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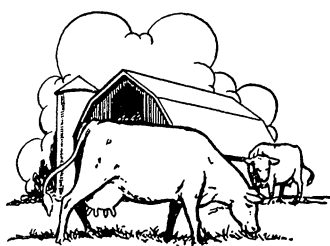
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MINNESOTA farm business NOTES



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How Are Minnesota Co-ops Financed?

E. Fred Koller and Reynold P. Dahl

One of the most difficult problems farmers' cooperatives face is that of obtaining the capital needed to market members' products and supply members with goods and services. Lack of adequate capital limits the effectiveness of many cooperatives and often contributes to failure.

In recent years inflation has increased the amounts required to finance inventories, receivables, equipment, buildings, and other expenses. Many cooperatives have sought added capital to expand services demanded by their members.

A survey of all farmers' cooperatives in Minnesota conducted by the Division of Agricultural Economics has provided much information on the various aspects of the financing of these organizations at the mid-century point.

It was found that total assets of all 1,341 associations in the state, including both the small local associations and the larger regional organizations, averaged about \$170,000 each. This compared with average assets of \$29,564 in these associations in 1936.

The average capital used by 1,321 local associations (eliminating the large regional organizations) was \$81,288 (table 1). Local cooperatives with the largest capital requirements were 231 grain associations with average assets of \$124,852. The 534 local dairy associations in the state had average assets of \$87,374, while 294 local farm supply cooperatives had an average of \$84,847.

For all of the local associations combined, current capital used averaged \$35,836, or 44 per cent of the total (table 1). Inventories required 19.6 per cent of total capital and net receivables 14 per cent. Net fixed capital, including land, buildings, and equipment, was 38 per cent of the total. Investment assets, consisting largely of the capital

stock and other equities which the locals owned in the regional federations with which they were affiliated, averaged \$12,656, or 15.6 per cent of all the assets.

Sources of Capital

Analysis of the sources from which the local associations obtained their

Table 1. Average Balance Sheet of 1,321 Local Cooperative Associations in Minnesota, Fiscal Year Ending 1949-50

	dollars	per cent
Current Assets:		
Cash and U. S. bonds.....	\$ 8,098	10.0
Receivables (net)	11,348	14.0
Inventories	15,965	19.6
Other current assets	425	0.5
Total Current Assets.....	\$35,836	44.1
Investment Assets:		
Equities in other co-ops., etc.	\$12,656	15.6
Fixed Assets:		
Land, bldgs., equip., (net)	\$30,918	38.0
Other Assets	\$ 1,878	2.3
TOTAL ASSETS	\$81,288	100.0
Current Liabilities:		
Notes payable	\$ 4,400	5.4
Accounts payable—general..	4,021	5.0
Accounts payable—patrons....	9,615	11.8
Patronage refunds payable..	2,224	2.7
Other current liabilities.....	2,248	2.8
Total Current Liabilities....	\$22,508	27.7
Long-term Liabilities:		
Notes, bonds, mortgages payable	\$ 3,412	4.2
TOTAL LIABILITIES	\$25,920	31.9
Net Worth:		
Capital stock		
Preferred stock	\$ 5,598	6.9
Common stock	13,375	16.4
Stock credits	4,451	5.5
Total Stock	\$23,424	28.8
Certificates of equity.....	\$ 1,071	1.3
Patrons' equity reserves.....	21,340	26.3
General reserves, surplus, etc.	9,533	11.7
TOTAL NET WORTH	\$55,368	68.1
TOTAL LIABILITIES AND NET WORTH	\$81,288	100.0

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capital showed that creditors supplied an average of \$25,920, or 31.9 per cent. The members, or owners, supplied \$55,368, or 68.1 per cent (table 1).

Examination of the current liabilities indicates that about \$4,000, or five per cent, of the needed capital was obtained from various suppliers on book account. Patrons provided \$9,615, or 11.8 per cent, of total capital by waiting for the proceeds from the sale of their commodities under various pooling arrangements.

These cooperatives relied in varying degrees on borrowed funds as a source of capital. Short-term borrowings showing on the year-end balance sheets averaged \$4,400 and long-term borrowings \$3,412.

Only 564 of the local cooperatives, or 42.7 per cent, had used borrowed funds during the fiscal year 1949-50. The total amount borrowed by these associations was \$10,175,300, or an average of \$18,041. The borrowings of 12 of the large regional associations totaled \$60,056,657, or \$5,004,721 each.

Individuals were the chief source of borrowed funds of the local associations. They provided \$2,730,800 to 274 associations (table 2). Commercial banks loaned \$2,633,700 to 279 local associations, and the St. Paul Bank for Cooperatives \$2,220,700 to 102 locals. The

MINNESOTA farm business NOTES

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large regional associations relied more heavily on the banks for cooperatives, eight associations having borrowed over \$36 million from this source during the year. Commercial banks provided five of the regionals with over \$13 million.

Owner Capital

Of the capital supplied by the owners (net worth), an average of \$23,424 per association was in the form of stock or stock credits, \$30,873 in various reserves and surplus, and \$1,071 in various kinds of certificates of equity (table 1). Common stock was an important source of funds, providing an average of \$13,375 in each of the local associations. Out of 1,341 associations 1,109 had common stock outstanding and only 232 were organized on the nonstock plan.

The use of preferred stock in financing Minnesota cooperatives has increased in recent years. The local associations obtained an average of \$5,598 by this means. A total of 313 associations used preferred stock in their financial structure.

The local associations had stock credits on their balance sheets averaging \$4,451. These came from patronage refunds made in the form of stock credits in many associations. In some cases, the association had not had time to issue stock certificates for the credits, and in some cases the credits were only fractional payments on a share. It should be noted that a relatively large proportion of the capital stock of these cooperatives was accumulated out of net margins which were refunded to the patrons in the form of stock credits.

Patrons' equity reserves are used extensively in the owner financing of cooperatives in this state. These reserves averaged \$21,340 and supplied over one-fourth of the capital used by these associations. Patrons' equity reserves represent patronage refunds which have been retained in the association in the form of book credits to the accounts of individual patrons. These credits often are held for a period of years and then paid in cash on a revolving capital plan. General reserves consist princi-

Table 2. Associations Borrowing, Number of Loans, and Amount of Loans by Type of Lender, for Fiscal Year 1949-50

	Number of associations borrowing	Number of loans	Combined amount of loans
<i>Local Associations</i>			
Commercial banks	279	346	\$ 2,633,700
Bank for co-ops	102	142	2,220,700
Other federal and state agencies	7	7	108,900
Private marketing and supply firms	23	25	326,300
Co-op marketing federations	34	38	236,200
Co-op supply federations	70	88	590,200
Insurance firms	45	49	680,000
Other cooperatives	32	38	170,800
Individuals	274	384	2,730,800
Unknown	11	11	477,700
TOTAL	564*	1,128	\$10,175,300
<i>Regional Associations</i>			
Commercial banks	5	5	\$13,218,000
Banks for co-ops	8	20	36,246,699
Other cooperatives	5	7	7,990,903
Individuals	4	5	2,601,055
TOTAL	12*	37	\$60,056,657

* This total is not an addition of the above column because some associations borrowed from two or more sources.

pally of reserves required under the Minnesota cooperative law. Often these reserves also are allocated to the credit of the patrons on a pro rata basis.

It may be observed that the owner (net worth) financing of cooperatives is largely from net margins retained in the business and evidenced by capital stock, stock credits, or book credits to various reserves. In this respect, farmers' cooperatives are like other businesses which also rely very extensively on net margins for their financing.

Revolving Capital

Many of these cooperatives have adopted the revolving capital plan of financing. This plan provides for annual additions to capital usually obtained from patronage refunds. These additions are continued until capital has reached a desired level. When this stage is reached the oldest capital increments are returned to the patrons each year, at the same time that new additions are obtained in a continuously recurring process. The plan has many advantages including the fact that patrons help finance the association in proportion to the use they make of it and in installments which usually are not burdensome.

It was found that 602 out of 1,341 Minnesota associations had adopted revolving capital plans. The plan was being used by 297 dairy, 134 grain, and 134 farm supply cooperatives. A total of 629 capital accounts were being revolved, since some associations revolved more than one account. In 452 cases, patrons' equity reserves were being revolved, in 108 common stock, in 47 preferred stock, and in 22 various certificates of equity.

In 19 cases, the revolving period was fixed in advance, but in 610 cases, the length of the period was left to the discretion of the board of directors. In 329 plans which had reached the revolving stage, 294 had a revolving period of ten years or less. In 169 cases, dividends or interest were paid on the capital in the revolving plan.

Lack of working capital and lack of enough financing by the members are troublesome problems for many associations. Indicative of this is that the average ratio of current assets to current liabilities in all of these associations (local and regional) was only 1.64 to 1 while at least a 2 to 1 ratio is considered desirable. Dairy associations had an average current ratio of only 1.22 to 1 reflecting working capital problems in many. The proportion of member, or owner, capital to the total averaged 62 per cent for all the associations. A minimum member capital of 66 to 70 per cent is desirable. The large regional associations had only 57 per cent of member capital, grain associations 58 per cent, and frozen food locker cooperatives only 48 per cent.

Artificial Breeding Affects Beef Supply

Robert E. Olson

While the chief effect of artificial breeding is on the productivity of dairy cows, it also has some effect on the number of dairy animals sold for slaughter.

About four million out of 24.5 million dairy cows are enrolled this year

in artificial breeding associations in the United States. Indications are that artificial breeding already has had some effect on the supply of sausage bulls. It is likely to affect the number of cows kept for milk, the rate at which they are discarded, and the number of calves marketed as veal.

In recent years, from three to five per cent of the number of cattle slaughtered and about four per cent of the total beef supply were bulls. Beef from dairy bulls was about 2½ per cent of the total supply. Obviously, a reduction in the number of bulls on farms will not seriously affect the total amount of beef produced.

Fewer Bulls on Farms

But changes in the number of bulls are important since most of the meat from them is marketed as processed meat. It is estimated that one bull has been eliminated on about half of the 427,000 farms reported participating in the artificial breeding program. The result has been a decrease of over 14 per cent in the supply of beef from dairy bulls and nine per cent in the supply of beef from all bulls.

This reduction may be partly responsible for the slight increase which has taken place in the price of sausage bulls compared with the price of steers. If artificial breeding were universally adopted, 90 per cent or more of the dairy bulls could be eliminated and the effect on beef supplies and bull prices would be much greater.

The majority of the males which previously would have been raised as bulls probably are marketed as veal calves and a smaller proportion raised and marketed as steers. Even if all were marketed as veal, the increase in veal production would be less than one per cent of the total.

Although artificial breeding has not been used extensively in the commercial beef-producing areas or on large-scale beef farms, many dairy breeding associations are now using bulls of the beef and dual-purpose breeds. In Minnesota, nearly 15 per cent of the cows bred artificially are bred to beef or dual-purpose bulls.

Indications are that these bulls are mated primarily with dairy or dual-purpose cows or with beef cows in herds which contain only a small number of beef cows. This development can have considerable effect on the quality of animals raised for beef from dairy and dual-purpose cows. It may also affect the supply of beef since more of these calves are likely to be carried beyond the veal stage.

Will Affect Both Meat and Dairy

Thus far, artificial breeding has not had much effect on the total output of milk. As more artificially sired daughters come into production, the number of cows needed for a given level of milk production can be expected to decline. Relatively fewer discarded dairy cows will be available for slaughter. The number of dairy calves available for veal can also be expected to decline. There will be less difference among cows, average productivity will rise, and thus, fewer cows will be culled from dairy herds. The effect of this program in reducing the number of dairy cows and veal calves offered for slaughter will occur gradually.

Artificial breeding has brought about a significant decline in the number of sausage bulls available for slaughter. The number of dairy cows and veal calves from dairy cows will contribute a small proportion of the combined supplies of beef and veal in the long run. The resources made available by the decline in the number of dairy animals needed are likely to be utilized for other meat producing animals. In the long run, the total supply of meat is likely to be increased. Although the magnitude of the shifts will depend on how widely artificial breeding is finally adopted, it is clear the program will lead to a more effective use of resources in meat and dairy production.

Homemakers Using Dry Skim Milk

E. Fred Koller and Dale G. Stallings

Dry skim milk¹ in one-pound and other consumer packages for home use was introduced on a large scale in the Twin Cities in the summer of 1950. Since then several distributors have entered the market and have vigorously promoted their respective brands. Similar introductions of the product have been made in leading cities in all parts of the United States. Consumers have responded favorably and sales are increasing.

Because broadened markets for dry skim milk are important to Minnesota dairy farmers, the Division of Agricultural Economics undertook a study of the sale and use of the product in Twin Cities homes. A carefully selected sam-

ple of 150 Minneapolis users was interviewed in June, 1951, as to their use of the product and their reactions to it.

It was found that the families interviewed were using the product at a rate of about one pound a week.² Sixty of those interviewed were using the product for the first time and averaged one-half pound a week. Ninety families had used the product for some time and reported an average consumption of about 1.2 pounds a week.

The 150 families were classified into three family-income groups to find the relationships between income and use. Average consumption of the dry skim milk was larger in the middle-income group than in the highest- and lowest-income groups. When the study was begun it was expected that the lower income group would show a relatively larger consumption of the product in view of its lower cost and economy.

Classification of the users by occupational groups showed that the largest numbers were from the professional, sales, and clerical groups. Other large-user groups were those in administrative and skilled craft jobs. The number of lower skilled laborers among the users was small.

Dry skim milk was used in various ways. Use for drinking ranked first in importance followed by cooking, baking, and preparing flavored milk drinks. Of the consumers surveyed 80 per cent used the product in two or more ways.

A factor in the large proportion used for drinking was that many were using it for dieting and weight-reducing. Repeat consumers, more experienced with the many uses of the product, consumed a relatively larger proportion in baking and cooking than did the beginning users.

Thirty-seven per cent of those interviewed reported economy as the most important reason for using dry skim milk. (At the time of the survey Minneapolis retail prices of dry skim milk ranged from 35 to 45 cents a pound, or about 7 to 9 cents a quart of fluid equivalent.) Diet was given as the most important reason by 30 per cent of the consumers. Twenty-four per cent indicated the convenience of the product as of first importance.

Expanded use of dry skim milk in the home is in prospect as it becomes more generally available, as more consumers become acquainted with it, and as they learn to use it in a greater number of ways. The potential market may not be as great in the Twin Cities as in cities of the East and South where fluid milk prices are higher.

² One pound of dry skim milk will make about five quarts of fluid skim milk.

¹ Also called nonfat dry milk solids.

Minnesota Farm Prices for September-October, 1951

Prepared by Jerry M. Law

Average Farm Prices for Minnesota, September-October, 1951, with Comparisons*

	Sept. 15, 1951	Sept. 15, 1950	Oct. 15, 1951	Oct. 15, 1950
Wheat	\$ 2.08	\$ 2.07	\$ 2.12	\$ 1.95
Corn	1.59	1.33	1.56	1.29
Oats .....	.72	.67	.77	.67
Barley	1.11	1.31	1.21	1.26
Rye	1.45	1.22	1.50	1.18
Flax	3.43	3.29	3.80	2.99
Potatoes	1.10	1.15	1.15	.85
Hay	14.90	14.90	14.60	14.10
Hogs	19.00	20.60	19.60	19.20
Cattle	29.20	25.30	28.60	25.30
Calves	32.80	29.10	33.30	28.70
Lambs-sheep ..	28.24	24.00	28.46	24.75
Chickens .....	.20	.187	.18	.168
Eggs .....	.50	.332	.49	.365
Butterfat .....	.74	.66	.76	.69
Milk	3.75	3.20	3.90	3.35
Wool† .....	.70	.55	.65	.55

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

† Not included in the price index numbers given below for Minnesota.

The index of Minnesota farm prices represents the average of the increases and decreases in farm product prices in the given month of 1951 over the average of the five corresponding months of the period 1935-39, weighted according to their relative importance.

Indexes and Ratios for Minnesota Agriculture

	Sept. 15, 1951	Average 1935-39	Oct. 15, 1951	Average 1935-39
U. S. farm price index*.....	271.5	100	278.7	100
Minnesota farm price index*.....	257.4	100	272.2	100
Minn. crop price index	230.4	100	251.4	100
Minn. livestock price index	303.6	100	312.8	100
Minn. livestock product price index	234.6	100	223.2	100
U. S. purchasing power of farm products	120.1	100	122.9	100
Minn. purchasing power of farm products	113.9	100	120.0	100
Minn. farmers' share of consumers' food dollar	57.9†	48.6	57.9‡	47.6
U. S. hog-corn ratio	11.94	12.6	12.38	14.1
Minnesota hog-corn ratio	11.95	14.9	12.56	17.8
Minnesota beef-corn ratio	18.36	11.9	18.33	14.7
Minnesota egg-grain ratio	16.90	17.3	16.21	20.9
Minnesota butterfat-farm-grain ratio	30.67	32.4	30.04	36.4

* The weights used for U. S. indexes are the average sales of 60 months in 1935-39. The weights used for Minnesota indexes for a given month are the average sales in the five corresponding months of 1935-39.

† Figure for June. ‡ Figure for July.

The Outlook Corner—The Feed Picture

The Outlook for the Coming Year

1. Farmers produced 120 million tons of feed grains (corn, oats, barley, and grain sorghums) in 1951. See the table.

2. The total production of feed concentrates was 147 million tons.

3. The number of grain-consuming livestock, 182 animal units, was exceeded only in 1942 and 1943.

4. This livestock will use about 157 million tons of feed or all of 1951 production and one-third of the reserves.

For Minnesota Farmers This Means:

1. As feed reserves go down, feed prices will strengthen.
2. Be sure now of feed supplies for the full year.
3. Stretch feed as far as possible. Use hay and silage to save grains.
4. Save good feed; it will be valuable property next year.

The Longer Outlook

1. Feed production has been very high the last five years. See the table.

2. This has been due largely to better varieties and methods. These will most likely continue and may improve.

3. Production of the feed grains has fluctuated greatly—from 95 million tons in 1947 to 138 million in 1948.

4. Increased population and high levels of employment produced a good demand and satisfactory prices for livestock.

Production and Use of Feed Grains, by Five-Year Periods, United States

Item	Average 1927-31	Average 1937-41	Average 1947-51
million tons			
Production			
Feed grains	97	99	121
By-product feeds	13	16	21
Other grains fed	4	4	5
Total	114	119	147
Uses			
For livestock	104	105	128
Other uses	10	12	18
Total	114	117	146
Animal units of grain-consuming livestock ..	154	153	170
Grain fed per animal unit .....	.67	.69	.76

5. This demand may hold livestock prices near their present levels for some time.

For Minnesota Farmers This Means:

1. You can work profitably toward increased production of grains.
2. Fit livestock production to feed production in 1952 and 1953. If the 1952 crop is normal, we can feed almost as much livestock as now. If the 1952 crop is very poor, we must cut down on livestock sharply. Bumper crops would again pile up big reserves of feed.
3. Keep your livestock plans flexible.
4. Keep your eye on the feed supplies and on 1952 crop conditions.
5. Be prepared to pick up extra feed or unload livestock if the 1952 crop is poor.
6. Watch economic conditions constantly. A decline in employment will mean weaker livestock prices.

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