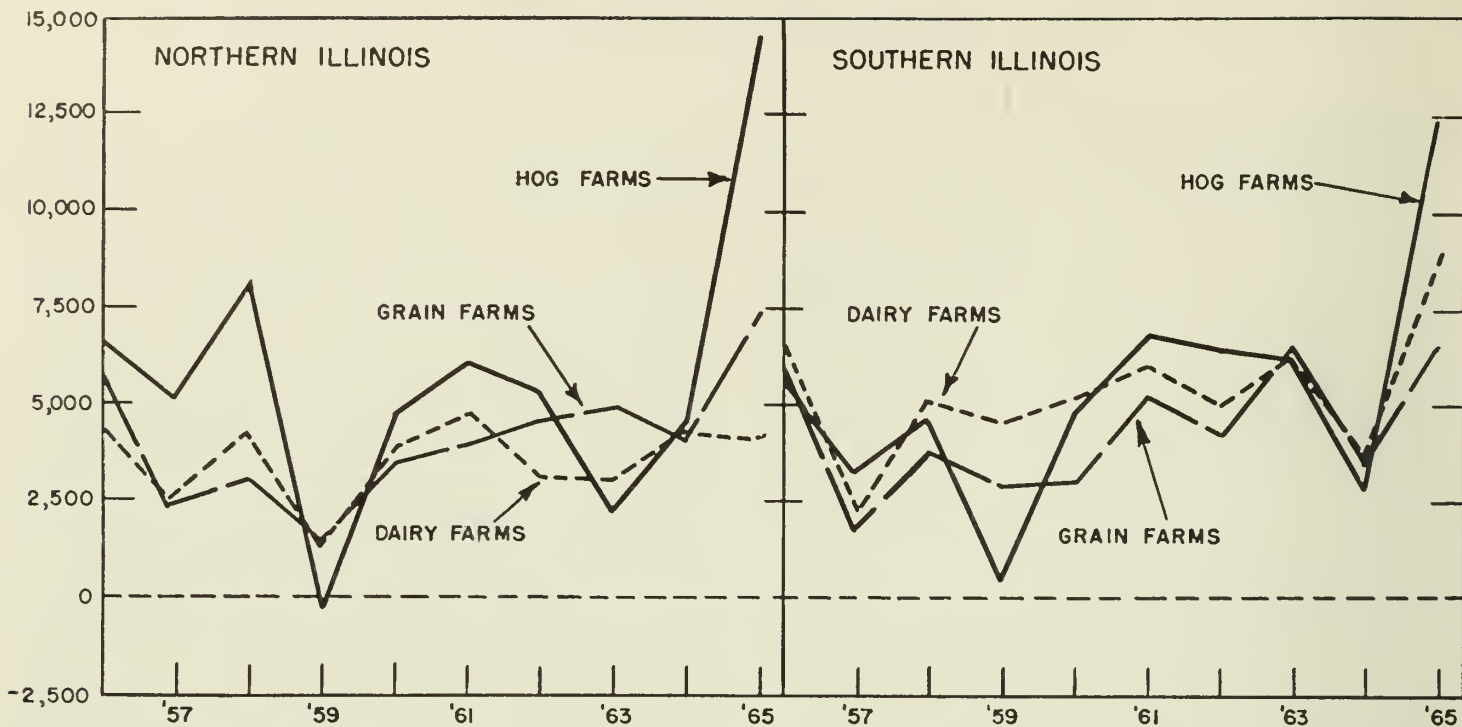
Size of farm, type of farm, quality of soil, and managerial inputs were held reasonably constant over time by the sampling procedure used in selecting farms within each type of farm. Variations between 1964, 1965, and the 10-year average are due to changes in farm prices and costs, weather, and internal 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

DOLLARS PER FARM



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

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

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

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

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

Items	1965	1964	1956-65 average
Number of farms.....	45	45	62
Total acres.....	222	223	221
Soil-productivity rating.....	77	78	76
Total cash sales.....	\$65,003	\$55,959	\$48,950
Less purchased feed and livestock.....	36,109	28,793	28,042
Net cash sales.....	\$28,894	\$27,166	\$20,908
Inventory change.....	6,669	-1,394	1,526
Farm products consumed.....	290	241	253
Value of farm production.....	35,853	26,013	22,687
Cash operating expenses.....	12,345	10,979	8,957
Annual depreciation.....	4,713	4,188	3,879
Farm and family earnings.....	18,795	10,846	9,851
Unpaid labor charge.....	3,386	2,815	2,826
Returns to capital and management.....	15,409	8,031	7,025
Interest charge on capital.....	7,795	7,478	6,433
Management returns.....	7,614	553	592
Total cash income ^a	\$65,617	\$56,015	\$49,305
Total cash expenditures ^a	55,774	43,166	41,270
Cash balance.....	9,843	12,849	8,035
FARM INVESTMENT			
Livestock inventory.....	27,547	26,949	23,393
Grain inventory.....	14,305	12,306	11,214
Remaining capital cost in:			
Machinery.....	8,011	8,072	7,310
Buildings and fence.....	24,083	22,555	18,163
Soil fertility.....	169	151	331
Auto.....	898	851	797
Value of land (current basis)...	101,120	98,336	84,302
Total farm investment.....	176,133	169,220	145,510

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

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

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

Items	Grain farms			Hog farms			Dairy farms		
	1965	1964	1956–65 average	1965	1964	1956–65 average	1965	1964	1956–65 average
Number of farms.....	45	32	40	41	51	42	40	55	44
Total acres.....	223	222	222	218	219	221	220	220	217
Soil-productivity rating.....	33	35	37	35	35	36	32	31	31
Total cash sales.....	\$18,946	\$18,834	\$16,452	\$33,059	\$29,993	\$25,239	\$27,626	\$26,855	\$22,350
Less purchased feed and livestock....	2,434	2,548	2,632	10,931	11,226	9,285	5,552	5,900	4,798
Net cash sales.....	\$16,512	\$16,286	\$13,820	\$22,128	\$18,767	\$15,954	\$22,074	\$20,955	\$17,552
Inventory change.....	2,165	-922	778	5,653	-2,121	1,309	3,536	-837	1,186
Farm products consumed.....	136	160	158	202	150	244	355	330	351
Value of farm production.....	18,813	15,524	14,756	27,983	16,796	17,507	25,965	20,448	19,089
Cash operating expenses.....	7,031	6,862	5,697	9,392	8,131	6,881	9,767	9,888	7,686
Annual depreciation.....	2,519	2,274	2,247	3,229	2,595	2,512	3,751	3,618	3,221
Farm and family earnings.....	9,263	6,388	6,812	15,362	6,070	8,114	12,447	6,942	8,182
Unpaid labor charge.....	3,003	2,829	2,621	3,296	3,035	2,883	3,601	3,241	3,182
Returns to capital and management....	6,260	3,559	4,191	12,066	3,035	5,231	8,846	3,701	5,000
Interest charge on capital.....	2,761	2,851	2,461	3,005	3,148	2,664	3,488	3,378	2,797
Management returns.....	3,499	708	1,730	9,061	-113	2,567	5,358	323	2,203
Total cash income ^a	\$18,968	\$18,840	\$16,571	\$33,085	\$30,215	\$25,336	\$27,901	\$26,861	\$22,458
Total cash expenditures ^a	12,512	11,699	10,818	25,311	21,997	19,381	20,984	19,848	16,858
Cash balance.....	6,456	7,141	5,753	7,774	8,218	5,955	6,917	7,013	5,600
FARM INVESTMENT									
Livestock inventory.....	3,112	4,039	3,062	8,751	9,131	7,781	10,688	10,590	8,344
Grain inventory.....	6,338	7,711	5,141	5,460	7,269	5,319	5,288	6,520	4,602
Remaining capital cost in:									
Machinery.....	6,420	6,165	5,476	5,817	5,987	5,105	9,551	9,272	8,057
Buildings and fence.....	5,575	5,895	4,831	7,773	9,054	6,837	12,488	12,399	9,678
Soil fertility.....	113	108	338	131	257	429	153	197	351
Auto.....	468	519	561	639	577	585	634	636	581
Value of land (current basis).....	41,495	40,738	37,263	39,406	38,359	34,040	38,690	34,929	30,403
Total farm investment.....	63,521	65,175	56,672	67,977	70,634	60,096	77,492	74,543	62,016

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

^a Eleven-year average.

The hog enterprise is the best illustration. Since 1953 the pattern of hog returns has been to exceed the 15-year average for two to three years, and then to fall below for one to two years. This pattern is referred to as the hog cycle and is related to the supply and demand for pork. Present strong demand and short supply of hogs continuing through most of 1966 should give above-average returns in 1966.

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

Feeder cattle returns vary greatly from year to year. Long-run average returns shown here indicate the cattle feeding business is very competitive. Above-average 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. Feeder-pig enterprise information is included in Table 6.

Table 5. — Hog Enterprises, 1965

Items	All farms	High-return farms	Low-return farms
Number of farms.....	734	76	88
Average per farm			
Pounds of pork produced...	120,465	152,354	97,670
Total returns.....	\$27,727	\$36,559	\$21,300
Value of feed fed.....	\$13,222	\$14,723	\$12,396
Returns per \$100 feed fed..	\$ 210	\$ 248	\$ 172
Returns above feed per litter.....	\$ 204	\$ 245	\$ 151
Number of litters farrowed	71	89	59
Pigs farrowed per litter....	9.2	9.5	8.8
Pigs weaned per litter.....	7.4	7.7	7.0
Number of pigs weaned....	525	686	410
Number that died after weaning.....	17	21	15
Death loss, percent of pounds produced.....	1.2	1.1	1.4
Weight per hog sold.....	235	233	240
Price received per 100 pounds.....	\$ 20.68	\$ 21.62	\$ 20.24
Feed cost per 100 pounds produced.....	\$ 10.98	\$ 9.66	\$ 12.69
Feed per 100 pounds produced			
Farm grains, lb.....	337	305	383
Commercial feeds, lb....	70	61	84
Total concentrates, lb.	407	366	467
Pasture (pasture days)...	.9	.8	1.1
Cost per 100 pounds of commercial feeds.....	\$ 5.62	\$ 5.36	\$ 5.54
Cost per 100 pounds of concentrates.....	\$ 2.67	\$ 2.61	\$ 2.68

Returns per \$100 feed fed to hogs were \$210 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 low-return 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 non-feed cost, it would have received 60 cents less than its total cost of production.

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

Feeder-cattle and feeder-pig enterprises

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

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

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

Items	Feeder cattle	Feeder pigs
Number of farms.....	419	74
Average per farm		
Total pounds produced.....	78,424	79,488
Total returns.....	\$21,943	\$15,617
Value of feed fed.....	\$14,501	\$ 8,875
Returns per \$100 feed fed.....	\$ 151	\$ 176
Death loss, percent of pounds produced	2.1	1.8
Average weight purchased.....	554	58
Price paid per 100 pounds.....	\$ 24.16	\$ 31.96
Price received per 100 pounds.....	\$ 24.73	\$ 20.96
Feed cost per 100 pounds produced....	\$ 18.49	\$ 11.16
Feed per 100 pounds produced		
Grain, lb.....	549	355
Protein and mineral feeds, lb.....	59	74
Total concentrates, lb.....	608	429
Hay, lb.....	122	...
Silage, lb.....	605	...
Pasture (pasture days).....	3	...

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 six-year average returns per \$100 feed fed of \$122 are still below the return needed to pay all nonfeed costs.

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

Pounds of grain and pounds of hay used per 100 pounds of beef produced has dropped steadily since 1960, from 644 to 549 pounds, and from 182 to 122 pounds respectively, while pounds of silage used has increased steadily from 458 to 605 pounds per 100 pounds of beef produced. Feed costs per 100 pounds

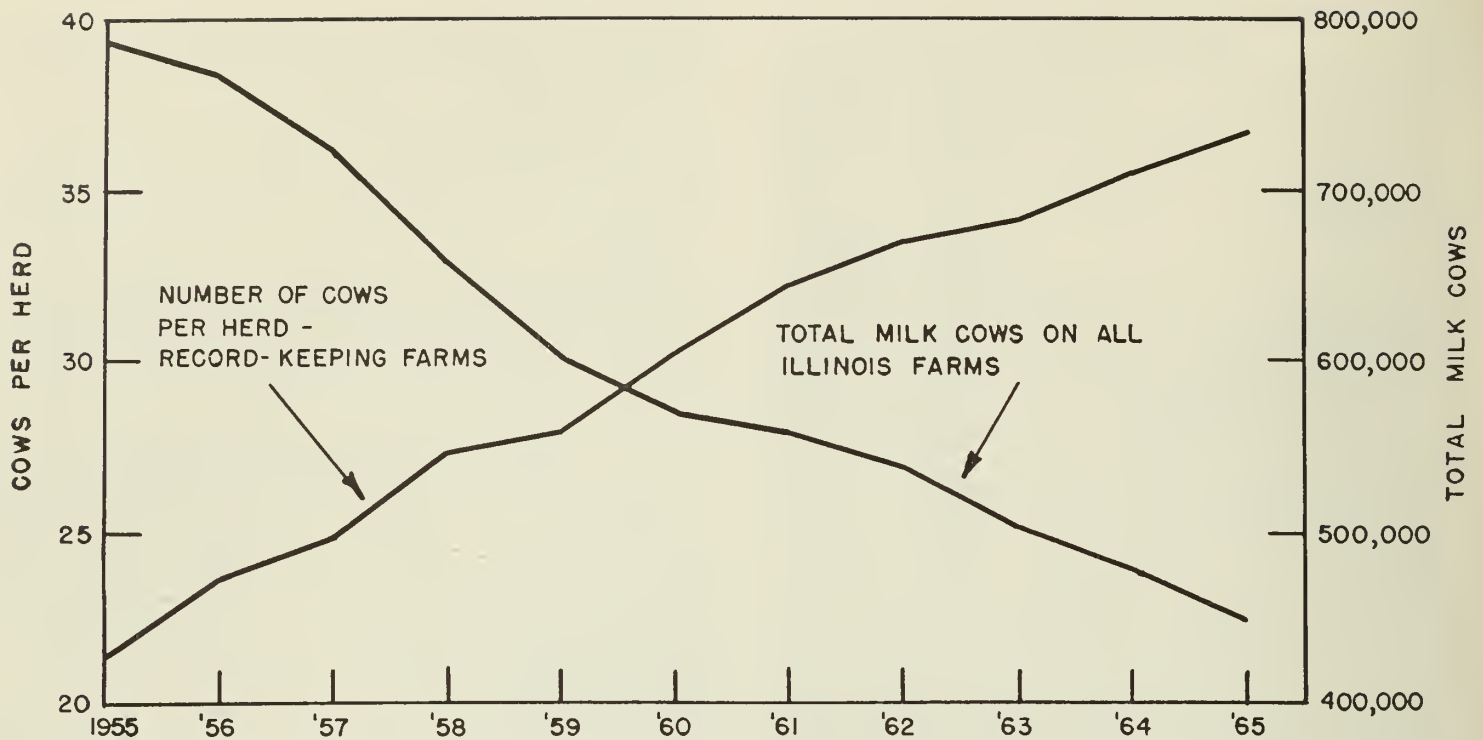
produced, however, remains about the same. Variations from the past six-year average have not exceeded 65 cents. The shift to the use of more corn silage in the ration reflects attempts by feeders to increase production from existing land by intensifying the crop system and to reduce labor by mechanizing the feeding operation.

These data do not show the wide variation in profits that exists among cattle feeding programs and individual feeders. Since 1960 prices paid for feeders have varied as much as \$3.18 per 100 pounds from the past

Table 7. — Dairy Cattle Enterprises, 1965

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

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



Number of cows per herd on record-keeping farms and total milk cows on all Illinois farms, 1955-1965. (Fig. 2)

six-year average while prices received have varied by as much as \$1.97 per 100 pounds sold from the past six-year average. More farmers are now feeding more than one drove of cattle each year to provide a better utilization of fixed investments in mechanized feedlots. The increase in investments and complexity of the cattle feeding operation makes good records more important than ever to evaluate returns to resources used in cattle feeding.

Dairy enterprises

The minimum size of herd included in this analysis was 10 milk cows. The average size of dairy herd was 36.6 cows in 1965, compared with 23.5 cows per farm on record-keeping farms in 1956. (Figure 2).

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

Returns per \$100 feed fed to dairy enterprises in 1965 were the same as in 1964. Slightly higher milk

and beef prices offset the 95 cents higher feed costs per 1,000 pounds of milk or 100 pounds of beef produced (Table 7).

Dairy farmers have reduced the amount of pasture and increased the amounts of grain and silage fed. Pasture days per unit (1,000 pounds of milk or 100 pounds of beef) remained at 15 days prior to 1959, but since 1960 have declined steadily to 8 days in 1965.

The dairy herds in Table 7 were divided into three groups: herds with no pasture days per animal unit, those with 1 to 119 days, and those with 120 days or more. Each year a few more herds have been adopting the practice of feeding cows in drylot. Dairy herds averaged 42.5 cows on farms with no direct grazing compared with 30.5 cows on farms using a full pasture season.

The main difference among these three groups of dairy herds is the amount of land required per cow to produce roughage. When pasture and hay yields are figured at 150 pasture days and 3 tons per acre respectively, the farms with drylot feeding required only 1.8 acres per cow to produce grass-legume forages, while the farms with over 120 pasture days per animal unit used 2.8 acres. Additional roughage was obtained through corn silage on the no-grazing farms. Milk production per cow was highest on the farms with drylot feeding. Part of the additional cost of harvesting

Table 8. — Beef Cow Enterprises, 1965

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

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

roughage to be fed in drylot is included in the cost of feed. Farmers using the drylot system must relate the

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

Beef-cow herds

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

Returns per \$100 feed fed to beef-cow herds in 1965 averaged \$127. Increased beef prices during 1965 and higher feeder calf prices during the last half of the year started cow-herd returns upward from the low level of 1964.

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

Table 9. — Poultry Enterprises, 1965

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

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

to apply against the added costs for labor, buildings, and capital required to feed them out.

Poultry enterprises

The minimum size of flock included in Table 9 is 100 hens. The average size of flock, omitting farms with less than 100 hens, has increased from 304 hens in 1956 to 728 in 1965. In the same period, pounds of concentrates per dozen eggs or 1½ 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 record-keeping farms. The minimum size of enterprise in

Table 10 was set at 3 animal units. One animal unit of sheep is defined as 750 pounds of liveweight. The sheep enterprises were divided into native ewe flocks and feeder-lamb operations. Returns per \$100 feed fed in 1965 were \$143 for native flocks and \$99 for feeder sheep. Pounds of wool and mutton produced per farm have remained fairly constant for the past ten years. The majority of Illinois farmers who keep sheep do so as a supplemental enterprise to market nonsalable feeds and labor.

Table 10. — Sheep Enterprises, 1965

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

DEFINITION OF TERMS AND ACCOUNTING MEASURES

Soil-productivity rating

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

Type of farm

Sampling technique. The records in each size group for northern Illinois were sampled to provide a proportional representation of all farms of that size range according to the 1959 census.

Grain farms. Farms where the value of feed fed

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

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

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

Cost items

Value of feed fed. Includes grains priced at the farm average as follows: corn—\$1.15 per bushel; oats—66 cents per bushel; barley—89 cents per bushel; soybeans—\$2.67 per bushel; rye—\$1.07 per bushel; wheat—\$1.40 per bushel. Commercial feeds were priced at actual cost, hay and silage at farm values, and pasture at 13 cents per animal unit pasture day. A pasture day represents an intake of approximately 20 to 25 pounds of dry matter. It has been defined as 16 pounds of total digestible nutrients (TDN) from pasture.

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

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

hire, gas and oil, electricity and telephone, and farm share of auto.

Labor. Includes actual hired labor costs plus family and operator's labor charged in 1965 at \$250 and \$235 a month respectively for northern and southern Illinois.

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

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

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

Return items

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

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

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

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

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

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

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

	1965		1964	
	Northern Illinois	Southern Illinois	Northern Illinois	Southern Illinois
Grain prices				
Corn, sold.....	\$1.13	\$1.15	\$1.12	\$1.15
Soybeans, sold.....	2.59	2.46	2.58	2.51
Oats, sold.....	.68	....	.64	.68
Wheat, sold.....	1.40	1.32	1.43	1.39
Corn, purchased.....	1.19	1.18	1.14	1.13
Oats, purchased.....	.69	....	.65	.80
Livestock prices				
Hogs, all weights.....	\$20.68		\$14.81	
Fat cattle, all weights....	24.73		21.92	
Feeder cattle, all weights, prices paid.....	24.16		21.26	
Dairy cattle, all weights..	15.51		14.60	
Sheep, all weights.....	25.11		21.80	
Poultry.....	.07		.07	
Milk.....	3.77		3.70	
Eggs.....	.31		.31	

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

	GRAIN FARMS WITH SOIL RATING 76-100					GRAIN FARMS WITH SOIL RATING 56-75					
	Under 180	180-259	260-339	340-499	500-649	650+	Under 180	180-259	260-339	340-499	500+
	28	93	123	163	98	70	14	37	43	70	59
Range in size (total acres).....	155	229	305	420	567	807	133	227	305	411	696
Number of farms.....	146	217	288	388	523	741	124	209	279	359	590
Size of farm.....	86	85	85	84	85	84	73	68	69	68	68
Acres of tillable land.....	30	61	40	24	3	4	49	17	44	8	57
Soil rating on tillable land.....	3	.5	.3	.3	.3	.5	...	.6	.7	1.1	1.5
Hens, number.....	15	53	74	99	188	254	63	81	110	162	206
Dairy cows, number.....	175	245	252	230	429	579	106	228	153	355	524
Beef produced, hundredweight.....											
Pork produced, hundredweight.....											
DOLLAR COSTS PER FARM											
Soil fertility.....	\$ 1,476	\$ 2,236	\$ 3,113	\$ 4,862	\$ 6,564	\$ 9,928	\$ 1,294	\$ 2,215	\$ 2,846	\$ 3,807	\$ 6,915
Buildings and fence.....	1,280	1,337	1,739	1,899	2,677	3,790	1,048	1,148	1,620	1,970	2,931
Machinery and equipment.....	4,075	4,966	6,420	8,009	11,613	15,066	3,649	5,059	5,809	7,771	12,477
Labor.....	3,364	3,406	3,677	4,688	6,173	8,306	3,108	3,402	3,547	4,164	7,165
Taxes.....	1,290	1,666	2,245	2,946	3,673	5,236	1,096	1,521	2,031	2,518	3,742
Seed expense.....	388	596	750	951	1,346	2,037	327	518	649	965	1,578
Crop expense.....	419	643	939	1,192	1,437	2,660	367	597	770	1,016	1,784
Livestock and miscellaneous expense.....	298	493	444	477	840	897	420	377	400	615	849
Interest charge on capital.....	4,566	6,456	8,665	11,217	15,225	21,466	3,389	5,000	6,810	8,799	14,304
Total non-feed costs.....	17,156	21,799	27,992	36,241	49,548	69,386	14,698	19,837	24,482	31,625	51,745
Total value of feed fed.....	2,190	4,135	4,425	4,711	8,263	10,943	2,488	4,064	3,878	7,374	10,679
DOLLAR RETURNS PER FARM											
Livestock returns above feed cost.....	\$ 2,392	\$ 3,351	\$ 3,558	\$ 3,095	\$ 6,302	\$ 8,886	\$ 2,033	\$ 3,694	\$ 2,311	\$ 5,702	\$ 8,114
Feed and grain returns.....	14,875	21,977	29,326	39,616	53,655	78,483	11,338	19,339	25,678	32,662	57,947
Other cash income.....	919	720	1,087	1,320	1,634	2,364	459	822	1,190	1,246	2,088
Total value of farm production.....	18,186	26,048	33,971	44,031	61,591	89,733	13,830	23,855	29,179	39,610	68,149
Management returns.....	1,030	4,249	5,979	7,790	12,043	20,347	-868	4,018	4,697	7,985	16,404
Farm production per \$1.00 of non-feed costs.....	1.06	1.19	1.21	1.21	1.24	1.29	13.384	21.362	25.010	29.161	30.629
Farm production per man.....	16,409	23,154	27,922	29,032	31,451	34,961	13,384	21,362	25,010	29,161	30,629
FINANCIAL SUMMARY											
Cash sales of products and services.....	\$18,308	\$26,243	\$36,273	\$44,328	\$60,119	\$88,995	\$15,420	\$24,072	\$28,668	\$43,365	\$69,336
Sales of capital items.....	55	176	252	241	499	422	...	104	103	217	402
Total cash income.....	18,363	26,419	36,525	44,569	60,618	89,417	15,420	24,176	28,771	43,582	69,738
Purchased livestock.....	804	1,653	2,618	1,522	4,082	7,833	1,573	1,953	2,272	3,811	6,253
Purchased feed.....	1,031	2,184	2,030	2,052	3,770	3,730	1,289	1,663	1,215	3,684	4,231
Cash operating expenses.....	6,827	9,340	12,259	17,081	23,362	34,025	6,402	8,836	10,872	14,720	25,734
Purchase of capital items.....	3,524	4,420	5,067	6,277	11,504	13,286	1,374	4,883	3,780	6,251	10,578
Total cash expenditures.....	12,186	17,597	21,974	26,932	42,718	58,874	10,638	17,335	18,139	28,466	46,796
Cash balance.....	\$ 6,177	\$ 8,822	\$14,551	\$17,637	\$17,900	\$30,543	\$ 4,782	\$ 6,841	\$10,632	\$15,116	\$22,942
Inventory change.....	1,680	3,527	2,239	3,167	9,170	12,111	1,213	3,252	3,863	3,583	9,157
Capital change.....	818	1,374	842	1,247	3,729	3,210	-604	1,886	56	1,257	2,365
Farm products consumed.....	33	115	107	110	154	190	59	147	135	157	140
Farm and family earnings.....	8,708	13,838	17,739	22,161	30,953	46,054	5,450	12,126	14,686	20,113	34,604
Labor and management earnings.....	3,941	7,229	8,956	10,785	15,043	23,329	1,989	6,957	7,601	10,921	19,370
Capital and management earnings.....	5,596	10,705	14,644	19,007	27,268	41,813	2,521	9,018	11,507	16,784	30,708
Capital and management earnings per acre.....	36.10	46.75	48.01	45.25	48.09	51.81	18.95	39.73	37.73	40.84	44.12

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

	GRAIN FARMS WITH SOIL RATING 76-100						GRAIN FARMS WITH SOIL RATING 56-75					
	Under 180	180-259	260-339	340-499	500-649	650+	Under 180	180-259	260-339	340-499	500+	
	28	93	123	163	98	70	14	37	43	70	59	
Range in size (total acres).....												
Number of farms.....												
COSTS AND RETURNS PER TILLABLE ACRE												
Soil fertility.....	\$ 10.11	\$ 10.30	\$ 10.81	\$ 12.53	\$ 12.55	\$ 13.40	\$ 10.44	\$ 10.60	\$ 10.20	\$ 10.60	\$ 11.72	
Buildings and fence.....	8.77	6.16	6.04	4.89	5.12	5.11	8.45	5.49	5.81	5.49	4.97	
Machinery and equipment.....	27.91	22.88	22.29	20.64	22.20	20.33	29.43	24.21	20.82	21.65	21.15	
Labor.....	23.04	15.70	12.77	12.08	11.80	11.21	25.06	16.28	12.71	11.60	12.14	
Value of feed fed.....	15.00	19.06	15.36	12.14	15.80	14.77	20.06	19.44	13.90	20.54	18.10	
Livestock returns above feed cost.....	16.38	15.44	12.35	7.98	12.05	11.99	16.40	17.67	8.28	15.88	13.75	
Feed and grain returns.....	101.88	101.28	101.83	102.10	102.59	105.91	91.44	92.53	92.04	90.98	98.22	
Total value of farm production.....	124.56	120.04	117.95	113.48	117.76	121.10	111.53	114.14	104.58	110.33	115.51	
Total non-feed costs.....	117.51	100.46	97.19	93.40	94.74	93.64	118.53	94.92	87.75	88.09	87.71	
Management returns.....	7.05	19.58	20.76	20.08	23.02	27.46	-7.00	19.22	16.83	22.24	27.80	
SELECTED COST ITEMS												
Fertilizer, annual application.....	\$ 1,440	\$ 2,200	\$ 3,049	\$ 4,781	\$ 6,466	\$ 9,829	\$ 1,276	\$ 2,179	\$ 2,808	\$ 3,710	\$ 6,860	
Lime and rock phosphate depreciation.....	36	36	64	81	98	99	18	36	38	97	55	
Building repairs and maintenance.....	372	408	441	481	771	1,166	331	352	513	614	882	
Building depreciation.....	908	929	1,298	1,418	1,906	2,624	717	796	1,107	1,356	2,049	
Machinery and equipment depreciation.....	1,505	1,647	2,320	2,999	4,842	6,509	943	1,837	2,158	3,015	5,283	
Machinery repairs and supplies.....	830	1,128	1,453	1,896	2,648	3,620	639	1,056	1,216	1,703	3,002	
Machinery hire.....	364	578	666	796	940	1,174	673	507	524	813	828	
Gasoline and oil.....	722	861	1,149	1,483	1,994	2,477	658	961	1,081	1,324	2,192	
Unpaid labor charge.....	3,112	3,133	3,095	3,154	3,685	4,241	2,929	3,108	3,179	3,329	3,896	
Hired labor charge.....	252	273	582	1,534	2,488	4,065	179	294	368	835	3,269	
Total months of labor.....	13.3	13.5	14.6	18.2	23.5	30.8	12.4	13.4	14.0	16.3	26.7	
Months of labor hired.....	.8	.9	2.2	5.6	8.7	13.8	.7	1.0	1.3	2.9	11.1	
FARM INVESTMENT												
Livestock inventory.....	\$ 2,361	\$ 3,569	\$ 4,769	\$ 5,298	\$ 7,927	\$ 12,779	\$ 2,535	\$ 4,211	\$ 5,252	\$ 8,153	\$ 11,358	
Grain inventory.....	8,484	11,647	16,132	19,646	26,108	38,345	6,208	8,692	11,233	15,855	25,234	
Remaining capital cost in:												
Machinery.....	4,804	5,934	8,661	11,068	15,721	21,033	3,547	6,306	8,742	10,382	17,949	
Buildings and fence.....	9,827	10,538	15,075	17,656	23,012	33,521	8,957	9,113	11,968	16,182	21,618	
Soil fertility.....	104	70	145	185	180	171	43	61	65	253	117	
Auto.....	574	756	773	833	1,126	1,113	814	544	842	857	1,018	
Value of land (current basis).....	81,465	120,752	159,680	212,081	288,032	402,959	57,094	88,849	122,620	155,380	260,984	
Total farm investment.....	107,619	153,266	205,235	266,767	362,106	509,921	79,198	117,776	160,722	207,062	338,278	
Total farm investment per acre.....	694.32	669.28	672.90	635.16	638.63	631.87	595.47	518.84	526.96	503.80	486.03	
PERCENT OF TILLABLE LAND IN												
Corn and corn silage.....	54.6	51.4	51.1	51.8	49.0	54.1	54.4	55.3	46.5	48.5	51.1	
Soybeans.....	23.5	29.2	30.4	29.5	31.4	29.7	24.7	20.6	28.9	27.8	27.0	
Wheat.....	4.5	4.3	4.8	4.6	5.4	5.0	4.3	4.0	5.9	3.8	5.7	
Other small grains.....	4.0	2.3	2.3	2.3	2.5	1.5	1.7	3.7	3.9	2.7	2.5	
Diverted acres.....	4.7	5.3	6.1	6.3	6.8	5.2	5.1	6.0	7.4	8.7	7.9	
All hay and pasture crops.....	8.1	7.0	5.2	5.4	4.5	4.2	9.7	10.2	7.2	8.5	5.5	
CROP YIELDS, bushels per acre												
Corn.....	114.2	113.7	114.3	116.5	117.6	116.5	101.1	106.2	106.2	104.6	107.1	
Soybeans.....	35.8	36.1	35.0	34.5	35.0	34.9	34.1	34.5	34.1	33.6	33.4	
Wheat.....	41.4	42.6	45.8	41.0	43.4	41.3	28.7	34.6	36.8	35.9	40.0	
Oats.....	68.9	64.4	71.2	71.9	74.4	79.6	55.4	68.5	64.2	58.9	69.0	

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

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

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

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

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

	GRAIN FARMS WITH SOIL RATING 5-55					HOG FARMS WITH SOIL RATING 5-55				
	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+ 40
Range in size (total acres).....	223	300	418	551	874	140	218	295	408	717
Number of farms.....	202	270	352	474	693	123	177	235	313	528
Size of farm.....	33	35	32	33	35	33	35	31	32	31
Acres of tillable land.....	95	47	74	123	82	43	81	106	42	73
Soil rating on tillable land.....	1.2	3.3	2.4	3.5	3.5	1.3	1.4	.7	.6	.6
Hens, number.....	52	57	86	107	220	54	106	87	218	304
Dairy cows, number.....	183	218	313	386	481	1,112	1,019	1,310	1,601	2,118
Beef produced, hundredweight.....										
Pork produced, hundredweight.....										
DOLLAR COSTS PER FARM										
Soil fertility.....	\$ 2,020	\$ 2,592	\$ 3,225	\$ 5,656	\$ 7,501	\$ 1,828	\$ 2,123	\$ 2,665	\$ 3,786	\$ 6,309
Buildings and fence.....	854	1,001	1,323	1,439	2,531	1,246	1,513	1,622	2,160	2,918
Machinery and equipment.....	4,424	6,029	6,982	9,724	13,142	4,662	5,679	6,458	8,591	12,203
Labor.....	3,368	3,523	4,151	5,138	6,777	4,222	4,097	4,155	5,114	6,944
Taxes.....	803	1,056	1,346	1,658	2,448	626	834	938	1,255	1,962
Seed expense.....	404	653	714	961	1,617	295	466	538	837	1,135
Crop expense.....	357	563	663	1,076	1,579	254	439	543	854	1,338
Livestock and miscellaneous expense.....	323	406	547	571	858	880	766	804	1,214	1,273
Interest charge on capital.....	2,761	3,581	4,478	6,071	9,304	2,459	3,005	3,590	4,975	7,565
Total non-feed costs.....	15,314	19,404	23,429	32,294	45,757	16,472	18,922	21,313	28,786	41,647
Total value of feed fed.....	3,534	4,574	5,929	7,527	10,251	13,951	13,654	16,677	21,555	29,725
DOLLAR RETURNS PER FARM										
Livestock returns above feed cost.....	\$ 2,900	\$ 3,699	\$ 4,848	\$ 6,168	\$ 8,177	\$15,227	\$13,661	\$16,509	\$21,614	\$28,492
Feed and grain returns.....	15,320	20,690	24,860	35,550	53,810	9,126	13,403	16,185	23,281	36,774
Other cash income.....	593	894	1,194	1,561	2,521	877	919	985	1,104	1,811
Total value of farm production.....	18,813	25,283	30,902	43,279	64,508	25,230	27,983	33,679	45,999	67,077
Management returns.....	3,499	5,879	7,473	10,985	18,751	8,758	9,061	12,366	17,213	25,430
Farm production per \$1.00 of non-feed costs.....	1.23	1.30	1.32	1.34	1.41	1.53	1.48	1.58	1.60	1.61
Farm production per man.....	15,787	20,500	21,312	25,334	27,946	17,202	19,637	23,227	26,796	28,442
FINANCIAL SUMMARY										
Cash sales of products and services.....	\$18,946	\$25,495	\$31,439	\$42,924	\$65,318	\$32,058	\$33,059	\$40,342	\$53,732	\$75,506
Sales of capital items.....	22	177	246	92	343	93	26	68	81	515
Total cash income.....	18,968	25,672	31,685	43,016	65,661	32,151	33,085	40,410	53,813	76,021
Purchased livestock.....	1,190	1,494	1,819	3,137	6,007	2,702	2,556	2,918	5,597	8,550
Purchased feed.....	1,244	1,571	2,330	2,955	3,531	10,227	8,375	10,889	13,301	15,527
Cash operating expenses.....	7,031	9,376	11,587	17,909	24,606	7,816	9,392	10,974	15,730	22,714
Purchase of capital items.....	3,047	4,741	5,875	6,474	10,129	3,160	4,988	5,718	6,846	11,906
Total cash expenditures.....	12,512	17,182	21,611	30,475	44,273	23,905	25,311	30,499	41,474	58,697
Cash balance.....	\$ 6,456	\$ 8,490	\$10,074	\$12,541	\$21,388	\$ 8,246	\$ 7,774	\$ 9,911	\$12,339	\$17,324
Inventory change.....	2,165	2,700	3,441	6,257	8,472	5,923	5,653	6,943	10,909	15,359
Capital change.....	506	1,159	1,574	1,316	2,279	473	1,733	2,116	2,071	4,247
Farm products consumed.....	136	153	171	190	255	178	202	201	256	289
Farm and family earnings.....	9,263	12,502	15,260	20,304	32,394	14,820	15,362	19,171	25,575	37,219
Labor and management earnings.....	6,262	8,602	10,238	13,775	21,563	11,500	11,853	15,130	20,000	28,226
Capital and management earnings.....	6,260	9,460	11,951	17,056	28,055	11,217	12,066	15,956	22,188	32,995
Capital and management earnings per acre.....	28.07	31.53	28.59	30.95	32.10	80.12	55.35	54.09	54.38	46.02

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

	GRAIN FARMS WITH SOIL RATING 5-55					HOG FARMS WITH SOIL RATING 5-55				
	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+ 40
Range in size (total acres).....										
Number of farms.....										
COSTS AND RETURNS PER TILLABLE ACRE										
Soil fertility.....	\$ 10.00	\$ 9.60	\$ 9.16	\$ 11.93	\$ 10.82	\$ 14.86	\$ 11.99	\$ 11.34	\$ 12.10	\$ 11.95
Buildings and fence.....	4.23	3.71	3.76	3.04	3.65	10.13	8.55	6.90	6.90	5.53
Machinery and equipment.....	21.90	22.33	19.84	20.51	18.96	37.90	32.08	27.48	27.45	23.11
Labor.....	16.67	13.05	11.79	10.84	9.78	34.33	23.15	17.68	16.34	13.15
Value of feed fed.....	17.50	16.94	16.84	15.88	14.79	113.42	77.14	70.97	68.87	56.30
Livestock returns above feed cost.....	14.35	13.70	13.77	13.01	11.80	123.80	77.18	70.25	69.05	53.96
Feed and grain returns.....	75.84	76.63	70.63	75.00	77.65	74.20	75.72	68.87	74.38	69.65
Total value of farm production.....	93.13	93.64	87.79	91.31	93.08	205.12	158.10	143.31	146.96	127.04
Total non-feed costs.....	75.81	71.87	66.56	68.13	66.03	133.92	106.90	90.69	91.97	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.....	\$ 1,966	\$ 2,492	\$ 3,118	\$ 5,544	\$ 7,256	\$ 1,777	\$ 2,059	\$ 2,535	\$ 3,642	\$ 6,186
Lime and rock phosphate depreciation.....	54	100	107	112	245	51	64	130	144	123
Building repair and maintenance.....	291	393	495	499	1,074	374	569	692	988	1,159
Building depreciation.....	563	608	828	940	1,457	872	944	930	1,172	1,759
Machinery and equipment depreciation.....	1,714	2,470	2,873	3,754	5,418	1,488	1,987	2,237	3,125	4,868
Machinery repairs and supplies.....	959	1,509	1,638	2,583	3,345	1,328	1,334	1,688	2,344	3,179
Machinery hire.....	407	418	523	663	1,037	439	698	721	729	956
Gasoline and oil.....	736	957	1,214	1,818	2,232	712	837	1,054	1,460	1,974
Unpaid labor charge.....	3,003	3,042	3,309	3,248	4,339	3,603	3,296	3,215	3,387	4,224
Hired labor charge.....	365	481	842	1,890	2,438	619	801	940	1,727	2,720
Total months of labor.....	14.3	14.8	17.4	20.5	27.7	17.6	17.1	17.4	20.6	28.3
Months of labor hired.....	1.5	1.9	3.3	6.7	9.2	2.2	3.1	3.7	6.2	10.4
FARM INVESTMENT										
Livestock inventory.....	\$ 3,112	\$ 3,922	\$ 5,299	\$ 6,689	\$ 11,354	\$ 7,616	\$ 8,751	\$ 9,977	\$ 14,667	\$ 21,193
Grain inventory.....	6,338	7,093	7,474	11,346	16,300	4,682	5,460	7,007	9,212	13,829
Remaining capital cost in:										
Machinery.....	6,420	9,031	10,705	13,737	19,974	6,089	5,817	7,916	10,644	13,817
Buildings and fence.....	5,575	5,726	8,159	9,667	14,344	8,057	7,773	8,004	11,116	14,275
Soil fertility.....	113	227	262	325	550	108	131	262	282	258
Auto.....	468	658	696	747	1,055	603	639	602	719	1,023
Value of land (current basis).....	41,495	56,205	71,215	98,643	153,126	27,510	39,406	47,532	66,069	108,639
Total farm investment.....	63,521	82,862	103,810	141,154	216,703	54,665	67,977	81,300	112,709	173,034
Total farm investment per acre.....	284.85	276.21	248.35	256.18	247.94	390.46	311.82	275.59	276.25	241.33
PERCENT OF TILLABLE LAND IN										
Corn and corn silage.....	37.1	36.3	36.5	44.9	41.1	52.7	47.4	47.6	47.4	42.4
Soybeans.....	32.0	33.7	33.5	27.9	27.9	19.3	21.6	26.5	22.0	20.5
Wheat.....	17.0	14.1	15.2	12.8	15.2	15.3	12.4	12.9	13.0	15.3
Other small grains.....	5.5	7.7	7.5	5.5	4.4	1.2	1.8	1.0	6.6	1.6
Diverted acres.....	5.1	6.7	6.4	6.7	5.8	1.8	4.1	4.1	4.8	4.4
All hay and pasture crops.....	8.0	8.1	7.3	6.6	8.6	9.5	13.1	7.2	11.6	14.9
CROP YIELDS, bushels per acre										
Corn.....	90.9	95.2	87.4	88.0	98.1	83.1	90.4	81.7	87.5	101.8
Soybeans.....	29.3	28.7	26.2	26.2	27.8	29.5	31.0	25.5	28.6	27.3
Wheat.....	43.8	42.9	41.9	41.1	43.4	42.3	42.5	40.3	42.1	40.5
Oats.....	80.7	49.9	58.8	47.5	63.2	46.0	56.4	52.3	45.8	37.5

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

	DAIRY FARMS, NORTHERN ILLINOIS, WITH SOIL RATING OF					DAIRY FARMS, SOUTHERN ILLINOIS, WITH SOIL RATING OF									
	76-100	56-75	76-100	56-75	56-100	Under 180	180-259	76-100	56-75	56-100	Under 180	180-259	260-339	340-499	500+
	20	46	14	46	20	34	40	23	23	18	34	40	23	19	18
Range in size (total acres).....	144	152	212	215	291	145	220	297	383	656	127	187	246	308	500
Number of farms.....	133	84	82	66	70	33	32	26	30	29	53	81	33	86	106
Size of farm.....	124	89	19	60	102	34.0	37.9	40.7	47.6	68.1	27.5	33.9	37.9	40.7	47.6
Acres of tillable land.....	1	6	9	31	13	25	5	1	19	12	191	120	103	114	199
Soil rating on tillable land.....	191	144	64	193	238	145	220	297	383	656	127	187	246	308	500
Hens, number.....	27.5	33.9	44.8	37.7	50.8	53	37.9	40.7	47.6	68.1	34.0	37.9	40.7	47.6	68.1
Dairy cows, number.....	1	6	9	31	13	25	5	1	19	12	191	120	103	114	199
Beef produced, hundredweight.....	191	144	64	193	238	145	220	297	383	656	127	187	246	308	500
Pork produced, hundredweight.....	191	144	64	193	238	145	220	297	383	656	127	187	246	308	500
DOLLAR COSTS PER FARM															
Soil fertility.....	\$ 1,173	\$ 908	\$ 1,478	\$ 1,179	\$ 1,874	\$ 1,122	\$ 1,653	\$ 2,257	\$ 2,990	\$ 4,679	\$ 1,265	\$ 1,695	\$ 2,257	\$ 2,990	\$ 4,679
Buildings and fence.....	1,502	2,012	2,591	2,429	3,253	1,265	1,695	1,724	2,167	3,140	5,043	6,332	6,729	8,452	13,411
Machinery and equipment.....	5,296	4,968	7,599	6,243	9,155	5,043	6,332	6,729	8,452	13,411	4,218	4,569	4,971	5,979	8,986
Labor.....	4,039	3,728	4,833	4,504	6,608	4,218	4,569	4,971	5,979	8,986	650	917	1,194	1,352	1,995
Taxes.....	1,324	1,197	1,795	1,637	2,175	650	917	1,194	1,352	1,995	320	454	608	789	1,126
Seed expense.....	404	431	668	575	826	320	454	608	789	1,126	155	308	236	509	767
Crop expense.....	322	208	447	334	533	155	308	236	509	767	998	1,191	1,306	1,473	2,158
Livestock and miscellaneous expense.....	1,193	1,046	1,692	1,293	1,675	998	1,191	1,306	1,473	2,158	2,519	3,488	3,740	5,067	8,340
Interest charge on capital.....	4,865	4,215	7,058	5,723	8,100	2,519	3,488	3,740	5,067	8,340	16,290	20,607	22,765	28,778	44,602
Total non-feed costs.....	20,118	18,713	28,161	23,917	34,199	16,290	20,607	22,765	28,778	44,602	10,424	12,689	12,699	15,441	24,449
Total value of feed fed.....	10,761	11,436	14,229	13,868	19,278	10,424	12,689	12,699	15,441	24,449	\$ 7,740	\$ 10,658	\$ 9,370	\$ 11,214	\$ 16,972
DOLLAR RETURNS PER FARM															
Livestock returns above feed cost.....	\$ 7,566	\$ 9,185	\$ 10,203	\$ 9,524	\$ 13,419	\$ 7,740	\$ 10,658	\$ 9,370	\$ 11,214	\$ 16,972	9,633	14,530	15,952	22,370	31,984
Feed and grain returns.....	12,009	9,899	17,128	14,132	22,067	668	777	1,098	1,338	2,221	18,041	25,965	26,420	34,922	51,177
Other cash income.....	706	555	636	822	938	1,751	5,358	3,655	6,144	6,575	1,751	5,358	3,655	6,144	6,575
Total value of farm production.....	20,281	19,639	27,967	24,478	36,424	18,041	25,965	26,420	34,922	51,177	1,751	5,358	3,655	6,144	6,575
Management returns.....	163	926	-194	561	2,225	1,751	5,358	3,655	6,144	6,575	12,162	15,978	14,477	16,499	17,348
Farm production per \$1.00 of non-feed costs.....	1.01	1.05	.99	1.02	1.06	1.11	1.26	1.16	1.21	1.15	12,162	15,978	14,477	16,499	17,348
Farm production per man.....	16,012	15,829	17,756	16,139	18,212	\$20,903	\$27,626	\$29,420	\$38,431	\$57,690	20,920	27,901	29,444	38,595	57,908
FINANCIAL SUMMARY															
Cash sales of products and services.....	\$25,984	\$22,455	\$32,088	\$28,453	\$39,426	\$20,903	\$27,626	\$29,420	\$38,431	\$57,690	20,920	27,901	29,444	38,595	57,908
Sales of capital items.....	44	99	170	117	270	17	275	24	164	218	20,920	27,901	29,444	38,595	57,908
Total cash income.....	26,028	22,554	32,258	28,570	39,696	20,920	27,901	29,444	38,595	57,908	740	922	1,350	2,554	2,878
Purchased livestock.....	1,336	873	2,081	1,782	1,405	4,315	4,630	4,769	4,716	8,483	4,315	4,630	4,769	4,716	8,483
Inventory change.....	568	730	1,189	980	2,589	7,201	9,767	11,454	14,836	22,772	7,201	9,767	11,454	14,836	22,772
Capital change.....	-545	-548	970	50	1,088	3,338	5,665	6,567	7,078	10,982	3,338	5,665	6,567	7,078	10,982
Farm products consumed.....	215	281	294	320	319	15,594	20,984	24,140	29,184	45,115	15,594	20,984	24,140	29,184	45,115
Farm and family earnings.....	8,266	8,451	10,588	9,935	14,344	\$ 5,326	\$ 6,917	\$ 5,304	\$ 9,411	\$ 12,793	\$ 5,326	\$ 6,917	\$ 5,304	\$ 9,411	\$ 12,793
Labor and management earnings.....	3,113	3,920	2,770	3,556	5,200	1,932	3,536	2,744	3,457	4,367	1,932	3,536	2,744	3,457	4,367
Capital and management earnings.....	5,028	5,141	6,864	6,284	10,325	4,270	8,846	7,395	11,211	14,915	4,270	8,846	7,395	11,211	14,915
Capital and management earnings per acre.....	34.92	33.82	32.38	29.23	35.48	29.45	40.21	24.90	29.27	22.74	29.45	40.21	24.90	29.27	22.74

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

	DAIRY FARMS, NORTHERN ILLINOIS, WITH SOIL RATING OF					DAIRY FARMS, SOUTHERN ILLINOIS, WITH SOIL RATING OF									
	76-100	56-75	76-100	56-75	56-100	Under 180	180-259	76-100	56-75	56-100	Under 180	180-259	260-339	340-499	500+
	20	46	14	46	20	34	40	23	19	18	34	40	23	19	18
Range in size (total acres).....															
Number of farms.....															
COSTS AND RETURNS PER TILLABLE ACRE															
Soil fertility.....	\$ 8.82	\$ 7.09	\$ 7.66	\$ 6.44	\$ 7.29	\$ 8.83	\$ 8.84	\$ 9.17	\$ 9.71	\$ 9.36	\$ 9.96	\$ 9.06	\$ 7.01	\$ 7.04	\$ 6.28
Buildings and fence.....	11.29	15.72	13.42	13.27	12.66	39.71	33.86	27.35	27.44	26.82	39.71	33.86	27.35	27.44	26.82
Machinery and equipment.....	30.37	29.12	25.04	24.61	25.71	33.21	24.43	20.21	19.41	17.97	33.21	24.43	20.21	19.41	17.97
Labor.....	80.91	89.34	73.73	75.78	75.01	82.08	67.86	51.62	50.13	48.90	82.08	67.86	51.62	50.13	48.90
Value of feed fed.....	56.89	71.76	52.87	52.04	52.22	60.94	56.99	38.09	36.41	33.94	60.94	56.99	38.09	36.41	33.94
Livestock returns above feed cost.....	90.29	77.34	88.74	77.22	85.86	75.85	77.70	64.85	72.63	63.97	75.85	77.70	64.85	72.63	63.97
Feed and grain returns.....	152.49	153.43	144.91	133.76	141.73	142.06	138.85	107.40	113.38	102.35	142.06	138.85	107.40	113.38	102.35
Total value of farm production.....	151.26	146.20	145.91	130.69	133.07	128.27	110.20	92.54	93.44	89.20	128.27	110.20	92.54	93.44	89.20
Total non-feed costs.....	1.23	7.23	-1.00	3.07	8.66	13.79	28.65	14.86	19.94	13.15	13.79	28.65	14.86	19.94	13.15
Management returns.....															
SELECTED COST ITEMS															
Fertilizer, annual application.....	\$ 1,145	\$ 891	\$ 1,391	\$ 1,169	\$ 1,868	\$ 1,048	\$ 1,555	\$ 2,149	\$ 2,864	\$ 4,460	\$ 1,048	\$ 1,555	\$ 2,149	\$ 2,864	\$ 4,460
Lime and rock phosphate depreciation.....	28	17	87	10	6	74	98	108	126	219	74	98	108	126	219
Building repairs and maintenance.....	355	595	843	804	1,133	426	609	672	721	892	426	609	672	721	892
Building depreciation.....	1,147	1,417	1,748	1,625	2,120	839	1,086	1,052	1,446	2,248	839	1,086	1,052	1,446	2,248
Machinery and equipment depreciation.....	1,822	1,764	3,052	2,137	3,354	1,748	2,357	2,621	3,274	5,531	1,748	2,357	2,621	3,274	5,531
Machinery repairs and supplies.....	1,186	1,035	1,541	1,398	2,196	1,162	1,552	1,628	2,411	3,099	1,162	1,552	1,628	2,411	3,099
Machinery hire.....	726	480	589	664	899	566	616	537	566	1,070	566	616	537	566	1,070
Gasoline and oil.....	726	710	1,129	950	1,260	707	915	996	1,268	2,226	707	915	996	1,268	2,226
Unpaid labor charge.....	3,238	3,310	3,724	3,651	4,019	3,725	3,601	3,576	3,871	5,118	3,725	3,601	3,576	3,871	5,118
Hired labor charge.....	801	418	1,109	853	2,589	493	968	1,395	2,108	3,868	493	968	1,395	2,108	3,868
Total months of labor.....	15.2	14.9	18.9	18.2	24.0	17.8	19.5	21.9	25.4	35.4	17.8	19.5	21.9	25.4	35.4
Months of labor hired.....	2.2	1.6	4.0	3.6	7.9	1.9	4.2	6.6	9.1	13.6	1.9	4.2	6.6	9.1	13.6
FARM INVESTMENT															
Livestock inventory.....	\$ 9,286	\$ 10,743	\$ 13,657	\$ 12,828	\$ 18,088	\$ 8,973	\$ 10,688	\$ 11,014	\$ 15,664	\$ 23,988	\$ 8,973	\$ 10,688	\$ 11,014	\$ 15,664	\$ 23,988
Grain inventory.....	7,800	5,899	10,458	8,159	11,054	3,414	5,288	5,601	8,038	11,571	3,414	5,288	5,601	8,038	11,571
Remaining capital cost in:															
Machinery.....	6,358	6,298	10,906	8,156	12,608	7,392	9,551	9,913	12,845	23,228	7,392	9,551	9,913	12,845	23,228
Buildings and fence.....	14,028	17,244	21,339	21,654	26,226	9,136	12,488	11,296	14,430	26,385	9,136	12,488	11,296	14,430	26,385
Soil fertility.....	47	52	349	18	12	151	153	253	291	365	151	153	253	291	365
Auto.....	601	706	795	653	781	728	634	847	409	853	728	634	847	409	853
Value of land (current basis).....	73,986	54,203	104,593	78,733	116,533	25,729	38,690	44,845	62,075	100,504	25,729	38,690	44,845	62,075	100,504
Total farm investment.....	112,106	95,145	162,097	130,201	185,302	55,523	77,492	83,769	113,752	186,894	55,523	77,492	83,769	113,752	186,894
Total farm investment per acre.....	778.51	625.95	764.61	605.59	636.78	382.92	352.24	282.05	297.00	284.90	382.92	352.24	282.05	297.00	284.90
PERCENT OF TILLABLE LAND IN															
Corn and corn silage.....	52.0	44.8	47.5	45.4	43.6	38.1	39.4	32.1	35.6	41.1	38.1	39.4	32.1	35.6	41.1
Soybeans.....	9.0	1.4	4.8	4.3	7.4	7.0	15.1	19.3	21.1	19.4	7.0	15.1	19.3	21.1	19.4
Wheat.....	1.0	1.0	..	..	..	12.2	13.3	13.2	12.3	15.5	12.2	13.3	13.2	12.3	15.5
Other small grains.....	8.8	13.5	9.2	13.5	11.3	4.0	1.4	1.0	1.1	1.7	4.0	1.4	1.0	1.1	1.7
Diverted acres.....	2.0	1.6	3.4	4.3	6.1	1.5	2.2	2.9	4.0	2.8	1.5	2.2	2.9	4.0	2.8
All hay and pasture crops.....	27.2	37.6	30.0	31.7	30.7	36.7	27.8	29.7	24.2	19.3	36.7	27.8	29.7	24.2	19.3
CROP YIELDS, bushels per acre															
Corn.....	103.9	85.9	99.7	88.2	99.6	77.6	83.2	83.1	91.3	70.5	77.6	83.2	83.1	91.3	70.5
Soybeans.....	35.2	30.5	35.2	27.5	27.4	28.6	27.5	24.6	24.4	25.6	28.6	27.5	24.6	24.4	25.6
Wheat.....	41.6	..	..	..	41.7	41.9	42.4	39.3	39.3	36.6	41.9	42.4	39.3	39.3	36.6
Oats.....	74.8	68.9	67.0	66.8	61.1	45.9	68.8	55.5	44.2	41.0	45.9	68.8	55.5	44.2	41.0

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

	BEEF CATTLE FARMS, NORTHERN ILLINOIS SOIL RATING 56-100					BEEF CATTLE FARMS, SOUTHERN ILLINOIS SOIL RATING 5-55					POULTRY FARMS, NORTHERN ILL. SOIL RATING 56-100	
	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	180-259 7	
Range in size (total acres).....	158	222	301	409	664	220	290	419	720	140	236	
Number of farms.....	146	201	268	359	565	191	240	320	493	129	217	
Size of farm.....	76	77	76	75	75	28	32	31	36	81	84	
Acres of tillable land.....	151	31	41	43	6	181	157	144	...	4,514	5,842	
Soil rating on tillable land.....	600	934	974	1,237	1,993	451	702	705	1,055	59	24	
Hens, number.....	280	568	628	776	1,108	376	570	413	699	192	418	
Dairy cows, number.....		.1	.5	.3	.9							
Beef produced, hundredweight.....												
Pork produced, hundredweight.....												
DOLLAR COSTS PER FARM												
Soil fertility.....	\$ 1,573	\$ 2,472	\$ 3,448	\$ 4,665	\$ 7,730	\$ 2,061	\$ 2,688	\$ 3,981	\$ 5,433	\$ 1,159	\$ 3,089	
Buildings and fence.....	2,300	2,928	3,066	3,978	5,564	1,454	1,611	1,731	2,935	2,326	2,163	
Machinery and equipment.....	5,408	6,664	8,683	10,068	14,627	5,167	6,771	7,840	11,841	5,602	8,625	
Labor.....	3,403	4,034	4,741	5,954	9,548	3,846	4,481	4,067	7,256	5,455	6,862	
Taxes.....	1,396	1,830	2,266	2,800	4,398	964	1,226	1,411	2,121	1,219	1,936	
Seed expense.....	504	781	870	1,195	1,639	521	604	762	1,061	386	802	
Crop expense.....	557	735	851	1,289	1,634	244	594	926	865	247	794	
Livestock and miscellaneous expense.....	523	1,000	909	1,256	1,864	446	809	800	1,336	907	1,017	
Interest charge on capital.....	5,360	7,795	9,318	12,307	19,022	3,609	4,530	5,137	9,064	5,210	7,572	
Total non-feed costs.....	21,024	28,239	34,152	43,512	66,026	18,312	23,314	26,655	41,912	22,511	32,860	
Total value of feed fed.....	14,126	24,061	26,410	33,097	49,171	14,143	20,401	18,108	28,952	18,613	24,635	
DOLLAR RETURNS PER FARM												
Livestock returns above feed cost.....	\$ 9,336	\$ 15,232	\$ 15,647	\$ 20,305	\$ 29,241	\$ 6,280	\$ 13,865	\$ 11,648	\$ 15,087	\$ 12,473	\$ 15,837	
Feed and grain returns.....	13,051	19,871	26,352	34,394	53,608	14,256	18,293	24,551	34,588	12,001	21,815	
Other cash income.....	632	750	1,113	1,306	1,804	670	770	1,275	1,224	731	833	
Total value of farm production.....	23,019	35,853	43,112	56,005	84,653	21,206	32,928	37,474	50,899	25,205	38,485	
Management returns.....	1,995	7,614	8,960	12,493	18,627	2,894	9,614	10,819	8,987	2,694	5,625	
Farm production per \$1.00 of non-feed costs.....	1.09	1.27	1.26	1.29	1.28	1.16	1.41	1.41	1.21	1.12	1.17	
Farm production per man.....	20,311	27,230	28,270	30,272	30,876	16,004	21,359	26,609	20,566	14,402	17,970	
FINANCIAL SUMMARY												
Cash sales of products and services.....	\$ 40,102	\$ 65,003	\$ 70,914	\$ 94,379	\$ 140,989	\$ 38,389	\$ 60,183	\$ 50,243	\$ 81,709	\$ 41,825	\$ 58,367	
Sales of capital items.....	6	614	237	107	1,770	68	13	53	128	20	966	
Total cash income.....	40,108	65,617	71,151	94,486	142,759	38,457	60,196	50,296	81,837	41,845	59,333	
Purchased livestock.....	16,395	26,937	24,087	34,582	51,907	14,025	20,210	17,152	25,642	6,412	5,456	
Purchased feed.....	5,631	9,172	10,136	11,984	18,726	6,494	11,105	7,209	10,549	12,931	16,827	
Cash operating expenses.....	8,006	12,345	15,550	20,410	33,111	8,116	11,168	13,638	22,441	9,405	16,355	
Purchase of capital items.....	6,241	7,320	9,921	10,679	13,354	5,489	7,187	7,348	10,393	3,049	8,905	
Total cash expenditures.....	36,273	55,774	59,694	77,655	117,098	34,124	49,670	45,347	69,025	31,797	47,543	
Cash balance.....	\$ 3,835	\$ 9,843	\$ 11,457	\$ 16,831	\$ 25,661	\$ 4,333	\$ 10,526	\$ 4,949	\$ 12,812	\$ 10,048	\$ 11,790	
Inventory change.....	4,673	6,669	6,158	7,862	13,905	3,071	3,728	11,288	5,084	2,576	2,228	
Capital change.....	1,844	1,993	3,847	3,429	1,770	2,144	3,024	2,666	3,563	-1,208	3,167	
Farm products consumed.....	270	290	263	330	392	265	332	304	297	147	173	
Farm and family earnings.....	10,622	18,795	21,725	28,452	41,728	9,813	17,610	19,207	21,756	11,563	17,358	
Labor and management earnings.....	4,978	10,603	11,951	15,484	21,627	5,636	12,394	13,640	11,807	5,694	8,536	
Capital and management earnings.....	7,355	15,409	18,278	24,800	37,649	6,503	14,144	15,956	18,051	7,904	13,197	
Capital and management earnings per acre.....	46.55	69.41	60.72	60.64	56.70	29.56	48.77	38.08	25.07	56.46	55.92	

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

	BEEF CATTLE FARMS, NORTHERN ILLINOIS SOIL RATING 56-100					BEEF CATTLE FARMS, SOUTHERN ILLINOIS SOIL RATING 5-55					POULTRY FARMS, NORTHERN ILL. SOIL RATING 56-100	
	Under 180 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	180-259 7	
Range in size (total acres).....												
Number of farms.....												
COSTS AND RETURNS PER TILLABLE ACRE												
Soil fertility.....	\$ 10.77	\$ 12.30	\$ 12.87	\$ 12.99	\$ 13.68	\$ 10.79	\$ 11.20	\$ 12.44	\$ 11.02	\$ 8.98	\$ 14.24	
Buildings and fence.....	15.75	14.57	11.44	11.08	9.85	7.61	6.71	5.41	5.95	18.03	9.97	
Machinery and equipment.....	37.04	33.15	32.40	28.04	25.89	27.05	28.21	24.50	24.02	43.43	39.75	
Labor.....	23.31	20.07	17.69	16.58	16.90	20.14	18.67	12.71	14.72	42.29	31.62	
Value of feed fed.....	96.75	119.71	98.54	92.19	87.03	74.05	85.00	56.59	58.73	144.29	113.53	
Livestock returns above feed cost.....	63.95	75.78	58.38	56.56	51.75	32.88	57.77	36.40	30.60	96.69	72.98	
Feed and grain returns.....	89.39	98.86	98.33	95.80	94.88	74.64	76.22	76.72	70.16	93.03	100.53	
Total value of farm production.....	157.66	178.37	160.87	156.00	149.83	111.03	137.20	117.11	103.24	195.39	177.35	
Total non-feed costs.....	144.00	140.49	127.43	121.20	116.86	95.87	97.14	83.30	85.01	174.50	151.43	
Management returns.....	13.66	37.88	33.44	34.80	32.97	15.16	40.06	33.81	18.23	20.89	25.92	
SELECTED COST ITEMS												
Fertilizer, annual application.....	\$ 1,498	\$ 2,411	\$ 3,380	\$ 4,495	\$ 7,603	\$ 1,897	\$ 2,559	\$ 3,724	\$ 5,092	\$ 1,112	\$ 3,045	
Lime and rock phosphate depreciation.....	75	61	68	170	127	164	129	257	341	47	44	
Building repairs and maintenance.....	663	902	938	1,234	1,689	430	547	628	1,139	567	681	
Building depreciation.....	1,637	2,026	2,128	2,744	3,875	1,024	1,064	1,103	1,796	1,759	1,482	
Machinery and equipment depreciation.....	2,422	2,303	3,288	3,936	5,369	1,946	2,731	2,995	4,247	2,169	2,889	
Machinery repairs and supplies.....	1,010	1,583	2,096	2,505	4,188	1,160	1,579	1,848	3,426	890	1,682	
Machinery hire.....	512	672	859	817	1,135	565	498	750	986	644	1,248	
Gasoline and oil.....	720	1,150	1,453	1,713	2,458	1,152	1,152	1,424	2,035	855	1,059	
Unpaid labor charge.....	3,267	3,386	3,447	3,652	4,079	3,310	3,466	3,251	3,705	3,659	4,161	
Hired labor charge.....	136	648	1,294	2,302	5,469	536	1,015	816	3,551	1,796	2,701	
Total months of labor.....	13.6	15.8	18.3	22.2	32.9	15.9	18.5	16.9	29.7	21.0	25.7	
Months of labor hired.....	.5	2.3	4.5	7.6	16.6	1.8	3.7	3.1	14.0	6.4	9.1	
FARM INVESTMENT												
Livestock inventory.....	\$16,709	\$27,547	\$28,814	\$38,170	\$54,737	\$18,446	\$20,813	\$20,133	\$38,881	\$ 9,104	\$ 8,847	
Grain inventory.....	9,602	14,305	16,141	21,213	31,656	6,330	9,356	8,455	14,108	9,264	11,628	
Remaining capital cost in:												
Machinery.....	7,431	8,011	10,192	13,131	18,964	8,234	8,790	11,387	15,621	8,220	10,318	
Buildings and fence.....	14,721	24,083	23,543	30,207	52,649	10,043	8,972	11,358	16,766	20,786	23,005	
Soil fertility.....	217	169	179	403	283	393	382	472	666	125	141	
Auto.....	739	898	788	735	995	489	762	493	706	517	772	
Value of land (current basis).....	72,248	101,120	133,358	177,847	276,451	35,319	51,905	63,050	118,167	70,228	120,911	
Total farm investment.....	121,667	176,133	213,015	281,706	435,735	79,254	100,980	115,348	204,915	118,244	175,622	
Total farm investment per acre.....	770.04	793.39	707.69	688.77	656.23	360.25	348.21	275.29	284.60	844.60	744.16	
PERCENT OF TILLABLE LAND IN												
Corn and corn silage.....	63.4	66.7	62.9	66.0	59.5	42.7	47.8	45.0	38.0	54.0	65.4	
Soybeans.....	1.0	3.9	9.1	7.4	10.7	19.1	16.4	20.0	17.6	20.5	13.5	
Wheat.....					3.0	15.1	11.9	16.4	13.5	7.7	4.4	
Other small grains.....	14.4	9.7	8.0	7.2	6.0	2.0	1.3	1.3	5.0	7.6	4.7	
Diverted acres.....	1.8	3.3	4.5	5.0	6.4	4.7	4.4	3.6	9.0	5.9	9.7	
All hay and pasture crops.....	18.3	14.6	15.0	12.6	13.2	16.2	18.9	12.7	21.1	11.2	6.3	
CROP YIELDS, bushels per acre												
Corn.....	103.8	103.8	106.7	100.9	103.7	91.7	88.6	91.0	91.5	105.1	107.2	
Soybeans.....	35.4	36.3	38.8	34.8	36.2	24.9	24.9	27.5	26.0	37.0	31.9	
Wheat.....					36.4	40.7	45.1	43.4	41.0	54.5	27.3	
Oats.....	58.9	78.3	71.5	72.1	68.6	30.1	..	..	..	70.5	71.2

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

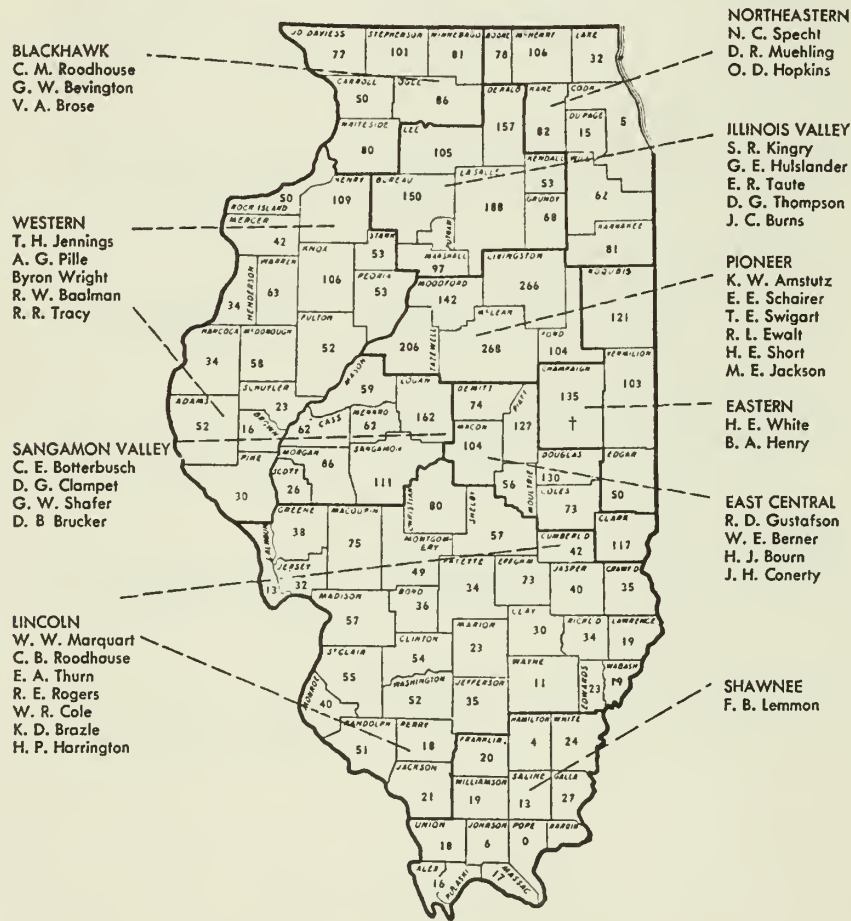
The cooperative effort of the university staff working with 40 fieldmen who are supported largely by fees paid by farmers makes this educational and service program possible. By participating in this program each farmer-cooperator (6,484 reporting this year) increases his chances for successful farm operation and contributes to the improvement of Illinois agriculture.

Each year more farmers are adopting improved production techniques based on studies of their farm records. Many crop farmers now plan for corn yields above 110 bushels per acre. Since 1956 the average hog enterprise has increased in size by 3 litters per year and the average dairy enterprise by 1 cow per year by substituting capital for labor. Farm records are becoming more important for the individual farmer to evaluate his competitive position in the farming business.

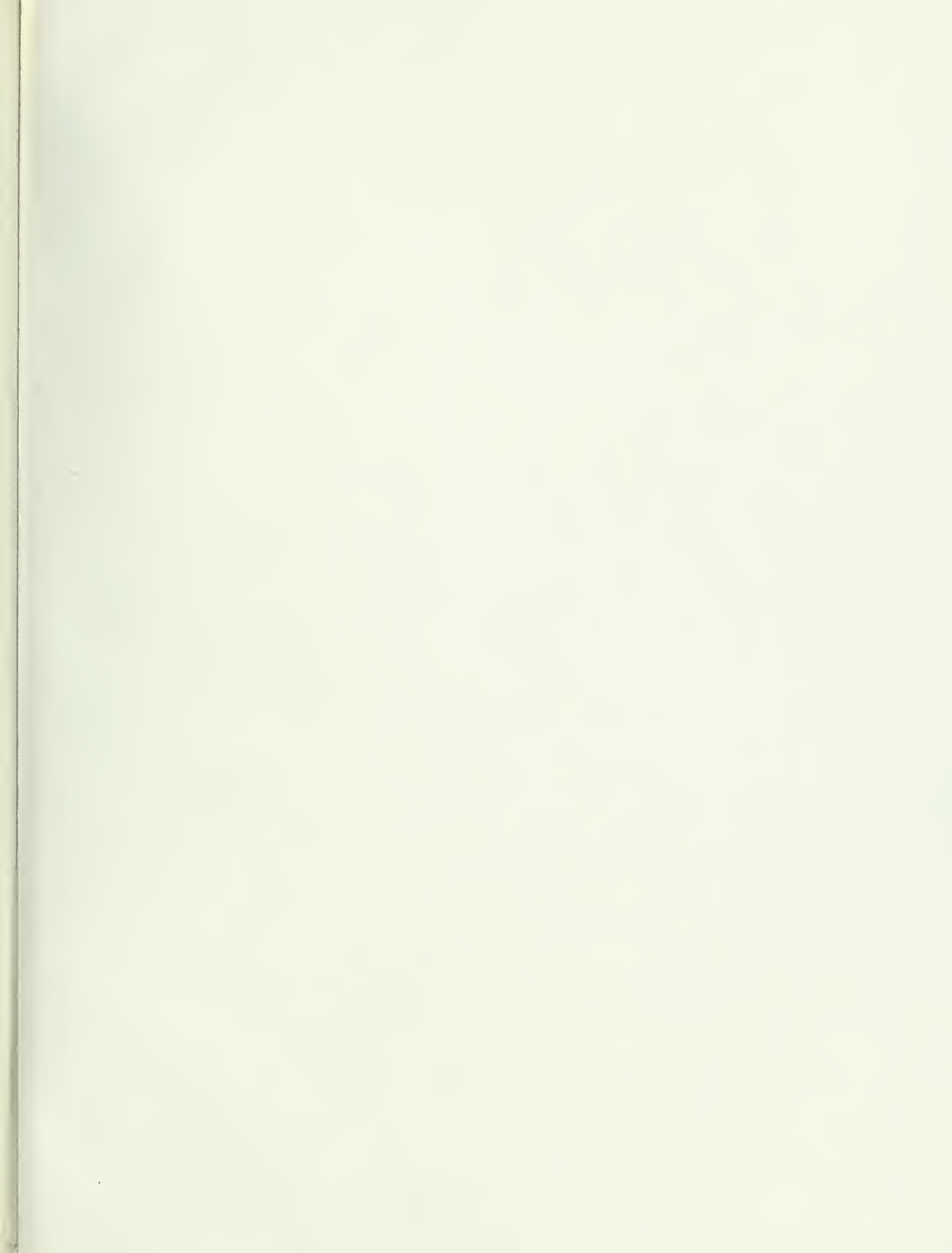
We hope that this 41st Annual Report will be used to contribute to more profitable farm operation and a more desirable level of family living.

Harold G. Halcrow, Head
Department of Agricultural Economics

ASSOCIATIONS, FIELDMEN, AND COOPERATORS ENROLLED



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



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