BULLETIN 184 AUGUST 1919

The University of Minnesota

AGRICULTURAL EXPERIMENT STATION

FARMERS' COÖPERATION IN MINNESOTA 1913-1917

BY

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FARMERS' COÖPERATION IN MINNESOTA 1913-1917

By JOHN D. BLACK AND FRANK ROBOTKA

INTRODUCTION

Since 1913 the Division of Research in Agricultural Economics has been collecting, under instructions received from the 1913 legislature, "statistics and information with reference to coöperative associations among farmers, and the management and methods of conducting such associations."[1] The results of these investigations have been published in the series of bulletins listed on the opposite page. All of these bulletins are available for general distribution among the people of the state. The purpose of this bulletin is to present the statistics of coöperation for 1917, and at the same time trace the changes in the coöperative movement in the state between 1913 and 1917. From these statistics certain important conclusions may be formed as to the reasons for the failure and success of various types of coöperative enterprises.

The statistics of coöperation for 1917 were mostly obtained, as in former years, by correspondence. About the usual number of companies failed to report, or their reports were so inaccurate and incomplete that they could not be used in the final averages. Enough coöperative companies reported, however, to make the results of interest and value. As in former years the statistics were collected in the same way, they can be readily compared from year to year. Some of the figures needed are collected annually by state officials, and in such cases the official records have been used.

The discussion of the causes of success or failure of coöperative enterprises is based in part upon questions included in the schedules sent out to the various companies, and in part upon first-hand experience with the accounting practices of a large number of cooperative companies.

In this bulletin, a company is considered coöperative if the farmers of the community largely own and control the business and divide most of its profits. According to strict use of the term, no company is coöperative unless it complies with the following three requirements: (1) Each member has one vote, regardless of the number of shares he owns; (2) no member owns more than a limited number of shares;

[1] Chapter 386, Sess. Laws of 1913.

(3) the proceeds of the business are distributed on the basis of patronage, that is, according to the amount of purchases from or sales to the company, the dividend on shares being restricted to prevailing rates of interest for similar risks. However, many of the companies in Minnesota accomplish in other ways the purpose which is aimed at in these three requirements, and it is altogether fair and proper to consider them as coöperative. Their organization may be a little at fault, but the coöperative spirit is there or they could not succeed.

SUMMARY, 1913–1917

Table I gives the number of coöperative associations of each kind in 1913 and 1917, and their total volume of business. As later discussions will show, many of these figures are more or less estimates. They are in every case intended, however, to be underestimates, rather than overestimates. Most of the gain of 950 in the number of organizations is a real gain, and all of it is for important types of cooperation, except perhaps the gain of 350 for farmers' telephone companies. Besides, the number of coöperative telephone companies can be only a rough estimate. The important gains are those for livestock shipping associations, elevators, and creameries. The increase in miscellaneous organizations is largely because 100 buying clubs and 75 horse-breeding associations are included, many of which were probably in existence in 1913 but not counted. The real gain for the four years is therefore about 450, or 800 if farmers' telephone companies are included.

TABLE I

SUMMARY OF THE FARMERS' COOPERATIVE MOVEMENT IN MINNESOTA, 1913-1917

	Number of organizations		Annual volume of business	
	1917	1913*	1917	1913*
Creameries	643	613	$31,012,000	$21,676,252
Elevators†	360	270	45,000,000	24,000,000
Livestock shipping associations	400	115	33,000,000	6,000,000
Cheese factories	52	34	986,000	637,224
Stores	102	115	6,500,000	4,250,000
Potato warehouses	15	20	300,000	100,000
Fire insurance companies‡	159	154	712,606	696,732
Telephone companies	950	600	1,200,000	900,000
Miscellaneous	275	86	.....	.....
Total	2,950	2,000	$118,710,000	$58,260,000

* Data taken from Bulletin 146.
† Business arising from 1917 crop.
‡ Business of 1916.

Miscellaneous organizations include the following: Farmers' clubs doing coöperative buying, 100; horse-breeding associations, 75; breed associations, 28; county breeders' associations, 25; coöperative bull associations, 8; cow-testing associations, 15; farmers' lumber yards, 7; miscellaneous, 12.

The increase in volume of business is of course in large part due to the rise of prices. In the period between 1913 and 1917, retail prices rose 60 per cent in the United States, wholesale prices 75 per cent, farm products at wholesale, 88 per cent, and farm prices for Minnesota grains, 92 per cent. The rest of the increase is due to the increase in the number of companies. Only a few kinds of coöperative concerns have actually increased in size.

Minnesota leads all other states in the number of coöperative companies. Wisconsin is probably second, with 2,070 in 1916[2], not including 200 miscellaneous organizations such as are included in Table I. Of this number, only 471 are farmers' telephone companies. But leaving out farmers' telephones in both states and all miscellaneous associations, Minnesota had 330 more coöperative associations in 1917 than Wisconsin had in 1916. The third state is Iowa.

Minnesota's lead will undoubtedly be retained. For this three things are necessary: (1) Forming new coöperative organizations wherever and whenever local conditions make it possible for them to succeed. Those kinds of coöperation which succeed best should be tried first. (2) Making reasonably sure that local conditions are such that a new company will succeed, and then organizing the right kind of association. (3) Improving the organization and management of the existing companies so as to make sure that few of them fail. The new companies that never get a good start and the old ones that fail do the coöperative movement much harm.

ESSENTIALS TO SUCCESSFUL COÖPERATION

The division of Research in Agricultural Economics, after having studied coöperation in Minnesota for five years, feels that no one thing seems to be absolutely necessary to successful coöperation. It has found many things, however, which help greatly to that end. Following is a list of these, the more important ones being named first. Wherever a coöperative company succeeds greatly, several of these conditions will be found to exist.

1. *Sound economic need for a coöperative company.*—Such a need exists (1) where present markets give poor service or take too large profits, (2) where the present marketing system is wasteful and expensive, and (3) whenever the farmers by combining can reach better markets with their products or teach themselves to turn out better products. Needless to say, many coöperative companies have been organized where these conditions did not exist. Often an imaginary grievance, hate, spite, or misguided enthusiasm has led farmers to think that a coöperative company was bound to succeed

[2] Hibbard, B. H., and Hobson, Asher. "Coöperation in Wisconsin." Wis. Exp. Sta. Bull. 282, 1917.

when their sober judgement in the matter told them better afterward. Most of all, the farmers have to look out for the promoters, the men who for a sum of money will convince them that they ought to organize. Many times the promoters are telling them the truth, but more often they are not.

2. *Enough business.*—Small businesses are conducted at high cost in proportion to the products handled. This means that private companies handling more business can undersell them. Farmers thinking about organizing need always to ask themselves how much business they can get right at the start, how much they can expect to take away from private companies, and whether the product they are proposing to sell is increasing or decreasing in importance in the neighborhood.

It is usually important that this business come from a rather small area. If the members of most kinds of coöperative companies are scattered over several townships, they do not have a chance to get acquainted and do not attend the meetings regularly, each of which is undesirable. Most villages and cities draw their trade from a rather closely defined territory around them. People trading in one village are not likely to keep on doing business with a co-operative company somewhere else. In organizing, therefore, it is important to keep within these natural trade areas.

It is also better if the business is one that keeps going throughout the year, like the creamery business. Organizations are likely to die out from season to season if some business is not taken on to keep up the interest. It also costs to have buildings stand idle.

3. *Coöperative spirit.*—Coöperation means working together in order to obtain a larger result than can be obtained individually. When one man holds a ladder while the other climbs, the job is better done than if the two try to climb together. Wherever people are coöperating successfully, they will be found all pulling together, some doing one task which has been assigned them and some doing another, and each having faith that the other will do his part. The most that many of the members have to do is to elect their officers and furnish the business, but this is a most important part and must be done well. The members of a company do not all need to be honorable, upright, peace-loving men, altho these qualities are desirable. Instead, what is needed is that each shall do his part faithfully and let the others do theirs and that all shall have faith that by so doing they will help the common cause. Farmers who have really learned how to co-operate and have come to know the benefits to be gained from co-operation are all very loyal to their companies and to the principle of coöperation, and this loyalty is worth more than all the other things put together.

4. *Interest in the business.*—The people who support a coöperative creamery best are those who get most of their income from milk. Fruit-marketing associations succeed only in sections where fruit is the principal source of income. However, where farming is diversified, as in southern and central Minnesota, farmers may well support a coöperative elevator, a creamery, and a livestock shipping association.

5. *Leadership.*—In nearly every case where farmers coöperate successfully, will be found a group of men belonging to the neighborhood who have worked hard year in and year out to make the enterprise go. Sometimes it is just one man. The reason these men are in the work is that they like it and are greatly interested in coöperation. The rest of the members have faith in these leaders, if they are real leaders and not "cranks"; and those who can not be leaders are content to be followers. The leaders can never be men from the outside.

6. *The personal element removed from the business.*—If there is any chance for the manager to show favoritism, as in grading grain, testing milk, or even figuring out member's checks, then some member is bound to suspect him of being partial to some other member, especially if there is another member of whom he is jealous. Consequently, if coöperation is going to succeed as it should, somebody must study out exact scientific methods of grading farm products and handling the business, with the personal element largely left out.

7. *A simple business.*—Farmers are seldom called upon to handle large, complicated business undertakings, and like other people when they first try they get their affairs into a tangle. But with simple business concerns, like creameries, they succeed splendidly right from the start. Later on, they can safely undertake larger enterprises. The California orange growers have learned how to market oranges in the big central markets, and the Canadian wheat growers have learned how to export wheat. It is well, therefore, for farmers always to be on their guard against new and complicated kinds of business, like meat-packing plants, for example, and ask themselves, "Do we now know enough about the running of this kind of business?"

8. *Proper organization.*—The constitution and by-laws should include the best arrangements anywhere known as to capital, shares, votes, membership, and dividends. Where everything else is favorable, a coöperative company may succeed with a poor organization, but nine times out of ten there are just enough conditions that are bad for coöperation to make a strong organization almost absolutely necessary. No better example can be found of the importance of the right kind of organization. No other one thing is so necessary in cooperation. When coöperation was first tried, the companies failed as rapidly as they were formed. But the "Rochdale Pioneers" discovered a new way of organizing, and since then all coöperative companies

formed on these lines have succeeded much more often than they have failed. Following are some of the arrangements that have worked out best.

9. *Only farmers accepted as members.*—If a company intended strictly for farmers is being formed, only farmers should be accepted as members. This means that all members will be interested in the affairs of the company, and that most of the enemies will be kept out. To carry out this provision, a company must reserve the right in its by-laws to pass on the applications of new members, and also the right to buy the shares of retiring members. While this rule is important, it can be too rigidly enforced. Where retiring farmers are still interested in their farms, or where extra capital is needed badly and retired farmers or friendly city people are willing to buy shares, the farmers *may* do well to take them in.

10. *Limit on the number of shares one member may own.*—This limit is usually five or ten. The state coöperative law places the limit at $1000. This means that about all the patrons of the company will also be members, which is very much to be desired, and also that there will be no large investors more interested in stock dividends and in the safety of the investment than in making the company serve the farmers best. Even tho he has but one vote, a large stockholder in a coöperative company is sure to be very active in his own interests.

11. *One vote per member.*—Regardless of the number of shares a member owns or the amount of business he does with the company, he should be allowed but one vote. This keeps the management of the company in the hands of those who furnish the business, and combined with the rule limiting the number of shares one member may own, keeps the control of the company from ever falling into the hands of a few persons.

However, in lines of coöperation in which many big and little producers are joined in one company, it sometimes works best to divide votes and shares according to the amount of business furnished.

12. *None of the gains of the business paid out as stock dividends.*—With true coöperative organizations the stockholders are paid the prevailing rate of interest for similar risks and no more, and the rest of the profits are distributed according to patronage. It may seem to some to make little difference whether a member receives his share of the profits as a stock dividend or as a patronage dividend. However, it is the business brought to the company, and not the money loaned, which is the real basis of profits, and shares are seldom owned in proportion to the business furnished. The evil of large stock dividends is less if the shares are widely distributed, but still it is an evil and should be avoided. The by-laws should therefore name a limit on the

rate of interest to stockholders. The best way to distribute dividends in most cases is to *pay the farmers* prevailing market prices for their products and afterwards distribute the profits from the transaction as a patronage dividend of a certain per cent, or of so much per bushel or per hundred pounds, as an addition to the market price. Similarly, profits from sales to members are distributed as rebates on their purchases. However, where the farmers can wait for their returns till the company has disposed of their products, as in the case of live-stock shipping associations, all the profits can be paid out after every sale. Creameries usually manage their affairs by paying out all the profits along with the cream checks every month.

13. *Enough capital to give the company a good start and to keep it going.*—If the farmers will not provide enough capital to start the company off well without too much coaxing, they are not ready for successful coöperation. Time after time, coöperative companies have failed because the amount of capital needed was miscalculated and the members would not provide any more afterwards, even to save the company from failure. If a plant is to be built, it is always well to figure on a heavier cost than estimated. If the business grows, more capital is soon needed. The best time to raise this money is at the beginning. The farmers are more liberal then. A company usually needs a few years to get on its feet and show its real worth to the members. A call for more money during this period sounds to the farmers like a signal of distress.

Increase in capital as the business grows is often provided by paying out patronage dividends in the form of extra shares of stock, or by using patronage dividends to redeem notes given by the members in payment for shares. Instead, a certain per cent may be deducted from the amounts paid to farmers for their products. The effect of any of these methods is to increase the capital of the company without imposing any noticeable burden on the members.

A company usually should raise enough capital to pay for its plant and equipment, and depend on borrowing, at least after the start, for much of its working capital. Funds for carrying on the business are needed usually for only short periods, and in greatly varying amounts, and it is cheaper to borrow when necessary than to carry a very large surplus on deposit.

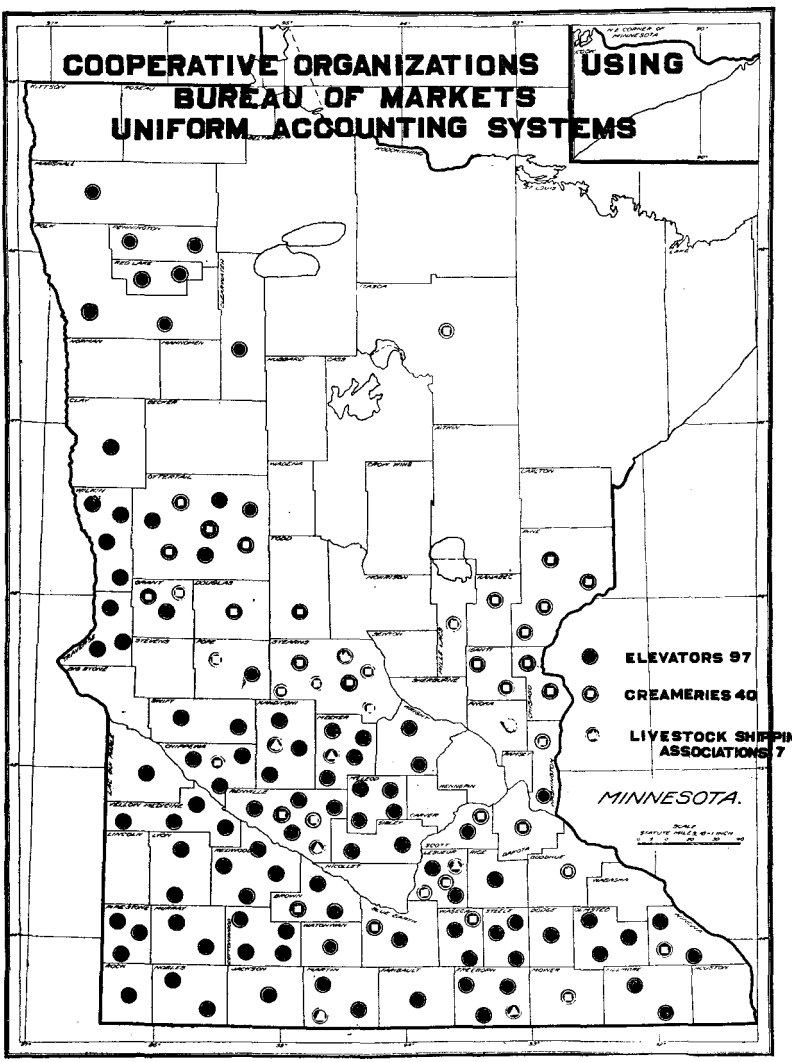
14. *Careful organization of the work.*—This means carefully laying out the work that must be done and giving each officer and each employee his part of it to do. The failure to do this is one of the greatest weaknesses of coöperative companies. Officers and committee-men who must see each other frequently, often live long distances apart. Some who are not officers at all are "taking a hand" in the business. Some of the officers are doing the work of other officers. The result of all this is trouble and confusion.

15. *Efficient management.*—After a machine is set up, someone who understands the business is needed to operate it. All the officers and the members and employees must be kept in their proper places. The president and directors need to know all about the particular business in which the company is engaged. If it is selling grain, they need to know about the grain market. The hired manager absolutely must know, especially if his directors are poorly informed. Farmers are still too likely to think that anybody can market grain or livestock or run a grocery store. Many of them still think that the manager's salary ought to be just a little more than that of a farm hand. The history of many companies in this respect runs about as follows. First, the job is given to the lowest bidder. By the end of the year, the business shows a deficit and everything is in a muddle. The job is then given to some faithful, honest farmer in the community at a somewhat higher salary. Affairs look a little better, perhaps, but it soon becomes evident that successful farming does not always fit one to manage a commercial enterprise. The farmer manager has not kept proper records. The company does not even know where it stands financially. The members begin to get disgusted and call a meeting to talk over the question of selling out to some private concern. If they don't sell out, they are likely at this stage to hire an experienced manager. If they get a good one, the business begins to prosper. All goes well now, until perhaps the members get to thinking that a cheaper manager can handle the business just as well, now that it is on its feet. In this case the whole experience is gone over again. A year or two of bad management will undo all the good results of several prosperous years. Poor management, in one way or another, according to Bradstreet's, caused 80 per cent of the business failures in the United States in 1917. Probably coöperative companies, if the figures were known, would make a similar showing.

16. *Keeping the same officers and managers, whenever they are giving good service.*—"Passing around the honors" is bad for efficient management. Every new officer has to learn the business before he is of much use. Managers and secretaries especially should be kept year after year.

17. *Keeping accurate records and accounts.*—Poor bookkeeping is a large part of poor management. If the books are kept so that the manager does not know where the business stands, and has to guess at things instead of judging from the facts, he is pretty sure to make some bad bargains. He needs to know what it is costing to handle the various parts of his business so as to know what prices to charge, what margins to take, and which departments to discontinue and which to enlarge. If net gain is not properly figured, wrong dividends are declared. Dividends may actually be paid out of capital instead

of earnings. Without good bookkeeping, seldom is anything set aside for reserves against depreciation. Suddenly the company finds itself forced to go out among the members and ask for funds with which to buy equipment. Some of the members quit the company at such times. All these things destroy the confidence of patrons and especially of bankers who are asked to loan money. The labor of keeping books is greatly reduced if suitable desks, filing cases, and adding machines are provided.



Considerable improvement would undoubtedly result from the general adoption of a uniform accounting system, especially if this were supplemented by extension work and short courses in coöperative bookkeeping conducted by the agricultural colleges. The federal Bureau of Markets has developed uniform systems of accounting specially adapted to the needs of the various types of coöperative organizations. In addition, it is investigating accounting methods, auditing, and business practices, and it maintains a corps of experts to meet, as far as possible, requests for personal assistance. A large number of creameries, elevators, and livestock shipping associations in this state have already availed themselves of this service, and the adoption of uniform systems is making considerable progress. Figure 1 shows the location of these companies.

18. *Careful auditing of accounts by an expert accountant.*—In order to discover if they have been properly kept, uncover any possible frauds, and show the true profit and loss and the true financial condition of the business, the books should be carefully audited by an expert. This audit is something quite different from the so-called audit made every two or three months by a committee of the stockholders and directors. The cost of auditing can be greatly lessened if coöperative companies will organize auditing associations, such as are now in operation in Europe and in certain states in this country.

19. *Community of feeling.*—Coöperation works better if the people in the community have much in common, if they belong to the same race, have the same religion, and are all about equally well-to-do. Coöperation is also easier where only a few of the farmers are shifting tenants. Altho all of these things help, they are not necessary. A large number of mixed communities of farmers have already learned to coöperate, and many more will do so.

20. *Friendly assistance of the business men and people in city or village.*—All right-thinking city people ought to favor coöperation, but in most places a few short-sighted business men and others will spread false reports about coöperative enterprises and fight them in every way they can. This is unfortunate and may cause the ruin of the company. All that the farmers can do in such cases is to try to coöperate in spite of them.

21. *Federation of coöperative enterprises as soon as they are ready for it.*—A federation can handle the marketing problems for all the separate companies, can standardize products, advertise, buy supplies, audit the books, fight for the companies in the legislature and in the courts, and more than all else, keep the separate companies from crowding into each other's territory. In this country, the citrous fruit growers of California are so federated; also the cheese producers of Sheboygan county, Wisconsin. In Canada, the grain growers are federated.

22. *An organization adapted to local conditions.*—Probably every one of the foregoing recommendations is unsuited to some local circumstances. Farmers therefore need to use common sense and good judgment in applying them. However, it will always be safe for them to assume these recommendations to be suited to their conditions till they find good reasons to the contrary.

Many of these factors will be discussed again in connection with special kinds of coöperation. Also some new factors will be introduced.

COÖPERATIVE CREAMERIES[3]

The number of coöperative creameries in Minnesota increased from 622 to 643 between 1914 and 1917, and the percentage of coöperative creameries from 73.2 to 76.4. Table II shows that this is a higher percentage that that of any previous year except 1911, when it was 77.2. The number of proprietary creameries decreased from 210 in 1912 to 159 in 1917. The centralizer creameries, however, have increased from 30 to 39 since 1911. Percentage of butter made, however, is a fairer measure than numbers of the importance of these three types of creameries. Table VI shows that the 39 centralizers made 25.5 per cent of the Minnesota creamery butter in 1914, and 27.7 per cent in 1917. The proprietary creameries made only 13.1 per cent of the butter in 1914, and only 10.6 per cent in 1917. The coöperative creameries have gained only a fraction of one per cent during this period. Part of the butter made by the centralizers is made from cream shipped in from outside the state.

TABLE II

COOPERATIVE MOVEMENT AMONG MINNESOTA CREAMERIES, 1910-1917*

Year	Number of creameries			Percentage of number cooperative	Amount of butter made			Percentage made by coöperative creameries
	Coöperative	Proprietary	Centralizers		Coöperative	Proprietary	Centralizers‡	
1910	560	190	13	74.8	Lbs.	Lbs.	Lbs.	Lbs.
1911	606	178	30	77.2	†	†	†	†
1912	621	210	33	71.9	†	†	†	†
1913	614	204	34	72.2	†	†	†	†
1914	622	189	39	73.2	74,079,146	15,764,091	30,856,368	61.4
1915	655	174	35	75.7	76,767,006	17,615,802	31,767,857	60.9
1916	646	165	39	76.3	79,815,936	16,275,411	36,298,825	60.5
1917	643	159	39	76.4	75,325,732	12,919,109	33,860,054	61.7

* These figures are taken from the 1917 reports of the State Dairy and Food Commission.
† Figures not available.
‡ Some of the butter made by Minnesota centralizers is made from cream shipped in from outside the state.

[3] All data given in tables II to VI were obtained from the records of the State Dairy and Food Department. Thanks are hereby extended to the Dairy and Food Department, the Railroad and Warehouse Commission, and all other public agencies that allowed the use of their records.

Tables III, IV, and V make further comparison of the three types of creameries in 1917. The coöperative creameries averaged 18 more patrons, 136 more cows, and 36 per cent more butter per creamery than the proprietary creameries. One reason for the larger amount of butter is the 14 per cent more butterfat per cow. Because they made more butter, the coöperative creameries made it cheaper, six-tenths of a cent less per pound of butterfat, which is the same as a half cent per pound of butter. Besides, they received 2.1 cents more per pound for their butter. As a result of these advantages, they were able to pay their patrons 2.6 cents more per pound for butterfat and still have left $1,040 per creamery to distribute as dividends, reserve fund, and surplus. The centralizers paid patrons less per pound of butterfat and made their butter at a lower cost than the proprietary creameries. In figuring these prices, all cream transportation charges were subtracted before naming the amounts paid to the patrons. The net profits reported for centralizer creameries are probably not all profits, but include some of the unusual expenses not borne by local creameries.

TABLE III

SUMMARY OF BUSINESS OF COOPERATIVE CREAMERIES AND COMPARISON WITH PROPRIETARY AND CENTRALIZER CREAMERIES, 1917*

	Kind of creameries			
	Coöperative	Proprietary	Centralizer	Percentage of total coöperative
Number of patrons	71,414	14,066	29,558	62
Number of cows	548,663	107,866	217,901	62
Milk received, lbs.	187,592,790	23,265,833	4,155,159	87
Cream received, lbs.	215,573,042	32,725,452	92,089,042	63
Butterfat, lbs.	61,577,684	10,595,401	27,499,042	62
Butter made, lbs.	75,325,732	12,919,109	33,360,054	61
Amount paid patrons	$28,001,194	$4,549,872	$11,624,705	63
Running expenses	$2,130,079	$433,143	$889,320	61
Amount received for butter	$30,800,724	$5,160,049	$13,212,141	62
Gross profits	$2,799,530	$610,177	$1,587,436	56
Net profits†	$669,451	$177,054	$698,116	43

* These figures are for 638 coöperative creameries, 149 proprietary creameries, and 39 centralizers.

† Only running expenses deducted.

TABLE IV

AVERAGES PER CREAMERY FOR THE THREE CLASSES OF CREAMERIES, 1917

	Coöperative	Proprietary	Centralizer
Number of patrons	112	94	758
Number of cows	860	724	5,587
Milk received, lbs.	294,032	156,146	106,542
Cream received, lbs.	337,888	219,634	2,361,257
Butterfat, lbs.	96,516	71,110	705,103
Butter made, lbs.	118,065	86,705	855,414
Amount paid patrons	$43,889	$30,536	$298,069
Running expenses	$3,338	$2,907	$22,803
Amount received for butter	$48,276	$34,631	$338,774
Gross profits	$4,387	$4,095	$40,705
Net profits	$1,049	$1,188	$17,902

Table VI compares the three types of creameries for 1914 and 1917. In prices received for butter and prices paid for butterfat, the coöper-

ative creameries have gained on their competitors. Besides, their expenses have increased less than those of the proprietary creameries. Coöperative creameries have increased their net profits only slightly; the other two types of creameries have increased them very noticeably.

TABLE V

COMPARISON OF SPECIFIC FACTORS FOR THE THREE KINDS OF CREAMERIES, 1917

Factors	Coöperative	Proprietary	Centralizer*
Cows per patron	7.7	7.7	7.4
Butterfat per cow during the year, lbs	112.0	98.2	.....
	Cents	Cents	Cents
Price received per pound for butter	40.9	38.85	39.6
Expenses per pound of butter	2.8	3.3	2.7
Price paid patrons per pound for butterfat	45.5	42.9	42.3
Price received per pound for butterfat†	50.0	48.7	48.0
Gross profits per pound of butterfat	4.5	5.8	5.7
Expenses per pound of butterfat	3.5	4.1	3.2
Net profit per pound of butterfat	1.1	1.7	2.5
Per cent gross profit on price paid for butterfat	10.1	13.4	13.6
Per cent net profit on price paid for butterfat	2.4	3.8	6.0

* The figures in this table are derived from the figures actually reported by the creameries. The figures reported by centralizers do not seem to be entirely consistent.

† Part of the factors are figured on the basis of pounds of butterfat instead of pounds of butter. Some creameries dispose of considerable butterfat as ice cream.

In comparing prices paid by centralizers, it must be borne in mind that the cream which they buy is often of inferior quality, and that much of it comes from sections not producing enough milk to support a local creamery, some of it from outside the state. The coöperative creameries are able to secure a higher quality of raw material, turn out a better product, and obtain prices which amply repay them for all extra care and effort.

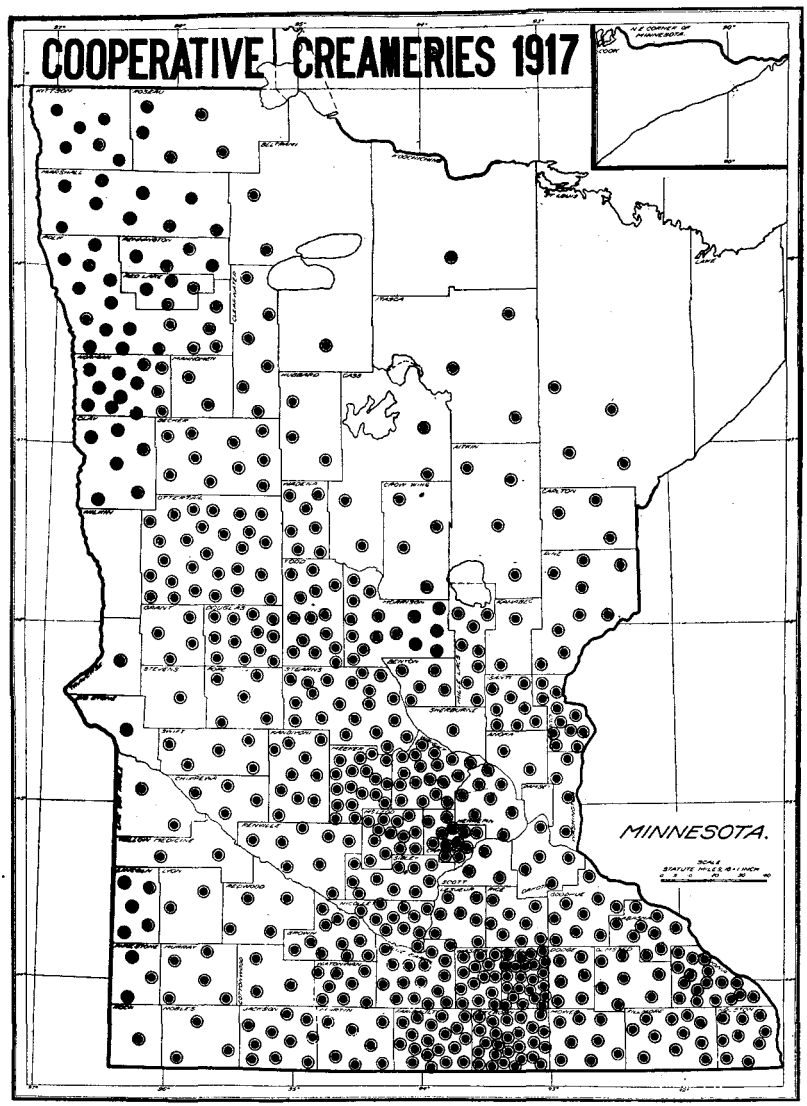
TABLE VI

COMPARISON OF SPECIFIED EFFICIENCY FACTORS FOR THE THREE KINDS OF CREAMERIES, 1917 AND 1914

Factors	Coöperative		Proprietary		Centralizer	
	1917	1914	1917	1914	1917	1914
Percentage of all creameries	76.4	73.0	18.9	22.0	4.7	5.0
Percentage of all butter made	61.7	61.4	10.6	13.1	27.7	25.5
	Cents	Cents	Cents	Cents	Cents	Cents
Price paid patrons per pound for butterfat	45.5	30.4	42.9	29.0	42.3	29.0
Price received per pound of butterfat	50.0	33.7	48.7	33.0	48.0	33.7
Expense per pound of butterfat	3.5	2.8	4.1	3.0	3.2	3.0
Net profit per pound of butterfat	1.0	0.7	1.7	1.1	2.5	1.3
Expense per pound of butter	2.8	2.5	3.3	2.4	2.7	2.5
Per cent of gross profits on price paid for butterfat	10.1	11.4	13.4	13.4	13.6	15.0
Per cent of net profit on price paid for butterfat	2.4	2.4	3.8	3.9	6.0	4.7

Table VII shows the results of a special inquiry as to the way in which the coöperative creameries disposed of their surpluses. Since more than three fifths of the creameries responded to the inquiry, the result should be reasonably representative. More than two fifths, or 43 per cent, of the creameries made no profits at all; that is, they paid out all of their receipts above expenses each month to the patrons.

Apparently 3 per cent of them miscalculated a little toward the end of the year and contracted small losses. The rest were on the profit side of the account at the end of the year with an average of $798.



Coöperative creameries generally include stock dividends in expenses, but there were some that in 1917 undoubtedly included them in profits. The average profits of $437 for the 393 creameries reporting is therefore somewhat higher than it should be. These profits, plus the amount paid against debt, should really be added to the amount

paid patrons for butterfat, because they are actual additions to the wealth of the patrons. They represent six tenths of a cent per pound of butterfat.

TABLE VII

DISPOSITION OF SURPLUS OF COOPERATIVE CREAMERIES, 1917

Disposition of surplus	Number reporting	Percentage of creameries*	Average amount reported
Profit and loss	393	100	$437
Profits†	213	54	798
Losses	12	3	194
Neither profits nor losses	168	43	....
Surplus not distributed	94	24	....
Stock dividend only	138	35	276
Patronage dividend only	10	3	742
Both dividends	12	3	1,416
Sinking fund or reserves‡	165	42	831
Paying off debt	105	27	978

* Percentage of those making report on profits and losses.
† Many creameries included dividends in profits.
‡ The creameries reported under this heading many things besides reserves, for example, undivided surplus, funds used to pay current expenses, etc.

Only 35 per cent of the coöperative creameries paid stock dividends only, 3 per cent paid patronage dividends only, and 3 per cent both dividends. Table VIII shows the dividend rates paid by 150 coöperative creameries. More than two fifths of them pay 6 per cent or less, and more than three fourths of them pay 8 per cent or less. Only five per cent pay more than 10 per cent. The average amount of stock dividend paid was $276. Of the 22 companies reporting patronage dividends, 14 paid on the percentage basis, usually 6 per cent, and 8 paid so much per pound of butterfat, usually 1 cent.

TABLE VIII

DIVIDENDS PAID ON CAPITAL STOCK BY 150 COOPERATIVE CREAMERIES, 1917

Per cent of dividend	Number paying	Per cent of dividend	Number paying
½	1	7½	1
1	2	8	34
1¼	1	10	28
2	1	11	1
4	4	12	3
5	14	15	2
6	40	20	1
7	16	25	1

Obviously the farmers' creameries of Minnesota are thoroly coöperative. Even tho only a few patronage dividends are paid, the patrons get the full benefit of coöperation. The common practice of paying out all the net receipts each month is thoroly coöperative. The only question to be raised concerning it is whether it means good accounting under all circumstances, whether it provides properly for meeting annual payments like taxes and interest, and for distributing large expenditures over the year. A majority of the companies seem to have some sort of a sinking fund, but the companies paying out all their net receipts each month are usually the ones that have no sinking fund.

An earlier inquiry showed that all but 3.5 per cent of the companies have adopted the one-man one-vote principle, and that 65 per cent of them limit the number of shares which one person may own, and that the limit is one share in a third of the companies, and not more than ten shares in 83 per cent of the companies.

Bulletin 166, which will be sent to anyone upon request, contains many other details as to organization and management of coöperative creameries; also a sample constitution and by-laws and full details as to the method of organizing.

FACTORS OF SUCCESS WITH COÖPERATIVE CREAMERIES

There can be no doubt as to the success of coöperative creameries in Minnesota. No other state has so many or so large a percentage of coöperative creameries as Minnesota. In the great dairy state of Wisconsin, according to Bulletin 282, already referred to, only 45.5 per cent of the creameries are coöperative. The average age of 337 creameries reporting on this question in 1917 was 13.4 years. More than one third of these were organized before 1900. Nevertheless, not all coöperative creameries succeed, and some companies even fail after succeeding for a time. The names of 38 companies have been reported to this division as having failed in the last 3 years. The reasons given were: Not enough business, 17; competition of centralizers, 6; competition of cheese factories, 1; lack of coöperation, 3; new creameries better located, 2; mismanagement, 2; fire, 1. Some of these did not really fail, but merely combined with other creameries. Of interest also is the fact that 99 out of 405 companies reported having reorganized once, and 2 reported having reorganized twice. Following are some of the matters of special importance to the success of coöperative creameries.

1. *Enough business.*—As a matter of fact, lack of patronage was the cause of nearly all the failures above reported. A creamery may lack patrons because it is located in a neighborhood where there are few farms or few cows, but usually it is because some competing firm is taking away part of the patrons. The important thing, therefore, is to locate the creamery and organize and manage it so that it can compete to advantage. Farmers considering organizing new creameries must not count too much on taking patrons away from competitors. The old company will fight the new one, and in doing so offer as many new inducements to patrons as it can afford. A few members who prove disloyal to the new company may be enough to put it at a disadvantage. Above all else, coöperative companies must avoid cut-throat competition with each other. Each company should stay content in its own natural territory. Every coöperative creamery that fails hurts the cause of coöperation more than several successful companies help it. The reason that size of business is important with

creameries is that it costs more per pound to make a small amount of butter than a large amount, because the plant, the equipment, and the buttermaker are not being put to full use. Even tho only a little butter is made, many of the expenses go on just the same.

2. *Quality of butter.*—A difference of a few points in the score of butter on the New York market may result in a difference of from 6 to 8 cents in prices. The place to begin improving the product is on the farm. Creamery operators have already done much to get their patrons to take better care of their cream, but there is much more to be done even in Minnesota. Where cream stations are not too near, sometimes a creamery can deduct from 1 to 3 cents per pound of fat for all cream grading lower than No. 1.

3. *Uniform product.*—A medium quality of butter which is uniformly good week after week often finds a better market than butter which is very good just most of the time. Buyers want butter they can sell to their customers regularly without offense. Creameries making a uniformly high grade of butter will find it well to get a license from the State Dairy and Food Department and market it under the Minnesota brand.

4. *A good buttermaker.*—The creamery operator is so often manager as well as buttermaker that he must be a combination of expert buttermaker, good bookkeeper, and good business man. He is more responsible than anybody else for a high and uniform quality of butter, for keeping costs low, and for keeping the patrons pleased and contented. He needs tact about as much as skill and knowledge. Even if the creamery has a separate manager, the buttermaker carries a large part of the responsibility.

CHEESE FACTORIES

The cheese factories of Minnesota will soon be as largely coöperative as the creameries. Already 68 per cent of the American cheese factories and 62 per cent of all cheese factories are in that class. Only one of the 6 brick-cheese factories is coöperative. Table IX shows the changes in the number of the three types of cheese factories since 1911.

TABLE IX

NUMBER OF COOPERATIVE, INDEPENDENT, AND CENTRALIZER CHEESE FACTORIES, 1911-1917

Year	Coöperative	Independent	Centralizer	Total	Percentage coöperative
1911	32	33	4	69	46
1912	30	29	4	63	47
1913	38	28	4	70	54
1914	36	31	4	71	51
1915	39	25	3	67	58
1916	49	31	3	83	59
1917	52	28	3	83	62

Table X analyses the business of 38 coöperative and 18 proprietary factories. As with creameries, the coöperative companies did a larger business, sold their product for a better price, and paid patrons more for their milk. Out of every $100 of gross receipts, they paid back to the patron $4.80 more than did the proprietary factories. Their manufacturing expenses seem to have been somewhat higher than those of the other factories. Apparently the coöperative cheese factories do business largely on a non-profit basis.

TABLE X

ANALYSIS OF BUSINESS OF COOPERATIVE AND PROPRIETARY CHEESE FACTORIES, 1917

	Coöperative	Proprietary
Milk delivered per factory, lbs	1,278,954	864,802
Cheese made per factory, lbs	122,885	86,961
Amount paid patrons per factory	$25,987	$16,897
Gross receipts per factory	$28,905	$19,883
Gross profits per factory	$2,918	$2,986
Running expenses per factory	$2,697	$1,768
Net profits per factory	$221	$1,218
Average yield, per cent	9.60	10.05
	Cents	Cents
Paid patrons per pound of cheese	21.2	19.5
Received per pound of cheese	23.6	22.9
Expenses per pound of cheese	0.219	0.203
Net profit per pound of cheese	0.2	1.4
Percentage of gross receipts paid patrons	89.8	85.0

FARMERS' ELEVATORS

This division has the names of 380 farmers' elevators on its mailing list. The Railroad and Warehouse Commission received reports of the amount of grain of the 1917 crop handled by 360 farmers' elevators. In addition, perhaps a fifth of the 50 to 75 elevators that failed to report the amount of grain handled were farmers' elevators.

However, not all of these are strictly coöperative. The farmers own and control a majority of the stock in all of them, but in some cases the stock is in relatively few hands and rather high stock dividends are paid. However, the 251 reporting to this division, whose business is summarized in Table XI, all have their shares rather widely distributed. The same is known to be true of a large majority of the remainder. The number reporting each year to the Railroad and Warehouse Commission is probably not far from the number of essentially coöperative elevators. The reports from these companies are summarized in Table XII.

The number of farmers' elevators reporting has increased from 296 to 360 in four years. This is a net increase of 16 per year. In addition, several companies not strictly farmers' companies have been transferred out of that class each year. Trade journals reported the names of 21 new farmers' elevators between June 1, 1916, and June 1,

1917, and the names of 28 more by December 1, 1918. This is at the rate of 20 per year. If this is a true average, the difference is due to the several companies that fail each year. The increase in percentage of elevators from 20.8 to 23.0 per cent is more significant than the increase in number. Some of the figures as to the number of mills and independent elevators are irregular because not all have reported each year and because of changes in classification.

TABLE XI

SUMMARY OF BUSINESS OF FARMERS' ELEVATORS, 1917 and 1918

	Number reporting amounts	Total for companies reporting amounts	Average for companies reporting
Gross receipts	251	$48,661,550	$208,251
For grain and flour	232	43,837,542	188,955
For supplies	250	4,824,008	19,296
Operating expenses	228	1,135,259	4,980
Profit and loss	241	949,658	3,941
Stock dividends	149*	192,827	1,294
Patronage dividends	49†	193,038	3,939
Sales of grain and flax	232	$43,837,542	$188,955
Sales of coal	191	1,570,166	8,221
Sales of flour	104	572,806	5,527
Sales of feed	106	475,157	4,483
Sales of flour and feed‡	36	476,185	13,228
Sales of other supplies	144	1,729,694	12,012
Bushels grain and flax	234	30,781,549	131,549
Tons of coal	162	178,595	1,102
Barrels of flour	78	33,611	431
Tons of feed	88	8,133	92
Member patrons	166	18,784	113
Patrons not members	118	10,185	76
Farmer members	168	18,149	109
Members not farmers	146	3,206	22

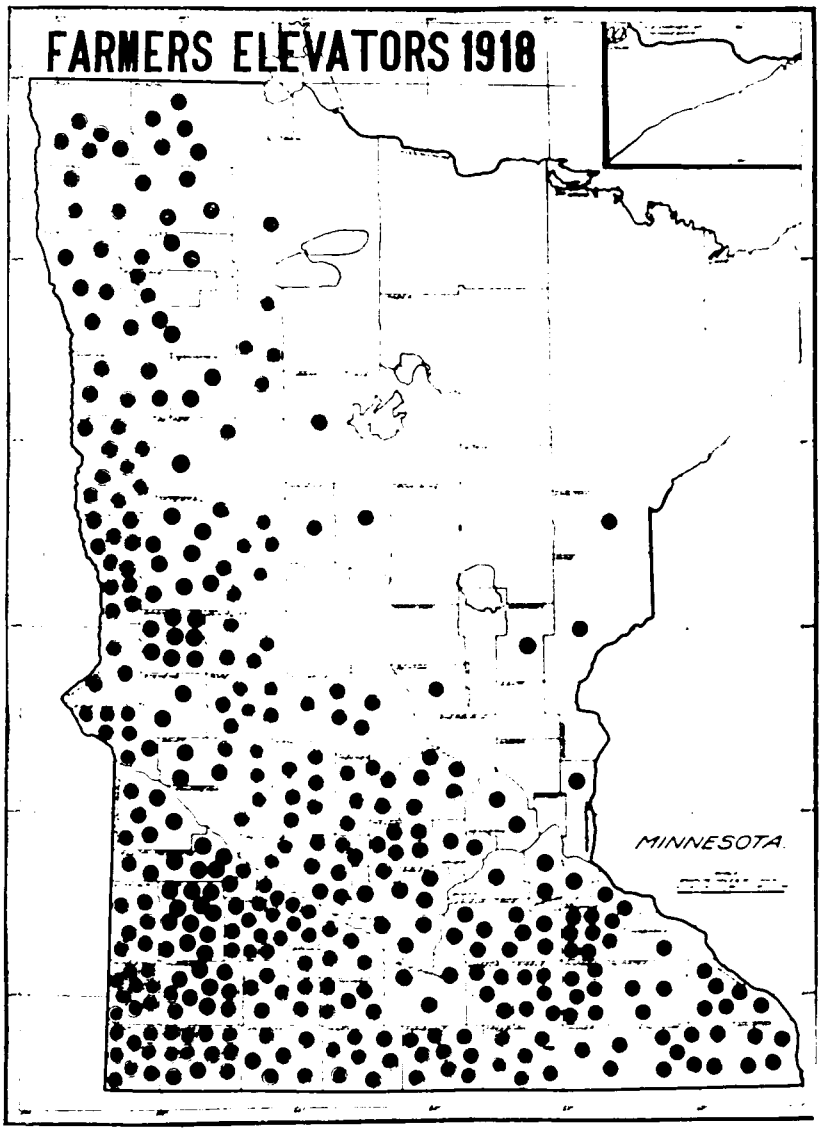
* Fifteen other companies reported stock dividends but did not give amounts paid.
† Nine other companies reported patronage dividends but did not give amounts paid.
‡ Not reported separately.

TABLE XII

COMPARISON OF BUSINESS OF FARMERS' AND OTHER ELEVATORS, 1914 to 1917

Kind of elevator	Number of elevators	Percentage of all elevators	Grain shipped	Percentage of all grain shipped	Average per elevator
Farmers'			Bushels		Bushels
1914-15	296	20.8	43,489,482	39.0	146,890
1915-16	299	19.0	37,374,690	35.5	124,998
1916-17	331	21.8	33,879,501	38.9	102,328
1917-18	360	23.0	45,205,695	40.1	125,571
Line					
1914-15	625	43.8			
1915-16	630	40.1	34,670,002	32.9	55,032
1916-17	613	40.2	22,579,948	25.8	36,845
1917-18	613	39.2	31,659,280	27.9	51,640
Independent					
1914-15	302	21.0			
1915-16	407	25.9	24,434,435	23.2	60,035
1916-17	357	23.4	16,371,188	18.8	45,857
1917-18	347	22.2	20,863,772	18.5	60,126
Mill-elevators					
1914-15	205	14.4			
1915-16	234	15.0	8,712,960	8.3	37,234
1916-17	222	14.6	14,407,753	16.5	64,909
1917-18	245	15.6	15,131,953	13.5	61,763
All elevators					
1914-15	1,428	100.0	111,667,146	100.0	78,198
1915-16	1,570	100.0	105,192,087	100.0	67,001
1916-17	1,523	100.0	87,238,390	100.0	57,214
1917-18	1,565	100.0	112,860,700	100.0	72,115

The new companies are mostly in southeastern and northern Minnesota. The Red River Valley has gained 20 farmers' elevators since 1913, and the southeastern counties about 40. The counties with fewer coöperative elevators now than in 1913 are mostly in west central Minnesota. Figure 3 shows that the grain-growing regions of the state, except for a few counties, are already well supplied with farmers' elevators.



The 360 farmers' elevators, altho only 23 per cent of the whole number of elevators in the state, handled 40.1 per cent of all the grain that was shipped out of local elevators during 1917-18. This is

because the farmers' elevators each handle more than twice as much grain as either the line or independent companies. In 1914-15, which seems to have been an unusual year, the coöperative elevators handled 39 per cent of the grain. In 1915-16 they handled 35.5 per cent of it, and in 1917, 40.1 per cent. The increase has been mostly at the expense of the line elevators. The mill elevators have handled an unusual amount of grain the last two years.

The 112,860,700 bushels of grain shipped by country elevators in in 1917-18 was 35.8 per cent of the 315,724,000 bushels produced in the state in 1917, according to the reports of the Bureau of Crop Estimates. Of the 1913 crop, 43 per cent passed through country elevators. The 1917 crop was divided as follows:

	Bushels
Wheat	36,675,877
Flax	2,133,228
Oats	42,905,183
Corn	7,201,133
Rye	5,978,945
Barley	17,966,334
Total	112,860,700

Table XI summarizes the reports of the companies making returns to this division. The gross receipts of the 251 companies averaged $208,251. Of this amount, $19,296 was obtained from sales of supplies. Gross receipts in 1913 were $89,000 per company, $7,400 of this coming from sales of supplies. Rising grain prices account for the increase in receipts from grain. Minnesota farm grains increased 96 per cent in price between 1914 and 1918. The increase in receipts from supplies is largely due to a general growth of business in this field. Table XIII shows that 76 per cent of the companies handled coal in 1917-18 as compared with 63 per cent in 1913-14. Furthermore, each company handled 200 tons more coal. Flour and feed show the same increase. Miscellaneous business also increased greatly, altho no doubt more of this could have been separately reported as twine, salt, and seeds.

TABLE XIII

NUMBER AND PERCENTAGE OF FARMERS' ELEVATORS HANDLING VARIOUS COMMODITIES, 1916 and 1917

Commodity	Number reporting sales		Percentage of companies which sell these commodities		
	1914–15	1916–17*	1912–13	1914–15	1916–17
Grain and flax	173	232	100	100	100
Coal	112	191	63	65	76
Flour	71	140	40	41	56
Feed	88	142	41	51	57
Salt	30	35	16	17	14
Seeds	17	18	18	10	7
Twine	51	52	35	28	20
Miscellaneous	49	135	...	29	54

* Includes companies reporting sales of given commodities but not reporting amounts sold.

Other commodities handled were machinery, lumber, wood, cement, tile, fencing, oil, and tires. Five companies also shipped livestock and four shipped potatoes.

The 234 companies reporting grain in bushels averaged 131,549 bushels as compared with 125,571 bushels shipped by 360 companies reporting to the Railroad and Warehouse Commission. Most of this difference is due to local sales of grain.

If the gross receipts of the 360 companies are estimated on the basis of the companies reporting, the results are as follows:

Grain and flax	$66,000,000
Coal	2,250,000
Flour	1,165,000
Feed	965,000
Other supplies	2,490,000
Total	$72,870,000

Table XIV shows that 94 per cent of the companies made profits averaging $4,254, and that 5 per cent had losses averaging $1,236. The average profit and loss of the 241 companies reporting this account was $3,941. This is 1.9 per cent of the gross receipts. In 1914-15, the profits were 2.7 per cent of the gross receipts. Most of the difference is because of the rise in prices. A margin of two cents a bushel is a smaller percentage of $2 a bushel than of $1 a bushel. Some of the difference is no doubt merely a matter of accounting. Most of the farmers' elevators included both stock and patronage dividends in the profits, but an increasing number of them figure at least stock dividends as expenses. The rest of the difference seems to be due to insufficient margins taken on some kinds of grain. The market was so irregular that it was hard to find a safe price to offer. Proof of this is the fact that 61 of the companies making profits did not have enough to warrant paying dividends as compared with 36 in 1915.

TABLE XIV

DISPOSITION OF SURPLUS OF FARMER'S ELEVATORS, 1917 and 1918

Items reported by elevators	Number reporting	Percentage of elevators reporting	Average amount reported
Profit and loss	241	100	$3,941
Profits	227	94	4,254
Losses	13	5	1,236
Neither profits nor losses	1	...	...
Surplus not distributed	35	15	...
Stock dividend only	109	45	1,472
Patronage dividend only	3	1	10,599
Both dividends	55	23	4,358
Sinking fund or reserve	102	42	*

* The companies reporting did not always distinguish between reserves and undivided surpluses.

Small profits do not mean that coöperative elevators are not prosperous, but only that they are paying high prices for grain or grading high. Most companies, coöperative, line, and independent alike, now set their prices strictly according to the daily market quotations, but they still have a large leeway in grading and dockage. Figures collected several years ago showed that at competitive points, farmers' elevators, like all others, grade higher than they do elsewhere. The result is lower profits and lower dividends, but larger grain checks when the grain is delivered. The disadvantage of this is that the company has not enough of a margin for safety, and may find itself with a deficit at the end of the year.

TABLE XV

DIVIDEND RATES ON CAPITAL STOCK OF FARMERS' ELEVATORS IN MINNESOTA, 1917 and 1918

Rate of dividend	Number of elevators reporting	Rate of dividend	Number of elevators reporting
Per cent		Per cent	
None*	75	20	15
2	1	21	2
4	2	22	7
6	12	25	1
7	10	30	5
8	36	40	10
9	1	50	1
10	42	54	4
12	2	100	1
15	8		

* Of the 75 companies reporting no dividends, 13 made no profits.

It is better to pay high prices for grain, however, than to collect large surpluses and pay them out as dividends to stockholders. Table XV shows that 45 per cent of the companies paid stock dividends only, and only 23 per cent of them paid both stock and patronage dividends. Three companies paid patronage dividends only. Of the companies reporting 1914-15 business, 49.6 per cent paid stock dividends only and 29.1 per cent patronage dividends in addition. The companies had larger profits to divide that year. Table XVI shows for the two years the percentage of dividend-paying companies which paid certain rates. More of the companies paid rates below 8 and 10 per cent in 1917-18, and fewer of them paid the higher dividends. Lower profits, however, may explain all the apparent improvement. It is to be hoped that soon all the farmers' elevators will place a limit of 8 per cent or less on stock dividends. Ten per cent is certainly too high in most cases. Farmers who demand higher rates either do not understand the principles of coöperation, or else they are so pleased with the profits they are now making on their neighbors' business that they cannot bear to forego them even for the sake of fair play. The provision of the federal income tax law exempting patronage dividends from taxation is proving a great benefit in this particular, and many companies have recently amended their constitutions so as to limit stock dividends.

TABLE XVI
DIVIDEND RATES ON CAPITAL STOCK

Rate of dividend	Percentage of all companies paying stock dividends	
	1914-15	1917-18
Per cent		
1 to 8	29.7	38.1
9 to 10	33.3	26.9
11 to 19	5.5	6.3
20 to 49	23.4	25.0
50 and more	8.1	3.7
More than 8	70.3	61.9
More than 10	37.0	35.0
Total	100.0	100.0

Operating expenses in 1917-18 were 2.4 per cent of gross receipts, as compared with 2.6 per cent in 1914-15. The higher prices received for grain explain this. If figures were available, they would no doubt show higher expenses per bushel.

Table XI shows an average of 113 member patrons, and 76 patrons not members, or a total of 189 patrons per company. This means that about sixty-eight thousand farmers are being served by coöperative elevators as compared with 58,000 in 1914. This is two fifths of the farmers in the state. Table XII shows that these elevators are also handling two fifths of the grain. In addition, the companies have about seven thousand members who are not farmers, and a large number of city customers for their supplies.

The farmers' elevators of Minnesota actually distributed about $630,000 in dividends in 1917-18, and in addition accumulated $700,000 as reserve funds and undivided surplus. This is but a small part, however, of the gains from this form of coöperation. The gains from the higher prices they have received for grain, and from the resulting higher prices paid by competing companies, can not be estimated. The coöperative movement is making a healthy growth in this field. Nothing short of a decline in grain farming can check its progress. When the companies all become truly coöperative, the movement will spread even more rapidly.

Bulletins 152 and 164, prepared by this division, give details as to the organization and management of farmers' elevators. Bulletin 152 tells how to organize a company and how to reorganize under the coöperative law, and gives a sample form of constitution and by-laws. Bulletin 164 gives a form for an annual report to the stockholders. These bulletins will be sent to anyone upon request.

ESSENTIALS TO SUCCESS OF COÖPERATIVE ELEVATORS

Following are a few points of special importance to the success of farmers' elevators:

1. *Enough business.*—An elevator has so much money tied up in buildings and equipment that it must do a big business in order to do it cheaply. Bulletin 152 contains the following figures:

Number of bushels handled	Average cost of handling Cents per bushel
50,000-100,000	2.5
100,000-150,000	1.9
150,000-200,000	1.5
200,000-300,000	1.3
300,000-400,000	1.15

It is largely because the farmers' elevators average twice as much business as their competitors that they are so successful. A community can not afford to have several elevators handling its grain. The farmers need to get behind one elevator and make it grow till it absorbs the whole business. Of course they will never be entirely safe under such circumstances unless it is their own elevator. On the other hand, farmers need to be cautious about starting new coöperative elevators unless they can get enough business. Ordinarily 100,000 bushels is about what a new company should try to obtain, unless it happens that the independent or line companies competing are still smaller, or that these companies are giving poor service.

2. *Good managers.*—Farmers' elevators have frequently taken their managers from the line houses they have supplanted. These men are often the best available, but they are not always satisfactory. They have been accustomed so long to looking after the interests of the elevator company that it takes them a long while to realize that a coöperative elevator is managed in the interest of the farmers. Then, too, they now have to buy, sell, hedge, select markets, and keep books, and do all these things largely according to their own judgment, when formerly most of this was done for them at the central office. However, in the twenty years that farmers have been running their own elevators, many men have been trained, and some of their wisdom has been passed on to the present generation of managers.

3. *No speculating.*—Every year several companies get into trouble because their managers or their officers try to "play" the market, either on their own account or for the company. Some way ought to be provided of supervising farmers' elevators to prevent such practices, just as banks are supervised to prevent wild investments. Experience seems to show that the companies ought to provide this themselves by combining into a federation.

4. *A year-round business.*—Farmers' elevators usually take on farmers' supplies as a sideline to keep up the interest of the farmers from season to season, and to reduce expenses by keeping equipment

in use the year round. Bulletin 164 shows that up to the point where such extra business can be done without hiring extra help, the saving is very great, and that even beyond that point the saving is noticeable under efficient management. The figures already presented show that the companies are making progress in this direction.

5. *Saving by-products.*—Country elevators are just beginning to take advantage of this chance to reduce costs. The wild oats and mustard seed screened from grain during the last two years have sold at exceedingly high prices. Besides, the saving in freight from shipping only clean grain is an important item.

6. *Proper organization.*—The facts seem to be that only one third of the farmers' elevators, in their by-laws, limit stock dividends and provide for patronage dividends; that of this one third, only 56 per cent limit it to 8 per cent or less, and 83 per cent to 10 per cent or less; that 20 per cent of them either set no limit to the number of shares one person may own or else set a very high limit; and that 5 per cent of them do not even limit members to one vote. The reason for this is that most of the companies were formed before the coöperative law was passed, and they do not care to change as long as they prosper as they do. Nevertheless, each of these provisions stands for something vital in coöperation, and sooner or later, one after another, each of these companies will find it necessary or advisable to change.

COÖPERATIVE POTATO AND PRODUCE SHIPPING COMPANIES

The mailing list of this division contains the names of 22 potato warehouse associations, potato growers' associations, and coöperative produce companies. Eleven of these have responded to inquiries, and reports from other sources indicate that at least four more were in operation in 1917. No doubt some of the others are still in existence, tho perhaps not operating at present. In Table I the number has been placed at 15.

The reports received indicate very little uniformity in methods of doing business. Six of them handle potatoes only. The other 5 combine potato shipping with some other kind of coöperation, 2 of them with a feed and elevator business, and 2 with livestock shipping, one one of these also including eggs, poultry, hides, and wool. Still another combines potatoes with fruit and berries and a coöperative store. Seven of the 11 companies handle the business on the same basis as the coöperative elevators handle grain, paying cash on delivery and the rest in dividends. Of these 7 companies, 6 limit the stock dividend, 5 of them to 6 per cent, and 1 to 10 per cent. These six all provide

for a patronage dividend. Two of the remaining 4 companies simply grade, store, and load potatoes for farmers at a flat rate per bushel, the farmers making their own sales. Another company simply buys for a commission firm at a flat rate per hundred pounds. The only other company reporting combines three methods, paying cash on delivery, handling and storing for the farmers at 3 cents per bushel, and in addition marketing the potatoes at 5 cents per bushel.

The eleven companies handled a total of 192,000 bushels of potatoes, and these sold for $157,000. However, since one fourth of these were stored or handled on commission, the actual gross receipts from potatoes were only $121,000. This means 17,400 bushels per company, and average gross receipts of $11,010. However, the business from other sources averaged $24,770 per company. This makes a total of $35,710 per company. It would thus seem that potato shipping was almost a side line. Undoubtedly potatoes alone have not furnished enough business in some localities to maintain large prosperous companies. However, the largest 5 of the companies handling only potatoes averaged 27,000 bushels at a cost of about 8 cents per bushel, paid dividends averaging $457, and had an average net profit left of $165, even tho one lost $900 because unable to obtain cars when needed. All but 2 of the 11 companies made profits, 5 paid stock dividends, and 2 patronage dividends.

In organization, a potato warehouse association is like a coöperative elevator. The difference is principally in their methods of doing business and of marketing their products.

LIVESTOCK SHIPPING ASSOCIATIONS

In 1918 about four hundred livestock shipping associations made reports to the Minnesota Central Coöperative Livestock Shipping Association at the Department of Agriculture of the University. About fifty more associations were supposed to be operating, but they made no reports. The figures in Table I are based on reports of 206 associations replying to an inquiry sent out by the Division of Research in Agricultural Economics. In 1914, only 82 associations replied to a similar inquiry; but 61 others were believed to be in existence. Later information shows that 5 of these 61 were probably not then operating. If so, then there were 138 associations in 1914. Of this number, 6 seem to have gone out of business, and at least 270 new ones seem to have been formed. No doubt others have organized and failed.

The receipts at the central market of the 206 associations making reports for 1917, totaled $20,664,000. This figure is to be compared with $5,750,000 for the 82 associations reporting in 1914. While much of this increase was due to higher prices for livestock, the number

of carloads reported increased from 5,000 to 11,240. A fair estimate for the 400 associations in the state is 18,000 carloads selling at the central market for $33,000,000.

TABLE XVII

COMPARISON OF BUSINESS OF LIVESTOCK SHIPPING ASSOCIATIONS IN 1913, 1914, AND 1917

	1913*	1914†	1917
Number of associations‡	115	138	400
Number reporting	61	82	206
Gross receipts reported	$3,641,280	$5,750,530	$20,664,000
Carloads of stock reported	2,630	5,000	11,240
Total weight of stock reported	45,100,000	.....	200,270,000
Average gross receipts	$59,692	$70,128	$100,310
Total expenses reported	$168,360	.....	$569,850
Average number of carloads	45	61	55
Average expenses	$2,760	.....	$2,782
Average expense per 100 pounds	$0.33	.....	$0.29

* See Minnesota bulletin 146, "Statistics of coöperation among farmers," by L. D. H. Weld, 1913.

† See Minnesota bulletin 156, "Coöperative livestock shipping associations in Minnesota," by E. Dana Durand, 1916.

‡ Probable number.

Table XVII shows the total number of each kind of livestock, and the average per association. Hogs make the largest showing in number of head, and cattle in number of carloads. Compared with 1913, the associations are now shipping on the average slightly fewer hogs, calves, and sheep, but more than twice as many cattle. Some of the reports undoubtedly included some calves with cattle without indicating this fact. This is because many of the newer associations are in counties more given to cattle raising than to hog raising. Practically all the associations ship cattle and hogs, 55 per cent of them ship calves, and 74 per cent sheep. Of the 11,240 cars reported shipped, 5,400, or 48 per cent, were mixed cars.

TABLE XVIII

KIND AND AMOUNT OF LIVESTOCK SHIPPED, 1913 AND 1917

Kind of livestock	1917			1913
	Associations reporting	Number of animals	Average per association	Average per association*
Cattle	196	140,440	717	329
Hogs	198	399,600	2,020	2,372
Calves	113	47,100	416	465
Sheep	150	24,070	160	192
Total	203	611,220	3,011	3,100

* See Bulletin 146.

The expenses of livestock associations may be divided into central market expenses, freight, and home expenses. The central market expenses are principally commission fees, feed, yardage, and switching. The home expenses are mostly salaries of managers and reserve funds set aside to reimburse members for death or injury of animals during shipment. Table XIX shows that central market expenses and freight averaged $1,932 per association, or $34.15 per carload,

and the home expenses $921 per association, or $16.50 per carload. Freight of course varies with the distance to market. All but a few of the associations ship to South St. Paul. The commissions paid are the regular fees charged all shippers. The manager's salary is most frequently paid as so much for 100 pounds home weight, 6 cents being the commonest rate. Other associations pay by the car, usually from $5 to $18. Others pay by the month, from $60 to $115. The reserve fund is usually 2 or 3 cents per 100 pounds home weight, or a percentage of gross receipts, usually 0.5 or 1 per cent.

TABLE XIX

ANALYSIS OF BUSINESS OF 146 LIVESTOCK SHIPPING ASSOCIATIONS IN 1917

	Totals	Average per association
Gross receipts at central market	$14,511,316	$99,393
Central market expenses and freight	284,135	1,982
Receipts at shipping point	14,227,176	97,461
Local or home expenses*	134,450	921
Net paid shippers	14,092,726	96,540

	Per car	Per cwt.	Per $100 gross receipts
		Cents	
Central market expenses and freight	$34.15	19.6	$1.96
Local expenses	16.50	9.5	0.93
Total expenses	50.65	29.1	2.89

* Includes amount put into reserves and all other deductions from gross receipts.

As to organization, a coöperative livestock shipping association is very simple. Little, if any, capital is required. A small membership fee pays all organization costs. No shares are sold. The association is seldom incorporated. The bookkeeping is simple. The manager notifies the shippers when the car will be ready, weighs, marks, and loads the livestock, accompanies the shipment to the central market (usually), obtains from the commission firm a record of the net weight, price received, and commission charged for each separate lot in the carload, divides the freight expense between the different lots according to weight, deducts his own commission and the payment to reserves, and then makes out to each shipper, along with a check for his net receipts, a statement covering all the above items of weight, price, and expense. In some of the markets the commission men even make out the checks and statements for the individual shippers. As to size, in 1917 the associations shipped on the average about $100,000 worth of livestock, or 3,000 head, in 55 cars. Most of the associations have from 100 to 300 members, but many associations smaller than this seem to be operating successfully. Other details as to organization, including a sample constitution, are given in Bulletin 156, which will be sent to anyone on request.

Obviously there has been rapid growth in this field of coöperation. The reason is not hard to find. Farmers always have made up carloads of stock among themselves. But in sections of the country where they

sell only a few head at a time, and where half of the cars are mixed lots, as in most of Minnesota and Wisconsin, this is hard to arrange without an organization. Moreover, under such conditions the farmers have always been more or less at the mercy of the local buyers. Especially have the buyers taken undue profits at off seasons and for unusual types of livestock. They have frequently made large profits on calves. This is because farmers, and sometimes buyers too, do not know how such stuff will sell on the market, and too many buyers are often trying to make a living out of the business. The farmers have resented these things and have hastened to organize. Organization is easy and generally successful. Where local buyers have probably been taking from $40 to $75 a car for home expenses and profits, the associations are doing it for $16.50. Where buyers have been demanding margins of from 60 cents to $1 per hundred, the associations are doing the business for 29 cents per hundred. More than this, the farmers are learning more about prices and markets and grades of livestock, and are thus becoming more able to take advantage of a favorable market. By means of the telephone, a manager can frequently assemble a carload of livestock at a day's notice.

ESSENTIALS TO SUCCESS OF LIVESTOCK SHIPPING ASSOCIATIONS

Few kinds of coöperative organizations have more odds in their favor than livestock shipping associations. The farmers are vitally interested in their receipts from sales of meat animals. The business is simple, and more than this, is largely impersonal. Each shipper has a complete record of all transactions concerning his part of the shipment. The gains from coöperative dealing in this field are immediately apparent to everybody in the prices received for livestock. The accounting is also simple, and what is more important, it has to be done at the proper time and done right. No capital is required. No dividends are to be reckoned. Only producers have any interest in becoming members.

However, in spite of these favorable odds, associations are constantly failing or gradually quitting business. Following are the usual reasons for this:

1. *No real economic need for an association.*—The farmers already have a market, and this market is giving them service at so small a margin that they can better it little, if at all, by doing the work themselves. This seems to be the case at many shipping points in southern Minnesota. The farmers there are more likely to be producing fat stock of standard types, and they know the market quotations for the day. In consequence, the buyers have to be satisfied with narrower margins. Many new associations have been formed in southern Minnesota in the last three years, but they are not half so numerous here

as in the central counties. Most of the cars from central Minnesota are mixed. More cattle are shipped than hogs, and the cattle are assorted lots. On such offerings, local buyers often take wide margins. Two or three competing or supposedly competing buyers may demand wider margins than one. In fact, it is because there are too many buyers in some places trying to make a living out of the business that wide margins are taken. One coöperative association with one manager may thus do the work now done by several buyers, each trying to make from $50 to $150 a car.

2. *Not enough business.*—Livestock shipping associations do not need a large business nearly so much as do elevators, creameries, and stores. This is because no money is tied up in buildings and equipment. The expenses are mostly in exact proportion to the amount shipped. However, there are several important gains from a large amount of business. (a) Regular shipping days can be fixed. In small associations, the members notify the manager when they are ready to ship and the manager sets a day. Some may not wish to wait till then. Some may fail to deliver on the day set. The market may decline in the meantime. Stock may have to be held over and fed. (b) Shipping expenses and commission charges are higher on mixed cars. (c) Managers are usually paid a smaller commission if they handle a large amount of stock. (d) Better managers can be hired. Associations need, therefore, to bring in as many members as possible, and take all the business they can get. It is doubtful, however, if they should organize, depending largely on members who do their trading at another shipping point.

Farmers should not refuse to coöperate in this or any other business, however, merely because they can form only a small association. They may need to organize in such case to get any kind of market, or their association may do the work much more cheaply than existing agencies, altho at not quite so low a cost as some of the large associations elsewhere. Thus farmers in small settlements in the northern counties frequently do well to organize.

3. *Members not bound together closely enough.*—Members of livestock shipping associations have no invested capital to lose if the association breaks up. All they lose is their local market. Moreover, only occasionally do they have livestock to ship. Hence it is easy for them to drift away from the association and sell to local buyers, especially if they live about as close to other shipping points. It is very necessary, therefore, that members of a shipping association be thoroly loyal. It helps, also, to have the association thoroly organized, with constitution and by-laws carefully framed and carefully administered. The setting aside of a reserve fund also strengthens the membership bond somewhat. The reserve makes it easy to satisfy members suffering losses in shipments.

4. *Federation not fully enough developed.*—Most of the livestock-shipping associations in Minnesota ship to South St. Paul. The Minnesota Central Coöperative Livestock Shipping Association is now looking after the interests of shippers in this market, so far as lies within its power. The local associations should support the central association to the limit and provide it with enough means and power to fully protect their interests. Just at present, the association is trying to look after their interests in the matter of commission charges, especially on mixed cars, and in the matter of prices charged for feed at the yards.

COÖPERATIVE STORES

Table I lists the number of coöperative stores at 102 because this is the number of stores on the mailing list of the division. Only 58 of these reported, but no doubt most of the others are still operating. Furthermore, not all the new companies organized have been reported. Four new companies have been reported since the annual reports were asked for. In 1913, only 62 companies reported, and the total number was estimated at 120. In 1914 only 42 reported and the total number was estimated at 126. Quite possibly these earlier estimates are high, and the number of coöperative stores has not really decreased at all.

The volume of business of coöperative stores increased greatly between 1913 and 1917, owing principally but not altogether to higher prices for merchandise. Table XX, which combines the 42 reports that were complete and accurate, places the average volume of business at $72,042, as compared with $42,518 in 1913. This is an increase of 69 per cent. In the period from July, 1913, to July, 1917, retail prices rose 60 per cent in the United States.

TABLE XX

ANALYSIS OF BUSINESS OF 42 COÖPERATIVE STORES, 1917

	Totals	Averages
Opening inventory	$602,429	$14,343
Paid for merchandise	2,639,016	62,834
Gross sales	3,025,759	72,042
Closing inventory	617,541	14,702
Gross profit	401,835	9,565
Total expenses	254,806	6,066
Net profit	147,029	3,501
Total dividends	63,674	1,516
Stock dividends	20,400	486
Trade dividends	43,274	1,030

Table XXI summarizes the reports for all the stores reporting each item. The net profits of 54 stores in 1917 were $190,157. The average net profits for the 42 stores were $3,501, the average stock dividends $486, and the average trade dividends $1,030. This still

leaves an average surplus of $1,985, of which about $1,250 was transferred to reserves. Most of the rest was used to pay debts. Assuming the 42 stores to be a little larger and more prosperous than the average, the 102 stores believed to be operating in 1917 probably made a net profit of $300,000 and paid stock dividends of $42,000 and trade dividends of $130,000. A stock dividend of $486 is 4.6 per cent on the average paid-up capital of $10,600. If 6 per cent had been paid, the trade dividend would still have been $880 per store.

TABLE XXI

VOLUME OF BUSINESS REPORTED BY COOPERATIVE STORES, 1917

	Number reporting	Amount reported
Paid-up capital	56	$590,669
Opening inventory	56	823,247
Paid for merchandise	52	3,386,368
Gross sales	56	4,008,877
Closing inventory	52	832,812
Gross profits	54	518,017
Total expenses	54	328,860
Net profit	54	190,157
Stock dividend	39	27,581
Patronage dividend	31	56,731
Transferred to reserves	37	46,203
Credit outstanding	52	374,364

The gross profits of $9,567 per store were 13.3 per cent of the gross sales, the total expenses were 8.4 per cent, and the net profits 4.9 per cent. The gross profits of 20 selected stores in 1913 were 14.4 per cent of gross sales, and in 1914, 16 per cent. Expenses were 10.8 per cent and 11.8 per cent in 1913 and 1914 respectively, and net profits 3.5 and 4.3 per cent. Altho expenses per store were $1,446 more in 1917 than in 1913, the percentage of expenses to gross sales was 2.4 less. The reason for this was of course the higher prices in 1917. Net profits were 1.4 per cent higher than in 1913. As a result, 69 per cent of the stores paid stock dividends in 1917 and 52 per cent paid trade dividends, as compared with 55 per cent and 38 per cent, respectively, in 1914. All but 21 per cent of the stores paid some kind of dividend and all but one made profits.

Apparently the coöperative stores prospered in 1917. They prospered also in 1913 and 1914, but not so greatly as in 1917. There can be no doubt that coöperative stores have been of considerable benefit to the farmers of Minnesota. It would be hard to find an equal number of privately owned stores, taken at random, that do business more efficiently or make larger profits than this group of coöperative stores. However, it is a business that has many difficulties for the inexperienced, and more attempts at coöperation fail in this field than in any of the others thus far discussed. Probably farmers are all the while learning better how to manage coöperative stores. At least, in 1913 the average age of 62 stores reporting was

5 years; in 1917 the average age of 55 stores was 8.4 years. New stores come and go, and once in a while an old one fails; but out of it all there remain a fairly constant number of stores that do a very good business.

In 1913, the coöperative stores averaged 104 members per company and farmers owned 86 per cent of the stock. All of those reporting limited votes to one per member, and all but 7 limited the number of shares per member. About two fifths of the business was furnished by non-members. Other details as to organization and management of coöperative stores, including a classification of accounts, will be found in Bulletin 171, which will be sent on request.

TABLE XXII

DISPOSITION OF SURPLUS OF 58 COOPERATIVE STORES, 1917

	Number reporting	Average amount reported
Surplus not distributed as dividends	12	$1,181
Stock dividend only	13	704
Trade dividend only	6	741
Stock and trade dividend	27	3,823
Stock and membership trade only	25	3,231
Non-membership trade also	2	2,953

ESSENTIALS TO SUCCESS WITH COÖPERATIVE STORES

Following are a few of the essentials to successful coöperation which have especial application to coöperative stores:

1. *An economic need stronger than required for most other kinds of coöperation.*—On reason for this is that most villages and small cities are already too well supplied with retail stores, and most of these are serving the public about as well as a rival coöperative store would do it. Another is that the members can not expect such large gains from this kind of coöperation as from most others. The average farm family in Minnesota, in 1917, probably spent between $300 and $500 for merchandise. The profits in 1917, after deductions were made for rebates to non-member patrons, amounted to about $25 per member. This is equal to a saving of 6 per cent on a $417 store bill. More than half of the $25 was left in the business as reserve and to pay off debt. A saving of 6 per cent is considerable, but $25 a year on a store bill will not make members as loyal as 2 cents a pound extra on butter, or 40 cents extra per hundred on livestock. For these reasons, farmers considering organizing a coöperative store must be very certain of a real economic need. Undoubtedly such a need exists in many places which have no coöperative stores to-day. This is especially likely to be true in the newer parts of the state. It is also true in many villages which have one or two stores and very little competition. In such cases, it is usually better if possible to

buy out a store already there. If this can not be done, then the new store must be certain of enough customers to enable it to compete with the old ones. In many cases, a coöperative buying club will serve the members for a while, and gradually open the way for a coöperative store later if one is really needed.

2. *Care in purchasing an existing store.*—A large percentage of the coöperative stores that have failed, have failed because they paid a high price for an unprofitable or even bankrupt business overstocked with unsalable goods. The farmers in every case before buying should call in a certified accountant and have him check the inventory and verify the statement of resources and liabilities.

3. *Expert management.*—The three essentials to good management of a store are, (a) keeping down expenses, (b) securing a rapid "turnover" of stock, and (c) extending credit wisely. To do all these things well needs special skill and special experience. Men with such skill and experience have to be well paid or they will go into business for themselves. The farmers' store that gets a good manager has little left to worry about.

Some believe that farmers' stores should give no credit whatever. Only one of the stores reporting operated on that basis. Two others had all their outstanding credit covered by personal notes. Ten of them had credit outstanding amounting to from 1 to 4 per cent of the amount of their gross sales in 1917. The average for all stores was 10 per cent of 1917 gross sales. A few of the larger stores had credit outstanding equal to the whole amount of their 1917 gross sales. No doubt the losses from this source have been greatly overstated by private owners of stores, but it is one of the things that is causing the coöperative stores to fail.

4. *Right distribution of profits.*—This includes limited stock dividends, and trade dividends to members and non-members, to non-members usually at a lower rate. An excellent plan is to let the rebate on non-member purchases accumulate on the books until they are enough to pay for a share in the company. This is a good way to build up the capital of the company.

FARMERS' MUTUAL INSURANCE COMPANIES

The number of farmers' mutual fire insurance companies in the state increased only from 154 to 159 between 1913 and 1916. The insurance in force, however, increased from $342,000,000 to $425,000,000. Some of the property insured is located in villages. Even in 1913, these companies were carrying more insurance policies than there were farmers in the state. The principal expansion of business

has been due to the increased valuation of farm buildings. Only five counties in the state had no farmers' insurance companies in 1916, and these are mostly in the northern part of the state or near large cities. Stearns and Goodhue counties each had seven companies.

The reasons for the great success of farmers' mutual insurance companies are indicated in Tables XXIII and XXIV. The cost of carrying insurance in farmers' companies in 1916 was only 17 cents per $100 of insurance in force. Stock companies have in the past solicited farm business at the rate of 46 cents a year per hundred on three-year contracts. The farmers' companies paid out an average of 71.5 per cent of their receipts in losses during the five-year period, as compared with 52.5 paid in losses by the stock companies. The competition of the farmers' companies seems also to have forced the stock companies to offer continuously better rates. The reason why the farmers' companies handle business so cheaply is that they have no solicitor's fees to pay, no high salaries to pay to officers, and no profits to make for outside owners. The business is so simple that intelligent farmers with a fair education can handle it, that is, unless the companies grow larger than is good for them. Such men are willing to take on an outside interest, like helping run a farmers' insurance company, for a very small return. Stock companies, if they had more farm business, could perhaps reduce their premiums, but they could not reduce their cost of doing business.

TABLE XXIII

SUMMARY OF MINNESOTA BUSINESS OF TOWN MUTUALS, 1916*

Number of companies	159
Insurance written	$98,976,888
Insurance in force	425,504,730
Total receipts	712,606
Total loss payments	517,589
Total expenses paid	211,042
Average insurance in force	2,669,184
Average receipts per company	4,482
Average loss payments	3,255
Average expenses	1,327
Cost per $100 of insurance in force	0.17
Percentage of receipts paid in losses	72.7

* From 46th annual report of Commissioner of Insurance.

Most of the companies depend upon assessments for a large part of their income. A third of them collect fees and premiums enough in advance to cover losses. The former method seems to be well suited to the ordinary small farmers' company. Large companies no doubt find the other practice better.

Eight hail and cyclone insurance companies in the state call themselves "mutuals." Two of these do three fourths of the business. At least three of the others are actually owned and managed by farmers. The reciepts of the 8 companies in 1916 were $1,055,137, and 58 per cent of this amount was paid in losses.

TABLE XXIV
COST OF INSURANCE IN TOWN MUTUALS IN STOCK FIRE COMPANIES, FIVE YEARS' BUSINESS, 1912-1916

	Receipts—premiums, assessments, and policy fees	Paid in losses	Percentage of receipts paid in losses	Amount collected for each dollar paid in losses
Town mutual companies				
1912	$631,400	$454,286	72.0	$1.39
1913	637,635	513,973	80.5	1.24
1914	708,703	511,262	72.3	1.385
1915	675,064	413,620	61.5	1.635
1916	712,606	517,589	72.5	1.378
Total	$3,365,408	$2,410,730	71.5	$1.399
Stock fire companies				
1912	$7,939,821	$3,416,001	44.0	$2.315
1913	7,508,131	3,687,639	49.2	2.019
1914	7,620,121	3,951,469	51.8	1.93
1915	7,698,395	4,576,853	59.5	1.68
1916	7,988,369	4,717,905	59.0	1.69
Total	$38,754,837	$20,349,867	52.5	$1.902

In the fall of 1918, the farmers' insurance companies were confronted by the problem arising from the forest fires in Northern Minnesota which wiped out a large part of the insured property of several companies. The member companies of the State Association of Farmers' Mutual Insurance Companies, at the annual meeting held in Minneapolis in December, 1918, voted to accept these losses as their own and to raise the funds among themselves by contributions levied at the rate of 75 cents per thousand on their insured property. A plan of inter-insurance between the mutual companies in Northern Minnesota, and perhaps in other sections of the state, was also discussed.

FARMERS' MUTUAL TELEPHONE COMPANIES

Exactly 1,430 telephone companies with receipts of less than $3,000 during 1917 reported to the Railroad and Warehouse Commission. Perhaps a hundred more did not report. Some of these companies called themselves stock companies or partnership companies, but most of them reported as mutual or coöperative companies. The reports do not always make clear the real nature of many of these companies. Many of the smaller companies, usually those with annual receipts under $500, simply divide expenses among the subscribers, each farmer owning his own telephone and keeping his part of the line in repair. Companies larger than this sell stock to subscribers and occasionally pay dividends. Not all of these are now strictly coöperative. When the companies were first organized, all the subscribers were members and paid the same rates. But farmers

coming into the neighborhood since have often wanted service without buying shares, and these have been charged a rental. Sometimes this rental has been high enough to reduce considerably the cost of service to the members. In most cases, from 90 to 100 per cent of the members and subscribers are farmers. Of the 1,430 reporting companies, at least 950 are coöperative in most respects.

The smaller companies usually have from 20 to 35 subscribers, who are assessed from $5 to $8 a year. The larger companies usually have from 100 to 300 subscribers, and the usual rate is from $10 to $12 a year. The annual revenues for the 950 companies probably amount to $1,200,000.

The small companies, if the lines are kept in proper repair and if they obtain proper connections with other lines, are in many ways most satisfactory. Farm populations naturally fall into neighborhood groupings along certain roads, in or around certain villages, churches, schoolhouses, or creameries. It should be the ideal of the farmers' telephone companies to connect all the people in one of these neighborhoods, and frequently the people of one or two other neighborhoods in addition. Furthermore, all the people living about one trade center should be brought into one system by proper connections of one sort or another. When one farmers' company spreads out over a whole township or county, the result too often is that the business gets too big to be properly handled by farmer managers.

OTHER FORMS OF CO PERATION

In addition to the main types of coöperation thus far discussed, there were in Minnesota in 1918 about two hundred and seventy-five other coöperative organizations handling farmers' business. Bulletin 146, compiled in 1913, lists 86 of these, but does not include buying clubs and horse-breeding associations. Several of these kinds of organizations are multiplying rapidly and no doubt will continue to do so. Others are still in the experimental stage. Following are the most important types:

Buying clubs.—The state of Minnesota has more than a thousand farmers' clubs of one kind or another, and a good many of these carry on more or less coöperative buying along with their social activities. Bulletin 167 describes in detail the organization and business methods of fifty of these clubs, which during 1916 bought merchandise worth about $100,000. This was estimated to be more than half of the coöperative buying done by all clubs in the state.

Lumber yards.—Probably 20 farmers' elevators handle lumber as one of their side lines. The combination seems to work satisfactorily. The same type of business organization fits both kinds of businesses,

except that patronage dividends on lumber are always figured on a percentage basis. The federal Bureau of Markets has worked out an accounting system for a lumber business handled along with an elevator business. There are, however, probably 7 coöperative concerns in the state which ship little or no grain and call themselves farmers' lumber yards.

Wool-shipping associations.—The county agents of Minnesota reported six farmers' associations selling wool in 1917, one a strictly coöperative company, three of them pooling associations, and the other two, joint selling associations. Probably most of these were only temporary organizations. The six associations sold 65,000 pounds of wool at $38,000. In addition one or two produce associations handled wool as a side line. Unfortunately the activities of the federal government in buying wool in 1917 caused considerable losses to many farmers selling at private sale, and in some cases to those selling coöperatively.

Egg-shipping associations.—So far as known, no association is now shipping eggs exclusively. However, several coöperative creameries and produce companies handle eggs for patrons on a coöperative basis. This is undoubtedly a field in which coöperation should expand.

Horse-breeders' associations.—There are 135 associations in the state calling themselves horse companies or horse associations. Most of these bear the name of the village or community in which they are located. An inquiry made in 1914 showed that a large percentage of these were coöperative, and that most of the members were farmers. Their purpose is to improve the breeding of farm horses by the coöperative purchase of purebred sires.

County breeders' associations.—These are organizations of the livestock breeders in a county for purposes of buying and selling livestock and improving their herds. The principal activity of these associations at present is arranging combination sales and advertising them. Most of the members are cattle breeders; the others are hog breeders. Several different breeds are usually represented in one association. A small membership fee is charged. Other costs are shared by those benefiting from them. Twenty-four counties have these associations at present.

Breed associations.—These are organized like the county breeders' associations, except that the members all keep the same breed of livestock. A county in which the farmers keep several breeds of cattle may have several breed associations. Under such circumstances, this is a better kind of association than the county association. Some of these associations run combined advertisements in the agricultural journals. There are 28 breed associations at present, and the number will surely grow. Wisconsin has more than a hundred.

Neither breed nor breeders' association prospers unless a county has enough good herds to make the thing worth while. Associations have sometimes been organized in counties where there was nothing for them to do, and of course the result has been that they have failed.

Coöperative bull associations.—Minnesota has 8 of these associations at present. The oldest association is located in Douglas County. It owns 9 sires, each of which is used two years by one group of farmers living close together and then exchanged with another group. In this way, the association gets full use out of all its sires, and as a result can afford to buy animals of much better breeding. The costs are met by assessments on the members. Farmers' Bulletin 993, of the United States Department of Agriculture, gives full particulars concerning these associations.[4]

Cow-testing associations.—There were 26 cow-testing associations in the state in July, 1917, but the war took so many of the testers into service that only 15 were operating in December, 1918. The number is bound to increase again. Membership in cow-testing associations shifts considerably. Many farmers test one year and then skip a year or two years. The usual method is to pay according to the number of cows tested, but some associations are now charging a flat rate per member. The cow testers visit each farm once a month, weigh and test the milk of each cow, estimate the value of the feed consumed, and figure out the records for each cow. The testers are paid from $40 to $60 a month and board.

Milk marketing associations.—So far as known, Minnesota has no association which handles the milk clear through to the consumer. The Twin City Milk Producers' Association concerns itself with getting the best prices possible from the regular milk distributors. The members are assessed according to the amount of milk they deliver.

Farmers' meat-packing plants.—A farmers' meat-packing plant has been built at Newport, but is not yet operating. The two earlier attempts to establish coöperative meat-packing plants in Minnesota failed, one plant closing down and the other passing into private hands. Four have been started in Wisconsin, one of which is at New Richmond just across the state line. The first plant started, at La Crosse, closed down after two years. It made the mistake of paying too much for an old packing plant. At least one of the other plants is very short of funds for carrying on its business, and apparently unwilling to ask the members for more funds. The cost of selling stock in these companies has ranged from 15 cents to about 25 cents on every dollar of stock sold.[5] A sensible plan for the people of Min-

[4] Winkjer, J. G. "Coöperative bull associations." U. S. Dept. of Agr., Farmers' Bull. 993, 1918.
[5] Wisconsin Bulletin 282.

nesota to follow is to await the results of the three remaining experiments in Wisconsin. Meat packing is a complicated business. The local market for meat is not so good as some farmers have imagined. It will not take all the meat of certain kinds that the farmers produce, and it demands other meats which the farmers do not produce in large enough quantities. When a farmers' packing plant has to look for outside markets, it meets very severe competition.

Other types of coöperative associations.—Minnesota also has a Coöperative Dairies Association, organized in 1907 to help the cooperative creameries market their butter to better advantage; an Equity Grain Exchange, Livestock Exchange, and Wool Exchange; at least four fruit-shipping associations; two farmers' banks which are more or less coöperative; one coöperative laundry; several community mills; and three farmers' hail and cyclone insurance companies. Not all of these are strictly coöperative in all particulars.

PROSPECTS FOR COÖPERATION

When farmers organize and market their own produce, they replace the local middlemen with middlemen of their own. They elect a president and board of directors and hire a manager, and these men do their buying and selling for them. When the regular middlemen do this, they do it in the hope of making wages of management plus a profit. The hired manager does his work for a salary, or wages of management. The *profits* go to the members, because they take the risks. Moreover, the hired manager does not do all the managing. The officers of the company also take a hand in it. Farmers are willing to do this kind of work cheap. There are always some of them whose mental energy is not all used up in running their farms who are very glad of a chance to use part of it in looking after something outside of their own particular farm, and the only pay they expect in most cases is the better market they get for their own produce as a result. The hired manager, if he is as capable as he should be, will want as good pay for the service he renders as he would make if he were working for himself; but he needs to be paid for only that part of the managing which he does. The rest of it the officers do and do cheaply. The members save by coöperating because they take the risks and get the profits, and because they contribute their own services.

On the other hand, one must not forget that sometimes the services of farmers in marketing farm products are not so economical after all. Where the officers do not understand the business they are handling, their services may be dear at any price. Moreover, hired managers do not always work so hard for their employers as the regular middle-

men do for themselves. For these two reasons, many coöperative enterprises are not so efficiently operated as some private concerns in the same towns. This is likely to be the case where coöperation is breaking into new fields of business or new territory. After a while, however, enough members learn the business, and enough hired managers become trained, that the farmers can compete on even terms, even in the matter of efficiency, with the regular middlemen. The coöperative companies of Minnesota, taken as a whole, are surely as well managed as the private companies.

Another advantage which comes to producers when they coöperate is that all of them soon come to know a good deal more about the marketing of farm products than they formerly did. This enables them to take advantage of the market at every turn, to put their products on the market at the right time, and more important than all else, to produce what the market demands. The result of this is that they are soon turning out better and more uniform products, and getting much better prices.

As long as farmers depend on the regular middlemen, they can never feel entirely certain that they are not being exploited somewhat. Where competition is active, they are usually safe enough, but they can never be really sure that competition is active. Local middlemen often find it is to their advantage not to compete, especially in the matter of price. However, when people do their own buying and selling, and do it on a democratic basis, they can feel perfectly sure that no local agencies are exploiting them, and this feeling of security is worth much to them and to the people who have to get along with them.

One great reason for the waste in buying and selling at present is that there are too many local middlemen. It would be better in many towns if there were only one elevator and one grocery store. But as long as these are private concerns it is never safe to let one of them corner all the business. It is perfectly safe, however, to let one coöperative concern absorb the whole business of a community as long as it is managed on a truly coöperative basis and membership is open to all. There are many places in Minnesota where this is exactly what has happened, or is happening, and the result is that the people are getting the best and cheapest service to be found anywhere in the state.

Great wastes also result because there are too many farmers each working almost entirely by himself. There are a great many things which they need to do that few of them can afford to do by themselves, or that cost a great deal when done in that way, which can be done easily and at little cost when all do them together. Only a few farmers can spare the money to buy a purebred sire of excellent

breeding, but twenty-four of them can easily buy six and get ten years' use out of each of them. Not many farmers can go to the trouble and expense of keeping milk and feeding records for their cows; but two or three dozen of them can coöperate and hire a cow-tester to do it for them. This is only a beginning. A large part of the great advantages which are possible from large-scale production in the cities, and from applying scientific methods to trade and industry, are quite possible in the country if farmers will combine and have these things done in coöperation.

The future in farming, just as in city trades and industries, promises therefore to include a considerable amount of coöperation along with private and public operation and management. But in just what fields and along just what lines it will develop, no one can definitely say. The proper course to follow is to go as far as possible with the kinds of coöperation that have been tried and found to work and to try out carefully all the likely-looking new kinds, not going too fast at the start with any of them, but first setting up a few associations as experiments, so as to find out if they will work, and what is the best way to organize and manage them. Some kinds of coöperation will be tried that will not work. Others will work after a while when the proper methods have been discovered and learned. Others will work almost from the start. In the end, we will know much better than we do now just what is the proper sphere for coöperation. We can safely predict even now that this sphere will have its limits.

In some men's minds, the all-important thing is to get the farmers to organize. It is doubtful, however, if too much pressure should be brought to bear to get the farmers in any particular community to form a company. If general campaigns are conducted in favor of all kinds of farmers' coöperation, and in favor of particular kinds that are succeeding at the time, then the intelligent people in a community will think about their local situation and decide whether a coöperative company is needed and whether it will succeed or not. In most places, there are county agents who will help them to decide this question. The points which they need to consider are set forth in this and similar bulletins issued by this division. Any additional information they need will be gladly sent upon request. The Department of Agriculture of the University of Minnesota will try to help them organize. It will send men to help them if they ask it. However, it will not go out into particular communities and say to the people: "You ought to organize a coöperative company." It has no right to say this because it does not know the community and the local conditions well enough. Only men who have lived in the community for several years know that. The first move toward coöperation should therefore always be made at home.

There are men, however, who will go out and tell people everywhere that they ought to organize. These are the promoters. There are two kinds. The old-fashioned promoter was in the pay of outside concerns having something to sell. He organized coöperative creameries so that he could sell them butter-making outfits at double their value, or horse-breeding associations so that he could sell them stallions at three or four times their value. About 1,500 creameries were promoted by these men in Wisconsin alone, at a cost to the people of the state of about $5,000 per creamery. By 1893, about $7,000,000 was tied up in idle promoted creameries in Wisconsin alone.[6] Minnesota was in large part saved from this calamity by the work of one man in the College of Agriculture, who got out posters and circulars warning the farmers against the promoter. As a result, 76 per cent of the creameries in Minnesota are now coöperative, as compared with only 45 per cent in Wisconsin. Kansas has a law which provides that the state must approve of any proposed creamery before it is built. The Wisconsin Dairymen's Association at its recent convention passed a resolution in favor of such a law for Wisconsin.

The modern type of promoter gets his pay from the commissions he gets for selling the stock of the new company. The promoters received $37,000 for selling the stock of the La Crosse meat-packing plant in Wisconsin. Where men are paid to do such work, there is always great danger that they will sell enough stock to start a company even tho the people do not want it enough to support it afterwards. A safer plan is for the farmers to do their own promoting. If they can not do it, then the community is probably not ready to coöperate. Conscientious promoters of course will not sell stock for a coöperative company unless they are quite sure that it will succeed, just as conscientious agents will not sell books to people who ought to use their money for something else. If coöperation is going to grow as it should in Minnesota, either the professional promoters must all become conscientious about their work, or laws must be passed controlling their activities. Already the Federal Farm Loan Bank has ruled that no charter shall be issued to a bank whose shares have been sold on commission.

The Division of Research in Agricultural Economics wishes to help farmers of Minnesota with their coöperation and their marketing problems in every way it can. It has already begun a study of cooperative potato warehouses and produce shipping associations. It hopes shortly to undertake investigations of several other new types of associations with a view to discovering what can be done

[6]Wisconsin Bulletin, 282, p. 41.

with them. Coöperative companies are becoming so thick in some parts of the state that they are encroaching upon each other. The division wishes to make a study of competition between coöperatives to see how it can best be controlled. It would like also to study the unfair practices resorted to by rival companies to put coöperative companies out of business. An investigation of immediate importance is the possible improvement of our present system of distributing milk in cities. During the war, it has been impossible to do these things because most of the investigators in the country have been in the service of the government. From now on, more helpers will be available.

LAWS OF MINNESOTA AFFECTING FARMERS' COÖPERATION

LAWS OF 1913, GENERAL STATUTES, CHAPTER 58

GENERAL COÖPERATIVE ASSOCIATIONS

6479. *Formation—Purposes*—A co-operative association may be formed for the purpose of engaging in any lawful mercantile, manufacturing, or agricultural business. Its certificate of incorporation shall be filed for record with the register of deeds of the county of its principal place of business, and thereupon it shall become a corporation. A majority of the incorporators shall be residents of the county of its principal place of business, and its duration without renewal shall not exceed twenty years.

6482. *Officers—Management*—Every such association shall have a president, a treasurer, and not less than three directors, who shall together constitute a board of managers and conduct its business. Such officers shall be chosen annually by the stockholders and hold their offices until others have been chosen and qualified. The association shall make its own by-laws, not inconsistent with law, and may therein provide for any other officers deemed necessary, and the mode of their selection. It may amend its certificate of incorporation at any general stockholders' meeting, or at any special meeting called for that purpose, upon ten days' notice to the stockholders.

6483. *Capital—Limit of interest—Shares*—The amount of capital stock shall be fixed by the certificate of incorporation, which amount and the number of shares may be increased or diminished at a stockholders' meeting specially called for that purpose, but the whole amount of stock shall never exceed one hundred thousand dollars, and, in case of a creamery association, shall not exceed twenty-five thousand dollars. Within thirty days after the adoption of an amendment increasing or diminishing its capital, it shall cause the vote so adopting it to be recorded in the office of the register of deeds where its original certificate is on record. No share shall be issued for less than its par value, and no member shall own shares of greater par value than one thousand dollars, or be entitled to more than one vote. It may commence business whenever twenty per cent of the stock has been subscribed for and paid in, but no certificate of shares shall be issued to any person until the full amount thereof

has been paid in cash, and no person shall become a shareholder therein except by consent of the managers.

6484. *Liability of officers—Dissolution*—If such board of managers, or the directors or officers having control of such association, for five consecutive years after its organization shall fail to declare a dividend upon its capital or shares, five or more stockholders, by petition setting forth such facts, may apply to the district court of the county of its principal place of business, for its dissolution. If, upon hearing, the allegations of the petition are found to be true, the court may adjudge a dissolution of the association.

6485. *Distribution of profits*—The profits on the earnings of such association shall be distributed to those entitled thereto by its by-laws, and in the proportions and at the times therein prescribed, which shall be as often as once in twelve months.

6486. *Annual report to dairy and food commissioner*—Every creamery association, on or before December 30 in each year, shall make report to the state dairy and food commissioner, or such officer as may at any time, by law, be given the supervision of dairy products. Such report shall contain the name of the corporation, its principal place of business, the location of its creamery, and the number of pounds of butter or other dairy product manufactured by it during the preceding year.

LAW APPLYING TO COÖPERATIVE ASSOCIATIONS FORMED FOR THE PURPOSE OF MARKETING PRODUCTS OF OTHER COÖPERATIVE ASSOCIATIONS

6487. *Associations for sale of certain products*—That any co-operative associations may be formed for the purpose of selling and otherwise disposing of any product of any manufacturing or agricultural co-operative association organized under the laws of this state. Its certificates of incorporation shall be filed for record with the secretary of state, and thereupon it shall become a corporation. A majority of the incorporators thereof shall be residents of this state and its duration, without renewal, shall not exceed twenty years.

6488. *Same—Officers—By-laws—Amendment of articles—Capital stock—Dissolution—Annual report*—Every such association shall have a president, a treasurer, and not less than three directors, who shall together constitute a board of managers and conduct its business. Such officers shall be chosen annually by the stockholders, and shall hold their offices until others shall be chosen and qualified. The association shall make its own by-laws, not inconsistent with the law, and may herein provide for any other officers deemed necessary, and the mode of their selection. It may amend its articles of incorporation at any general stockholders' meeting, or at any special meeting called for that purpose, upon ten days' notice to the stockholders. The amount of capital stock shall be fixed by the articles of incorporation, which amount and the number of shares may be increased or diminished at a stockholders' meeting, specially called for that purpose, but the whole amount of stock shall never exceed one hundred thousand dollars. Within thirty days after the adoption of the amendment increasing or diminishing its capital stock, it shall cause the vote so adopting it to be recorded in the office of the secretary of state. No share shall be issued for less than its par value and no member shall own shares of a greater par value than one thousand dollars, or be en-

titled to more than one vote. It may commence business whenever 20 per cent of the authorized stock has been subscribed for and paid in, but no certificate of shares shall be issued to any person until the full amount of such subscription therein has been paid in cash, and no person shall become a shareholder therein except by the consent of the managers. If such board of managers, or the directors or officers having control of such association, for five consecutive years after its organization shall fail to declare a dividend upon its capital or shares, five or more stockholders, by petition, setting forth such fact, may apply to the district court of the county wherein is situated its principal place of business in this state, for its dissolution. If, upon hearing, the allegations of the petition are found to be true, the court may adjudge a dissolution of the association. The profits on the earnings of such association shall be distributed to those entitled thereto by its by-laws and in proportions and at the times therein prescribed, which shall be as often as once in twelve months. Every corporation organized under the terms of this act shall on or before December 30th, in each year, make a report to the state dairy and food commissioner; such report shall contain the name of the corporation, its principal place of business in this state, and generally a statement as to its business, showing total amount of business transacted, its profits and losses.

6489. *Same—Stock in other corporations*—Any corporation heretofore or hereafter organized under the provisions of section 3073, Revised Laws of 1905 (6479), or chapters 276 or 313, General Laws 1905, is hereby authorized, in addition to those other powers to it granted, upon an affirmative vote of a majority of its directors or other governing body, had at any regular meeting or any special meeting called for that purpose, to subscribe to the capital stock of any corporation organized under the provisions of this act, pay for the same, and thereafter, in like manner, vote the same and exercise all the usual powers of a stockholder in a corporation, subject to the limitations herein set forth.

LAW APPLYING TO RURAL TELEPHONE COMPANIES

6480. *Formation—Rural telephone business—Powers*—Seven or more persons of lawful age, inhabitants of this state, may, by written articles of agreement, associate themselves together for the purpose of trade or for carrying on an (any) lawful mercantile, manufacturing, agricultural or rural telephone business within this state; and when such articles of association shall have been executed and recorded in the office of the clerk of the city or town in which the business is to be carried on, such persons shall be and become a corporation, and enjoy all the powers and privileges, and can buy and hold stock in other corporations organized for the same general purpose, and be subject to all duties, restrictions and liabilities set forth in all general laws in relation to similar corporations, except so far as the same may be limited or enlarged by this act.

6481. *Same*—A co-operative association may be formed for the purpose of engaging in any lawful mercantile, manufacturing, agricultural or rural telephone business. Its certificate of incorporation shall be filed for record with the register of deeds of the county of its principal place of business, and thereupon it shall become a corporation. A majority of the incorporators that reside in this state shall be residents of the county of its principal place of business, and its duration without renewal shall not exceed twenty years.

6490. *Rural telephone companies—Place of business—Stockholders' meetings, where held*—All rural telephone companies or associations, organized or incorporated under any of the laws of this state shall have its principal place of business in the township, city or village designated in is articles of incorporation as such; provided that any officer of such company may transact the business pertaining to his particular office in any township, city or village into which such township, city or village, the lines of such company extend, or in any city or village within any such township; and provided further that any such rural telephone company whose lines extend into more than one township may hold its stockholders' meeting in any township, city or village through or into which its lines extend or in any city, or village, within any such township as its stockholders, or members may from time to time designate at a previous annual meeting or a special meeting called for that purpose, but until a different place is so designated the township, city or village named as its principal place of business shall be the place for holding all stockholders' meetings thereof and when a place is so designated it shall be and remain the place for holding all stockholders' meetings until again changed by a vote of the stockholders as aforesaid and it shall be the duty of the officer calling any such meeting to procure a place of meeting in the township, city or village so designated; and state the location of same in his notice of the meeting.

LAWS OF 1919, GENERAL STATUTES, CHAPTER 382

Section 1. *Co-operative associations—Who may organize—Purposes*—A co-operative association, society, company or exchange may be formed for the purpose of conducting any agricultural, dairy, mercantile, mining, telephone, manufacturing, or mechanical business upon the co-operative plan, and in addition to other powers, such society, association or exchange, shall have power to buy, sell or deal in its own products, the products of its individual members, the products of any other co-operative association whether organized under the provisions of this Act or otherwise. It shall be lawful for such association or associations to sell its own products as well as the products of its members for them, either individually or collectively, and to negotiate the price at which such products may be sold either for itself or for its members, individually or collectively, as the case may be. For the above purposes it shall have the power to purchase and hold, lease, mortgage, encumber, sell, exchange and convey such real estate, buildings and personal property as the business of the association may require; also to erect buildings upon its own lands or leased grounds. For the purpose of this Act the words "company", "corporation", "exchange", "society", or "union", shall be construed to mean an association. No corporation or association hereafter organized or doing business for profit in this state shall be entitled to use the term "co-operative" as part of its corporate or business name or title, unless it has complied with the provisions of this Act. Any corporation or association violating the provisions of this section may be enjoined from doing business under such name or title at the instance of any stockholder of any association legally organized hereunder.

Sec. 2. *Articles of incorporation—Contents and filing*—Persons forming an association under this Act shall sign and acknowledge written articles of incorporation specifying:

(a) The name of the association, the general nature of its business and the principal place of transacting the same. Such name shall distinguish it from all other corporations, domestic or foreign, doing business in the state and shall be preserved to it during its corporate existence.

(b) The period of its duration, if limited, shall not exceed Thirty years (30) without renewal.

(c) The name and place of residence of the incorporators. Associations with a capitalization of Fifty Thousand Dollars ($50,000.00) or less shall have at least seven (7) incorporators and associations with a capitalization of more than Fifty Thousand Dollars ($50,000.00) shall have at least fifteen (15) incorporators, a majority of whom in both cases shall be residents of the state.

(d) In what board its management shall be vested, the date of the annual meeting at which it shall be elected, and the names and places of residence of those composing the board until the first election, a majority of whom shall be residents of the state.

(e) The amount of capital stock if any; how the same is to be paid in, the number of shares into which it is to be divided and the par value of each share.

(f) The highest amount of indebtedness or liability to which the association shall at any time be subject, which may be fixed in a stated amount or by percentage of its paid-in capital.

(g) To amend its articles of incorporation, as hereinafter provided, and it may also contain any other lawful provision defining and regulating the powers or business of the association, its officers, directors, trustees, members and stockholders.

Articles of incorporation of any association organized under this act, or amendments to such articles of incorporation, shall be published in the same manner as provided in Section 6149, Chapter 58, General Statutes of 1913, relating to corporations. The original articles of incorporation, or a certified copy thereof, verified as such by the affidavits of two of the signers, shall be filed with the Register of Deeds of the county of the principal place of business of the association, if incorporated for Twenty-Five Thousand Dollars ($25,000.00) or less, and with the Secretary of State if incorporated for more than Twenty-Five Thousand Dollars ($25,000.00). If the articles of incorporation are filed with the Secretary of State, a certified copy shall be filed and recorded in the office of the Register of Deeds of the county in which the principal place of business of the association is located. For filing the articles of incorporation with the Secretary of State there shall be paid to the State Treasurer a fee of Ten Dollars ($10.00) and for amendments to such articles Five Dollars ($5.00).

Sec. 3. *Capital—Limit of interest—Vote*—The amount of capital stock shall be fixed by the articles of incorporation. The amount of stock and the number of shares may be increased or diminished at any regular meeting of the stockholders or at any meeting of the stockholders called for such purpose in the manner hereinafter provided for amending the articles of incorporation. Within Thirty (30) days after the adoption of an amendment increasing or diminishing its capital the vote by which such amendment was adopted shall be recorded in the office where the original articles of incorporation were recorded, as provided in Section 2 of this Act. The association may commence business whenever twenty per cent (20%) of the capital stock has been subscribed and paid in, and

the amount of capital stock outstanding shall at no time be diminished below twenty per cent (20%) of the amount of the authorized capital. No share shall be issued for less than its par value nor until the same has been paid for in cash or its equivalent and such payment has been deposited with the Treasurer. The association may limit the amount of stock or the number of shares which may be issued or owned by one person but in no case shall the person be allowed to own or hold more stock than would represent the value of One Thousand Dollars ($1,000.00) of the par value of such stock. No stockholder shall be entitled to more than one vote, which shall be in person or by mail as hereinafter provided, and no stockholder shall be allowed to vote by proxy. No person shall become a stockholder of any association organized under this Act by transfer of stock except by consent of the Board of Directors, and the By-Laws may provide that the association shall have the first privilege of purchasing stock offered for sale by any stockholder. Any stock so acquired by the Board of Directors for the company may be held as Treasury stock or may be retired and cancelled.

Any stockholder who knowingly and intentionally violates the provisions of this Act or the provisions of the By-Laws adopted by any association organized under this Act may be required by the Board of Directors to forfeit his stock, in which case the Board of Directors shall refund to such stockholder the par value of his stock, or in case the book value of such stock shall be greater than par value, he shall be paid the amount of the book value of same. Stock so forfeited shall be retired and cancelled by the Board of Directors and such stockholder shall have no further rights or benefits in such association.

At any regularly called general or special meeting of the stockholders a written vote received by mail from any absent stockholder certified to and signed by him, may be read in such meeting and shall be accepted as the vote of the stockholder so signing; provided, however, that such stockholder has had due and previous notice, as elsewhere provided in this Act, and that a notice containing the exact text of the motion or resolution or amendment has been mailed to him at his last known postoffice address and that a copy of same is forwarded with and attached to the vote so mailed by absent stockholder. The Board of Directors may cause a referendum vote to be taken by mail upon any action or recommendation of the Board or for the purpose of electing members upon the Board of Directors, subject to the same regulations as above provided.

Sec. 4. *Stockholders' meetings—regular and special*—Meetings of the stockholders shall be held annually at the principal place of business of the association at such time as shall be designated by the By-Laws. At such annual meeting, reports covering the business of the association for the previous fiscal year and showing the condition of the association at the close of the fiscal year shall be submitted to the stockholders by the officers, and directors shall be elected for the ensuing year. The Secretary shall cause notice of such meeting to be published in a daily or weekly newspaper published in the principal place of business of such association and being qualified to publish legal notices and such notice shall appear in at least two consecutive issues of such newspaper in the case of a weekly paper and in the case of a daily paper once each week for two consecutive weeks, previous to such meeting. Or notice of such meeting may be given by mailing notice of such meeting to each and every stockholder at his or her last known postoffice address not less than ten (10) days previous to the date of such meeting.

Special meetings of the stockholders may be called by a majority vote of the directors or upon written petition of at least ten per cent (10%) of the stockholders, in which case it shall be the duty of the President to cause notice of such meeting to be made as above provided. Such notice shall state the time, place and purpose of such meeting and shall be issued within ten (10) days of the date of the presentation of such petition and such meeting shall be held within thirty (30) days of the date of the presentation of such petition. Notice of regular or special meetings having been mailed to the stockholders of the association or published in a daily or weekly newspaper as above provided, the Secretary shall execute a certificate stating the date and manner in which such notice was issued and an exact copy of such notice, and failure of any stockholder to receive such notice shall not invalidate any action taken by the stockholders at such regular or special meeting.

Sec. 5. *Quorum*—Except in cases where this Act requires a majority vote of all stockholders, the number of stockholders required to be present in person or represented by mail vote at any regular or special stockholders' meeting to constitute a quorum for the transaction of business shall be a majority of such stockholders when the total number does not exceed one hundred (100), and at least ten per cent (10%) of the total number of stockholders in all other cases, which shall not be less than fifty (50); but four hundred (400) stockholders present in person shall constitute a quorum in any association. The fact of the attendance of a sufficient number of stockholders to constitute a quorum shall be established by a registration of the stockholders of the company, which registration shall be verified and certified to by the President and Secretary of the association. No action of any association organized under this act shall be valid or legal unless there is a quorum present, as above provided, at the meeting at which such action is taken.

Sec. 6. *Directors—Election of—Duties—Officers*—Every association shall be managed by a board of not less than five (5) directors, who shall be members of the association and who shall be elected by the stockholders by ballot at such time and for such period as the By-Laws shall prescribe. The officers of the associations shall be a president, one or more vice-presidents, a secretary and a treasurer, who shall be elected annually by the directors. Each officer shall be a director of the association. The office of secretary and treasurer may be combined, and when so combined the person filling the office shall be termed "secretary-treasurer." A quorum of the stockholders shall have power at any regular or special stockholders' meeting, regularly called, to remove any director or officer for cause and fill the vacancy. The By-Laws shall specify the manner of nominating and electing the directors.

Sec. 7. *Earnings—Reserve fund—Distribution*—The stockholders may set aside all of the earnings of the first and second fiscal years of the association for the purpose of creating a reserve fund and the directors shall transfer to said reserve fund at least ten per cent (10%) of the annual net earnings until an amount has accumulated equal to thirty per cent (30%) of the paid-up capital stock, which reserve fund may be used in the business of the association, the same as paid-up capital. When recommended by the directors, the stockholders at any annual meeting, or at a special meeting called for that purpose, may increase such reserve fund out of the annual net earnings to one hundred per cent (100%) of the paid-up capital stock. A portion of the net profits not

exceeding five per cent (5%) may be used as an educational fund for teaching co-operation. Annual dividends shall not exceed eight per cent (8%). Additional net profits shall be disbursed by uniform dividends based upon the amount of purchases from the association by stockholders and upon the wages and salaries received by the employees. Non-stockholders shall receive dividends upon purchases equal to one-half the amount paid to stockholders which may be paid in the capital stock of the association. In productive associations, such as creameries, canneries, and elevators such dividends shall be based upon raw material delivered instead of upon goods purchased, and if an association is both a selling and a productive concern the dividends may be upon raw material delivered and goods purchased. Distribution of net earnings shall be made as often as the directors shall determine, which shall be at least once in each year, if the net earnings after the amount required to be set aside as a reserve fund has been deducted, are of sufficient amount to pay such dividend, and not otherwise. If the Board of Directors of any association shall authorize the payment of dividends on the paid-up capital stock in excess of eight per cent (8%), such act shall operate as a vacation of office of each director or officer voting for, authorizing, or in any manner sanctioning such payment and as a disqualification of such director or officer from holding any office of the association for a period of three years thereafter. Whenever any such association for a second time authorizes the payment of dividends on the paid-up capital stock in excess of eight per cent (8%), the secretary of state may institute the proper proceedings for the forfeiture of the charter of such association.

Sec. 8. *Purchase of going business—Payment—Special stock issue.*—Whenever any association shall purchase the business of another association, corporation firm, or individual, it may pay for the same in whole or in part by issuing in payment therefor shares of its capital stock to an amount, which, at par value, would equal the fair market value of the business purchased; and in such case the sale to the association of such business shall be equivalent to payment in cash for the shares of stock so issued. In case the cash value of such purchased business exceeds one thousand dollars, the directors of the association are authorized to hold the shares in excess of one thousand dollars ($1,000.00) in trust for the vendor, and dispose of the same to such persons, and within such times, as may be mutually satisfactory to the parties in interest, and to pay the proceeds thereof as currently received to the former owner of such business. At any regular meeting of the stockholders or at any regularly called special meeting, at which a quorum of stockholders shall be present or represented by mail vote, any association may, by a majority of the votes of the stockholders present and voting or represented by mail vote, subscribe for shares and invest the reserve fund or any portion thereof in the capital stock of any other co-operative association or for the purpose of purchasing any going business permitted under its articles of incorporation.

Sec. 9. *Promotion expense limited*—None of the funds of any association organized under this act shall be used, nor shall any stock of such association be issued in payment of any promotion of such association or commissions, salaries, or expenses of any kind, character or nature whatsoever; except that a sum not to exceed five per cent (5%) of the par value of stock sold may be used by committees elected by the stockholders for selling or soliciting for the sale of stock or for hiring responsible

salaried solicitors for such purpose, Provided, that associations operating in more than one county may expend ten per cent (10%) for such purpose if incorporated for less than one hundred thousand dollars ($100,000.00) and over fifty thousand dollars ($50,000.00). Associations incorporated for more than one hundred thousand dollars ($100,000.00) shall be governed by the laws of the state regarding the sale of stock by other corporations.

Sec. 10. *Annual reports—Form of filing*—Every association organized under this act shall be required to file with the Department of Agriculture, and every creamery or other association manufacturing or handling dairy products, whether organized under this act or otherwise, shall file with the Dairy and Food Commissioner each year a report of its business for the last fiscal year, which report shall be made on or before the first day of March or at the close of the fiscal year. Such report shall contain the name of the association, the amount of its authorized and paid-in capital, the names of its officers and directors, a statement of its resources and liabilities and such other information as may be required by the departments with which such report shall be filed.

Sec. 11. *Associations heretofore organized may come under this act*—Any co-operative corporation or association heretofore organized and doing business under prior statutes, or which was doing business under an attempted organization thereunder, which retains the same name or title, may come under the provisions of this act and be bound thereby upon filing with the proper official a copy of the resolution authorizing such action adopted by the stockholders of such corporation or association in the manner provided for the adoption of amendments. There shall be filed at the same time a copy of the articles of incorporation of said corporation or association. The place for filing such resolution and articles and the fees to be paid therefor shall be the same as for new associations organized under this act. Co-operative associations organized under the laws of other states may become subject to the provisions of this act by proceeding as provided by this section.

Sec. 12. *Amending articles of incorporation.*—The articles of incorporation of any association organized under this Act or which may elect to come under the provisions of this Act may be amended so as to change its corporate name or title, or so as to increase or diminish its capital stock, or to change the number and par value of the shares of its capital stock, or in respect to any other matter which the original articles of incorporation of the same kind might lawfully have contained, in the following manner: The Board of Directors, by majority vote of its members, may pass a resolution setting forth the full text of the proposed amendment and also the full text of such section as may be repealed by such amendment. Upon such action by the Board of Directors, notice shall be mailed to each and every stockholder containing a copy of the resolution so adopted, the full text of the proposed amendment, and also the full text of such section or sections as may be repealed by such amendment. Such notice shall also designate the time and place of the meeting at which such proposed amendment shall be considered and voted upon, in the same manner as elsewhere provided in this Act. If a quorum of the stockholders is registered as being present or represented by mail vote at such meeting, a majority of the members so present or repre-

sented by mail vote, may adopt or reject such proposed amendment. In case such amendment is adopted, it shall be filed and recorded with the office in which the original articles of incorporation are filed or recorded, together with a copy of the notice given to stockholders and the certificate of the President and Secretary verifying the action of the meeting at which such amendment was adopted.

Sec. 13. *Companies excepted*—Existing laws relative to the incorporation and management of rural telephone companies and co-operative creameries, except as specifically repealed by Section 14 of this Act, shall remain in force and shall not be affected by any of the provisions of this Act; provided, however, that any such rural telephone company or co-operative creamery organized under the provisions of existing laws may continue to operate thereunder until they shall come under the provisions of this Act by complying with Section 11 thereof.

Sec. 14. *Laws repealed*—Sections 6479, 6481, 6482, 6485, 6488, 6489 if Chapter 58, of the General Statutes of 1913, and amendments thereto, insofar as they conflict with the provisions of this act, are hereby repealed, but any corporation or association incorporated and operating under the provisions of said sections shall continue to be governed thereby until they elect to come under the provisions of this act.

GENERAL STATUTES, CHAPTER 126

Section 1. *Extension of time for closing affairs of certain dissolved co-operative associations*—Where any co-operative association other than a co-operative association having the power of eminent domain, which has been dissolved more than three years by expiration or forfeiture of its charter, did not fully close its affairs and convey all its property within the three-year limit prescribed by section 6198 of General Statutes of 1913, the time so limited is hereby extended for two years from and after the passage of this act for the purpose of closing up the affairs of any such co-operative association and conveying its property.

Sec. 2. *Conveyances legalized*—Any and all conveyances of property by any such co-operative association after the expiration of the three-year limitation prescribed by section 6198 of General statutes of 1913, are hereby legalized and made of the same force and effect as though the same had been done within said three-year limit. Provided that nothing herein contained shall be construed as affecting any vested rights or any action or proceeding now pending.

GENERAL STATUTES, CHAPTER 105

Sec. 2. Section 1 of Laws of 1917, amended to read as follows: "Sec. 1. There is hereby created a commission to be known as the state securities commission, hereafter referred to as the "commission," whose duty it shall be to administer and provide for the enforcement of all the provisions of this act.....

Sec. 3. Section 2 of Laws of 1917, amended to read as follows: "Sec. 2. The provisions of this act, except section 10 thereof, shall not apply to (a) securities of the United States or any foreign government. (b) .....

(d) securities of.....co-operative associations organized under sections 6479 to 6490 inclusive, general statutes, 1913, for operating creameries, cheese factories, or rural telephone lines, where

the authorized capital stock does not exceed twenty-five thousand dollars;.....:

Sec. 4. "Investment company" is defined to include coöperative companies except as excluded in Sec. 3.

Sec. 5. Section 4 of Laws of 1917, amended to read as follows: "Sec. 4. No such investment company and no such dealer shall sell or offer for sale any such securities or profess the business of selling or offering for sale such securities, unless and until he or it shall have been licensed by the *commission* as herein provided. To secure such license said investment company or dealer shall file application therefor with the commission and shall furnish said commission, upon oath in form as the commission shall prescribe, the following information, to-wit: The investment company's or dealer's name, residence and business address, the general character of the securities to be sold or dealt in, the place or places where the business is to be conducted within this state, and where the business in this state is not to be conducted by the investment company or by the dealer in person, the names and addresses of all the persons in charge thereof. Said investment company shall pay to the commission a filing fee of one-tenth of one per cent upon the face value of the securities for the sale of which application is made; provided that such filing fee shall not be less than twenty-five dollars.....

Sec. 10. Provides a penalty of not to exceed $1,000.00, or a year's imprisonment, or both, in case of violation of this act.

IMPORTANT CHANGES IN COÖPERATIVE LAWS

The coöperative law of 1919 modifies that of 1913 in some fundamental respects, and makes a number of important additions to it. The new law follows more closely than the old the fundamental principles of coöperation. Both the old and the new law limit the amount of capital stock that any one person may own to $1,000. Both require that no person shall have more than one vote. But the 1913 law in no way regulates the distribution of earnings. (See Section 6, 485.)

The act passed by the last legislature, however, provides that stock dividends shall not exceed 8 per cent and that the rest of the earnings shall be distributed to members and non-members on the basis of the business done, non-members receiving one half the amount paid to members. The dividends to non-members may be paid in capital stock. (Sec. 7.) It further requires that 10 per cent of the annual net earnings shall be set aside for a reserve fund until this reserve fund shall equal 30 per cent of the paid-up capital stock, and also provides that 5 per cent of the annual net earnings may be used as an educational fund. (Sec. 7.)

The old law adopts the one-man-one-vote principle, but to secure real coöperation, each member of an association must be able to make his vote count, and more important still, be made to feel that he is a real part of the organization. The new law insures this by

requiring that notices of all meetings of stockholders shall be published in the newspapers of the principal place of business for two consecutive weeks before the meeting, or that each stockholder shall receive a written notice not less than ten days before the date of such meeting and that the stockholder may then vote by mail in case he is unable to attend the meeting. No one can vote by proxy. (Sec. 3.) Regular meetings of the stockholders shall be held each year at the time specified in the by-laws, and special meetings may be called on petition of 10 per cent of members. (Sec. 4.) A quorum is necessary before any business can be transacted. (See Section 5 for definition of quorum.)

Filing of articles of incorporation.

Law of 1913: (Sec. 6479 and 6487).

Articles of incorporation shall be filed with register of deeds in county of principal place of business, except that associations for the purpose of marketing products of other co-operative associations must file articles of incorporation with the Secretary of State.

Law of 1919: (Sec. 2).

Associations incorporated for $25,000 or less shall file articles of incorporation with register of deeds in the county of principal place of business, but associations incorporated for more than $25,000 shall file articles of incorporation with the Secretary of State, and a certified copy of the same with the register of deeds of the county of its principal place of business.

The new law also gives a detailed statement as to what the articles of incorporation shall contain. (Sec. 2.)

Residence and number of incorporators.

Law of 1913: (Sec. 6479 and 6487).

A majority of the incorporators shall be residents of the county of its principal place of business, except that associations for marketing products of other co-operative associations must have a majority of their incorporators residing in the state.

Law of 1919: (Sec. 2.)

A majority of incorporators shall be residents of the state. Associations with a capitalization of $50,000 or less must have at least 7 incorporators. Associations with a capitalization of more than $50,000 must have at least 15 incorporators.

Limit on capital stock.

Law of 1913: (Sec. 6483 and 6488).

Creameries $ 25,000
All others $100,000.

Law of 1919:

The only provision relating to limitation of capital is a section dealing with limitation of promotion expense, found in Sec. 9, which says that associations incorporated for more than $100,000 shall be regulated by the laws of the state regarding the sale of stock by other corporations.

Annual reports.

Law of 1913: (Sec. 6486 and 6488).

Creameries and associations organized for the purpose of marketing products of other cooperative associations shall report to the State Dairy and Food Commissioner. All other associations organized under this act shall report to the Department of Agriculture.

Liability of officers.

Section 6486 of the law of 1913 is not repealed or any part of it changed, but the new law states as additional grounds for dissolution that if any association twice declares a stock dividend in excess of 8 per cent, the Secretary of State may institute proceedings for the forfeiture of its charter. (Sec. 7.)

Provision for purchase of going business.

See section 8 of new law. The law of 1913 does not contain any similar provisions.

Limitation of promotion expense.

Found in new law only. (See Sec. 9.) Limited to 5 per cent of capital stock, except that associations operating in more than one county and with a capital stock of more than $50,000 and less than $100,000 may charge 10 per cent. Associations incorporated for more than $100,000 shall be regulated by laws regarding the sale of stock of other corporations.

Provision for amendment.

The law of 1913, Sec. 6483 states that any association may amend its certificate of incorporation at any general stockholders' meeting called for the purpose, upon ten days' notice to the stockholders.

The law of 1919, Sec. 12, gives many additional details as to amendment to articles of incorporation, but does not repeal the above.

Review by State Securities Commission.

The law of 1917, Chapter 429, Sec. 2, required coöperative companies selling shares of stock to obtain a license from the State Securities Commission, except in the case of creameries, cheese factories, and rural telephone companies with less than $15,000 of authorized capital stock.

The law of 1919, Chapter 105, Sec. 3, raises the exemption for these same companies to $25,000.

Use of name "Coöperative."

The new law prohibits companies hereafter organizing from using the word "coöperative" in the name of the company unless they comply with the provisions of the new act.

APPLICATION OF COÖPERATIVE LAWS

All coöperative companies organized under the statutes of 1913 will continue to operate under that law, unless they elect to come under the provisions of the statute of 1919. Coöperative companies organized previous to 1913 and operating under the general corporation laws of the state will continue as heretofore, unless they elect to come under the new statute. All new coöperative companies must organize according to the new statute. The procedure to be followed in case an old company wishes to come under the new law

is the same procedure as required for the adoption of amendments. (Sec 11.) Companies now operating under the general corporation laws will find it easier to arrange their income tax exemptions if they will elect to come under the new law.