



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

FARM BUSINESS NOTES

Prepared by the Divisions of Agricultural Economics and Agricultural Extension
Paul E. Miller, Director Agricultural Extension

NO. 310

UNIVERSITY FARM, ST. PAUL

NOVEMBER 29, 1948

Earnings of Beginning Farmers

TRUMAN R. NODLAND

Comparatively little is known about the earnings of beginning farmers. The farm business records of veterans taking on-the-farm training in the state's public schools afford an opportunity to study earnings, farm organization, and financial progress of beginning farmers. The 1947 records from 328 enrollees in the program have been analyzed by the University of Minnesota. Since most of the veterans began farming in 1946, these records give a picture of their farming operations in the second year of business.

The receipts and expenses per farm for four areas of the state are shown in table 1. For purposes of comparison,

University Farm Radio Programs

HI-LIGHTS IN HOMEMAKING
10:45 a.m.

UNIVERSITY FARM HOUR—12:30 p.m.

Station KUOM—770 on the dial

the earnings are presented on a full-owner basis. Operator's labor earnings are computed by subtracting from the total receipts all the farm costs, including a 5 per cent charge for the use of capital and a charge for unpaid family labor. The net increase in farm capital and the value of the family living secured from the farm are included in receipts.

The average earnings received by this group of beginning farmers differed considerably among the various areas. The highest average operator's labor earnings were received by the farmers located in southeastern Minnesota. The sale of dairy products and hogs comprised the principal items of receipts.

The farmers included from the west central Minnesota area are predominantly crop farmers, with sale of crops making up nearly 50 per cent of the total sales. Hogs ranked second as a source of income.

Dairying was the main source of income in the remaining two regions. The northwestern Minnesota area represents the transition area between the Red River Valley and the cut-over region.

In terms of the total acreage per farm and in tillable crop land, the farms operated by the beginning farmers in west central Minnesota are considerably larger than those in the other areas. (Table 2) The acreage in tillable and non-tillable hay and pasture, however, is smaller than in the other areas; approximately 6 per cent of the tillable land is in hay and pasture.

The northeastern region represents the other extreme, with over 50 per cent of the tillable land in hay and pas-

Table 1. Earnings of Beginning Farmers, 1947

	South-eastern Minn.	West Central Minn.	North-western Minn.	North-eastern Minn.
Number of farms	125	62	65	76
Sales:				
Livestock	\$2,948	\$1,978	\$1,471	\$ 658
Dairy products	1,923	434	1,592	1,508
Poultry and eggs	801	589	609	330
Crops	1,140	3,094	1,162	347
Misc.	396	240	203	292
Total farm sales	\$7,208	\$6,335	\$5,037	\$3,135
Increase in farm capital	1,907	1,913	1,092	1,046
Family living from the farm	490	348	493	419
Total farm receipts	\$9,605	\$8,596	\$6,622	\$4,600
Farm expenses:				
Livestock bought	\$ 693	\$ 579	\$ 405	\$ 329
Misc. livestock expenses	77	59	43	39
Misc. crop expenses	348	420	250	148
Feed bought	905	635	567	534
Custom work hired	248	206	184	146
New power, machinery, and equip.	1,134	1,063	923	816
Power, mach., and equip. upkeep.....	777	838	683	433
New buildings and fences	347	231	235	209
Buildings and fences upkeep.....	81	85	118	73
Hired labor	167	110	116	90
Taxes, ins., and gen. farm expenses	283	272	200	128
Total farm purchases	\$5,060	\$4,498	\$3,724	\$2,945
Interest on farm capital	1,004	909	760	481
Unpaid family labor	584	399	457	315
Board furnished hired labor.....	74	31	46	15
Total farm expenses	\$6,722	\$5,837	\$4,987	\$3,756
Operator's labor earnings	\$2,883	\$2,759	\$1,635	\$ 844

Table 2. Distribution of Acres in Farms Operated by Beginning Farmers, 1947

Item	South-eastern Minn.	West Central Minn.	North-western Minn.	North-eastern Minn.
Total small grain	41.1	80.3	48.9	16.1
Total cultivated crops	41.5	58.0	24.9	8.0
Total tillable land in hay	22.4	6.1	20.4	30.4
Total tillable pasture	6.2	3.9	2.8	3.8
Tillable land not cropped	1.0	5.9	.8	1.7
Total tillable land	112.2	154.2	97.8	60.0
Total land in farms	178.9	204.4	178.9	150.2

ture. In the latter region the soil, topography, and climate make the grass and legume crop relatively profitable.

There was a wide variety of tenure arrangements used by this group of beginning farmers. Landlords or partners supplied some capital in 70 per cent of the cases. Thirty per cent of the beginning farmers owned the farm they were operating. At the other extreme some of the veterans did not own any farm capital at the beginning of 1947 but were operating on some basis whereby the landlord or partner furnished all the capital.

The size of farm, capital supplied by the operator, liabilities on January 1, 1947, the return to capital and family labor, and the financial progress made during the year for different tenure groups are shown in table 3.

The *capital supplied by the operator* is his investment in the farming business on January 1, 1947. In addition he has some assets in the form of cash on hand, household equipment, and in some cases bonds. The *liabilities* include mortgages, notes, and accounts payable at the beginning of 1947. The *operator's equity* in the farm capital is the difference between the capital supplied by the operator and the indebtedness. The difference between the operator's total assets and his liabilities represents his *net worth*. The gain in net worth is the difference between the net worth at the beginning and at the end of the year and represents the *financial progress* for the period. The *return to capital and family labor* represents the amount available for living expenses and payment on indebtedness.

With the exception of the cash and crop share renters in southeastern Minnesota, the owner-operators were on the smaller farms. Since they received no capital from landlords or partners, the owner-operator group furnished more of their own capital than any other group. Likewise they have a larger indebtedness per farm because they had

to borrow a great deal of the capital to begin farming.

Farmers beginning as livestock and crop share renters operated the largest farms, furnished the smallest amount of capital, and had the lowest indebtedness. In some cases the landlords furnished practically all the working capital as well as the real estate. In others, the operators furnished one half of the productive livestock and all of the power and machinery.

Renting a farm offers a chance for the operator with a limited amount of capital to begin farming on a farm of sufficient size to form an efficient operating unit. This is particularly true in the case of the livestock and crop share arrangement. In some cases, the tenant is able to step into a completely equipped going concern without financially embarrassing himself with a large debt load.

Many veterans purchased small farms because they did not have sufficient capital to buy a large farm. The purchase of a farm drained their financial resources to the extent that they did not have funds for the purchase of livestock and equipment.

In the southeastern Minnesota region owners received a larger return to capital and family labor and made a greater financial progress than the two renter groups. In the other areas studied, however, the reverse was true. This is additional evidence that owners frequently sacrifice earning capacity for the privilege of owning a farm. Veterans beginning as livestock and crop share renters are assuming less risk, and supply less capital. Because they are usually on large well-equipped farms, their earnings and financial progress is equal to and often greater than those of owners. Cash and crop share renters rank between the owner-operators and livestock and crop share renters as far as capital supplied and risk is concerned.

Financial Condition of Minnesota Creameries

E. FRED KOLLER AND JOHN T. BUCK

Analysis of the balance sheets of 160 Minnesota creameries shows that there have been some significant changes in their financial condition since the prewar years. The capital invested in creameries in the state has more than tripled since 1934 (table 1).

An important factor in this change has been the increased fixed capital required to shift from a gathered cream to a whole milk basis of operation. Inflation has added to the burden of creamery financing not only in increased costs of building and equipment, but also in increased values of inventories, receivables, and other capital items. Net returns retained in the business in the form of reserves and stock credits have been the principal source of new funds, but reliance on borrowings also has been greater than in the prewar period.

While capital provided by the members has increased, it has not kept up with the need. The financial ratio of members' equities to debt in these plants shows that in 1934 the members supplied \$2.78 of capital for each \$1.00 supplied by the creditors. In 1947, members supplied only \$1.60 for each \$1.00 put up by the creditors. A ratio of \$2.00 of member capital to \$1.00 of creditor capital is

Table 3. Operator's Investment in Farm Capital, Liabilities, Increase in Net Worth, and Return to Capital and Family Labor, 1947

	Owners	Cash and crop share renters	Livestock and crop share renters
Southeastern Minnesota			
Number of farms	20	35	45
Acres per farm	145	144	206
Capital supplied by operator	\$12,677	\$5,041	\$3,311
Indebtedness against operator's capital	7,429	1,690	1,171
Increase in net worth	2,832	2,354	1,876
Return to capital and family labor	2,901	2,815	2,371
West Central Minnesota			
Number of farms	11	36	.....
Acres per farm	182	216	.....
Capital supplied by operator	\$12,530	\$4,007	.....
Indebtedness against operator's capital	7,487	1,635	.....
Increase in net worth	2,536	2,399	.....
Return to capital and family labor	2,240	2,628	.....
Northwestern Minnesota			
Number of farms	18	14	16
Acres per farm	115	173	207
Capital supplied by operator	\$8,955	\$3,549	\$2,392
Indebtedness against operator's capital	3,572	1,703	341
Increase in net worth	1,322	1,789	1,828
Return to capital and family labor	1,375	2,021	2,312
Northeastern Minnesota			
Number of farms	43	.....	.....
Acres per farm	124	.....	.....
Capital supplied by operator	\$7,468	.....	.....
Indebtedness against operator's capital	2,963	.....	.....
Increase in net worth	799	.....	.....
Return to capital and family labor	1,091	.....	.....

Table 1. Average of Balance Sheets of 160 Minnesota Cooperative Creameries, 1934, 1940, and 1947

	Average Per Creamery		
	1934	1940	1947
Current assets			
Cash	\$ 2,263	\$ 3,949	\$12,351
Receivables (net)	3,137	4,254	14,787
Inventories	1,983	2,925	6,916
Other current assets	77	122	1,017
Total current assets	\$ 7,460	\$11,250	\$35,071
Investment assets			
Equities in other coops	1,580	2,457	13,853
Long-term assets			
Net land, buildings and equipment	\$16,628	\$18,937	\$36,338
Other assets	561	194	49
Total all assets	\$26,229	\$32,838	\$85,311
Current liabilities			
Notes payable	599	1,169	2,173
Accounts payable (general)	502	651	2,007
Accounts payable (patrons)	3,554	6,471	20,865
Accruals, etc. payable	454	698	2,297
Total current liabilities	\$ 5,109	\$ 8,989	\$27,342
Long-term liabilities			
Mortgages payable, etc.	1,824	1,289	5,418
Members' and patrons' equities			
Stock and stock credits	6,624	7,094	8,875
Patrons' equity reserves	613	2,488	30,288
Statutory reserves	11,582	12,088	12,457
Undistributed net returns	477	890	931
Total M. and P. equities	\$19,296	\$22,560	\$52,551
Total liabilities and equities	\$26,229	\$32,838	\$85,311

considered to be a desirable standard.

The working capital position of these creameries is also weaker. In 1934 there were \$1.46 of current assets for each \$1.00 of current debt, but in 1947 there were only \$1.28 of current funds for each \$1.00 of debt. A reasonably sound position requires \$2.00 of current assets for each \$1.00 of current debt.

The weakening trend in both the member capital and working capital ratios is largely attributable to highly competitive conditions in the industry. Many plants have paid their patrons to the limit of their current resources to attract an adequate volume of milk or cream. This has drained away current funds and has made the accumulation of reserves difficult. To halt the unfavorable trends in creamery financing, there is need of some limitation on current payments to dairy producers until ample reserves have been set up.

Farm Family Living Costs

GEORGE A. POND

Much information is available about farmers' incomes and farm expenses but little about the farmers' living costs. These costs are highly significant since they have first priority in the farmers' spending program. Living costs must be met first before there is anything available for improvements, savings, interest, debt payments, or even for farm operating expense. They may be curtailed in periods of low income but there is a minimum of family needs that have first claim on this income.

The personal and household expenses for 100 farm families for the years 1931 to 1946 are shown by four-year periods in table 1. The average number of persons in the families covered by these records was 4.4. In addition, hired help amounting to an average of .7 of a person lived with the farm family.

Food is the largest single item in the cash budget of the farm family, even though a substantial part of the food consumed by the family is raised on the farm. The average value of farm-raised food consumed by these families was \$274 at farm prices. This was divided as follows: dairy products, \$81; eggs, \$42; meat, \$94; and fruits and vegetables, \$57. If purchased at prevailing retail prices, these would have cost approximately twice as much. The average quantity of home-raised products per person (man equivalent) was 592 quarts of milk, 47 dozen eggs, and 185 pounds of meat. In addition to this farm-raised food, the farm supplied a house for the family. The cash outlay for this house is included in the farm expenses deducted in computing the net income in table 1. The farm also supplied an average of 7 cords of wood for fuel with an estimated value of \$33. The food, fuel, and shelter supplied by the farm are important factors in reducing the necessary cash outlay for living by the farm family.

The net farm income of these families is also shown in table 1. Like anyone else, the farmer and his family spend more when they have more to spend. Part of the increased expenditure shown here was due to increasing prices. From the period 1931-34 to 1943-46 the number of dollars spent for food, operating expense, furniture, and clothing increased 60 per cent, but because of the decreased purchasing power of the dollar the quantity of goods received increased only 40 per cent. This, however, is sufficient to provide a substantial increase in quality of living.

Living costs did not rise as rapidly as incomes. The excess of net income over living costs was 5 times as large in the four-year period 1943-46 as it was during the years 1931-34. Knowing how much is needed for family living and allowing for that amount when planning the financial set-up of the farm will do much to avoid financial difficulties. This is especially important in a business with such widely varying annual incomes as farming.

Table 1. Personal and Household Expenses and Net Farm Incomes of Farm Families, 1931-1946*

	Average				
	1931-34	1935-38	1939-42	1943-46	1931-46
Food	\$ 224	\$ 283	\$ 325	\$ 445	\$ 320
Operating expense	70	113	117	169	117
Furnishings and equipment	28	83	113	104	82
Clothing	93	122	147	217	145
Personal care and spending	42	47	53	64	51
Education, recreation, and development	55	72	67	92	71
Medical care and health insurance	42	70	94	138	86
Church, welfare, and gifts	43	51	90	193	95
Personal share, auto expense	76	79	146	81	95
Personal share electricity and gas engine	22	24	38	44	32
Life insurance	92	94	100	102	97
Total expenditures	\$ 787	\$1,038	\$1,290	\$1,649	\$1,191
Net farm income	\$1,180	\$1,788	\$2,083	\$3,629	\$2,170

* From Records of Southeastern Minnesota Farm Management Service.

Minnesota Farm Prices For October, 1948

Prepared by W. C. WAITE AND K. E. OGREN

The index number of Minnesota farm prices for October, 1948, is 266. This index expresses the average of the increases and decreases in farm product prices in October, 1948, over the average of October, 1935-39, weighted according to their relative importance

Average Farm Prices Used in Computing the Minnesota Farm Price Index, October, 1948, with Comparisons*

	Oct. 15, 1948	Sept. 15, 1948	Oct. 15, 1947		Oct. 15, 1948	Sept. 15, 1948	Oct. 15, 1947
Wheat	\$ 2.05	\$ 2.03	\$ 2.81	Hogs	\$24.30	\$27.00	\$27.50†
Corn	1.25	1.67	2.14	Cattle	21.20	23.00	16.10†
Oats .....	.62	.60	1.06	Calves	26.00	27.00	21.10†
Barley	1.21	1.13	2.07	Lambs-Sheep ..	21.87	22.93	19.80
Rye	1.36	1.30	2.68	Chickens .....	.248	.290	.202
Flax	5.75	5.75	6.50	Eggs .....	.462	.422	.464
Potatoes	1.15	1.35	1.45	Butterfat .....	.76	.84	.84
Hay	16.70	16.00	12.90	Milk	3.75	3.95‡	3.80‡
				Wool† .....	.45	.45	.44‡

These are the average prices for Minnesota as reported by the United States Department of Agriculture.

† Not included in the price index number.

‡ Revised.

Minnesota farm prices decreased about 6 per cent from September to October. Price declines of 10 per cent or more were recorded by corn, potatoes, chickens, hogs, and butterfat. All of these commodities, however, (except butterfat) usually have some seasonal price decline in October.

The decline in prices received resulted in another decrease in the purchasing power of Minnesota farm products. The purchasing power index in October was at its lowest level since June, 1946, the month before price controls were first removed. The October value was only slightly higher than the average of the war period, 1942-46, but was more than 30 per cent above the 1935-39 period.

Indexes and Ratios for Minnesota Agriculture*

	Oct. 15, 1948	Oct. 15, 1947	Oct. 15, 1946	Average 1935-39
U. S. farm price index	260.8	272.1	257.0	100
Minnesota farm price index	265.9	300.2	252.5	100
Minn. crop price index	253.2	366.8	261.8	100
Minn. livestock price index	294.5	303.2	235.5	100
Minn. livestock product price index	229.7	238.9	272.7	100
U. S. purchasing power of farm products	130.1	141.4	154.2	100
Minn. purchasing power of farm products	132.6	156.0	151.5	100
Minn. farmers' share of consumers' food dollar	62.3†	65.7	69.5	47.6
U. S. hog-corn ratio	17.8	12.4	13.5	14.1
Minnesota hog-corn ratio	19.4	13.0	12.2	17.8
Minnesota beef-corn ratio	17.0	9.1	9.8	14.7
Minnesota egg-grain ratio	17.4	11.4	15.2	20.9
Minnesota butterfat-farm-grain ratio	35.2	22.8	34.8	36.4

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

† Figure for August, 1948.

Index of Prices Paid by Farmers

K. E. OGREN

The level of parity prices (and support prices) is determined by the index of prices paid. The parity price of most agricultural products is calculated by multiplying the average price of the product, in the base period 1909-14, by the index of prices paid by farmers, which uses the same base period.

This index attempts to measure the over-all changes that occur in the level of prices paid by farmers for commodities used in living and farm production, plus interest and taxes on farm real estate. Table 1 gives a partial description of the composition and weighting of this index. The weighting of each subgroup and the individual items is based upon the average quantity purchased per farm during the six-year period 1924-29. This weighting now has a limited applicability for individual farms because of wide variations in expenditure patterns on individual farms, differences in types of farming throughout the country, and shifts in production and living cost patterns which have occurred in the last 20 years.

Table 1. Percentage Weights Used in Computing the Index of Prices Paid by Farmers

Commodities used for family living (86 items)	48.6
Food (22)	17.5
Clothing (17)	14.8
Supplies—fuel, soap, gasoline, oil, etc. (11)	6.8
Building materials for house (14)	3.6
Automobiles—share used for living (1)	3.0
Furniture and furnishings (21)	2.9
Commodities used for production (91 items)	37.4
Feed (12)	10.1
Equipment and supplies—gasoline, tools, harness, etc. (15)	6.9
Building and fencing materials (19)	5.9
Automobiles, trucks, and tractors (3)	5.7
Fertilizer and seed (14)	4.6
Machinery (28)	4.2
Interest—charges per acre on farm real estate debt	7.2
Taxes—per acre on farm real estate	6.8
Total	100.0

UNIVERSITY OF MINNESOTA
Department of Agriculture
Agricultural Extension
University Farm, St. Paul 1, Minn.

PAUL E. MILLER, Director
Form 8—11-48—3500
Permit No. 1201

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300

FREE—Cooperative Agricultural Extension
Work, Acts of May 8 and June 30, 1914.

UNIVERSITY FARM, ST. PAUL 1, MINNESOTA

Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Division and United States Department of Agriculture Cooperating, Paul E. Miller, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.