

FARM BUSINESS NOTES

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Farmers' Earnings in 1941

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University Farm Radio Programs

FRIENDLY ROAD—7:15 a.m.

MID-MORNING MARKETS—10:30 a.m.

UNIVERSITY FARM HOUR—12:30 p.m.

Station WLB—770 on the dial

Farm account records kept by approximately 650 farmers in Minnesota in cooperation with the University of Minnesota Department of Agriculture give some interesting information on the variations in farmers' earnings in different parts of the state. Records were secured in 1941 from six of the nine major type-of-farming areas. The location of the counties and the number of records from each county are shown in figure 1.

A statement of the receipts, expenses, and operator's labor earnings for each of the six areas is presented in table 1. The operator's labor earnings are computed by subtracting from the gross income of the farm all the farm costs including a 5 per cent charge for the use of the farm capital as well as a charge for unpaid family labor.

The net increase in the value of the farm capital and the value of the family living secured from the farm are included in the receipts. For the purpose of comparison the operator's labor earnings are computed on a full owner basis.

The average earnings received by farmers differed considerably among the various areas. The highest average earnings were in the

corn, hog, and beef cattle producing region of southwestern Minnesota. The year 1941 was unusually favorable for the production of meat-producing animals. Many of the farmers in areas 3 and 4 have very large cattle and hog feeding enterprises and several in Area 3 also have large

Table 1. Farm Earnings in 1941

	Type-of-Farming Area					
	1	2	3	4	6	7
Receipts:						
Cattle	\$ 1,154	\$ 1,290	\$ 2,987	\$ 3,159	\$ 498	\$ 575
Dairy products	1,346	1,512	772	650	920	776
Hogs	1,657	1,867	2,130	2,187	261	446
Sheep	183	131	1,013	203	265	206
Poultry and eggs	792	981	796	370	366	389
Crops	458	734	1,634	1,944	649	1,521
A.A.A. payment	259	361	483	459	190	339
Misc. cash receipts	474	480	641	639	372	346
Total farm sales	6,323	7,356	10,456	9,611	3,521	4,598
Increase in farm capital	1,384	1,341	2,604	1,732	734	1,401
Family living from farm	516	528	510	498	401	453
Total receipts	\$8,223	\$9,225	\$13,570	\$11,841	\$4,656	\$6,452
Expenses:						
Cattle purchases	\$ 302	\$ 461	\$ 1,496	\$ 1,381	\$ 70	\$ 86
Hog purchases	125	99	213	121	23	26
Sheep purchases	46	26	703	16	25	16
Poultry purchases	86	105	102	52	34	50
Feed purchases	702	778	1,426	1,394	173	208
Other livestock expense	60	104	111	66	21	20
Custom work hired	108	107	133	124	50	82
Crop expense	197	179	265	294	132	177
Power, mach. and equip.	1,112	1,383	1,522	1,580	947	1,097
Buildings	362	465	567	485	227	208
Hired labor	364	407	499	390	181	325
Taxes, ins. and misc.	333	294	389	391	200	303
Total farm purchases	\$3,797	\$4,408	\$7,426	\$6,294	\$2,083	\$2,598
Board of hired labor	122	145	147	146	83	145
Unpaid family labor	298	278	270	346	353	313
Interest on farm capital	1,036	1,240	1,719	1,481	594	896
Total expenses	\$5,253	\$6,071	\$9,562	\$8,267	\$3,113	\$3,952
Operator's labor earnings	\$2,970	\$3,154	\$4,008	\$3,574	\$1,543	\$2,500

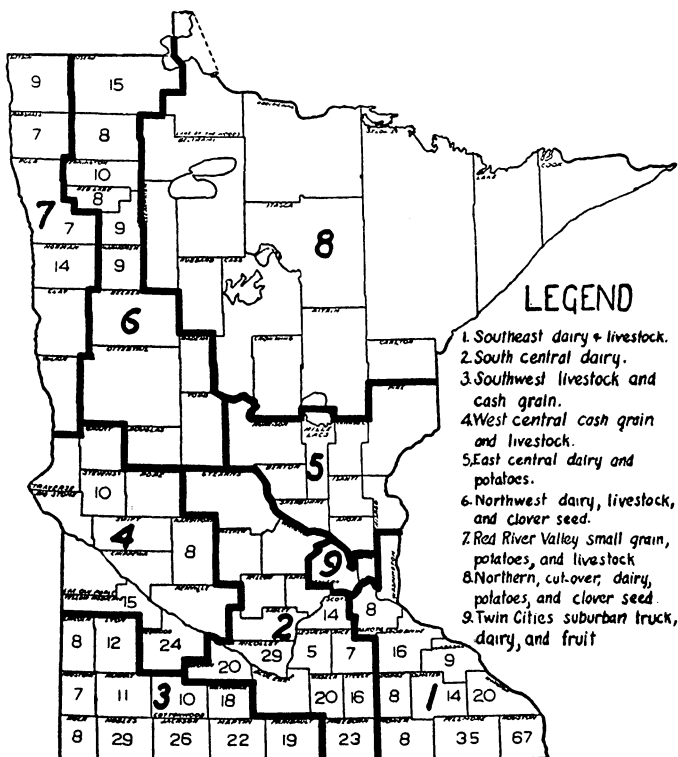


FIG. 1. LOCATION OF COUNTIES AND TYPE-OF-FARMING AREAS INCLUDED IN THIS STUDY

lamb feeding and turkey enterprises. In Area 3 the cattle sales per farm amounted to \$2,987 of which \$2,601 was from the sale of beef cattle. In Area 4 the average cattle sales per farm were \$3,159 of which \$2,767 was from the sale of beef cattle. The farmers included in these two groups likewise showed the largest purchases of beef cattle. In areas 1 and 2 the principal sources of cash income were hogs, dairy products, cattle, and poultry. Approximately 60 per cent of the receipts from cattle in areas 1 and 2 were from the sale of beef cattle.

Crops are an important source of cash receipts in Area 7 where they amount to one third of the total cash income. Of the total crop sales 67 per cent was secured from the sale of small grain and 23 per cent from the sale of potatoes. Very little feed was purchased in this area. In Area 6 crops rank second to dairy products as a source of income. In the heavy livestock producing areas the net receipts from crops was either very small or actually was less than the value of the purchased feed.

In all the areas weather conditions in 1941 affected the yields of some crops unfavorably (Table 2). In areas 6 and 7 where the production of potatoes is usually an important source of income the average yields per acre were 62 and 54 bushels, respectively. The yields of flax and the legume seed crops, both of which are important crops, were also unusually low due to adverse weather conditions in the fall. In all of the other areas the yields of small grain were considerably below normal.

In terms of the total acreage per farm and in tillable crop land, the farms in Area 7 are considerably larger than those in the other areas (Table 3). Approximately 50 per cent of the tillable land is in small grain, principally wheat, flax, oats, and barley. Only 10 per cent of the tillable land is in cultivated crops. In Area 6 legume and grass hay and seed crops occupy one third of the total tillable acreage. Another one third of the tillable land is in small grain. In the other four areas the small grains, principally oats, barley, and flax, occupy the largest proportion of the tillable land. The cultivated crops, principally corn,

Table 2. Average Yields Per Acre, 1941

	Type-of-Farming Area					
	1	2	3	4	6	7
Barley, bushels	29.3	27.9	17.5	30.6	28.9	26.2
Oats, bushels	33.2	27.8	28.2	24.2	32.0	32.5
Spring wheat, bushels	13.6	10.7	12.5	11.3	14.1	17.1
Flax, bushels	11.9	9.9	12.1	11.0	4.6	4.3
Corn, grain, bushels	59.1	56.7	57.4	46.5	34.0	35.0
Alfalfa hay, tons	2.5	2.8	2.1	2.1	1.7	1.7

Table 3. Distribution of Acres in Farms, 1941

	Type-of-Farming Area					
	1	2	3	4	6	7
Total small grain	55	63	99	127	86	171
Total cultivated crops	34	46	72	70	18	34
Total hay and seed	38	27	28	31	90	54
Total tillable pasture	28	17	28	25	35	36
Tillable land not cropped	2	4	3	6	19	49
Total tillable land	157	157	230	259	248	344
Nontillable hay and pasture	54	39	19	31	60	36
Timber, roads, waste, etc.	30	22	19	23	63	40
Total land in farms.....	241	218	268	313	371	420
Per cent tillable	65	72	86	83	67	82

Table 4. Average Farm Inventories (Beginning of Year) 1941

	Type-of-Farming Area					
	1	2	3	4	6	7
Horses	\$ 369	\$ 405	\$ 358	\$ 323	\$ 334	\$ 269
Productive livestock	2,728	2,984	4,083	3,873	1,603	1,713
Crop, seed, feed	1,800	2,347	3,930	3,281	708	1,201
Machinery and equipment	2,205	2,564	2,847	2,649	1,961	2,709
Buildings	5,829	6,590	7,047	6,375	2,996	4,532
Land	7,088	9,244	14,823	12,259	3,912	6,795
Total farm capital	\$20,019	\$24,134	\$33,088	\$28,760	\$11,514	\$17,219

are important in all the southern areas with the exception of the southeastern counties where much of the land is too steep for intertilled crops.

Although the farms in areas 6 and 7 are large in terms of acres, they have the smallest investment in total farm capital (Table 4). In Area 6 much of the land resembles the cut-over area to the east; timber, brush, and imperfect drainage reduce the proportion of tillable land. The average value of the land and buildings is less than \$20 per acre. The farms in Area 7 are valued only slightly higher than those in Area 6. They also carry a larger investment in machinery and equipment. The farms in the other areas are generally well developed with large investments in land, buildings, equipment, and livestock. The average value of land and buildings is \$53 per acre in Area 1, \$72 in Area 2, \$82 in Area 3, and \$60 in Area 4. The large proportion of nontillable land in Area 1 reduces the average value of land in that region.

Although most of these farmers are men of more than average managerial ability and, in general, are on farms larger and more productive than the average for the areas studied, the variations in the earnings probably are indicative of the range in earnings occurring between the areas in 1941. However, several facts must be kept in mind in comparing the earnings for the different areas. The unusually favorable prices received for cattle, hogs, and sheep made meat production very profitable in 1941. Had normal prices and normal yields been secured for all the areas the range in earnings would not have been as large.

Cost of Automobile, Truck, and Tractor Power on Minnesota Farms

R. W. Cox

The rapid motorization of Minnesota agriculture has increased expenditures for the operation of automobiles, trucks, and tractors by farmers from an average of about 10 million dollars in 1921-24 to almost 30 million dollars in 1941.¹ In the former period these expenditures constituted about 7 per cent of the total cash expenditures of Minnesota farmers, but in 1941 they were more than 21 per cent of the total, exceeding even the proportion for taxes, interest, labor, or feed. The rapid increase in the expenditures for motor power has been due not only to the great increase in the number of automobiles, trucks, and tractors but also to their more intensive use.

¹ These estimates include only 40 per cent of the total expenditure on automobiles since 40 per cent of the total is the result of productive farm operations and 60 per cent is the result of family use.

The number of automobiles on farms almost doubled from 1921 to 1941 and the number of trucks increased three-fold. The most rapid increase occurred in the case of tractors, the number in 1941 being five times that in 1921. At the present time about seven eighths of the farmers on Minnesota farms have automobiles, nearly one fifth have trucks, and one half have tractors.

There has been but slight change in the consumption of gasoline per mile by automobile and trucks. As motor vehicles and roads have improved, heavier and more powerful automobiles and trucks have been constructed with about the same gasoline consumption as previously. The cost of gasoline and oil per car in 1941 averaged about 30 per cent higher than in 1921-24. The effect of reduced prices of gasoline and oil per gallon has been more than offset by increased mileage. In the case of trucks the increase in mileage was less than that of automobiles, and consequently the cost of gasoline and oil per truck in 1941 was about the same as in 1921-24.

Although mileage per automobile and truck has increased, the great improvement in the quality and decreased price of tires reduced tire expense per vehicle in 1941 to slightly more than two fifths of the expense in 1921-24. The expense for mechanical repairs per automobile and truck in 1941 averaged about two thirds and one half, respectively, of the costs in 1921-24. Although major repairs are required less frequently than formerly, automobile and trucks have become more complicated requiring expert service. In consequence, the decrease in repair cost has been somewhat less than that of tires. In 1921-24 the expenditures on gasoline and oil averaged 45 per cent and those on tires and repairs 55 per cent of the total on these items. In 1941 the proportions were 70 and 30 per cent, respectively.

The variation in the amount of tractor fuel used per hour has been due principally to the changes in the size of the tractor. By 1924, when the smaller machine was in common use, the average consumption of fuel had declined to about two gallons per hour as compared to five gallons in 1910-15. There has been but slight change in the average rate of consumption during the past 18 years, but accompanying the more intensive use of the tractor, the average fuel and oil cost per machine in 1941 was about 11 per cent higher than in 1924.

The expenditures for fuel and oil used by tractors has increased more rapidly than similar expenditure for automobiles and trucks. In 1921-24 tractors accounted for 45 per cent of the combined cost, but in 1941 the proportion was 65 per cent.

Financial Progress of Minnesota Cooperative Oil Associations

E. FRED KOLLER and OREN R. SHELLEY

Analysis of the balance sheets of 90 identical Minnesota cooperative oil associations for the years 1938-1941 shows that these organizations have materially strengthened both their current and longer term financial position in recent years. The improvement in the current position is shown by the steady increase in current assets while

Table 1. Average of Balance Sheets of 90 Minnesota Cooperative Oil Associations, 1938-1941

	1938	1939	1940	1941
Current Assets:				
Cash	\$ 2,817	\$ 3,180	\$ 3,265	\$ 3,413
Accounts Receivable (Net)	5,235	5,538	4,928	4,747
Inventories	5,323	5,267	5,382	7,587
Other Current Assets	887	903	1,477	1,722
Total	\$14,262	\$14,888	\$15,052	\$17,469
Investment Assets				
Fixed Assets (Land, Buildings, Equipment)*	1,473	1,882	2,133	2,347
Other Assets	8,869	9,148	10,215	11,201
Other Assets	576	527	420	393
Total Assets	\$25,180	\$26,445	\$27,820	\$31,410
Current Liabilities:				
Notes, Acceptances, and Contracts	\$ 1,969	\$ 1,758	\$ 1,808	\$ 1,122
Accounts Payable	2,131	2,368	1,893	1,532
Other Current Payables	4,859	3,979	4,272	4,980
Total	\$ 8,959	\$ 8,105	\$ 7,973	\$ 7,634
Noncurrent Liabilities				
Net Worth (Stock, Surplus, and Reserves)	2,141	2,805	3,153	4,838
Net Worth (Stock, Surplus, and Reserves)	14,080	15,535	16,694	18,938
Total Liab. and Net Worth	\$25,180	\$26,445	\$27,820	\$31,410

* Original cost less reserve for depreciation.

current liabilities steadily declined. (See table 1.) In consequence, the ratio of current assets to current debts changed from 1.59 to 1 in 1938 to the more desirable level of 2.29 to 1 at the end of 1941. Examination of current asset items also reveals other desirable changes, notably a gradual decrease in outstanding accounts receivable in a period when total sales were rising. Where outstanding accounts amounted to 25.8 days of sales in 1939 they were only 19.8 days of sales in 1941, indicating the result of stricter credit policies. Another indication of improved financial position is that in recent years more and more associations have made substantial advance payments to their wholesales for goods to be purchased at a later date. It is also significant that notes, acceptances, and accounts payable were lower in 1941 in spite of the fact that substantially larger inventories were held.

The improved long term financing of these associations is shown by the fact that net worth or member equities increased from an average of \$14,080 in 1938 to \$18,398 at the end of 1941, or an increase of 35 per cent. The proportion of the total capital supplied by the members increased steadily during this period and averaged 60 per cent in 1941 indicating reduced dependence upon outside or creditor sources of capital.

While the average financial position of these associations has improved greatly, much remains to be done. Many associations need to take more positive steps to reduce the volume of their accounts receivable. With agricultural income at a higher level, the time is opportune to apply stricter credit controls. Steps should be undertaken to reduce association debts, particularly the noncurrent debts which have tended to increase in recent years. This may be done by retaining more of the association earnings in surplus, in patron equity reserves, or by adopting revolving fund plans of financing. Incidentally, programs aimed at reducing patron accounts receivable and association debts fit in well with the nationwide effort now being made to prevent a disastrous inflation.

Minnesota Farm Prices For June, 1942

Prepared by W. C. WAITE and H. G. HIRSCH

The index number of Minnesota farm prices for the month of June 1942, was 145. When the average of farm prices of the five Junes, 1935-39, is represented by 100, the indexes for June of each year from 1935 to date are as follows:

1935—102	1937—119	1939— 83	1941—119
1936—100	1938— 96	1940— 83	1942—145

The price index of 145 for the past month is the net result of increases and decreases in the prices of farm products in June, 1942 over the average of June, 1935-39, weighted according to their relative importance.

Average Farm Prices Used in Computing the Minnesota Farm Price Index, June 15, 1942, with Comparisons*

	June 15, 1942	May 15, 1942	June 15, 1941		June 15, 1942	May 15, 1942	June 15, 1941
Wheat	\$.96	\$1.01	\$.85	Cattle	\$11.00	\$10.50	\$ 8.30
Corn .....	.70	.70	.55	Calves	12.70	12.60	10.10
Oats .....	.40	.45	.27	Lambs-Sheep	11.34	10.89	9.02
Barley .....	.70	.70	.43	Chickens .....	.15	.15	.14
Rye .....	.50	.57	.44	Eggs .....	.27	.26	.21
Flax	2.33	2.40	1.64	Butterfat .....	.40	.41	.38
Potatoes	1.00	1.00	.40	Hay	5.50	4.50	5.50
Hogs	13.40	13.30	9.10	Milk	2.00	1.95	1.65
				Wool† .....	.39	.41	.39

* These are the average prices for Minnesota as reported by the United States Department of Agriculture.
† Not included in the price index number.

The prices of agricultural products have increased only slightly during the past two months, the Minnesota Farm price index for April being 141 and that for June 145.

Agricultural products as a whole for the United States are now just about at parity. Livestock prices are well above 110 per cent of parity, and retail ceilings have been placed on a number of beef and pork products. Livestock product prices are above parity but below 110 per cent of parity. Crop prices remain below parity, with flax at 91, the highest of the important Minnesota crops. Corn was 84 and wheat 71 per cent of parity on June 15, 1942.

Indexes and Ratios of Minnesota Agriculture*

	June 15, 1942	May 15, 1942	June 15, 1942	Average June 1935-39
U.S. farm price index	146.3	144.0	114.3	100
Minnesota farm price index	145.1	144.4	118.9	100
U.S. purchasing power of farm products	120.5	119.0	113.6	100
Minn. purchasing power of farm products	119.5	119.3	118.2	100
Minn. farmers' share of consumers' food dollar	55.7	57.9	48.9	45.5
U.S. hog-corn ratio	16.3	17.5	13.1	12.0
Minnesota hog-corn ratio	19.1	19.0	16.5	15.2
Minnesota beef-corn ratio	15.7	15.0	15.1	12.8
Minnesota egg-grain ratio	19.3	17.8	18.9	14.6
Minnesota butterfat-farm-grain ratio	31.5	29.7	42.6	30.9

* Explanation of the computation of these data may be had upon request.

Change in Base of Minnesota Farm Price Index

Beginning with this issue we report Minnesota Farm Prices on the basis of 1935-1939 equal to 100 rather than on our old base of 1924-5-6 equal to 100. It is thought that during the next decade the comparisons with the period immediately preceding the war will be more useful than a comparison of prices with their predepression level. Prices are represented as about 25 per cent higher under the new index than under the old index because of the difference in level of prices in the two base periods. The index by months for the period 1935 to date is given in the table below.

**Index of Minnesota Farm Prices
(Corresponding month 1935-1939=100)**

Month	1935	1936	1937	1938	1939	1940	1941	1942
January	96	103	118	98	85	86	98	128
February	100	105	118	92	85	85	94	130
March	100	99	124	93	83	85	93	134
April	109	100	119	91	82	86	103	141
May	106	97	122	91	84	90	103	144
June	102	100	119	96	83	85	119	145
July	95	108	122	94	80	87	121	.....
August	96	127	118	84	76	82	113	.....
September	97	119	112	85	87	84	120	.....
October	100	117	111	84	88	86	118	.....
November	102	116	108	88	87	86	121	.....
December	106	118	104	89	83	92	127	.....

The weights used in computing the new index are the estimated average marketings of the included products by months for the five-year period, 1935-1939. The index for January, 1942, for example, is computed by multiplying the January prices of the commodities by the average January quantities marketed in the base period and comparing this with the same marketings priced at the average January prices of the base period. The comparison is thus with the prices in the corresponding month of the base period. The weights for each month differ since they depend upon the quantities of the particular commodities marketed in that month.

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