

REPORT  
of  
COMMITTEE ON EXAMINATION

This is to certify that we the undersigned, as a Committee of the Graduate School, have given Budd Alexander Holt final oral examination for the degree of Master of Arts. We recommend that the degree of Master of Arts be conferred upon the candidate.

Minneapolis, Minnesota

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THE UNIVERSITY OF MINNESOTA

GRADUATE SCHOOL

Report  
of  
Committee on Thesis

The undersigned, acting as a Committee of the Graduate School, have read the accompanying thesis submitted by Budd Alexander Holt for the degree of Master of Arts. They approve it as a thesis meeting the requirements of the Graduate School of the University of Minnesota, and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts.

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ORGANIZATION AND MANAGEMENT PROBLEMS OF THE  
MINNESOTA POTATO EXCHANGE

By

BUDD A HOLT

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Graduate School of the University of Minnesota  
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Chapter I  
INTRODUCTION

The purpose of this thesis is to analyze the organization and management problems of the Minnesota Potato Exchange, an organization formed in January, 1920, for the purpose of marketing the potatoes and other produce of the local cooperative potato and produce shipping associations of the state.

Production. First of all, it will be necessary for us to get a general idea of the potato industry in Minnesota. Table I gives the acreage and production of potatoes in the United States and in ten leading states for the years 1918, 1919, and 1920. These figures show that Minnesota ranks <sup>fourth</sup> third on the basis of acreage, averaging about 300,000 acres for the three years given, and <sup>fourth</sup> fourth on the basis of production, averaging slightly under 30 million bushels annually.

TABLE I. ACREAGE AND PRODUCTION OF POTATOES FOR UNITED STATES AND TEN LEADING STATES 1920, 1919 AND 1918\*

Country and States**	Acreage (000 omitted)			Production in Bushels (000 omitted)		
	1920	1919	1918	1920	1919	1918
United States	3,929	3,952	4,295	430,458	355,773	411,860
New York	370	363	380	46,250	39,567	37,240
Wisconsin	308	302	304	33,264	28,388	33,440
Michigan	340	310	340	35,700	27,900	28,560
Minnesota	295	310	312	28,025	26,970	32,760
Pennsylvania	317	308	275	36,455	30,800	22,000
Maine	123	106	112	22,140	25,440	22,400
Virginia	126	121	135	13,608	11,495	12,690
Colorado	78	92	99	10,920	11,040	15,840
California	95	85	90	13,015	11,050	12,870
Ohio	115	125	160	11,500	7,625	11,040

\* Figures taken from December 1920 Monthly Crop Reporter.

\*\* States are in order of average production, 1920, 1919, 1918.

Table II gives the acreage and production of potatoes for the ten leading counties of the state for the years 1919, 1920, and the acreage in 1909. The ten counties do not rank quite the same in production and acreage, but the same ten counties lead in both. Comparing the acreages of 1909 with those of 1919 and 1920 shows that potato production is becoming more important in the Red River Valley counties and falling off in the old Early Ohio district about the Twin Cities. (Insert Table II)

So far as interstate shipments of potatoes are concerned, production alone is not an accurate measure. From the production figures deduction must be made for seed and for potatoes consumed as table stock within the state. The quantity of potatoes sold outside of the state may be estimated by deducting from the 30 millions of potatoes produced, 12 bushels per acre for 300,000 acres as seed, and 4 bushels per capita for the  $2\frac{1}{2}$  million population of the state. This leaves  $16\frac{1}{2}$  million bushels, which at an average of 650 bushels per car leaves 25,000 cars. This estimate corresponds with the figures in Table III, which gives the shipments of 1918 as 24,585 cars and of 1919 as 25,546 cars. This system of estimating will not work in all years. When production is high and prices are low, a large amount of potatoes are fed to livestock, left in the ground, or taken to starch factories. When potatoes are scarce and prices high, more small potatoes are used as seed, so that there is not as large a reduction of interstate shipments as might be expected. The potato shipments for 1919 shown in Table III are shown graphically by map on Figure 1.

(Insert Table III)

TABLE II.

## ACREAGE AND PRODUCTION OF POTATOES

IN LEADING POTATO COUNTIES OF MINNESOTA, 1919 AND 1920. ACREAGE IN 1909.

County	Rank	Production 2-year average Bushels (000 omitted)	Rank	A c r e a g e			
				1920	1919	Average 1919-1920	1909
Clay	1	2,630,000	1	27,000	27,800	27,400	19,674
Chisago	2	1,439,000	3	14,000	15,000	14,500	12,284
Hennepin	3	1,346,000	2	14,300	16,000	15,150	17,471
Ottertail	4	1,148,000	4	14,000	14,000	14,000	6,195
Isanti	5	1,113,000	5	12,900	14,000	13,450	16,798
Todd	6	924,000	6	10,300	10,500	10,400	4,504
Stearns	7	875,000	7	10,500	10,000	10,250	3,938
Polk	8	780,000	8	8,000	10,100	9,050	3,900
Norman	9	705,000	10	8,200	8,200	8,200	1,353
Anoka	10	702,000	9	8,500	9,000	8,750	10,756



TABLE III. CARLOT SHIPMENTS OF MINNESOTA POTATOES,  
CROPS OF 1918 AND 1919\*

County	Number of Carloads		County	Number of Carloads	
	1918	1919		1918	1919
Aitkin	91	95	Norman	742	954
Anoka	644	464	Ottertall	800	1,902
Becker	351	439	Pennington	86	30
Beltrami	306	326	Pine	1,569	1,094
Benton	873	771	Pipestone	2	123
Carlton	310	429	Polk	1,353	1,257
Cass	74	147	Pope	32	8
Chisago	2,050	2,002	Ramsey	80	24
Clay	3,260	3,767	Red Lake	70	4
Clearwater	234	249	Rock	--	15
Crow Wing	145	184	Roseau	78	12
Douglas	329	328	St. Louis	31	70
Hennepin	1,193	887	Sherburne	919	763
Hubbard	481	494	Stearns	497	380
Isanti	1,444	1,743	Stevens	11	12
Itasca	325	442	Todd	777	754
Kanabec	860	810	Wadena	611	819
Kittson	221	247	Washington	442	353
Mahnomen	159	151	Wilkin	261	157
Marshall	116	11	Wright	17	182
Meeker	21	4	Miscellaneous <sup>x</sup>	605	431
Mille Lacs	1,493	1,513	Total	24,585	25,546
Morrison	622	699			

\* Data furnished by Paul H. Kirk, Minnesota Field Agent of the Bureau of Crop Estimates.

<sup>x</sup> Mostly from Dakota, Dodge, Goodhue, Olmstead, Winona, and counties in the southeastern part of the state.

Marketing machinery. A definite classification of the middlemen in the potato trade is impossible, because the fields of their work greatly overlap. (1) At most local shipping points, there are at least three classes of buyers, "(1) the agent of the large potato merchant, who is generally employed to handle potatoes and nothing else, (2) the independent buyer who usually combines enough other lines of business to give him employment when not handling potatoes, and (3) agents of the farmers' warehouses, which often combine the feed business and sometimes the machinery business with the handling of potatoes." (2)

In the Twin Cities are located a considerable number of potato dealers, whose method of operation is to buy in carlots in the surplus area and sell in carlots in other consuming areas. These dealers are a big factor in handling the Minnesota crop. There are about twenty-five such dealers. Two-thirds of these own or rent warehouses at the shipping points in which they operate. Those operating without warehouses handle more of the early crop, while those with warehouses handle mostly the later varieties. These concerns sometimes do a little local jobbing and occasionally handle a few cars on a brokerage basis, but on the whole, their business is pretty definitely confined to carlot purchases and sales. Shipments from these dealers are sold mainly outside of the state. A few cars are sold to jobbers and retailers in the Twin Cities. (3)

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(1) E.G.Nourse, The Chicago Produce Market, Ch. III.

(2) "The Marketing of Wisconsin Potatoes", Wis. Bul. 256, pp.17-18.

(3) From a conference with R. Maynard Peterson, representative of the U. S. Bureau of Markets, Minneapolis, Minnesota.

Chicago offers a better opportunity for a study of the middlemen than does the Twin Cities. While Chicago ranks second as a consuming center for potatoes, it leads as a distributing center.<sup>(4)</sup> Practically all of the original receivers in this city sell in carlots. There are about twenty of these dealers, most of them doing both a commission and merchandise business. These dealers receive shipments from their own buying representatives, from farmers' warehouse associations, and from other independent buyers. There are a few concerns in Chicago which do a strictly brokerage or commission business. These dealers usually combine the handling of fruit and other vegetables with potatoes. The brokers or commission merchants sell their cars to large retail dealers or to jobbers. They make very few shipments outside of Chicago. The cars billed to the large dealers are usually resold in carlots. The majority of these cars are sold to city jobbers or retailers but a considerable number go to outside buyers. The jobbers may make deliveries directly to retail stores, sell to peddlers who deliver the potatoes directly to the consumer, or they may unload into their warehouses and sell in small lots later in the season.<sup>(5)</sup>

The local association. The step which prepared the way for the establishment of the Minnesota Potato Exchange was the formation of the local potato warehouse associations. These

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(4) The Market Reporter, Vol. 4, No. 2. July 9, 1921. "During the 1919 calendar year, 16,489 carloads of potatoes arrived in Chicago and 12,158 were unloaded, the rest, or about one-fourth, having been distributed to other markets."

(5) The Marketing of Wisconsin Potatoes. Wis. Bul. 256, pp.24-8.

associations were organized as cooperative capital stock associations. Their purpose was to market the product of their members.

The number and volume of business of these associations has grown considerably during the past decade. There were twenty of these associations in 1913. It is estimated that they did a business of \$100,000.<sup>(6)</sup> In 1917 only fifteen associations responded to a questionnaire sent out by the Division of Agricultural Economics. These fifteen associations did approximately a \$300,000 business that year.<sup>(7)</sup> Our mailing list of cooperative associations in the state shows that there were about seventy potato associations prior to the organization of the Exchange. A similar list shows that there were one hundred thirty-five associations in the spring of 1921. (See Appendix).I.

The local warehouse associations are a result of various local marketing problems. It has already been pointed out that there are at least three types of buyers at many local shipping points. There are often fifteen or twenty of these buyers at one point. Farmers and writers on this subject believe that there is considerable duplication of effort and expense among these buyers. These buyers are also accused of "getting together" and thereby reducing competition.<sup>(8)</sup> The writer has observed that under such conditions there are great ranges in prices paid farmers for their produce. These price ranges are not always the result of central market price fluctuations, or of variations in the quality of the

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- (6) Statistics of Cooperation <sup>Among Farmers</sup> in Minnesota, Minn. Bul. 140, p. 20.  
(7) Farmers' Cooperation in Minnesota, 1913-1917. Minn. Bul. 184, pp. 30.  
(8) The Marketing of Wisconsin Potatoes. Wis. Bul. 256, p. 17.

produce. Two loads from the same field sold in the same hour may bring prices varying 20 or 40 per cent. This happens mainly with the earlier crop, which is loaded directly into cars. Buyers are anxious to wind up their cars Saturday afternoons and if the farmers' deliveries are small, prices for a few loads will go very high. But again, when deliveries are coming in rather fast, the price may take a considerable drop. It seems to be the opinion among farmers at least, that buyers take an unfair advantage in such cases, knowing that the farmers will not haul their loads back home after once reaching the market. In such cases, buyers often buy several cars at their own price.

Other difficulties relate to the methods of handling the business. The local associations have used various methods in the past. A bulletin now in press on local warehouse associations states that "in 1918 and 1919, about half the associations bought for cash and about a third of them handled potatoes on a commission basis." (9) Of the 13 associations in 1918 handling potatoes on a commission basis, 6 sold for growers and 7 bought for dealers. In 1919 there were 9 associations reporting the commission basis, 6 of which bought for dealers. Pooling was little used, only 3 associations reporting this practice in 1918 and 2 in 1919. Table IV shows the basis on which 52 associations handled 1914 cars in 1920. Nearly 90 per cent of the cars handled by Exchange members were pooled as compared with 10 per cent for the non-Exchange members. (For further discussion of these methods see Chapter VI).

The local associations working independently are unable

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(9) Local Cooperative Potato Marketing in Minnesota, p. 41.

TABLE IV. BASES ON WHICH 52 ASSOCIATIONS HANDLED 1914 CARS OF THE 1920 POTATO CROP. ALSO ESTIMATE FOR THE OTHERS.

Bases	Exchange members		Others		Exchange members	Others	Exchange members and others combined -	Estimate for 96 associations-
	Number of associations	Number of cars	Number of associations	Number of cars	Per cent of all cars	Per cent of all cars	Per cent of all cars	Per cent of all cars
Pooling	31*	874	2	99	89.9	10.6	50.8	58.4
Buying for cash	6*	109	11 <sup>x</sup>	574	11.1	61.7	35.7	31.0
Selling on commission for growers	0	0	3 <sup>x</sup>	144	0	15.5	7.5	6.1
Buying on commission for dealers	0	0	4	63	0	6.7	3.3	2.5
Joint account with dealer	0	0	1	51	0	5.5	2.7	2.0
All bases	32	983	20	931	100.0	100.0	100.0	100.0

\* Includes 5 associations using two bases.

<sup>x</sup> Includes 1 association using two bases.

to handle many marketing problems. Private buyers oppose these organizations and use every possible means to check their progress. A common practice is to pay high prices for a few loads of potatoes to cause dissatisfaction among the association members. Another practice is to direct the poorer loads to the farmers' associations. This practice has branded the "farmers' cars" in the terminal markets. Such cars have been greatly discriminated in the terminal markets resulting in many losses to the associations. There are many other functions which the local associations are unable to perform properly; for example, the collection of market information is too expensive to be undertaken by the associations, working independently. The associations are also unable to handle such problems as routing cars and collecting railroad claims. Furthermore, the volume of business of an association working alone is insufficient to attract any degree of attention in the terminal markets.

The establishment of the Exchange. After considering the various problems confronting the local potato associations, the State Department of Agriculture and other interested agencies took steps to unite the local associations of the state into one large marketing federation. These agencies made a study of the Michigan Potato Growers Exchange, which had apparently given great satisfaction. They circulated proposed by-laws and other organization information among the potato growers of the state. The Farmers' Institute Annual of 1919 gave the subject considerable publicity.

The proposition was first submitted to the potato growers of the state at an annual meeting of the "Minnesota Potato

Growers' Association" held at Moorhead November, 1919. Delegates from twenty counties attended this meeting. Mr. D. D. Buell, general manager of the Michigan Potato Growers' Exchange, and Mr. H. S. Tennant of the U. S. Bureau of Markets explained the Michigan organization. Progress from then on was rapid. Constitution and by-laws were drafted and a campaign started at once to canvass the support of the already organized local associations, as well as to organize new associations. Many of the old local associations became members and a large number of new associations were formed. On May 1, 1921, there were 96 members, 81 in Minnesota, 11 in North Dakota and 1 in South Dakota. Minneapolis was chosen for the location of the central office. Other locations would have been cheaper in so far as office rent is concerned. Minneapolis, however, is more centrally located. Many buyers come to this city every year during the potato season.

The work of the Exchange necessarily had to be rushed, as it planned on handling the 1920 crop. Some difficulties were encountered in getting the necessary office supplies and competent clerical help. Business began the second week in August. The first car was shipped by the Verndale association.

During the first year ending June 30, 1921, the Exchange marketed 2405 cars of potatoes, besides handling about a \$300,000 business in supplies. Table V gives by shipping points the carlot shipments of potatoes handled by the Exchange to May 1, 1921.



TABLE V. POTATO SHIPMENTS BY SHIPPING POINTS TO MAY 1, 1921

Shipping Point	No. Cars	Shipping Point	No. Cars	Shipping Point	No. Cars
Minnesota:		Halstad	56	Red Lake Falls	10
Aitkin	6	Hackinsack	1	Round Prairie	9
Aldrich	56	Hampton	4	Sawyer	1
Akeley	21	Hawley	83	Sebeka	13
Askove	29	Hendrum	37	Shelly	41
Audubon	20	Hines	44	St. Hillire	12
Backus	18	Isanti	10	Thief R. Falls	28
Bagley	9	Jasper	86	Turtle River	2
Bemidji	10	Kelliher	4	Twin Valley	16
Braham	61	Lake Park	73	Verndale	131
Bronson	2	Lancaster	5	Wadena	165
Cambridge	37	Laporte	12	Westbury	35
Clarissa	43	Long Prairie	54	Wrenshall	10
Cohasset	23	Mahnomen	12	N. & S. Dakota:	
Crookston	3	McIntosh	51	Barney	12
Dale	35	Moorehead	1	Colfax	23
Darling	49	Mora	13	Hankinson	16
Detroit	52	North Branch	10	Hoople	17
East Grand Forks	72	Oak Park	29	Hunter	11
Elk River	92	Ogilvie	19	Kindred	23
Foley	57	Osseo	43	Leal	14
Foston	30	Park Rapids	47	Marion	2
Gonvick	26	Pequot	10	Oakes	2
Grand Rapids	14	Pillager	27	Page	7
Grandy	43	Pine River	5	Ward	27
Groningen	14	Randall	31	Total	2222

Chapter II  
THE ORGANIZATION

The object of the present chapter is to give a brief general description of the Minnesota Potato Exchange as a marketing organization. The details of organization will be discussed later.

Distribution of Membership. At the time of organization of the Exchange, as previously mentioned, there were probably 70 local associations. The most complete information which the Division of Agricultural Economics has been able to secure is that there were on February 1, 1921, 135 warehouse associations in Minnesota. Of this number, 92 are members of the Exchange and 43 are not. The Exchange also has 11 members in North Dakota and 1 in South Dakota. Only 95 Minnesota associations actually handled potatoes during the 1920 crop year, of which number 68 were members and 27 were non-members. Of the 40 associations not operating in 1920, 24 were members and 16 were non-members. The reasons for these associations not operating in 1920 might be any of the following: a failure of the potato crop, organization not completed in time for this season's business, renting warehouse to buyers, or temporarily discontinuing business (some of these may never start again). Incomplete organization accounts for at least 5 associations not operating in 1920. These are members of the Exchange at present. Three associations reported inactive in 1920 because of renting their warehouses; only 1 of these is a member of

the Exchange. (10) The active and inactive member and non-member associations are given in Group A and B of Appendix I.

The map in Figure 12 shows the location of all cooperative potato associations shown in Groups A and B of Appendix I. The small dots on this map give the carlot shipments for the year 1919. This map affords an opportunity to study the location of these associations in reference to the potato area of the state. The associations which are not members of the Exchange were for the most part organized prior to 1920. These associations are rather widely distributed, but on the whole are confined quite closely to the potato district proper. The associations which are members of the Exchange have a wider distribution, many being located in the north-eastern part of the state. In the counties of Clay, Chisago, Isanti, Mille Lacs, Ottertail, Pine and Polk, which in 1919 shipped half of the carlot shipments of the state, there are only 14 Exchange members as compared with 77 for the remaining territory. This shows, as can be readily seen from the map, that a large percentage of the Exchange members are located in the newer sections of the state. This tendency is not at all a surprising one; in fact, it is what one should expect. It is in these more scattered and newer regions that marketing needs are more keenly felt, and where cooperation usually gives the greatest benefits. In these areas, marketing facilities have not been developed to the degree that they have in counties like Chisago, Isanti or Clay. The fact that there are as many as 14 Exchange members in the main producing

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(10) Local Cooperative Potato Marketing in Minnesota, Minn. Bul. 193, pp. 1-2.

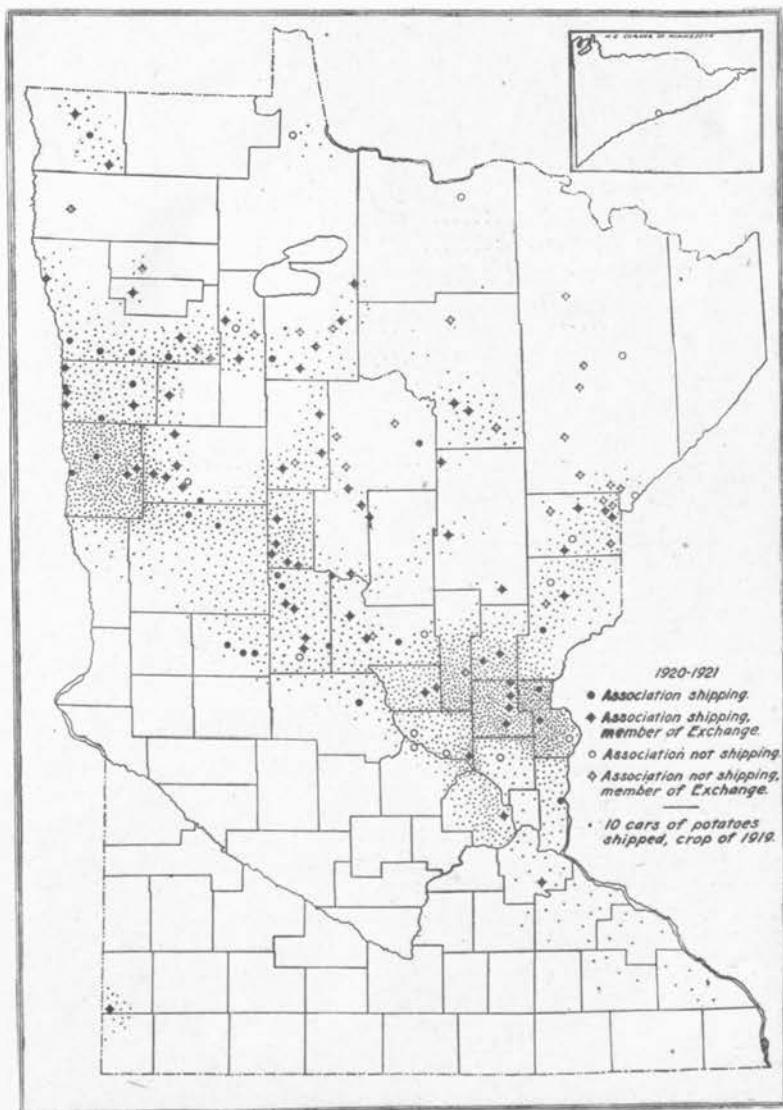


Fig.1 Location of Potato Marketing Associations, and Car Lot Shipments of Potatoes in 1919.

areas indicates a considerable tendency towards cooperative marketing. Some of the associations in Northeastern Minnesota, shown as inactive in 1920, purchased supplies thru the Exchange. While it is desirable that the associations in newer sections should belong to the Exchange, yet they complicate its problems without adding greatly to its volume of business. An association shipping a hundred or more cars contributes more to the success of a central cooperative organization than a dozen or more associations with but a few cars. To accomplish the best results, a cooperative federation must make its organization efficient and attract the support of the larger shippers.

The Organization. The Minnesota Potato Exchange is a federation of 92 local associations representing nearly 10,000 potato growers. It is a capital stock cooperative organization organized under the Minnesota cooperative laws. Its stock is held by its local associations. Its by-laws limit votes to one to each member, limit the amount of <sup>on</sup> stock dividends, limit the amount of stock that one member can hold, regulate the transfer and sale of stock, and provide for a patronage dividend on the basis of the amount of business done. The management is in the hands of a board of directors elected from the delegates of the local units. The directors elect a manager who has control of the business affairs from day to day.

The Exchange is primarily a selling organization for its members. Its purpose is to establish an efficient selling and distributing agency. Besides the actual selling of potatoes, the Exchange collects and disseminates reports as to crop and market

conditions, looks after transportation problems, collects claims, controls the grading system, purchases supplies for its local members and in general works for the good of its member associations.

It is evident that the functions of this organization are different from those of the central exchange of the California Fruit Growers' Exchange. The latter organization does no selling for its members, but merely furnishes the distributing agency or market machinery thru which its district and local associations work. The California Exchange also has charge of all services such as advertising, collecting of claims and handling all legal matters for its members.

Many of the local associations were organized before the Exchange, and for this reason do not have uniform by-laws. The new associations, however, for the most part have a uniform set of by-laws proposed by the Exchange. (See Appendix II ). Before they could enter the Exchange, many of the older associations had to reorganize or change their by-laws in some particulars to conform with certain cooperative principles, particularly the limiting of stock dividends to a reasonable rate of interest and the prorating of savings on the basis of business volume.

The local associations are all capital-stock organizations. Their stock is held by their grower members. The management of the locals is similar to that of the Exchange. Their boards of directors are elected from the growers at their annual meetings. The manager is elected by the local boards of directors and in many cases is a member of the Board.

The main functions performed by the local associations are assembling, storing and grading of potatoes. They order and load their own cars, but beyond this leave the selling functions to the Exchange. The by-laws proposed by the Exchange specify two methods that the associations may use in handling their potatoes--pooling and individual sales. Most of the older associations were not limited as to methods when they joined the Exchange.

In order that the Exchange may be guaranteed a sufficient volume of business to cover its expenses, each local association enters into a contract pledging the sale of all its potatoes thru the Exchange. A note of \$500 is given by each association guaranteeing the delivery of its product. The relation between the local associations and the grower is similar. The by-laws proposed by the Exchange, and which are in use by all of the new associations, require a hundred per cent contract with the growers and the deposit of a \$100 note. Some of the older associations do not have contracts with their members. One of the main purposes of the contract is to guarantee the Exchange business volume. Contracts with local associations which do not have crop contracts with their growers do not guarantee this volume. To be effective, contracts should be used between the growers and their local units as well as between the Exchange and the locals.

It has been the purpose of this chapter to outline roughly the organization of the Minnesota Potato Exchange. The following chapter will take up several of the details of organization.

### Chapter III

#### PROBLEMS OF ORGANIZATION

The 70 local farmers' warehouse associations in the state, established before the Exchange was organized in the fall of 1919, found, as has already been pointed out, that they were unable, while working independently, to compete with private dealers in the terminal markets. They knew too little about marketing methods. Their product was poorly graded and in consequence they lost heavily from rejected cars. If these associations were to continue their operations, it seemed to them they must form a central organization to operate in the terminal ma\_rkets.

The main objects, of course, of such an organization must be to secure better prices to the growers for their products. Such an end can be attained only by building up a system of marketing more efficient than that now existing. How much of a system is needed to accomplish this? What functions must be performed? What problems must be met?

It seemed to the founders of the Exchange that their organization must reach back to the growers and comprehend every subsequent step in the handling of the potatoes as carlots. It must perform or supervise the performing of all the following market functions: buying, assembling, grading, storing, transporting, selling, financing and assuming risks. They proposed to collect and disseminate to their members information concerning crop and market conditions. Realizing that transportation prob-



lems had in the past been a great handicap to their efforts, they proposed to pay special attention to such problems as car shortage, freight rates and protection of cars in cold weather. They proposed to establish a department for the collection of claims against railroad companies. They proposed to increase the demand for Minnesota potatoes by the establishment of uniform grades and by advertising. Believing that such an organization could be of service in capacities other than the handling of potatoes, they proposed to establish a purchasing department for the handling of supplies needed by their members. (11)

Structure of the Organization.

What type of an organization can best perform the above-named functions? Shall it be built on the principle of the Twin City Milk Producers' Association or the Equity Cooperative Exchange, in both of which one large central organization performs all the functions without any local autonomy? Shall it be built on the principle of the California Fruit Growers' Exchange, in which the central organization is merely a service organization, the functions of assembling, grading, selling, assumption of risk and financing being left to a local association, with a district organization acting as a clearing house? Or shall the organization be patterned after the Michigan Potato Growers' Exchange, in which the central organization is a federated sales organization representing various local units who perform the various shipping point functions?

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(11) Art. I, By-laws of Minnesota Potato Exchange. (See Appendix II.)

Mr. Powell, manager of the California Fruit Growers' Exchange, says, "A large cooperative movement should be founded on independent local units which, for greater business efficiency, federate and form an agency thru which they can handle their common problems." (12) In certain types of business, like that of the Twin City Milk Producers Association, there is not so much need of the local association. But where there are local peculiarities of product, or where there are numerous local functions to be performed or where considerable of invested capital is required at local shipping points, the necessity of the local unit cannot be overestimated.

The local associations should own their own warehouses, employ their own managers and perform all functions that they can do as efficiently as a central organization. The central organization should handle all matters too large to be handled by the locals or which they can handle more efficiently than a local unit. In a potato marketing organization, the local unit should be of foremost importance. The capital requirement is almost entirely a local problem. Numerous functions such as assembling, grading, and storing, are strictly local affairs.

If the area in which a large cooperative organization is to operate, because of soil conditions or other peculiarities, shows considerable sectional variation in product either as to variety or quality, it may be advisable that intermediate district organizations be placed over such similar territories. This system is used in the California Fruit Growers' Exchange. The

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(12) Fundamental Principles of Cooperation in Agriculture, University of California Circular #222, p. 14.

district organizations serve as clearing houses between local associations in a similar producing area and the central exchange. They serve "as a medium thru which most of the business relations between the exchange and the local associations are handled."<sup>(13)</sup>

The potato area of Minnesota is quite definitely divided into about four districts: the Early Ohio district about the Twin Cities; the Early Ohio district of the Red River Valley, famous as a seed potato area; the North Central and Northeastern district in which the Green Mountain, Burbank, Russets, and the Cobblers are the leading varieties; and the East and Central district in which the Rural Yorker and Burbanks are the leading varieties.<sup>(14)</sup> These four districts, particularly the two Early Ohio districts, have their own peculiar problems. The area about the Twin Cities produces very early stock which is often marketed even before becoming thoroughly mature. The Red River Valley district produces a high grade of seed stock which differentiates it from the other areas.

Now the question arises as to whether or not these four district producing areas necessitate a district organization for each area, or can the local associations of all areas be grouped directly into one large central federation? The purpose of a district organization in such a case would seem to be to represent certain interests and perform certain functions that are common to the locals of a particular area. If these interests and functions can be looked after with greater efficiency by investing

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(13) The California Fruit Growers' Exchange, reprint. Report #98, U.S.D.A., Office of Secretary.

(14) Minn. Farmers' Institute Annual, No. 32\*(1919). P. 22.

them directly in a central organization, there is no need of the district organization. The whole problem is one of dividing the various marketing functions in such a way as to get the greatest efficiency. The use of a district exchange occasions additional expense. Where the volume of business of an organization is large, this expense may be more than offset by the value of the services performed by this unit. The large volume of business of the California Fruit Growers' Exchange justifies the use of this intermediate step. Under the present volume of business of the Minnesota Potato Exchange the increased expense of a district exchange would be greater than the value of the services that this unit might perform. Had the organization been built up in the first place by local associations of a particular area uniting into district organizations, the situation would be different. In fact, this system of development seems to be the most logical.

There is one argument at least, aside from the problem of business efficiency, which seems to favor the district exchange idea. Where cooperation on a large scale is rather new to a particular community, the gap between the local association and a central state exchange appears rather wide to the local members. They cannot quite realize that the central organization is their organization. They are apt to act as though they were tied up with some outside agency in which they have no particular interest, and as a result, look with suspicion at the central exchange. If the Red River Valley district was represented by a district organization, the gap between the local and central exchange would be bridged, the marketing organization would be brought closer to

the local members, and as a result they would have more confidence in their organization. This argument for district exchanges must not be under-emphasized.

The analysis thus far seems to show that the best type of organization to handle the potato marketing of the state should consist of definite local units which own and control their local institutions, but which for certain activities federate together into a central exchange.<sup>(15)</sup> What shall be these activities of the central organization?

There seems to be no question but that the central organization should establish the market connections, furnish the marketing machinery, conduct advertising campaigns, make collections on sales, collect railroad claims, and look after the legal affairs of the organization. Which organization shall conduct the actual selling? In the California Fruit Growers' Exchange, the central exchange furnishes all of the above services, but the actual sales are made by the local units. In the Michigan Potato Growers' Exchange, the central exchange conducts all of the selling and decides the pooling policy. It might seem that one system or the other might be the best for all cooperative federations. Whether the system of the California Fruit Growers' Exchange could work in a potato organization is not known. Undoubtedly either

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(15) The writer rather favors the use of intermediate district organizations, perhaps serving no other functions than as a connecting link or clearing house between the local and central exchanges. This organization will not be further considered, as it is desired in this thesis to follow the organization of the Minnesota Potato Exchange as it developed and to point out the problems as they arise. The use of district organizations, however, would require but little change in the present organization.

system could succeed, though perhaps not equally. The question undoubtedly hinges on the efficiency of the two methods. If the making of sales is left to local managers, the costs of this service is likely to be greatly increased, since few associations are able to employ skilled salesmen. A good salesman must know his product and know the markets and market channels thru which it passes. A central exchange can furnish this information to its salesmen. But it can also furnish it to local associations. It might be that where all the available market information is thus placed before the local association, they can conduct their sales more satisfactorily than and as efficiently as a central organization. In any case, the Minnesota Potato Exchange, following the policy of the Michigan Exchange, delegates the actual selling to the central organization.

#### Financial Organization,

Capital Needs. The capital needs of an organization are for fixed investments such as land and buildings and for working capital to carry on its business operations. In a potato marketing organization, the fixed capital consists mainly of local warehouses and equipment and central office equipment. Working capital is needed to pay the various current operating expenses and to make payments on the produce handled.

The division of the Minnesota Potato Exchange into a central and local units also divides its capital needs. The capital required by local associations for warehouses, machinery, and for office equipment is a local association problem and is not

considered in this thesis. (16)

The capital needs of a marketing federation depend mainly on its business policy. The amount of investment of the Exchange is rather small, consisting at present mainly of office equipment. Where the practice is that of buying the potato crop handled and paying for it in cash, which probably is an unwise policy for any cooperative organization, its needs for working capital would be very high. Likewise if the organization was required to own warehouses for storage or carried supplies in stock, the amount of capital would be great. Such, however, is not the case with the Minnesota Potato Exchange, as this organization is primarily a sales organization. Further needs for working capital to finance the handling of the crop and to pay current operating expenses are considered under "pooling" in Chapter VI.

Method of Financing. There are two general types of cooperative financial organizations: the non-stock or membership organizations and the capital-stock cooperative organizations. The method of furnishing capital differs in these two types.

The capital-stock cooperative organizations sell stock to members for the fixed capital needed. The amount of stock that one member can hold is limited and the organizations usually control the transfer of their stock. The dividends on stock are limited to a reasonable rate of interest and further "savings" (see <sup>Appendix II</sup> ~~page~~ ) are prorated on the basis of patronage. Voting in this type of organization is usually on the "one man one vote" principle.

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(16) See "Local Cooperative Potato Marketing in Minnesota", p. 23.

The non-stock organizations charge membership fees instead of selling stock. In some of these organizations, one membership payment is all that is required. In others, membership is sold on the basis of acreage or some other measure of business volume. Some organizations require the payment of annual membership fees. The membership fees seldom raise sufficient capital for large fixed investments. Additional capital is raised by issuing corporation notes or by membership loans. In the latter case, the loans are usually proportioned to the member's production. To pay off these loans, the organization assesses a flat-rate charge on all product sold thru the organization. Voting in this type of organization quite often is on the basis of production.

It has been the opinion of many authorities on cooperation that the capital-stock form of organization violates the fundamental principle of cooperation.<sup>(17)</sup> In so far as this type of organization enables the control of the business to get into the hands of a few stockholders, the above statement certainly is true. This situation is largely prevented, however, in organizations which require the cooperative principles previously named. Mr. Powell, while preferring the non-stock form of organization, recognizes the soundness of capital-stock organizations when given the necessary restrictions.<sup>(18)</sup>

Section 6 of the Clayton amendment to the Sherman Anti-trust Law states, "Nothing contained in the anti-trust laws shall be construed to forbid the existence and operation of labor, agricultural, or horticultural organizations, instituted for the pur-

(17) Hoard's Dairyman, Vol. LX, No. 12 (1920) p. 736.

(18) Univ. of Cal. Circular #222, p. 4.



poses of mutual help, and not having capital stock or conducted for profit, or to forbid or restrain individual members of such organizations from lawfully carrying out the legitimate objects thereof; nor shall such organization, or the members thereof, be held or construed to be illegal combinations or conspiracies in restraint of trade, under the anti-trust laws."

Bulletin 541, U. S. Department of Agriculture, states, "It is obvious that if an association is to get the benefit of the section, it must comply with its requirements. It must be, first a 'labor, agricultural, or horticultural organization'; second, it must be 'instituted for the purpose of mutual help'; third, it must be formed without 'capital stock'; and fourth, it must not be 'conducted for profit'". (19)

The first, second and fourth of these requirements can be met as satisfactorily by the capital-stock cooperative organizations as by a non-stock membership organization. This bulletin further states regarding the third requirement, "The qualification that an organization shall be without capital stock does not mean that it is not permitted to have any capital. Capital, or money needed to carry on the business, must be provided in some other way than by the issuance and sale of capital stock..... Associations which are already engaged in business and which are not formed in accordance with the provisions of Section 6 of the Clayton Act, will have to change their form of organization and the manner of conducting their business, if they desire to obtain the benefits of the exemption provided in that section." (20)

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(19) Cooperative Organization By-laws, U.S.D.A. Bul. 541, p.4, 10

(20) Ibid, p. 4, 10 and 11.

More recent interpretations, however, tend in the direction of considering capital-stock organizations with the necessary cooperative limitations as in the same class as non-stock organizations. The Office of Internal Revenue has ruled that capital-stock cooperative organizations with proper provisions in their by-laws do not have to submit statements of business returns as is required by the ordinary profit organizations.

Furthermore, it is believed that the real purpose of this act was to legalize the formation of such organizations and not to grant them any special privileges. The intent of this law must have been to permit these organizations to create monopolies in their products or else it was believed that such monopolies were impossible. It seems that the latter is the more reasonable deduction, and certainly if it is found that harmful monopolies result, further legislation will bring them under control. Furthermore, this law is a federal one and applies only to interstate and foreign commerce and in no way "supersedes nor affects the anti-trust laws of the various states." (21) Of course the business of the Minnesota Potato Exchange is interstate and comes under this Act.

While Section 6 of the Clayton Act has undoubtedly marked the type of many cooperative organizations in this country, it is believed that either type of organization receives the same benefits from this Act.

What is desired in a cooperative organization is a sound

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(21) Cooperative Organization By-Laws, U. S. D. A. Bul. 541, p. 12

basis for raising the fixed capital, which will at the same time be truly equitable. The equitableness of the capital-stock and non-stock cooperative organizations can be judged from the three factors, income, risk and control.

Income. The income of a cooperative organization consists of the services which it renders to its members. In performing services for its members, an organization may unintentionally assess too large expense charges for carrying on its business, or it may for the purpose of business expansion retain certain money in the business. In ordinary profit corporations, earnings retained in the business or paid out as dividends are called profits. In a cooperative organization, the motivating principle is not profits, but mutual help to its members and accumulations resulting from assessing too large operating charges are not profits. For want of a better term, they are called "savings."<sup>(22)</sup> The income of a strictly cooperative organization and any "savings" which may accumulate should be distributed on the basis of patronage.

The practice used by non-stock organizations of assessing fixed charges on produce to redeem its notes or loans made to the business by members is not equitable unless these deductions are credited to the members from which they are collected. If no record is kept of these assessments, members withdrawing from the organization lose their contributions, and new members coming into the business are relieved of this financial obligation. Where membership is not kept constantly in proportion to the use made of

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(22) Ibid, pp. 4-5.

the organization, large producing members may contribute the majority of the fixed capital without any additional equity in the business.

A bulletin of the U. S. Department of Agriculture outlines a revolving-fund system of financing non-stock organizations which eliminates the difficulties mentioned above. <sup>(23)</sup> Under this plan the original membership loans to the organization are paid off by installments, perhaps over a five-year period. Annual statements are issued to members showing the amount that each has contributed by the assessments made on their products. These contributions are also handled as loans. The practice of assessing charges against the produce must be continued thruout the life of the organization. In order that the face value of the outstanding certificates of indebtedness shall not exceed the assets of the business, an adequate reserve must be maintained and deductions made for each member's share of the interest and other expenses. Under this system, the organization owns but little equity in the business. Members' loans are kept in almost constant proportion to their business, withdrawing members are reimbursed for their loans, and new members coming into the organization assume their proportion of the financial obligations.

The equity of members in the capital-stock cooperative organization is more easily determined. Injustice, however, may result when a surplus is accumulated. A surplus increases the value of the outstanding stock, but is accumulated on the basis of patronage. If the outstanding stock is kept in proportion to

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(23) Ibid, pp. 7-10.

membership patronage, no injustice results. Capital-stock cooperative organizations can keep this equilibrium by selling their stock on the basis of patronage, by issuing new stock on the basis of patronage for all surpluses which result, and by retiring stock of members who withdraw from the business.

The California Fruit Growers' Exchange offers a similar plan for local associations organized on the capital-stock basis. "Where a producers' organization requires capital for the purchase of supplies or for other purposes, the Exchange has worked out a plan by which the capital contribution of stockholders is kept permanently proportionate to their shipments by a revolving fund into which the stockholders agree to pay a specified amount per box annually based upon their respective shipments. With the money so contributed, an equivalent amount of the oldest-issued stock is purchased and transferred to the stockholders making the last contribution. The capital stock is revolved out every five or more years depending on the cycle adopted. The grower contributes annually on the basis of his previous shipments, and receives a return of capital based on his shipments of five or more years previously. The capital contributed is paid six per cent interest, but no dividends are paid to the capital except the interest rate." (24)

Risk-Liabilities of Members. The liabilities of members in a cooperative organization should be in proportion to the use

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(24) Principles and Practice in Cooperation, by G. Harold Powell, General Manager of California Fruit Growers' Exchange. p. 4. (Reprint from the February, 1920, issue of the California Citrograph).

made of the organization. These liabilities are of two kinds: first, the positive liability of members losing their investment in the business; and second, the contingent liability which may result in case the organization becomes insolvent. The investment of members (positive liability) in either the non-stock or capital-stock cooperative organization may be kept in almost constant proportion to their patronage. The contingent liabilities of members in either form of organization depends on the state law under which the organization is incorporated. In case of the capital-stock organizations, liabilities of this nature are in proportion to the stock held. The Minnesota Corporation Law provides for double liability, that is, stockholders are liable for an additional amount equal to the par value of the stock that they hold.

A bulletin of the U. S. Department of Agriculture proposes a set of by-laws for non-stock organizations.<sup>(25)</sup> Article XV of these by-laws has to do with "Indebtedness, Membership Liability." Section 1 provides a definite limit to the indebtedness which the organization may incur. Section 2 provides that "each member shall be responsible for his per capita share of all contracts, debts, and engagements of the association up to and including the maximum indebtedness." In case any member's share is uncollectible, "each remaining member shall be responsible, as his additional liability, for such unpaid share or part thereof to an amount equal to such member's original liability." The contingent liabilities of members under these provisions is not in proportion to their investment in the organization, nor to their patronage,

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(25) Cooperative Organization By-laws, U.S.D.A. Bul. 541, p. 20.

but instead it is equal to all. In case a member's liability proves uncollectible, under this Article, each member may be held responsible for the amount. A better method would be to proportion such additional liabilities over all members. The liability of members under the non-stock type of organization depends so much on the state laws that each case must be considered separately.

Control of Voting. The voting power of members of an organization which distributes capital contribution and financial risk on the basis of membership patronage, in theory at least, should also be in proportion to patronage. That is, if in an organization there are two members, one shipping 1000 bushels of potatoes and contributing \$100 to the fixed investment, and another shipping 500 bushels and contributing \$50, the former should be given two votes and the latter only one. This practice has been used by the California Fruit Growers Exchange and by other non-stock organizations. While in theory this system of voting seems to be sound, in practice it falls down, as it does not agree with most people's idea of cooperation. This is but one point where profit corporations and cooperative corporations differ. The primary interest of the former is investment and profits, and so the voting is proportional to the investments made. In the latter, the primary object is mutual benefits to members, and a democratic voting system seems to give better satisfaction. Mr. Powell states from his experience with the California Fruit Growers' Exchange that while there is considerable sentiment against the "one man one vote" policy, in actual practice it gives but little difficulty and

far less than the inequality system of voting. (26)

In most of the capital-stock cooperative organizations, the "one man one vote" principle is used. The Minnesota cooperative law requires this system.

Which Method to Use. In the final analysis, there is no great difference in the non-stock and cooperative capital stock form of organization. Either type can undoubtedly work with equal success. The non-stock form is received more favorably in some sections and the capital-stock in others. Either type, when properly organized, provides a sound equitable method of raising capital. The non-stock type seems especially well adapted to organizations which do not require large fixed investments. It has at least one disadvantage in requiring more complicated accounting systems. The capital-stock type is especially adapted to territories in which credit conditions are poor. This type has met with disfavor mainly because it has not always been differentiated from the ordinary profit-stock company.

Where the state law provides for either type, the one which is most familiar to the particular territory should be chosen. If, however, the corporation laws of the state are not clear as to the right of an organization to control the transfer of its stock or where the practice is prohibited by state law, the non-stock type of organization may avoid difficulty. An organization doing an interstate business might incorporate under the state laws of some other state. Most of the California organizations organize

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(26) Fundamental Principles of Cooperation in Agriculture, University of California Circular No. 222, pp. 9-10.



on the non-stock basis. The Canadian Grain Growers, Ltd., of Canada, The Equity Cooperative Exchange, and the Wisconsin Cheese Producers' Federation are examples of the capital-stock type.

Table VI gives a summary of important data regarding various cooperative produce associations. The Michigan Potato Growers' Exchange is the only non-stock organization listed. This organization, though organized under a non-stock law, is essentially identical with the Minnesota Potato Exchange. The membership fee of the Michigan organization and the par value of the shares of stock in the Minnesota Exchange, are both \$100. The stock of the other organizations, three of which are in \$5 units and one \$10, are sold to grower members instead of to local associations as is the case of both the Michigan and Minnesota Exchanges. The authorized capital stock of the Minnesota Exchange, \$15,000, is the lowest of any of the five organizations. A comparison of the capital of these organizations with their volume of business cannot justly be made because in some of these organizations the capital is used to furnish equipment at the shipping points.

#### Other Important By-law Provisions

Size of Shares. The size of shares of capital stock is determined mainly by the authorized capital stock and the number of prospective members. It must be sufficiently high to raise the necessary capital and low enough that all associations can afford to become members. As previously stated, the par value of the capital stock of the Exchange is \$100. This amount seems to meet the second requirement satisfactorily, as \$9600 has been subscribed

TABLE XVI. SUMMARY OF MORE IMPORTANT DATA REGARDING COOPERATIVE PRODUCE ASSOCIATIONS IN OTHER STATES (1919)

Name and address	Year Organized	Number of members, branches or affiliated locals	Capital		Size of Shares	Present Surplus	Total Turn-over	Number of cars handled
			Authorized	Paid in				
Eastern Shore of Virginia Produce Exchange, Onley, Virginia	1900	5000 members	\$50,000	\$42,000	\$5	\$295,000	\$13,281,000	\$11,850
South Carolina Produce Association, Meggetts, South Carolina	1915	70 members	\$20,000	\$20,000	\$10	80,000	1,197,000	2,508
South Jersey Farmers' Exchange, Woodstown, New Jersey	1909	734 members 5 branches	125,000	125,000	5	124,000	2,000,000	1,523
Burlington County Supply & Produce Company, Mount Holly, New Jersey	1909	900 members	125,000	20,280	5	33,000	-----	230
Michigan Potato Growers' Exchange, Cadillac, Michigan	1918	70 locals 9000 members	Non-stock	1,000*	100 <sup>x</sup>			2,164

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36  
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\* Membership fees.

<sup>x</sup> Stock sold to locals only.

and paid in. The Exchange has recently considered raising its capital stock to \$25,000 in order that the business might increase its membership. Had the shares been in \$50 units, this change would not have been necessary.

Limit on Indebtedness. The Minnesota Cooperative Law of 1919 requires that the articles of incorporation of organizations formed under this law shall state the limit of the indebtedness which the organization may assume. The Minnesota Potato Exchange places this limit at its authorized capital stock. The reason for this requirement is that banks and other loan agencies may be able more definitely to state the credit risk on loans to cooperative organizations; also to provide the members with a check on a reckless manager or board of directors. Paid-in capital is the best limit in the early years of an association. Later on, especially if earnings have been reinvested in the business, the limit may safely be raised if need arises.

Membership. Mr. Powell, General Manager of the California Fruit Growers' Exchange, states that "the membership of a cooperative association should be confined exclusively to producers who actually use its facilities." (27) Membership in the Minnesota Potato Exchange consists only of local associations which are incorporated under the state law and that meet the following requirements of cooperation: (1) adhere to the principle of one vote to each stockholder regardless of the number of shares held; (2) limit the dividends on capital stock to a reasonable rate of interest; (3) prorate earnings among the members or patrons on the basis of business furnished. (See Article II, Section 1, of Appendix II ).

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(27) Ibid, p.8.

No restrictions have been made as to the membership of the local units taken in so far. The by-laws of many of the associations, however, limit membership to producers of potatoes or vegetables; but this is not desirable, particularly when these associations handle supplies or other lines of business. The Exchange in its proposed by-laws for local associations proposed to extend membership to any producer of farm products. This system makes provisions for a farmer to make use of any particular portion of the business in which he is interested. Several cooperative organizations, including the California Raisin Growers, have used the contribution of capital as a basis of membership and have sold stock to local business men. This policy is an undesirable one. (28)

#### Contracts and Agreements

Nearly all of the large cooperative organizations that have been successful provide for some sort of an agreement or contract between the organization and its members. This practice was borrowed from the Danish cooperative organizations and has been adopted by nearly all the cooperative associations in California. An investigation of these organizations in California showed only two business failures where some kind of a contract was used. (29) The original purposes of the contracts between members and the association were to keep members in line and to insure the supply of product to the association. These are at present fundamental. A further advantage to be gained by such contracts is that of solv-

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(28) Hoard's Dairyman, Vol. LX, No. 12 (Oct. 8, 1920) p. 484.

(29) Hoard's Dairyman, Vol. LX, No. 18 (Nov. 19, 1920) p. 787.

ing financial difficulties. When an association holds contracts for the supply of a product, it holds the title of this product when it is delivered. This makes it possible that an advance payment be made to growers at the time of delivery of their product. Bankers recognize the soundness of such a policy and are willing to extend considerable credit on this basis. When once the acreage of product is definitely secured, close estimates can be made as to volume of business for the year. A further advantage is that of stabilizing the organization when faced by unfair competition from private dealers.

There are various kinds of contracts and agreements in use, particularly among California organizations. The California Almond Growers' Exchange has no definite contract, but requires all members to sign the constitution and by-laws, thus accomplishing the same results. The egg associations in California have a simple contract requiring the delivery of the product and stating the damage collectible in case this is not carried out. The contract of the California Raisin Growers' Exchange guarantees a minimum price for the product of growers and also requires the fulfillment of the contract in case the land is sold. These provisions are both undesirable and doubtful of enforcement. The California Fruit Growers have three contracts: one between the central association and the district association; one between the district and local association, and a third between the local association and the growers. Each of these contracts states definitely the requirements of both parties. About the latest development in crop contracts is one drawn up by Mr. Aaron Sapiro for the California Prune and

Apricot Growers, Inc., This contract is very definite, stating fully the requirements of the association and members. Among the provisions of this contract, the following points apply to any cooperative organization: the agreement on the part of the grower to sell and on the part of the association to buy all of the grower's products specified in the contract; the time for which the contract shall run; the time of delivery and grading and packing provisions; the time and method of advance and other payments for the crop; provision for sale of farm or mortgage of crop; and provisions for determining damages and method of collecting the same in case product is marketed elsewhere. (30)

As previously stated, the Minnesota Potato Exchange has contracts with all of its local units and most of the locals have contracts with their grower members. The contracts between the central organization and the local associations are almost identical with those used by the Michigan Exchange. (See Appendix III ). It provides that each local appoint the Exchange its agent for marketing and distributing its crop. It requires that the locals report the acreage grown by their members and furnish such other information concerning the crop as the Exchange may request. These contracts run indefinitely, though either party may cancel the agreement on the first of July of any year by a written notice. Any indebtedness due prior to this time must be settled. It further requires that the local follow the grading and inspection rules laid down by the organization. The sales of crop may be handled as the

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(30) Idem.

central board of directors decides. The Exchange maintains a lien upon the crop of an association for any indebtedness to the Exchange. The sales may be made in whatever market the Exchange considers best, and after deducting a charge that the board of directors thinks sufficient for running expenses and a contingent fund, the balance must be returned to the association. In case an association fails to deliver its crop, it must pay the Exchange as "liquidated damages" ten cents per hundredweight for the crop not delivered. This may be deducted from any money of the association in the hands of the Exchange. In order that this contract be enforceable, each local is required to give to the Exchange a negotiable non-interest bearing promissory note for \$500, payable on demand. This note becomes the property of the Exchange as long as the contract is in force and may be used in the settlement of any liquidated damages resulting from an association failing to live up to its contract.

Most cooperative organizations do not use the promissory note to enforce their contracts. The Michigan Potato Growers' Exchange was the first large cooperative organization to use this practice. These notes serve two purposes, first, as a means of collecting liquidated damages and any other indebtedness that locals may owe the Exchange, and second, as security upon which to borrow capital. The Minnesota Exchange used them for the latter purpose during its first year's operation. In the former connection, these notes give security to the two items "advances to associations" and "miscellaneous association charges" appearing among the assets in the balance sheet <sup>In Appendix IV.</sup> on page . These notes have met with disfavor

among some of the local associations. Where the purpose of these notes is clearly understood they can be used to advantage.

The legality of crop contracts has not been definitely tested. Among the California organizations, a large number of suits have been brought against both growers and local associations for violating their contracts. In all cases, the courts upheld the contracts.<sup>(31)</sup> The difficulty of the contracts arises in the method by which liquidated damages are assessed. The usual method is to state a definite fixed per unit charge, which in most cases is the same rate as is charged against the product sold thru the organization. This is not a very desirable method of stating this charge. The charges placed on products sold outside of the organization should not be looked upon as a penalty. It is a charge which all members agree to pay to cover the overhead expenses of the organization. When once an organization is started and its expenses incurred, there must be some assurance that they may be met. A flat rate may be assessed against products sold outside, but the rate should not be as high as for products sold thru the organization, because many of the expenses are not overhead but vary with the amount of product handled.

The contracts of the Exchange with the locals and of the locals with the growers run indefinitely with the privilege that either party may cancel them before July first of any crop year after previously giving a 30-day written notice. This avoids the necessity of renewing the contracts and at the same time does not bind the two parties for any length of time.

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(31) Idem.



In case a local association gets an offer for more than the Exchange can hope to get for its produce, the offer may be turned over to the Exchange and filled from the potatoes of the association, in which case the usual deduction will be made. This is a desirable policy to follow, because it permits a local to take advantage of all high bids offered by private buyers. The deduction going to the Exchange is not so high that any really attractive local offer cannot be accepted and the association still be ahead.

Rights, Duties and Restrictions of Locals. As stated elsewhere, the management of the local units is left almost entirely to their own organization. They own their own warehouses and equipment and finance their own operations. In tying themselves up with the Exchange, they suffer no particular loss of individuality. They can sell their produce where they see fit, but must pay the Exchange its regular commission. Outside sales, however, are not advisable, for it is in violation of the purpose of the organization. Each local is required to put its own individual number or stamp on all units of its shipments. This makes it possible for the Exchange to identify all sales and to make charges against any local for any losses occasioned by improper grading or handling. As set forth in the contract, the locals are required to submit on or before July 1, the acreage of potatoes grown by its members, and during the growing season any other such information as the manager of the Exchange may request.

The representation of all locals is equal. No member of the Exchange can hold over ten shares of stock, nor have more than one vote. In case a local wishes to dispose of its shares of stock,

it must give the Exchange first opportunity to purchase them. In case the Exchange fails to act in thirty days, the association may sell the shares to any other association eligible to membership. While the contracts between locals and the Exchange run indefinitely, any member may withdraw during the month of June in any year and after settling all indebtedness, receive back its note for \$500 made out to the Exchange. The Exchange may cancel the membership of a local which ceases to be a shipper, or which for a period of two consecutive years fails to patronize the Exchange or fails to comply with the requirements of its by-laws. In such cases, the Exchange may purchase the stock of the local at par or market value, depending on which is the higher.

The Board of Directors and Officers. The management of the Exchange is left to a board of nine directors who are elected by delegates from the local associations (one from each local). It is the duty of this board to manage the business and affairs of the Exchange and to make all necessary rules and regulations not inconsistent with the laws of the state and by-laws of the organization. They have the power to specify how the potatoes of the locals shall be graded and handled, and have control over all brands, labels and trademarks used by the organization. It is their duty to provide the Exchange with an adequate accounting system and to standardize the accounting system of the local units. They have a further authority to employ and dismiss the business manager. They have no particular authority or control over the management of the local associations. On this point, the potato Exchange differs from the Eastern Shore of Virginia Association which has the power

to employ and dismiss the managers of the local associations. It is the opinion of the general manager of the Minnesota Potato Exchange that the central organization should have at least the authority to advise the board of directors of the locals as to their choice of managers, thus helping them to secure local managers who are efficient and who will cooperate with the central organization. Much trouble results where such cooperation is not maintained.

Several of the Pacific coast cooperative organizations have adopted the policy of having an outside member on the board of directors who is appointed by the governor of the state. This is supposed to give the public some control over the affairs of the organization. The fact of the matter is, however, that in most cases, except in milk producers' organizations, the public concerned in the consumption of the product is mainly outside the state in which the producers are organized. The real value of such a public representative is questionable.

The officers of the Minnesota Potato Exchange, as in most similar organizations, consist of a president, vice-president and a secretary-treasurer who are elected by the board of directors from their number.

The powers and duties of officers should be definitely stated where possible, but not to the extent that the business is handicapped by too much rigidity. The division of power between the locals, board of directors, officers and managers should be rather definitely defined in any set of by-laws.

The duties of the secretary and treasurer are the most important of all the officers. It is his duty to keep records of

meetings of the Exchange and the Board of Directors and to serve all notices required by law and by the organization by-laws. He furthermore must sign with the president all notes, deeds and other instruments on behalf of the Exchange. In most cases, this officer is more or less responsible for the finances of the organization. It is advisable that some one officer be given this definite responsibility. It is not advisable, however, to require this officer's signature on all checks of the business. Such a policy would delay business operations.

The Manager. The manager of the Exchange works under the supervision of the board of directors and the provisions of the by-laws. He is in direct charge of the marketing of all potatoes and overseer of all departments of the business. It is his duty to furnish the local associations information concerning market and crop conditions, to encourage the production of standard varieties, and to conduct packing schools so that members may become acquainted with the best methods of handling their products. The manager is given more or less absolute control of affairs as they come up from day to day. He employs all office help and labor needed to conduct the business.

With these powers and duties assigned to one man as manager of an organization, it is very essential that the proper sort of manager be selected. Too often farmers' cooperative organizations sacrifice the right kind of a manager because they believe the work can be handled by a cheaper man.

A manager of a cooperative federation the size of the Minnesota Potato Exchange must be a man with considerable capabili-

ties. First, he must have business and managerial ability; second, he must know potatoes and be skilled in their handling; third, he must understand the markets and marketing of potatoes; fourth, he must have ability to keep accurate accounts; fifth, he must be honest and fair in his dealings; and sixth, he must have natural ability as a leader. (32)

Business Practice. Just what the by-laws of a cooperative organization should specify as to its business practice and what can be best left to the discretion of the board of directors or manager is rather difficult to determine. It must be remembered that a change in the by-laws of an organization requires an amendment which usually requires a two-thirds vote with a quorum present. For this reason, matters which fluctuate as business conditions fluctuate, should not be stated in the by-laws, but should be left to the board of directors, or better yet, in many cases to the manager.

As a general rule, the by-laws should make only such requirements as are known to be good business policies. They should give in general the methods by which the sales must be conducted and in case of pooling, perhaps, give in more or less detail how the pool shall be conducted and what deductions shall be made. Matters which are decided yearly, such as a definite sales method, should be left to the board of directors, and the minor details which come up from day to day should be left to the manager. Care should be taken that the by-laws provisions do not cripple the efficiency of the manager or delay his quick action on important

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(32) Local Cooperative Potato Marketing in Minnesota, pp. 110-12.

business matters. They should, however, guard the organization against unsound business practices.

The by-laws of the Potato Exchange provide that the locals shall receive their payments after each shipment thru the Exchange. The exact time and amounts of such payments is left to the board of directors or manager. Two systems of sales, individual and pooling, are provided, the choice being left to the board of directors. The system of pooling is quite definitely outlined, provisions being made that locals shipping the same grade and variety within a pool shall receive the same price. Deductions from the returns may be on a percentage basis or a flat charge per hundredweight, as the board of directors may decide. This charge is to cover current and accrued operating expenses, provide for a minimum surplus of thirty per cent of the paid-up capital stock, pay a stock dividend of six per cent and for any miscellaneous purposes that the board of directors deem necessary.

The matter of purchasing supplies for local associations is also left to the board of directors, but to guard against losses from this source, all supplies must be first ordered by the locals and the necessary deposit made on the same. The deductions that can be made from the supplies purchased are the same as in handling farm products. Further consideration of this phase of the business will be found in Chapter X.

Non-Member Business. The by-laws of most cooperative exchanges or federations make no provision for the handling of business for non-member associations. The demand for this service by outside associations is either very small or else the organiza-

tions do not desire their business.

The by-laws of the Minnesota Potato Exchange leave the matter of handling the business of non-members to be decided by the board of directors. The board of directors permitted the general manager to handle this service as he saw fit. During the season, about twenty cars were handled for non-members. Some of these were cars from private growers and the balance were shipments from small associations which were considering joining but had not completed their arrangements. For the first two or three cars handled, an additional charge of five cents per hundredweight was assessed, and the rest were handled the same as the cars of members. This was done mainly with the hope that these associations would come in to the Exchange, as some did.

There are about 44 non-member local associations in the state at the present time, 28 of which were active during the 1920 season; part of the other 16 were temporarily inactive for various reasons. Many of these associations have a large volume of business, and their business would give considerable support to the Exchange. If their business was handled at no extra charge, they would have no objects in becoming members. They would be out only half of the patronage dividend, because the state law requires that non-members must receive one-half the patronage dividend rate as members. For this loss, if any, they would be relieved of any risk or responsibility connected with membership in the organization, and furthermore, they would be free to sell their product where they chose.

Undoubtedly some extra charge should be assessed against

non-members' business, but it should not be based on an amount necessary to force non-members to join. It should be based on the cost of the service to members and the value of the service to non-members. It should be high enough to cover any additional costs and low enough to get the non-members' business. Non-members will join only when they figure the organization offers real advantages. They can not be forced in by high charges unless there are real advantages. (33)

The purpose of this chapter has been to discuss various problems encountered in the formation of a cooperative exchange. No attempt has been made to draw up an ideal set of by-laws applicable to such organizations. The by-laws of the Exchange appear in the Appendix. Each particular organization will have organization problems peculiar to itself and its organization must be considered separately.

The following chapters will deal with problems of managing a cooperative organization of the nature of the Potato Exchange.

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(33) Local Cooperative Potato Marketing in Minnesota, pp. 22-23.



## Chapter IV

### ORGANIZATION FOR OPERATION

In the previous chapter an attempt was made to analyze the various organization problems which come up when a cooperative enterprise is undertaken. The theme of the present chapter is the internal organization or management organization, what is ordinarily called "organization for operation." This includes the problems concerned with the division of the business into departments for the purpose of dividing up the numerous details. Organization for operation is one part of the setting up of the machinery of the business. Management itself, which is operating the machine after it is set up, comes in a later chapter.

Before considering how this type of organization is worked out by the Minnesota Potato Exchange, it is perhaps first advisable to review some of the functions, operations, and details which are to be performed by this organization. In the selling of a car of potatoes, there is first the problem of finding a suitable market, which requires definite knowledge as to trade practices, the demands of different markets, and acquaintance with dealers in these markets. After these connections are established, there are the problems of receiving and filling orders for shipments. This involves such problems as grading, inspection, term of sale, car shortage, car rejections, railroad claims, and finally calculating the returns and expenses of the pool. There are, furthermore, numerous local complaints and inquiries concerning sales which must be given prompt consideration. In connection with the

supplies part of the business, there are similar details, such as determining where and how to buy and what kinds of supplies to handle.

For handling problems as numerous and complicated as the foregoing, some definite system of organization must be worked out. These details while numerous are capable of being classified or grouped under certain functional heads, that is, certain of these problems are definitely sales problems, others are traffic problems, others are purchasing problems, and others are accounting problems. The sales, traffic, purchasing and accounting departments of the Minnesota Potato Exchange were developed as a means of handling these various problems.

These four departments are functional in type and are headed by men, supposedly at least, specialists in their particular line. They are hired by the general manager, who has authority over all departments. The division of the business into functional departments makes it possible for the general manager to place definite responsibilities upon each department head. In this way if anything goes wrong, the seat of the trouble can easily be located. These department managers are given considerable authority in their particular divisions and especially over those working under them.

#### The Sales Department

The sales department of a cooperative marketing organization can be expected to be the most important division. It is the duty of such a department to look after the sales of all prod-

ucts, to build up market connections, and to collect information concerning the various markets. At the present time the Minnesota Potato Exchange does not maintain its own selling agency, but employs the services of the North American Fruit Exchange, a large brokerage concern. This organization furnishes a sales manager who, while an employee of the North American Fruit Exchange, works under the supervision of the general manager of the Exchange and serves the same function as if he were an employee of the Exchange. The rights and duties of the Exchange and the North American Fruit Exchange are set forth by a contract between the two parties.

(See provisions of contract <sup>Appendix III</sup> on ~~page~~ ). Further details of the operations of this department will be brought out in the following chapter.

#### The Traffic Department

The traffic department is run by a hired traffic manager. This manager must be familiar with all questions pertaining to the transportation of farm products. It is his duty to look after problems of car shortage, car routing, transportation rates, figure freight differentials, provide for messengering of cars in cold weather and finally to file railroad claims for various losses in transit. The work of this department is very important and probably capable of saving or losing for the organization as much as any other department. In Chapter IX, detailed consideration will be given to the problems of this department.

### The Purchasing Department

The by-laws of the Minnesota Potato Exchange provide that the board of directors may create a purchasing department for the handling of supplies desired by its local members. This department was formed and headed by a purchasing manager. The duties of this department are to take the orders of the local associations and to go into the market and purchase supplies to fill these orders. The kinds of supplies that shall be handled and the methods of handling them is left largely to the manager of this department, though he is constantly under the direction of the general manager and the board of directors. The manager of this department is held responsible for the success of his department. Particular problems of this department will be considered in Chapter X.

### The Accounting Department

The accounting department of the Minnesota Potato Exchange, as in any other organization, stands in a little different relation to the business than do the other departments. It is the purpose of this department to keep all financial records of the business and to furnish such reports as the management may require from time to time. All such matters as figuring pool prices, making advances on shipments, and rendering financial standings of local members falls on this department. In Chapter XI, the accounting system used by the Exchange and other problems of the accounting department will be discussed.

With the management organized into these four departments, it is possible for the general manager to oversee the operations of

the business and at the same time to be relieved of the responsibility connected with each department. It gives a basis upon which an orderly system of office procedure can be built. The necessity of system in this connection is particularly important during rush seasons. It is necessary to attain promptness in filling orders and in making payments, and to avoid the numerous errors which result from haphazard methods. Outside of these four departments, the manager has enough other details to occupy fully his attention.

It has been the purpose of this chapter to outline the machinery by which the business from day to day is conducted. In the following chapters, attention is given to the management details and other special problems.

Chapter V

"SYSTEM" OF HANDLING BUSINESS

The detailed method by which business is conducted may be called "system". "So important is system in the prevention of waste that we find many who look upon the systematic doing of things as organization itself." <sup>34</sup> \* The purpose of this chapter is to show how "system" is worked out by the Minnesota Potato Exchange.

The cars are loaded by the local associations without any particular instructions from the central organization. The locals order their own cars, and load them pretty much as they see fit. When a car is loaded, the local manager wires the Exchange, giving the car initial and number, the grade and variety of the potatoes, and the number and size of the sacks. From this information the traffic department makes out an office manifest. (Form No.1) This manifest is then turned over to the sales department.

The sales manager after consulting his orders for cars makes out an order (Form No. 2) for the sale of the car, and places the manifest on file. In case he has no definite orders booked, he wires a representative of the North American Fruit Exchange in some consuming center, giving the contents and description of the car which is for sale, and quoting a price F.O.B. shipping point or Minneapolis. If the offer is accepted the order referred to is made out in triplicate, one copy going to the local association, one to the accounting department, and the third remaining in the sales book. The information concerning freight rates and routing is filled in by the traffic department.

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<sup>34</sup> Russell Robb - "Lectures on Organization" P.15-16

FORM NO. 1

**OFFICE MANIFEST**

No. ....

*M. R. T. C.*  
Car Initials

*1822*  
Number

Bill Lading \_\_\_\_\_  
Wire \_\_\_\_\_  
Telephone *7*  
Letter \_\_\_\_\_

Sacks *60* - *250*  
Number

*150 #*  
Size

New or Old

Potatoes *R W*  
Variety or Kind

Grade No. 1 or No. 2

Weight if Bulk

Billed by \_\_\_\_\_

Where

*U.S. # 1*

*1 3/4" screen*

Shipped When

*R W*

Remarks: *Invoice to Dept. billed car M. R. T. C.*

*Randall*  
Association

Date *11/15/20*

192

Town

State

FORM NO. 2

3891

**ORDER**

Minneapolis, Minn., *Nov. 17* 192*0*

Name of Buyer *National Ice Cream Co.*

P. O. Address *Charleston W. Va.*

Ship to *O. A. 6 mo N.R.T.C.*

When to Ship *19* Route *K. & M. Hill* Car No. *1822*

Under Grading and Packing Rules of *ones*

Shipper *Randall*

Heated \_\_\_\_\_

Produce *2* Terms \_\_\_\_\_

Box \_\_\_\_\_

Salesman *H. C. P.*

HOW SOLD } In Person \_\_\_\_\_  
                  } Telephone \_\_\_\_\_  
                  } Telegraph *2* \_\_\_\_\_  
                  } Letter \_\_\_\_\_

NO. CARS	SPECIFICATION	PRICE
<i>1</i>	<i>60 - 150 Sax Round Whites</i>	<i>35-</i>
	<i>250 - 120 " " "</i>	
	<i>Pool 15-</i>	
	<i>61 #</i>	
	<i>Cr. Charleston</i>	

*39020*

This sale is made to the buyer on the above specifications and shipping instructions, in your understanding.

**POTATO EXCHANGE**  
MINNEAPOLIS, MINNESOTA

When the sale is made a wire is sent at once to the local association, giving instructions for shipping the car. In billing the car, the straight form of bill of lading is used. This form has an advantage over the "order" form in that it does not require that the bill of lading be attached to the draft sent thru the banks. It bears a stamp, "Allow Inspection and Delivered Only on Consignee's Written Order, Without Bill of Lading". In case a car is to be diverted, wiring instructions is all that is necessary. This is very important because a large number of cars are sent out as "rollers" to some diverting point, like Rockford or Chicago, Illinois. If the "order" form of bill of lading were used, it would have to be submitted in order to have the car diverted.

When shipping instructions have not been received it is the practice of many local associations to bill out their cars by the first train. In this case they are billed to the Exchange at Minneapolis. Upon their arrival here the railroad company notifies the Exchange, and the Exchange issues the railroad company orders for diverting the car. When the bill of lading given the local association arrives at the office of the Exchange, it is exchanged with the railroad company for another bill of lading which designates the Minnesota Potato Exchange as the shipper instead of the local association, as was designated on the original bill of lading. Cars are either billed to the Minnesota Potato Exchange or in case of diversion, to a representative of the North American Fruit Exchange with instructions for diversion. The local association mails the bill of lading and a shippers' manifest (Form No. 3) to the office of the Exchange immediately after the car is billed. Upon receipt of these papers the Exchange sends the local an



acknowledgement (Form No. 4). This form serves as a receipt to the local.

FORM NO. 3

# SHIPPERS' MANIFEST

THE MINNESOTA POTATO EXCHANGE,  
Minneapolis, Minn.

Randall, Minn., Nov. 13 1920.

Gentlemen:

Attached find Bill of Lading for car	<u>M. R. T. C.</u>	<u>1822</u>
	Initials	Number
Sacks	<u>60</u> <u>250</u>	<u>9000</u> <u>30000</u>
	Number	New or Old
Potatoes	<u>Round Whites</u>	<u>U. S. # 1</u>
	Variety or Kind	Grade No. 1 or No. 2
Grader used	<u>Valley</u>	<u>1 3/4"</u>
	Kind	Shape of mesh.
		Size of mesh.

## IMPORTANT!

If car does not grade U. S. No. 1 give percentage of each defect causing lower grade. Scab.....

Second growth ..... Grub injury .....

Sunburn ..... Size .....

Does stock show frost Nw.

Other defects .....

Sign Randall Potato & Prod. Ship'g. Association  
Per C. P. Easterman

FORM NO. 4

1542

## Acknowledgement of Receipt of Bill of Lading

Minneapolis, Minn., 11-17 1920

Randall Potato & Prod. Ass'n.

Randall, Minn.

DEAR SIR:—

Your Bill of Lading 11-15 Form Straight

Initials M. R. T. C. Number 1822 Received 11-17

Consigned to \_\_\_\_\_ Route M. & St. L. Ry.

No. Packages M. P. Ex - Mpls. No. Sacks 310 Weight 39000 ±

You will receive check on the car representing approximately an 80% advance of the sale price as soon as all cars shipped that day are sold, or a check as a loan whenever it is impossible to estimate the pool price on account of cars rolled that day for sale on arrival at destination.

THE MINNESOTA POTATO EXCHANGE

After receiving the bill of lading the accounting department makes out an invoice for the car (Form No. 5). This form is made in duplicate one copy put on file and the other mailed to the buyer. In case the sale is a "to arrive" sale deduction is made on the invoice for freight and other transportation charges which are foreknown. The accounting department enters the sale on its pool book, and draws a draft (Form No. 6) for the amount collectable from the buyer. An order for delivery (Form No. 7) is attached to

FORM No. 5

INVOICE

MINNESOTA POTATO EXCHANGE

MINNEAPOLIS, MINNESOTA

NATIONAL ICE CREAM COMPANY,  
CHARLESTON, W. VA.

At

Invoice No. 1543 ✓

Terms

F. O. B.

Ship Date 11/19

Via

Car Initial N.R.T.C.

Car No. 1822

Route CNW C&O K&M  
Del

19	60 - 150# sax Round White Potatoes (ones)			
	250 - 120# sax Round White Potatoes "			
	Wt. 39000#	2.35		916 50
	Freight 61¢ cwt		237 90	
	R/C		2 50	
	War tax		7 21	
				668 89

Draft with delivery order attached at Charleston National Bank.

Please send us paid freight bill.

P A I D  
Dec. 1920  
Minnesota Potato Exchange.

the draft which is sent thru the banks for collection. Thru special banking arrangements explained in the following chapter the Exchange receives full credit on its account for the amount of the draft. An advance of approximately 80 per cent of the draft is made to the association. This is paid by check (Form No. 8). The final settlement of a pool can not be made until all drafts are honored or else otherwise settled. Some of the settlements are not handled by sight draft, but are collected by the North American Fruit Exchange. This is the procedure in case of "rolled" cars which are not sold in transit but are handled by the North American Fruit Exchange agents upon arrival.

# RECORD

FORM NO. 6

Lot Number 1542  
 Car N. R. T. C. 1822  
 Buyer National Ice Cream Co  
 City Charleston, W. Va.  
 Bank Charleston Natl. Bank

## NO PROTEST

Present promptly but hold until arrival of car if desired. Documents attached cover perishable freight and are to be surrendered ONLY upon payment of draft. Remit immediately to

**Lincoln National Bank**  
 Minneapolis, Minn.

Please detach and return with remittance

Collection No. 1542

Minneapolis, Minn., Nov 20 1920

\$ 668<sup>89</sup>

AT SIGHT, WITH EXCHANGE, PAY TO THE ORDER OF

**LINCOLN NATIONAL BANK**

MINNEAPOLIS, MINN.

DOLLARS Six Hundred Sixty Eight and <sup>89</sup>/<sub>100</sub>

CAR N. R. T. C. 1822

To National Ice Cream Co

Charleston W. Va.

COMMODITY Potatoes

Value Received, and Charge to the Account of  
**THE MINNESOTA POTATO EXCHANGE**

By A. W. Ramodt

FORM NO. 7

Minneapolis, Minn., Nov. 20 1920

Freight Agent

H & M. Del. Railroad

Charleston W. Va.

Please deliver on this Order without Bill of Lading,

car N. R. T. C. 1822 containing Potatoes

to National Ice Cream Co upon payment of all freight

and refrigeration charges.

**MINNESOTA POTATO EXCHANGE**

Signed A. W. Ramodt

General Manager

In case a car sold F.O.B. or "to arrive" is complained against, an inspection is obtained from an uninterested party, preferably the United States Bureau of Markets. The shipper of the car is given a Rejection Notice (Form No. 9). Where such cars are rejected they are usually sold to the same buyer on an adjustment.

With the sale thus completed the accounting department closes the pool, and after deducting all selling expense gives the local a check for the balance of its account. An account sale (Form No. 10) usually accompanies the final pool settlement.

FORM NO. 8

No. 3866

Minneapolis, Minn., Jan 17 1920

**THE MINNESOTA POTATO EXCHANGE**

PAY TO THE ORDER OF

Randall Potato & Produce Shipping Assn. \$ 21<sup>60</sup>

Twenty One and <sup>60</sup>/<sub>100</sub> DOLLARS

To LINCOLN NATIONAL BANK  
MINNEAPOLIS, MINNESOTA

THE MINNESOTA POTATO EXCHANGE

By A. W. Amendt  
GENERAL MANAGER

No. 3866

This check is <sup>Advance</sup> Full payment for Car 1822 Company M.R.T.C. Lot 1542 Weight 39000

Pool Price 1.64 per cwt. amounting to \$ 639.60

Advance \$ 520.00

Our Charges 39.00

Messenger Service 20.00

Adjustments 39.00

Total Charges 618.00

Check to Balance \$ 21.60

In some cases, mainly with cars which are not pooled the account of sale precedes the final payment. A report is made out in duplicate (Form No. 11) for all cars handled. This is done in order that a check may be kept of car demurrage and delays in transit. This record may be used as a basis of making claims against transportation companies. All railroad claims are filed on Form No. 12.

FORM NO. 9

Lot No. 1542 Car No. M.R.T.C. 1822 Shipped Nov. 13 1921

### REJECTION NOTICE

Notice Telephoned by \_\_\_\_\_

Notice Mailed  1-23

Minneapolis, Minn., Nov. 29 1920

To Randall Potato & Prod. Ship'g Assn.

Randall, Minn.

National Ice Cream Co. of Charleston, W. Va.

Reject above car claiming deficient in quality as follows:

\_\_\_\_\_ % Scab \_\_\_\_\_ % Green \_\_\_\_\_ % Hollow Heart \_\_\_\_\_ % Under Size  
\_\_\_\_\_ % Decayed \_\_\_\_\_ % Growth Crack \_\_\_\_\_ % Frost Injury

*Claims run small, our representative says won't quite pass U.S.#1 but very near, have authorized settlement dime allowance, think will accept.*

Returns on above car will of necessity have to be delayed until final adjustment can be completed, full report will be given you as soon as copy of inspection report is received, meanwhile we are using all possible means to protect your interests in the matter.

MINNESOTA POTATO EXCHANGE

By H. C. Prater

ACCOUNT SALE

MINNESOTA POTATO EXCHANGE  
MINNEAPOLIS, MINNESOTA

Sold for Account of

Date Jan 17 1921

Randall Potato & Prod. Shipp'g. Ass'n

Randall

Minn.

LOT NO. 1542  
N. R. Y. C.  
CAR NO. 1822

WEIGHT	NO. PACKAGES	DESCRIPTION	PRICE	AMOUNT	TOTAL
39000	310	U. S. #1. Round Whites	1.64		639 60
				Advance	520 00
				Inspection	
				Messenger Service	20 00
				Shortage	
				Adjustments	39 00
				Our Charge	39 00
				TOTAL CHARGE	318 00
<i>We credit your ac</i>					21 60

Form No. 11

DATE.....192.....RAILWAY

Car Initial	Car No.	Transferred Into	At	By	Shipped From	Date	Ar. Mpls.	Lot No.	Date	Remarks

FORM NO.12

C L A I M F O R

{ Loss. . . .  
Damage. . .  
Overcharge.

M I N N E S O T A P O T A T O E X C H A N G E  
MINNEAPOLIS, MINNESOTA

Name of person to whom claim is presented	Address of Claimant	Claimant's Number
Name of Carrier	Date	Carrier's Number
Address		

This claim for \_\_\_\_\_ is made against the carrier  
 names above by MINNESOTA POTATO EXCHANGE for \_\_\_\_\_  
 Amount of claim \_\_\_\_\_  
 Name of claimant \_\_\_\_\_ Loss, damage or over-charge \_\_\_\_\_  
 in connection with the following described shipments:

Description of shipment \_\_\_\_\_  
 Name and address of consignor (shipper) \_\_\_\_\_  
 Shipped from \_\_\_\_\_ City, town or state TO \_\_\_\_\_ City, town or state  
 Final Destination \_\_\_\_\_ City, town or state Routed via \_\_\_\_\_  
 Bill of Lading issued by \_\_\_\_\_ Co.; Date of Bill of Lading \_\_\_\_\_  
 Name and address of consignee (Whom shipped to) \_\_\_\_\_  
 If shipment re-ensigned enroute, state particulars: \_\_\_\_\_

DETAILED STATEMENT SHOWING HOW AMOUNT CLAIMED  
 IS DETERMINED

(Number and description of articles, nature and extent of loss or damage, invoice price of articles, amount of claim, etc.)

-----  
 -----  
 -----  
 Total Amount Claimed

IN ADDITION TO THE INFORMATION GIVEN ABOVE? THE  
 FOLLOWING DOCUMENTS ARE SUBMITTED IN SUPPORT  
 OF THIS CLAIM.\*

- ( ) 1. Original bill of lading, if not previously surrendered to carrier.
- { } 2. Original paid freight ("Expense") bill.
- { } 3. Original invoice or certified copy.
- 4. Other particulars obtainable in proof of loss or damage claimed.

R E M A R K S

The foregoing statement of facts is hereby certified to as correct  
 MINNESOTA POTATO EXCHANGE

Per \_\_\_\_\_

In cold weather all shipments must be messengered while in transit. It is the practice for most locals to messenger their own cars to Minneapolis where they are taken over by the Exchange. Upon the delivery of these cars, the Exchange gives the local messenger a receipt (Form No. 13). An inspection is also made at this time, giving the condition of the car upon arrival. This information is filed at the office of the Exchange on Form No. 14. The Exchange furnishes messenger service from Minneapolis to the terminal markets on cars which are shipped under "Option One". In order that a check may be maintained on the messenger, as well as on delays in transit, the messenger is given a card (Form No. 15) which must be properly filled out and returned to the Exchange before the messenger receives his pay.

Reference has been made to the filing of the various forms. For this purpose a large envelope (Form No. 16) is used. One envelope is used for each car and it contains all information concerning the sale of that car, from the first office manifest to the final payment. Filing by cars is especially desirable because all complaints relate to particular cars.

FORM NO. 10.3

Date ..... 192..... Lot .....

Received from Messenger ..... Car .....

From ..... Association ..... Town ..... State .....

Released by ..... at Yard ..... Date ..... Hour .....

Remarks: .....

.....

.....

THE MINNESOTA POTATO EXCHANGE,

By .....



This chapter has outlined the steps involved in handling a car of potatoes by the Exchange and described the systems used in so doing. We are now ready to take up the problems of the various departments.

Form No. 14

Lot..... Car.....  
R. R. .... Date .....  
SHIPPER .....  
REPORTED AS .....

I N S P E C T O R ' S   R E P O R T

SIZE.....  
Give per cent under U. S. grade one.

MATURITY .....

SACKS .....  
Give size, condition, how sewed.

DEFECTS, scab.....soft rot.....

grub.....cuts.....dry rot.....

second growth.....other defects.....  
Give percentage main defects.

LOADING.....

REMARKS:.....

.....  
.....  
.....

(Sign).....  
Inspector.

(Front) --

(Back) --

THE MINNESOTA POTATO EXCHANGE

Record of car and time of messenger traveling with same.

Car Initial- U.R.&T. Car Number- 1822  
 From- Minneapolis Date- 11/19  
 Train No.- 80 R.R.- Omaha  
 Temperature-36 above Time-9 PM

SHOW FULLY ANY DELAY

RECORD AT DIVISION POINTS

Arrived- Altoona  
 Date- 11/22 Time-8 AM Temp.-34  
 Left- 11/22 Time-10 AM Temp.-37  
 Arrived- Adams  
 Date- 11/22 Time- 5 PM Temp.-32  
 Left- 11/22 Time- 6 PM Temp.-32  
 Arrived- Eutler  
 Date- 11/23 Time- 4 AM Temp.-33  
 Left- 11/23 Time- 7 AM Temp.-35  
 Arrived- Chicago  
 Date- 11/23 Time- 2 PM Temp.-40  
 Left- 11/24 Time-11 PM Temp.-33

L. Meyers .....Messenger

Arrived- Hammond  
 Date- 11/24 Time- 4 PM Temp.-42  
 Left- 11/25 Time- 3 AM Temp.-30  
 Arrived- Peru  
 Date- 11/25 Time -7 AM Temp.-39  
 Left- 11/25 Time- 8 AM Temp.-40  
 Arrived- Cincinnati  
 Date- 11/26 Time- 1 AM Temp.-43  
 Left- 11/26 Time- 2 AM Temp.-43  
 Arrived- Russell  
 Date- 11/26 Time- 9 AM Temp.- 48  
 Left- 11/26 Time- 1 PM Temp.-50

Remarks

Arrived Charleston  
 Date- 11/26 Time- 8 PM Temp.-46

LOT NUMBER. 1542

CAR NO. M.R.T.C. 1822

DATE Nov. 15 1920

	Variety	Grade	No. Sacks	Weight	Price per Cwt.	Gross	Freight	Net
Local Ass'n. <u>Randall</u>	<u>R.W</u>	<u>ones</u>	<u>310</u>	<u>39000</u>	<u>2.35</u>	<u>916.50</u>	<u>247.61</u>	<u>668.89</u>
Route <u>K &amp; M.</u>								
Shipped to <u>National Ice Cream Co.</u>								
Address <u>Charleston, W. Va.</u>								
Rolled to								
Address								

Advance Check No. 1840 Date 11/20/20 Amount Advanced \$ 520<sup>00</sup>

69  
Remarks

123

CLAIMS

Our No.	Their No.
Against	Date Filled
Address <u>K 4/21/21</u>	Date Settled
Amt. of Claim \$	Amt. Received \$
Remarks	

Chapter VI  
BUSINESS POLICIES

General Consideration of Questions of Business Policies.

An analysis of the marketing policies used by the larger cooperative organizations shows two distinct types. In one of these types the organization becomes owner of the product by outright purchase from its members. In this case the organization becomes a dealer and stands all risks connected with price fluctuation between the time of purchase and sale. There are, of course, several variations of this general method. In the second type, the organization as such has no ownership in the product, but acts only as a sales organization for its members. Under this system some organizations may handle each sale separately, and others may pool several sales together. There are, as with the first method, several variations in this general method, both for individual sales and for pools. Any particular organization may combine two or more of these variations. Besides the methods given, some of the smaller organizations, particularly among the local potato warehouse associations, operate on a joint account with some wholesale dealer or in some cases buy on a commission for such dealers. While these two methods are quite common among local units, they are impractical for larger organizations or federation.

Buying for Cash. The system of buying products and paying for them in cash at the time of delivery is not used by the larger cooperative organizations except some of those handling grain, such as, The Equity Cooperative Exchange and the Canadian Grain Growers Limited. It is also one of the three proposed

methods to be used by the new United States Grain Growers Incorporated. This system is more adapted to the handling of grain than most farm products, because of the well-developed grain grades, the system of warehouse receipts, and still more important, because purchases of grain can be hedged. A large number of the local potato warehouse associations have used this system in the past. (35)

The essential features of this method have been outlined as follows: "(1) Paying growers in full at time of delivery. (2) Paying prevailing competitive prices for produce, making sure, however, that these prices provide a safe margin to cover risk and operating expense. (3) Adjusting the price paid for each lot of produce according to its grade and condition. (4) Assuming the risk involved in price fluctuations between date of purchase and sale. (5) Building up a reserve out of gain due to favorable turn of the market to offset losses when prices slump. (6) Paying off all gain in excess of necessary reserves in the form of patronage dividends." (36)

Buying for cash, while it has the advantage of being easily understood and insures the shippers of a definite price, and does not require waiting for returns, is not a desirable method to use in a central potato marketing organization. In the first place, the working capital would be enormous. This, of course, would depend on the volume of business, the time required in making the sales, and the price for which the product sells. Second, it would be difficult to adjust prices to various grades on the basis of

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(35) Local Cooperative Potato Marketing in Minnesota. P.25-27

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(36) Idem

market information and price quotations which are inadequate. Third, it would be easy to show favoritism to various member associations. The fourth, and perhaps greatest, difficulty of a cash method is the great amount of risk involved in price fluctuation. The price fluctuations in potatoes are far greater than in a staple commodity like wheat. This is particularly true where potatoes are stored for any length of time. With such large price variations any method of buying potatoes for cash must necessarily be rather speculative.

Table VII gives fall and spring prices for twelve years, 1909 to 1920, and compares the changes in prices between fall and spring with the per capita production of potatoes in the United States. In only four of the twelve years were there profits in holding potatoes. In five of the other eight years spring prices were actually lower than fall prices an average of twenty-five cents per bushel. In three years the prices were about the same spring and fall. The holder of potatoes lost eight years out of twelve years. In years of small per capita production the fall prices were too low, resulting in considerable spring shortage and high prices. In years of high per capita production the fall prices were too high, resulting in a large surplus in the spring and very low prices. Were the production for these years previously known definitely early in the season, an organization might adjust its operations to take advantage of probable rise in price and to avoid losses in falling markets. The chances under existing circumstances of striking the rising prices and falling prices at the right time are very doubtful.

TABLE VII

RELATION BETWEEN PRODUCTION, PRICES, AND SEASONAL CHANGE IN PRICE OF POTATOES,

UNITED STATES, 1909-1921

Crop Year	Production		Farm prices (per bushel)			Change in price (+ rise) (- fall)
	Total (in millions)	Per capita	Crop Year *	Fall months **	Spring months ***	
	Bu.	Bu.	Cents	Cents	Cents	Cents
1909-10 .....	389.2	4.30	53.6	58.7	41.1	- 17.6
1910-11 .....	349.0	3.78	69.2	59.7	60.4	+ 0.7
1911-12 .....	292.7	3.12	99.4	81.5	121.4	+ 39.9
1912-13 .....	420.6	4.46	53.4	49.0	51.2	+ 2.2
1913-14 .....	331.5	3.42	73.1	70.7	70.9	+ 0.2
1914-15 .....	409.9	4.16	54.1	55.4	49.7	- 5.7
1915-16 .....	359.7	3.59	80.3	57.1	97.1	- 40.0
1916-17 .....	287.0	2.83	189.2	131.3	262.8	-131.5
1917-18 .....	442.1	4.31	113.4	124.2	82.7	- 41.5
1918-19 .....	411.9	3.97	128.8	130.0	115.2	- 14.8
1919-20 .....	355.7	3.39	258.7	159.5	370.2	+220.7
1920-21 .....	430.5	4.10		123.2	71.2	.....

\* September to August.

\*\* October, November, December.

\*\*\* April, May, and June following.

Pooling: In most of the large cooperative marketing organizations some system of pooling is used. The pools may be conducted by the central organization, the local organization, or if there be such, by the district organization.

Pooling as a method of handling the sale of products has been used for some time. The California marketing organizations have long used it. Farmers' creameries in Minnesota and other states have always used this method. The livestock shipping associations nearly all pool their shipments. It has been used by the Michigan Potato Growers Exchange, The Eastern Shore of Virginia Produce Exchange, The Wisconsin Cheese Producers Federation, and in fact of nearly all of the successful cooperative marketing organizations.

The details of particular pooling systems vary greatly, but all are alike in certain essential features, which have been outlined in a recent bulletin on local cooperation as follows:

- "(1) Throwing together into one lot the products of different members. Where the products are graded or of different classes, there may be one pool for each grade or class.
- (2) Price Pooling -- that is, selling produce in each pool or each shipment of each pool at a common price regardless of ownership.
- (3) The title of the product remains with the grower throughout; the association is merely agent for the grower or shipper.
- (4) Expense Pooling -- that is, prorating the expenses of marketing, both current and overhead expenses, on some uniform basis among the different shippers.
- (5) Dividing the net receipts from each pool between the various shippers, ordinarily on the basis of quantity shipped.



(6) The grower does not know what he will receive for his product until it has been sold and the expenses deducted. This method, therefore, requires that the grower shall have more confidence in his association than other methods.

(7) Because it requires this confidence, because it requires that the individual shipper merge the identity of his produce with that of the other members, frequently regardless of quality because the marketing risks are jointly assumed by the several shippers in any pool and not shifted to the management of the association, and because, for all these reasons, the members of a pooling association must work together and overlook many temporary advantages and disadvantages accruing to each other, the pooling method has come to be looked upon as more truly cooperative than any other." (37)

A pooling system is concerned with at least one of the three factors: price, expenses, and marketing risk. Whether or not all of these three factors are pooled, depends on the particular organization. In many of the California cooperative organizations, the central organization simply furnishes the marketing machinery, and hence does not conduct any price pooling. In the case of the central organization of the California Fruit Growers Exchange, marketing expenses only are pooled. (38) In the Minnesota Potato Exchange all three factors are pooled to some degree, though marketing risks only slightly. While pooling may be considered in connection with prices, expenses, and marketing risks, its most important connection, as a sales method, is with that of prices. The other factors enter in largely as details by which the sales method is carved out.

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(37) Local Cooperative Potato Marketing in Minnesota. P 32

(38) California Fruit Growers Exchange. U.S.D.A. Report No. 98

Individual Sales. Individual sales is really a form of pooling. In marketing potatoes by a central organization the carlot is the sales unit. This in many ways is a convenient unit for figuring returns to member associations. Under this system, all cars are sold separately and their returns figured independently. Actual current expenses, such as freight, are deducted from each car, but other expenses are usually covered by a flat rate, that is, pooled for the season. The losses on the sale of any car are losses to the shipper of that car. This type of sale is particularly applicable to shipments which are unusually good or poor; or where there are local peculiarities of product. Under such circumstances, it would not be fair to all concerned to pool the cars of several member associations. Often a buyer is especially well pleased with a car he has received. He may accordingly order another car, specifying that it be the product of the same local association. This illustrates how a local may establish itself in the market. Such orders often offer a premium for the product of a particular association. Such product should not be pooled with the product of other associations.

There are, however, several disadvantages to an individual sales system, mainly relating to risk. The returns for several cars of the same grade sold on the same day through a central organization may vary widely. Where the confirmation of the sale is left to the central organization, the loss may fall on almost any shipper. The central organization may be fair in its dealings and consider all such factors as additional freight before accepting a price offer. But even then, all offers are not equally good. Long hauls

add additional risk from frosts or heating in transit which increase the danger of cars being rejected. Certain markets may offer better prices than others. Buyers also are not equally reliable. The direct sales method, furthermore, offers a chance for a central organization to show favoritism to certain members.

It may be agreed that in the long run the losses to the various associations will average about alike. This is undoubtedly true, but any particular car may represent the total product of a local grower. One such loss will cause growers to withdraw from the organization and sell their product where they know beforehand what they are to get. A system of pooling risks can be worked out, however, which, while retaining the individual sale, will spread these various risks over several, perhaps all, the member associations. It is not desired, however, to pool losses which are the results of carelessness or ignorance on the part of shippers.

Advantages of Pooling. The pooling system proper, that is, price pooling, offers several advantages over either the cash basis or handling individual sales. First, it provides a sales system whereby the organization may have control of the product until it reaches the terminal market. At the same time it relieves this organization of the risks involved in price fluctuations. This is a distinct advantage over the policy of buying for cash. Second, it provides a system which will insure the individual association a price which is equal to all other associations shipping the same grade and variety on that particular day. However, it puts the matter of grading up to the central marketing association and opens the way for chances of favoritism. Under the individual sales

system, the market does the grading on each car merely by placing its price upon it. A central exchange which pools several cars differing in quality, though of the same grade, must either allow the same pool price to all, or else arbitrarily differentiate the prices on the basis of their quality. The degree to which the advantages of pooling can be accomplished will depend to a large extent upon how the details of the pooling system are worked out. Among the various details to be worked out by any pooling system are the pooling period, pooling classes of grades, the system of financing, and the handling of expenses and marketing risks.

Factors Determining Type of Pool. There are numerous factors which determine the type of pool best adapted to the marketing of any product. First, commodities vary as to their adaptability to grades. Various lots of grain, potatoes, or cream could be thrown together into one grade and the identity of each lot be lost. Such a procedure would not work in livestock marketing. Second, the number of grades into which different commodities may be classed also varies. Third, the production period of commodities differ. The production period of fruit, grain, or potatoes is seasonal, while cream production is more or less continuous throughout the year. Fourth, the marketing period of various commodities vary. Grain, while produced seasonally, may be marketed at any time. Strawberries, on the other hand, must be marketed soon after production. Potatoes may be marketed in the fall and stored in the terminal markets or they may be held over until spring on the farms or local warehouses. Potatoes because of their perishability differ from grain which may be held in storage from one year to the next.

Fifth, commodities differ as to price fluctuations. Grain prices are more stable than are potato prices. Sixth, the volume of business controlled by marketing organizations differs. This factor has an influence on the effect of an organization in stabilizing prices. Seventh, the degree of centralization of the market varies with the organization and for different commodities. The market for Minnesota livestock is largely centralized in South St. Paul, while that for potatoes extends over a large number of states. The centralization of a market is determined to a large extent by the scope of activities undertaken by the marketing organization. Eighth, the volume of business of the pooling unit may determine the type of pool used. Ninth, the financial status of the producers may necessitate immediate payments for their product or they may be in a position to wait for their returns until the pool is closed.

It is evident from these factors that the type of pool best suited for one commodity may not be suited for another and that the type best suited for one organization may be impractical for another. Each of these factors has an influence in determining the pooling period, the pooling grades, the pooling unit, the method of finance, and the methods of pooling prices, risks and expenses.

Pool Grades. The problem of dividing pool grades starts first with the growers. Their product varies both in size and quality, and any pooling system must, so far as possible, take these factors into consideration in the price adjustment. This phase of the question might be considered a local problem and of no importance in the operation of the exchange. This is hardly the case. The principle interest of a central exchange, however, is that the locals load their cars in such a way that they meet the

trade requirements. Whether or not any particular grower receives just compensation for the quality of his product must be taken into consideration in determining what grades the locals shall use in loading their cars. The number of grades cannot, however, be so large that there will not be sufficient product to make a car in a reasonable length of time. But it must be large enough to make the necessary classification required by the market; that is, there must be at least one grade for each variety, for mixed shipments are seriously objected to on the market. The number of grades should also provide for some divisions within each variety. It is possible to adjust each variety to one grade and leave the rest of the product behind or else have it sold on its own merits.

The following are the grades recommended by the U. S. Bureau of Markets: U.S. Grade Fancy, U.S. Grade No. 1, and U.S. Grade No. 2.<sup>(39)</sup> These grades are described on the basis of variety, size and quality, They offer perhaps the best system of grades for a marketing organization to use.(see Appendix V)

There are no particular specifications concerning the "field run" or "partly graded" grades. Such grades are usually sold on the market by describing them as being a certain percentage below the size or quality requirements of U.S. Grade No. 1. If a car is unusually good, but ungraded, it should not be pooled, but sold on its own merits. It is the duty of local managers to report such cars to this sales agency in order that the local members may receive payment for the quality of their product.

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(39) United States Grades for Potatoes.  
U.S.D.A. Department Circular 96.

A system which is sometimes used by the local associations is to grade their product upon delivery and then mix various grades of the same variety in the same car. The car constitutes the pool. In the final adjustment, the growers' delivering the superior product is paid for it on an arbitrary basis. The difficulty of such a system is that there is no way of determining the real effect of each grade upon the final car grade. To use such a policy within the central organization would be even still more arbitrary.

The Pooling Period. The pooling period is the length of time during which like products are given their proportionate share of price, risk or expense. The period as used in this discussion refers only to price pooling. The pooling period for risk and expenses is considered later.

The pooling period is an important point to be determined in any pooling system. The length of this period varies with different products and among different organizations. Cooperative creameries usually pool one month at a time; live stock shipping associations, by car loads or by a day's shipment. The pooling period for oranges and other citrus fruits is usually one month, while in the case of raisins or prunes this period may extend over the whole season.

The pooling period for a central marketing organization should be long enough to equalize the prices which may fluctuate from temporary market disturbances. This period should not be long enough to interfere with a member's right to take advantage of what information he may have regarding the best time to sell his product. Ordinarily it should not be the purpose of the pool to

equalize prices throughout the year. This depends upon the seasonal price fluctuations for the particular commodity and upon the volume of business which an organization controls. If an organization controls a large enough proportion of the crop it may stabilize the general price throughout the season by regulating the flow of the product to the market. In such cases a longer pooling period can be used to advantage. And it may here be advisable for the organization to regulate the time which its members can sell their product. It is possible with the California Fruit Growers Exchange, which handles 70 per cent of the oranges of a state which produces 70 per cent of the United States production, to pool successfully for a longer period of time than it would be for the Minnesota Potato Exchange, which handles only 10 per cent of the potatoes of a state which produces only 8 per cent of the United States production. In the latter case the members should use their own judgment as to the time to sell their product and the pooling system should be optional.

The pooling period may be influenced by certain natural divisions of the marketing period. In the case of potatoes the marketing period can be divided into three main divisions. First, the early table stock period which begins in late July and extends into September; second, the late table stock period during the months of October and November; third, the seed stock period during the late winter and early spring months. The marketing period might also be divided into the fall period, during which there is no danger of transit frost, the winter period, during which shipment must be protected from freezing and the spring period which extends to the end of the crop year. These divisions in either case



greatly overlap. In most cases they represent a longer period of time than is desired for a potato pooling period.

The pooling period is also influenced by the degree of organization and concentration of the market. A livestock shipping association can pool for a short period of time because its sales are made mainly in one large centralized and highly organized market. Under such conditions there is little need for a long pooling period. The potato market, however, is widely distributed and not so highly organized. For this reason potato prices fluctuate considerably during a month, a week, or during one day. Consequently potato marketing requires a longer pooling period.

Where a central organization is to conduct a complete pooling system for a marketing organization the analysis thus far shows that a seasonal pool is too long and a one day pool is too short to handle the situation. Just what period would give the best result is difficult to determine. It seems that a two-weeks or one-month period could be used to advantage.

Perhaps a better arrangement of the pooling system would be for the central organization to use a one-day pool and the local association to pool in two-weeks or one-month periods. Under this arrangement the local association would receive the same price for all produce of the same grade which was shipped during the same day. ~~The~~ Additional local pools could adjust price fluctuations over a longer period of time. Such an arrangement in the central organization would permit a local association to adjust its pooling period to its particular needs. The Michigan Potato Growers Exchange use a one-day pooling period and leave the matter of a longer period to the local associations.

Financing the Pool. The pooling method of handling the product of a cooperative business raises the difficulty or problem of financing. Under the system of buying for cash the members receive full payment upon delivery of their product; but under a pooling system, this is impossible. Farmers often have criticised private dealers for taking too large margins for handling their product; but not until having had experience in their own marketing organization do farmers realize that at least part of their margins are taken to cover risks in price fluctuation and interest on the money tied up in these products. Where farmers organizations propose to do their own marketing they must stand these expenses and risks themselves and unless their organization has large working capital, they will have to wait for their returns until their products are sold and the payment returned. In the case of many stable products like grain, cotton, tobacco and wool, advances may be made on their products while in storage by a system of warehouse receipts. In the case of potatoes no such system of financing has been devised. Storage of any product without hedging facilities involves too great risk for most farmers organizations to undertake.

In many cooperative organizations where pooling is practiced some advances are made at the time the products are delivered. The California Rune and Apricot Growers Inc. advance their growers at the time of delivery approximately two-thirds of the net return which they estimate the product will bring. Three months after the final deliveries, nine-tenths of the estimated return has been paid. The first payments, however, often extend for nearly a year's time.

Similar arrangements are used in the marketing of raisins and almonds which are pooled on the annual basis.<sup>(40)</sup> The system of financing these pools has been to borrow part at least of the first payment. These loans have been in most cases secured from banks which recognize the soundness of these organizations. Intermediate and final payments are made from the returns as they come in.

It seems advisable in pooling, particularly where the product is a seasonal one and represents the grower's main source of income, that some advance should be made at once, upon delivery. In the producing of these commodities the growers have incurred expenses which often must be met at the earliest possible time. In the case of dairy products, returns are more continuous, which makes it possible to use a monthly pooling system in cooperative creameries and make no advance whatsoever. With this consideration in mind in the pooling of potatoes the first payment, regardless of its amount, should be made as near as possible to the time of delivery. The Michigan Potato Growers Exchange has aimed to make an advance of approximately 30 per cent as soon as possible after the shipment is made.

There are some difficulties in determining just what is a fair amount to advance. In the first place, if advances are to be made immediately after shipment, cars which are rolled will not yet be sold. For this reason the amount of the advance is determined largely by the sales method employed. Were all cars sold f.o.b. shipping point or "to arrive" a payment could be made immed-

<sup>(40)</sup>Hoard's Dairyman. Vol. LX, No. 17, Nov. 12, 1920. p. 736.

ately, but a certain number of "rollers" are necessary. When prices are declining, sales are hard to make and it is absolutely necessary to roll cars with the hope of selling them in transit or upon arrival. When prices are advancing rapidly it is desirable to roll a large percentage of cars to take advantage of the rising market. Another difficulty which must be guarded against is not to make the advance too much. Cars are not always accepted on arrival, and the drafts are often turned down. This may result that the first payment, if made on an 80 per cent basis, exceeds the total returns. An overpayment to local members may be difficult to collect, or at its best, may result in dissatisfaction, for upon the first returns from a shipment, the locals often pay this money out to the growers shipping in the particular pool. In case this is an overpayment, to the local the exchange can hold back returns on a following car, but this car usually represents a different group of farmers. Such difficulties as these are very undesirable. It seems, however, that when grading is well practiced so that too many cars will not be rejected, and where too many cars are not "rolled" during falling markets, that an advance can safely be made at once of 80 per cent. Where there is a degree of uncertainty concerning these conditions it is better to make a smaller advance and make it at once.

The money needed to make advance payments on produce can usually be secured by special banking arrangements. The Michigan Potato Growers Exchange made arrangements with banks whereby they were permitted to draw 80 per cent of the face of their drafts against buyers. This system necessitates the borrowing of some capital to begin operations, because there is some danger of cars

being rejected and their drafts turned down.

Another source of security which both the potato exchanges have access to is notes of the local associations, which the by-laws provide may be used for such purposes. There are 96 of these notes with a par value of \$500 each, or a total of \$48000. While the full amount of these notes could not be secured as a loan yet they offer a basis for a considerable sum. The Michigan Exchange found these notes to furnish a satisfactory basis for credit.

Price Pooling. When the term price is used it is quite necessary that it be made clear what price is meant. In the selling of potatoes through the Exchange three types of sales are mainly used and the price may mean something quite different in each case. These three types of sales are "f.o.b. shipping point," "to arrive," and "rollers." In the f.o.b.-shipping point sale, the price applies to the shipping point and to the day of the sale. The buyer has to pay the freight and stand the risks in transit. In the "to-arrive" sale which is most commonly used, the price applies to the destination and to the day of sale. The shipper in this case pays the freight. In case of "rollers," their sale may be made while in transit, on an f.o.b.-shipping point basis or as a "to-arrive" sale. If not sold in transit, they are sold upon arrival, in which case the price is adjusted to the destination and the shipper pays the freight. In any particular pool, all of these systems of sales may occur. As used here, the Pooling of prices means the lumping together the net returns of the several cars of the same grade, on the basis of the sale agreement, and

determining an average price for each unit of product in the pool. The pool price is made up leaving out the expenses of the marketing organization and the losses incurred because a particular car in the pool was rejected upon arrival in the market. Adjustments for these will be considered later. This system of price pooling avoids all chances of showing favoritism to any member association and makes it possible for each association to get the benefits from an occasional exceptionally good sale and to stand the losses of poor sales, not rejections however. Any particular association shipping in the pool shares equally in the chances of gain or loss ~~through chances of gain or loss~~ through changes in the market condition in case of a rolled car, regardless of which association shipped the car.

There is one factor which influences the pool price which has not yet been mentioned. That is the freight differential. The prices any particular association may be offered for its potatoes depends to a considerable extent on the favorableness of location of the association with respect to freight rates to the terminal markets. At the present time in particular, freight expense constitutes an enormous expense, averaging better than 50 cents per hundred weight. Any system of pooling must take into consideration the situation of all shipping points and adjust their prices accordingly. In shipping to Columbus, Ohio, Mahanomen has a 72 cents per hundred weight and Wadena has a 65 cent rate. On page 135 the method is given by which this differential is determined.

Pooling of Expenses, Losses and Risks. It has already been stated that the basis of any good potato pool must be definite grade. Without a system of local inspection, the local managers alone determine the grades. It is very difficult to work out an equitable pooling system on this basis. The discussion previously given of price pooling handles a number of expenses like freight switching, messengering, etc., very satisfactorily in pools in which all cars are accepted with no difficulty. But where cars are rejected for the various reasons, such as given in table VIII or where railroad claims or claims against sales organization must be made, the problem is more complicated.

When a car is rejected, various expenses may be incurred which will lower the returns on the car. An inspection may be made ~~AND~~ the car found up to grade, in which case the inspection cost should be pooled and not assessed against the individual car. This expense is not the fault of the local association but has resulted from the buyer attempting to protect himself against loss due to a decline in price. The inspections usually, however, show the car to be below grade. Where this is the result many additional expenses may result besides the inspection cost. The car may have to be reconditioned at a great expense, it may be sold to the same buyer at a much reduced price. It may have to be diverted to other markets adding additional freight, switching charges, and in many cases demurrage. The resale of the car often times calls for additional brokerage, which is perfectly just. The delays thus caused may in some cases cause a total loss on a car, particularly in very hot or cold weather.

Additional expenses and losses of this nature may be due to the local association; as shown elsewhere, it is not uncommon for local managers to call their cars U.S. Grade No. 1 when they are far below that grade. They may bill their cars to the wrong destinations or load them with the wrong-sized sacks. Where it can be definitely shown that these losses are due to local negligence, they should not be pooled but assessed against the particular car with which they are associated.

Oftentimes these losses are not the result of local negligence. The sales organization may make an error in selling the car, railroads may delay deliveries or fail to protect the car while in their care. The car may have been in good shape when leaving the shipping point, but hot weather on long hauls may have occasioned considerable loss. Under these circumstances the loss should not be assessed against the local associations. Some of these losses when not too high may be assessed against the pool. Losses due to freezing may be very high, but should not be carried by the organization because some associations never ship in cold weather. This point may be an argument for a longer pooling period or else for a special reserve created on the percentage basis to cover losses of this kind.

Losses which are due to railroad companies, or to sales agencies may often be collected by the filing of claims. Where these losses are covered by claims and are known not to be due to any particular shipper, they should not be deducted from the returns but should be carried by the organization by a special reserve.



Care must be taken in the handling of losses by the central organization that they are not carried by reserves collected on a flat rate basis. Flat rates are usually collected on a per hundred weight basis. Losses occur on basis of value of the product and the value varies in some years over a hundred per cent. Reserves to cover any expenses or losses which are on a value basis should be collected on a percentage basis.

General Organization Expenses. The general expenses of a marketing organization, such as rent, insurance, depreciation, salaries, supplies and the services of a sales organization are in no way in proportion to the value of the product handled. It is probably easier to sell high priced potatoes than cheap potatoes. For this reason these expenses should be covered by a direct assessment of a certain amount per hundredweight. The usual method of determining a flat-rate charge is to estimate the expenses for the season and divide this amount by the estimated volume of business. Care must be used that all expenses are included. Upon first thought, it might seem that this rate of charge should be varied throughout the season; that is, that the rate in the fall when the business is running full capacity should be lower than in the spring when business is more slack. There seems to be no particular need for this change in most cases. Most associations must run throughout the year anyway.

Relation of Local Practices to Central. There may be some question as to the relation between the sale methods used by the locals and by the central organization. Does it make any

difference to the central organization using a pooling system whether the locals pool, buy for cash, or use some other method? So far as the theory is concerned, the central organization works independently from the locals and is not concerned with the methods they use. Where the locals finance their own operation and employ sound business policies, it should make no difference to the central organization in determining its sales methods. In practice, however, there is greater harmony between the central organization and those locals which use a pooling system than between those which buy for cash. In the first place, a pooling system requires thorough cooperation and where used by the locals, they understand the system used by the central and consequently work in greater harmony. Where locals employ the cash system, the members are used to getting returns at once and often object to delayed returns of the pooling system used by the central organization. A further difficulty results from the fact that locals buying for cash do not always operate on a safe margin or provide in good years for losses in bad years. Consequently their organization gets into bad financial condition and they are likely to lay the blame for this on the central organization. It is possible for any local method to work in strict harmony with a central pooling system, providing the policy is carefully conducted, but in active practice better cooperation results when the locals pool as well as the central organization.

The Minnesota Potato Exchange Pooling System.

The preceding discussion attempted to bring out some of the problems connected with the pooling of potatoes. No attempt has been made to propose a definite pooling system. Several exchanges have already developed pooling systems which are more or less satisfactory. The system used by the Minnesota exchange is identical to that used by the Michigan Potato Growers Exchange.

The by-laws of the Minnesota Potato Exchange leave the details of business practices to be decided by the board of directors. The Exchange used both the pool and individual sales methods. Individual sales have been made with cars which are of mixed varieties, unusually good or poor cars, or where some buyer offers a premium for the product of a particular local. Individual sales were also used at the end of the season when only a few shipments are made.

The Exchange used the U.S. Grades, a "field-run" grade and a "partly-graded" grade as bases for its pools. Most of the shipments were of the U.S. Grade No. 1. All of these grades were used for each variety handled. In the case of the Early Ohio variety, a distinction was made between the Red River Valley and the sand-land product. While there were 24 different market grades used during the season, the majority of the product was handled by four classes of pools. A large number of cars could not be pooled, because only one car of any particular grade was shipped during the pooling period. Thus with a large number of grades, the real object of the pool frequently is not attained.

The Exchange uses a one-day pooling period. The shipments of like grade shipped on the same day constitute a pool. Local associations are left free to pool the returns from the central for such an additional period as they see fit. No local pooling, in this sense, was used during the 1920 crop. Several associations plan on using a two-week price pool during the 1921 crop. The general expense of the organization for the year was covered by a flat-rate assessment of 10 cents per hundredweight. Part of this assessment was used to cover losses which were believed to be due to the central organization. Expenses incidental to the sale of the cars, such as freight are average in when the pool price is determined. Losses caused by rejected cars are assessed against each car individually.

To finance its pools the Exchange made arrangements with a bank which accepts their drafts giving the Exchange full credit on its account, without interest, with the understanding, however, that their cash deposits must be at least equal to their outstanding drafts. Because of the large number of drafts which were turned down, the Exchange experienced some difficulty in maintaining this balance. Where outstanding drafts exceed cash deposits they had to pay 8 per cent interest. This expense averaged about \$20 per month.

In order that the detailed operations of this pooling system may be more thoroughly understood, the following analysis is given of a typical pool settlement. A copy of the pool under discussion is shown on page 100. There are 10 cars in this pool shipped from 7 different shipping associations and sold at 8 dif-

ferent destinations. All of these cars were billed as U.S. Grade No. 1, Round Whites. They were sold "to arrive" at prices ranging from \$1.75 to \$2.15 per hundredweight.

The column on the pool sheet headed "Invoice" contains the gross amount of the sales at the original price terms. Had these cars all been sold without rejections or other difficulties, all freight charges and other miscellaneous transportation expenses would have been subtracted from the invoice amounts and the balance carried into the "Net Returns" column. In this case the "net returns" minus a 10 per cent per hundredweight charge for central organization expense would give the amount to be distributed to the associations.

It is seldom the case, however, that pools are settled without rejected cars or other losses which are difficult to place. A rejected car, as previously shown, may cause a price reduction, additional freight, additional sales expense and possibly a car may have to be reconditioned at a considerable expense. In handling expenses and losses of this nature where they are thought to be due to local negligence, the Exchange does not deduct them from the pool price. The pool price is figured as though all cars were accepted. In other words the net returns column is not reduced by losses of this nature.

In determining the pool price the total of the "net returns" column is divided by the total hundredweights. The pool price from the pool sheet given is \$6180.52 divided by 424.96, or \$1.454 per hundredweight. In the settlement of this pool, \$1.45 was used. This pool price applies to no particular place but

would be the pool price to an association whose freight differential was the average of the freight differentials represented in the pool. The freight differentials of this pool range from 0 to 16 cents with an average of 13.9 cents. In settling this pool 13.5 cents was used as the average freight differential. From the basis of a \$1.75 pool price for an association with the average freight differential of 13.5 cents the pool prices for the various associations can be determined. The associations with a 16-cent differential get 16 cents minus 13.5 cents or 2.5 cents less per hundredweight than one with an average differential, or \$1.425. The association with a zero differential gets \$1.45 plus 13.5 cents or \$1.585 per hundredweight.

The amount of the pool that the various associations receive is determined by multiplying their pool prices by their respective hundredweights. To determine the balance which an association has coming from a pool settlement, several deductions must be made from their pool amounts. These deductions are first the advances made; second, a 10-cent per hundredweight charge for the exchanges expense; and finally, all adjustments which must be made to the original terms of the sale, which are considered due to local negligence. The adjustments "car charge" as shown on the pool sheet contain two wire reductions in price totaling \$295.80. One car was resold at 35 cents per hundredweight loss totaling \$126; at least one car was reconditioned and sold at a loss of \$189. The other deductions of better than \$300 are partly reductions in selling prices, additional sales expense and reconditioning. In this pool \$942.81 had to be deducted from the

total amount of the pool. This is 15 per cent of the total pool amount and 20 per cent, or an average of \$157.13 per car, of the pool amounts of the 6 cars standing the loss. In summing up the pool settlement the estimated 80 per cent advance has exceeded the total amount for distribution for 4 associations, with a total excess of \$141.49 for the entire pool.

The two columns at the extreme right "Miscellaneous Debit and Miscellaneous Credit" are adjustment columns. They represent the only posting which must be taken from the pool settlement sheet. The majority of these adjustments are adjustments between a "net returns" account and the accounts of the local associations. The final adjustment entry of \$49.24 represents an earning to the organization from a balance left in determining freight differentials. This amount results from calling the pool price \$1.45 instead of \$1.454 and from calling the average freight differential 13.5 instead of 13.9. This source of income as a rule averages less than one cent per hundredweight, for the average freight differential and the pool price is usually figured at the nearest half cent.

The operations of this pool settlement sheet shows the manner in which prices, expenses and losses are pooled by the Minnesota Potato Exchange.

The main difficulty of this system is that it places too many losses against the local associations. Without some system of local inspection there is no way of determining where many of these losses belong. Where grading is poorly done, this system is bound to lead to a great deal of local dissatisfaction. The final

prices received by the associations pooling in this pool is \$1.12 per hundredweight. The following prices were received by the various associations in the order appearing on the pool sheet: \$1.12, \$1.32, \$1.34, \$ .87, \$1.13, \$1.32, \$ .69, \$1.32, \$1.13 and \$1.03 per hundredweight. These prices may represent quite closely the differences in quality of the potatoes called U. S. Grade No. 1 by the various local managers. If such is the case, there is no injustice. The range in prices of over 100<sup>x</sup> per cent would lead one to believe, however, that such differences in quality probably did not exist. Undoubtedly a large part of these variations represent the differences of different buyers. Some buyers will accept cars which are considerably below grade while other buyers will reject cars upon the slightest excuse. When a car is once rejected the price adjustments are left pretty much to the buyer. The cars are in distant markets and if not sold at once may result in a total loss. Furthermore, a car which has been once rejected is discriminated against by other buyers. The fact that many local associations claim to have shipped two cars going in the same pool, one which they know to be better than the other, and then received nearly twice as much for the poorest of the two cars would tend to show that these prices are not always in proportion to their quality. Under this system, it is highly advisable that a local association practice the highest type of grading; otherwise their cars may be rejected and result in a great loss.

Lengthening the pooling period would have no particular effect on these difficulties. The fault is not due to too short a



pooling period but to inability to place accurately losses which occur without a system of local inspection. The main features of this pooling system would probably be quite equitable were all cars taken into a pool previously inspected. Losses occurring then could be spread over the pool or even for a longer period, a month or the season.

There is one point in the present pooling system which might give some injustice. Certain losses which are not felt to be due to the local associations are carried by the Exchange. The 10 cent per hundredweight charge is divided 7 cents for selling expenses, one cent for publicity and 2 cents to cover certain loss adjustments. These losses, as previously pointed out, are on basis of value while the reserve is collected by a flat rate charge. Where any losses are to be carried by the Exchange the insurance assessment should be on a percentage basis.







Chapter VII

GRADING STANDARDIZATION AND INSPECTION

The subject, grading, standardization and inspection even though limited to the one product, potatoes, is alone broad enough for a thesis subject. In this chapter, emphasis will be given to the necessity for grading, standardization and inspection, and the methods used and the results attained by the Minnesota Potato Exchange in their attempt to solve these problems.

Each crop of potatoes grown by the thousands of growers of the state represents a distinct lot for marketing purposes. They may represent any one or any possible mixture of the fifteen or more varieties grown in the state. Fortunately few farmers grow mixed varieties. But potatoes must be marketed in car lots; hence if varieties are to be kept separate in shipment, their number must be so limited that a car can always be loaded of some one variety. This particular form of standardization is being rather well established. There are eight recommended varieties for the state and each is becoming more or less localized in its most favorable environment. (41)

Aside from the possibilities of mixed varieties, any particular grower's product may contain potatoes varying in size, shape, and soundness. Any particular load of potatoes delivered at a local warehouse may contain a mixture of large and small, smooth and rough, and sound and unsound potatoes. The unsoundness may vary from slight mechanical injuries or a little scab to totally worthless decayed potatoes. This heterogeneous mixture

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(41) Minnesota Farmers Institute Annual, No. 32. P. 22.

is not always the fault of the grower, but may be largely the results of an unfavorable producing season.

In considering the classes of consumers to which potatoes go, it will be discovered that they do not always desire their product in the condition in which it is delivered at the local shipping point. The type of potato demanded by the general public may differ widely from that demanded by hotels or by railroad companies.\* Different sections of the country also demand different varieties of potatoes. The round white varieties have a rather general market for table purposes, while the Irish Cobblers and Kings are sold largely in the South for seed. The Red River Valley Early Ohios are sold largely in southern Ohio and Illinois, Iowa, Kansas and Oklahoma, while the sandy land Early Ohios go to Iowa, Missouri and Illinois. Burbank varieties sell best in the far South. Another peculiarity in market demand is that regarding size of sacks. The market has been accustomed to receiving Red River Ohios in two-bushel sacks, and in fact does not recognize this variety as such if handled otherwise. Other varieties of the state are sold in two-and-one-half bushel sacks. With these variations in the market demands, it is evident that grading and standardization are necessary to correct the various maladjustments between production and consumption.

The function of grading may be performed at any point in the marketing channel from the grower on his own farm, to the retailer who may sell in peck lots and be obliged to throw out

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(42) Advantage of Market Grades to the Producer.  
Office of Farm Markets Circular No. 19.

worthless potatoes.<sup>(43)</sup> Most of the grading is undoubtedly done at the shipping station. Private dealers do considerable grading in the terminal market. Many of these dealers prefer buying in bulk and doing their own grading and sacking at the time of unloading in the terminal markets.<sup>(44)</sup> In this way they know exactly the condition of the product which they are handling.

There is no doubt that if it pays to grade potatoes, it can be more economically done at the local shipping point than elsewhere. The freight rates on culls and dirt are a considerable item. It is not uncommon for one car to contain a ton of such worthless product. Not only do worthless potatoes increase the freight but the longer diseased stock is left in contact with the good stock the greater is the loss through further decay.

There are other advantages to grading and standardizing aside from those concerned with expenses and losses in marketing.<sup>(45)</sup> Perhaps the most important advantage in marketing is that of giving a basis on which sales can be made. Without some system of grading it is impossible to make sales except upon inspection upon arrival. Such sales are really nothing more than options to buy if satisfied and leave the seller at the mercy of the buyer. A uniform system of grading makes it possible for buyers and sellers to deal with one another in mutual confidence. Where standard grades are used, sales can be made f.o.b. shipping point as well as in any other way. If the product of any organization is well graded it is possible to develop a demand for that product particularly when it

(43) Ibid.

(44) Marketing of Wisconsin Potatoes. University of Wis. Bulletin No. 256, p. 15.

(45) Ibid, p. 12-13.

is sold under the association's own brand or name. Another advantage which will be considered later in this chapter is that of avoiding car rejections in the terminal market. A bulletin of the U.S.D.A. states that "Carelessness in grading, packing, and loading are largely responsible for the high percentage of rejection which occur in the handling of fruits and vegetables."<sup>(46)</sup> Like most other questions, the grading question has two sides. Most of the arguments against grading are made by the farmers. They are as follows: Grades are an advantage to the dealers, but a disadvantage to the producers; if grades are enforced, a large proportion of their crop finds no market except as culls. Buyers pay no more for graded than non-graded stock; hence the costs of grading must be paid by the farmer.<sup>(47)</sup> These arguments are undoubtedly true in so far as grading done by one particular farmer is concerned; and in fact, the effect that any particular local association can have on the market, unless for some specialized trade, is almost negligible. In case of an organization which can command a considerable supply and sell the same under its own name, the possibilities are quite different. It is difficult to say who pays the freight on culls going to market at the present time. Certainly the dealers do not. Their offers are determined from their knowledge of the consumers demand and of the available supply and in the long run their margins are adjusted to cover such costs. The chances are that the consumer pays this freight for in the long run all costs, and freight is such, must be

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(46) Methods of Wholesale Distribution of Fruits and Vegetables on Large Markets. U.S.D.A. Bulletin No. 256, p. 6.

(47) Advantages of Market Grades to the Producers. Office of Farm Markets, Circular No. 19.



covered in the value of the product. But increasing the cost of potatoes by this extra freight makes the consumer pay more for his product. As a result he may buy less. Whether or not he will do this depends upon the effect of changes in price on the consumption of potatoes; that is, on the elasticity of demand for potatoes. There is all reason to believe that the elasticity is not very great. If this assumption is true the amount consumed may not change much with changes in price. If this is true, then the consumer stands most of the losses.

However, this is not the whole of the analysis. In any case, the consumers are bound to have a large assortment of potatoes offered to them, some excellent in quality, some poor. They will bid as they think for the various grades of quality. The poor lots may have to take a discount in price which much more than offsets the costs of sorting and grading. In this way, although the consumers as a whole, may stand most of the losses of poor sorting and grading, the price may be established between grades of quality so that the good product receives a premium greater than the cost of making it good and the poor product the contrary of this.

A system of grading carried out by a marketing organization may therefore enable this organization to compete more favorably in the markets and as a result obtain higher prices for its members.

The mechanics of grading is not simple. It involves grading both as to size and quality. The matter of size can be handled easily by grading machinery, but removing other defects such as bruised scabby or decayed potatoes requires a considerable

amount of hand work. At the best, any system of grades is more or less arbitrary. Even under the standards adopted by the U.S. Bureau of Markets, any two lots of any particular grade may show much variation in quality. But, even though a perfect system of grades is almost impossible, some universal system is far better than none at all.

The Minnesota Potato Exchange during the season of 1920 used three market grades: U.S. No. 1, "partly graded" and "field run." The U.S. grades are preferred and were used by 95 per cent of the local associations. It is estimated that 70 per cent of the cars were sold as "U.S. No. 1;" 20 per cent as "partly graded" and 10 per cent as "field run." The requirements of the U.S. grades appear on page 10 of Appendix V. In securing the U.S. No. 1 grade some associations used a 1 5/8 inch square mesh screen, but this results generally in a large amount of undersized potatoes. The 1 3/4 inch square mesh or 1 7/8 inch round mesh usually give better results. Much depends on the variety being graded. The "partly graded" grade was used mostly by a few of the older associations. The 1 5/8 inch square or round mesh is the most common screen used for this grade. This grade was accepted fairly well on the market when of the same quality as U.S. No. 1 but running not more than 10 per cent under size. The "field run" grade is used early in the season when the crop is too green to be subjected to the use of a mechanical grader. In selling "field run" potatoes, the approximate percentage under 1 7/8 inches in diameter must be stated and also the percentage of other defects. In comparing these three grades on the basis of sales satisfaction,

15 per cent of the U.S. No. 1; 20 per cent of the field run and 25 per cent of the partly graded were rejected. Further consideration will be given later to rejected cars, but it might be stated here that these rejections were not all due to poor grading.

Inspection. Uniform grades and standards can do considerable to aid the marketing of potatoes, but there are two other difficulties which may arise. First, the local association may be slack in their methods. They may send out cars in the wrong sized sacks or of mixed varieties or else more commonly call their cars U.S. Grade No. 1 when they are not. The other difficulty arises in the terminal market, particularly when prices fall. In this case, a buyer may use any excuse possible to reject a car. These rejections are oftentimes on sound basis, but again they are a common method to prevent losses due to a break in prices. Good reliable dealers who have a reputation in the market may not be so quick to follow this practice, but when local associations are slack in their methods, even the better class of dealers reject cars. To correct these difficulties there is only one method, and that is inspection. It seems that the most satisfactory results could be gained if some system of local inspection could be used. During the operations of the Exchange this far, no inspection service has been maintained in the local area. The determination of grades has been entirely left to the judgment of the local managers.

There might be some possibility of federal or state inspection at this point, but nothing has been done in this state as yet. In California the State Bureau of Markets cooperates with

the Federal Bureau of Markets and does shipping point inspection. (48)  
Nebraska has also recently passed a law making shipping point inspection compulsory. This work is to be carried out by the state at a charge of \$4 per car. "A certificate of inspection specifying grade, or a permit for shipment shall be posted in the car before the car is released for shipment." (49)

It is possible to get federal inspection at Minneapolis, but this would necessitate holding over of cars, and thereby increasing the freight rates. The value of state inspection is limited only to intra-state shipments and only a small percentage of sales are within the state.

It would seem that the Potato Exchange could accomplish considerable by employing its own traveling inspectors. It would be impossible for such an agency to inspect all cars shipped, and of course such inspection would have no enforcement authority in the sale of the product. If one or more inspectors were on the road during the shipping season, however, it would serve as a check on the grading of each local. Were such a system used, it would be possible for the organization to operate in such a way as to pool all losses incurred after cars once leave any local shipping point. The Exchange plans on such a service during the coming year. The California Fruit Growers Exchange protects its "Sunkist" brand of oranges by establishing a special field service which is responsible for seeing that all associations live up to the requirements of this brand. (50)

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(48) From statement of C.J. Brand, American Fruit Growers, at a meeting of Minnesota Potato Growers Exchange.

(49) State and Federal Marketing Activities. May 25, 1921. No. 11

(50) Cooperative Marketing - Cumberland, p. 264-5.

The other place for inspection is that of the terminal market. Cars may be properly graded and still meet with difficulty in the terminal market. Frost injuries, heating, or chemical injuries may occur in transit and give a buyer reason for rejecting a car. Besides these reasons, cars may be rejected because of a decline in market price. Because of these facts, terminal inspection is an absolute necessity. This service can be gotten through the Bureau of Markets inspection service or from private agencies. The Bureau of Markets service with that of the agents of the North American Fruit Exchange comprised the inspection service used by the Minnesota Potato Exchange in handling the 1920 crop. The jurisdiction of the Federal Bureau of Markets inspection service is limited to interstate trade, but this does not greatly limit its use by the Exchange, because Minnesota potatoes are largely shipped outside of the state. In case a buyer rejects a car a wire can be sent to an agent of the Bureau of Markets if there is one in the particular market and an inspection requested. The inspector renders a report to both buyer and seller stating to his best judgment the condition of the car. Beyond this, the Bureau of Markets has no authority. It does not compel buyers to take the car at the agreed price. Inspections from this agency, however, furnish unbiased judgment on the car, which is usually accepted by both parties. The Bureau of Markets makes a charge of \$4 per car for inspection service. This is paid by the party making the request. The service of the field agents of the North American Fruit Exchange is used in some markets, but it has no particular court recognition, as is the case with the

Bureau of Markets. It does, however, serve as a check against buyers rejecting cars which are in every way satisfactory.

The California Fruit Growers Exchange maintains its own force of inspectors at various diversion points.<sup>(51)</sup> It is the duty of these inspectors to report the condition of the cars at various points and to see that they are properly *iced* when necessary. This service is considered an important factor in the success of this organization in collecting its claims against railroads and to enforce f.o.b. sales. The organizations in California have the further benefits of local inspection carried on by cooperation between the U. S. Bureau of Markets and the State Bureau of Markets.

Rejected Cars. Up to May 1, 1921, the Minnesota Potato Exchange handled 2,349 cars of potatoes. Of this number 24.1 per cent, or 566 cars, were rejected. Of this number 81 were resold at invoice price and 4 at better than invoice price. The final selling price of the cars resulted in a loss of \$66,501.92 or between 4 and 5 per cent of the original invoice. Besides the cars rejected about 200 others were complained against but not rejected on inspection. Table VIII summarizes the various causes for loss on 2222 cars. The amounts of these losses were calculated in proportion to the percentages off-grade reported by the inspection. For example, if a car having a loss of \$150, was reported as 10 per cent off grade in size and 20 per cent off for scab, \$50 of the \$150 was considered as due to size and \$100 due to scab.

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(51) Ibid, pp. 74 and 84.

TABLE VIII. SUMMARY OF LOSSES OR DEDUCTIONS ON A VOLUME OF 2222 CARS OF MINNESOTA POTATOES SHIPPED COOPERATIVELY IN 1920-21\*

Causes of loss	Amount of loss	Percentage of total loss
Scab . . . . .	\$14,692	22.5
Undersize. . . . .	8,567	12.7
"Old frost". . . . .	8,110	12.2
Immature, heated. . . . .	7,695	11.5
Dry rot . . . . .	7,343	11.0
Transit frost . . . . .	6,396	9.5
Blemish . . . . .	4,615	7.0
Wet rot . . . . .	2,828	4.3
Mixed variety. . . . .	1,851	2.8
Reconditioning of cars, in Minneapolis. . .	998	1.5
Shortage . . . . .	828	1.2
Unjustified rejection. . . . .	797	1.1
Other causes** . . . . .	1782	2.7
Total . . . . .	\$66,502	100.0

\*566 cars affected.

\*\*"Other causes" includes losses from wrong sized sacks, delayed shipment, chemical injury, incorrect manifest, wrong variety, wrong routing, sunburn, and failure to tag.

Scab causes nearly twice as much loss as any other factor. Growers and local managers have not yet learned that sizing potatoes alone will not give the desired grade. Scabby potatoes must be removed by hand as must all other defective tubers. Much can be done in controlling scab by seed treatment and proper crop rotation. The loss caused by undersized potatoes is altogether too high for any system of grading. This factor can easily be controlled if desired. This factor alone shows that local managers have not yet learned what grading means. Better than 90 per cent of the losses, when calculated by the above method, result from improper grades or from factors affecting the quality of the

potatoes. The losses from other factors are of less importance and will be largely overcome as more marketing experience is gained.

While these figures are probably quite accurate as to the final causes for the cars selling below the original invoice, care must be taken not to lay all these losses to the poor condition in which the cars were shipped. Many of these losses occur in transit and are not the fault of the local association. Unnecessary losses may occur in transit because of inefficiency on the part of the sales system. This again points out the necessity for some system of local inspection to make possible the pooling of the various unavoidable losses which occur in transit.

Table IX summarizes by counties the shipments and losses due to rejection. These losses range from \$4.09 per car in Chisago county to \$88.75 per car in Kittson county, with a total average loss of \$29.85 per car. This information is also shown on the map in Figure 2. It is evident that the losses are more or less localized. In the counties of Wadena, Todd and Morrison, most of the losses were due to scab. In the Red River Valley and counties bordering that territory, much of the loss was due to dry rot. In the area around the twin cities the crop was marketed early and consequently avoided a large part of the losses. In the north central portion of the state losses did not run so heavy. The crop in this area was in good condition though marketed very late.

While this map shows considerable localization of losses, it covers up a significant point. Some of the counties whose



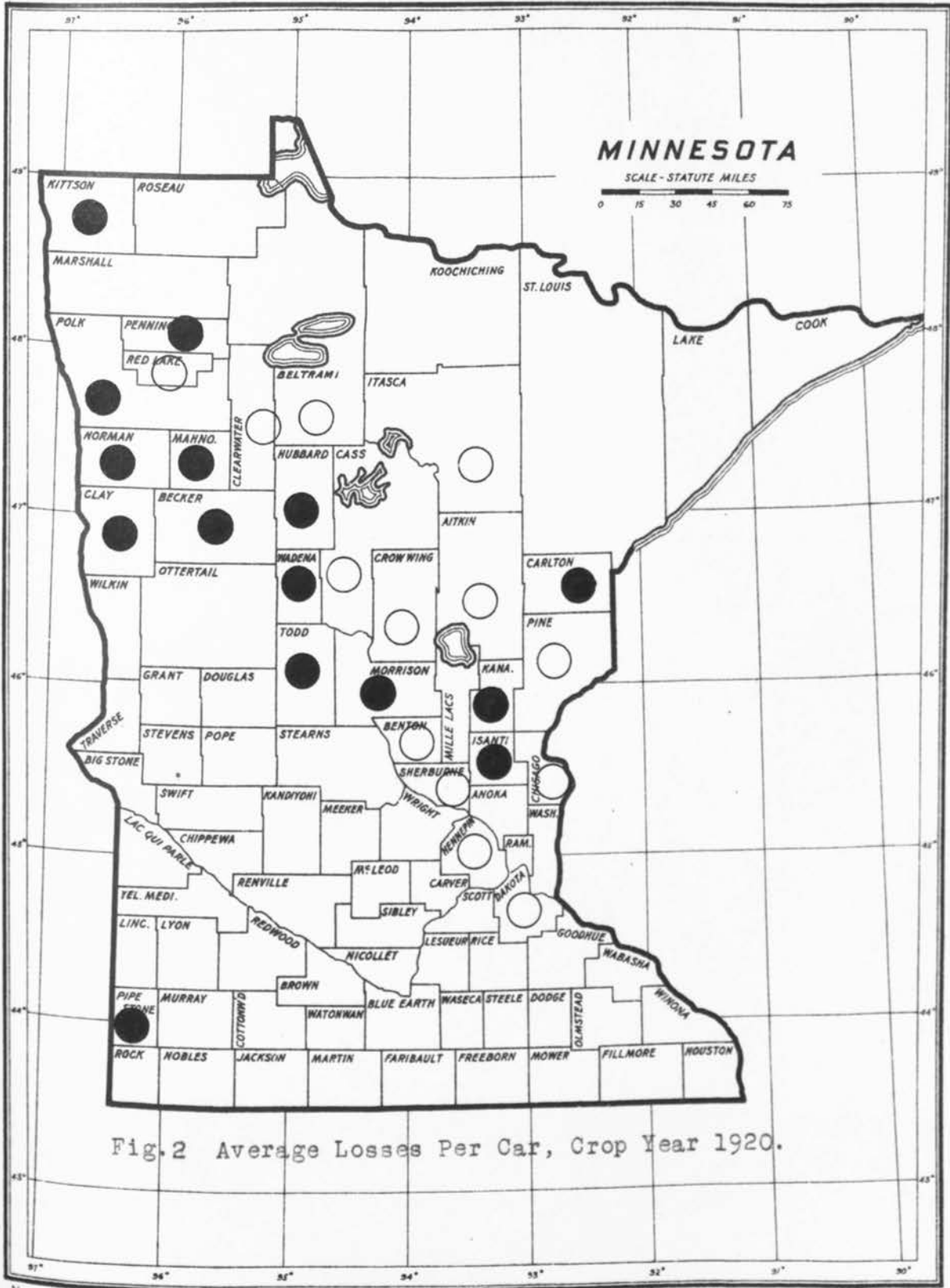


Fig. 2 Average Losses Per Car, Crop Year 1920.

November 1, 1914

THE NORRIS PETERS CO., WASHINGTON, D. C.

- Above \$20 loss per car.
- Below \$20 loss per car.

TABLE IX. AVERAGE LOSSES PER CAR BY COUNTIES, CROP YEAR 1920

COUNTY	Number Shipping Points	Cars Shipped	Cars Rejected	Average Loss Per Car Shipped	COUNTY	Number Shipping Points	Cars Shipped	Cars Rejected	Average Loss Per Car Shipped
Aitkin	1	6	1	\$ 9.00	Kanabec	2	32	10	\$33.08
Becker	5	187	60	34.08	Kittson	2	7	4	88.72
Beltrami	4	59	12	12.46	Mahnomen	1	12	4	82.75
Benton	2	86	16	15.97	Morrison	2	80	21	31.12
Carleton	2	11	5	79.03	Norman	4	150	26	25.75
Cass	4	51	8	17.61	Pennington	2	40	14	37.96
Chisago	1	10	1	4.09	Pine	2	43	10	10.46
Clay	3	119	27	23.20	Pipestone	1	86	27	40.71
Clear Water	2	35	13	12.47	Polk	4	156	53	67.50
Crow Wing	1	10	2	9.69	Red Lake	1	10	2	17.92
Dakota	1	4	1	18.00	Shurburne	1	91	15	13.89
Hennepin	1	43	4	7.07	Todd	3	106	21	25.15
Hubbard	3	80	17	31.05	Wadena	4	365	93	29.05
Isanti	4	151	39	25.07	N.D. & S.D.	11	156	42	41.55
Itasca	2	37	8	13.74	TOTAL	76	2222	566	29.85

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average loss is high contain large shipping points at which losses were low. Likewise in some of the counties whose average loss is low some shipping points had high loss. This is mainly due to the differences in the way different associations put out their product. It has been evident all through the operation of the Exchange that those associations who followed the grading rules closest, received far better returns and sufficiently high enough to cover the extra grading costs and loss of product.

As already stated, 566 cars were rejected because of being below grade. This raises the question of disposing of rejected cars. Eighty-five of these cars are known to have been sold to other buyers, 81 at the original invoice price, and 4 above invoice price. This leaves 481 cars which were sold at a loss. It is the policy of the Exchange to resell these cars to the original buyers where possible. This is done because these buyers are informed as to the condition of the cars and furthermore it is often difficult to sell a car which has once been rejected, to another buyer in the same market. In some cases rejected cars are diverted to other nearby markets and sold at a price equal to the original invoice or in some cases better. This policy works more successfully in the markets in which the North American Fruit Exchange has representatives.

These representatives have an opportunity to inspect these cars and, being in close touch with the market conditions, oftentimes can make a better sale by moving the car to some nearby point. Where sales are made to the original buyer at an adjusted price, the buyer often makes an offer usually by wire for a certain

amount under the original price. These offers are usually accepted, particularly if the car has been inspected and known to be below grade. In markets in which there are no sales representatives, it is usually advisable to try and resell to the same buyer or else there is a danger of the car resulting in a total loss. Care should be taken in interpreting the term "loss" as used in connection with the resale of a car. It is a loss in the sense that it is under the original invoice, But if the grade is below invoice too, it may not be a loss at all but merely a fair price for the grade.

Chapter VIII  
SELLING PROBLEMS

It is not hard to realize, after considering the difficulties connected with rejected cars, the need of some form of representation in the terminal markets. The local associations prior to the organization of the Exchange realized this need. In times of rising prices they found little difficulty in selling cars f.o.b. shipping point, but when prices were falling buyers were not easily found on any basis. Consequently many local associations were forced to sell through commission merchants or brokers, or else roll their cars with the hopes of making a sale while in transit or on arrival. Even the Exchange, upon a falling market, was obliged to sell a considerable number of cars as rollers. In a season of rising prices, it is advisable to roll cars to take advantage of rises in prices. For this reason an organization can not hope for success without representatives to look after its cars upon arrival in the markets. Without such representation it is often difficult to make connections with the various jobbers who finally break up the cars, and for this reason sales are more likely to be made through commission merchants or brokers. Further needs for this service come up in making sales collections, in opening up new markets and in collecting market information. In fact, the success of cooperative marketing organization depends largely on the thoroughness of its knowledge of the markets for its product.

The California Fruit Growers Exchange realized the need of such representation and developed an elaborate system for it.

It has divided the United States into six divisions with a division manager over each. Under these managers are 77 salaried and bonded agents who report daily to their division managers, who in turn report to the central office. The functions of this organization are to secure orders for fruit, to sell fruit on orders from the shippers, and make collections, to develop new markets, to cooperate with jobbers and retailers, to collect market information and in general to look after the shippers' interests. The efficiency of this department is largely responsible for the success of the citrus organization.<sup>(52)</sup> The Eastern Shore of Virginia Produce Association employs salaried representatives who work in the terminal markets and in addition use the services of a considerable number of brokers in various markets.

Private Sales Agency. The Minnesota Potato Exchange at the time of its organization planned to develop its own sales service and maintain its own market representatives but did not have time enough for it before the crop was going to be ready. The next alternative was to employ the services of some agency which already maintained market connections. Following the system used by the Michigan Exchange, the Exchange hired this service from the North American Fruit Exchange.

This organization does strictly a brokerage business in fruits and vegetables, handling no products in its own name. It consists of a central office in New York City, 20 salaried branches in various markets, about a hundred bonded and contracted brokers in other markets, and the sales managers which they furnish to organizations employing their service. They estimate that approx-

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(52) Ibid, pp. 171-5.

imately 90 per cent of their business is that of cooperative marketing organizations. They are handling at present shipments from cooperative potato associations in Texas, Montana, Colorado, and Nebraska. Whether or not this type of service is the best it at least offers market connection in approximately 120 cities in the United States.

Contract with Sales Organization. In order to avoid difficulties which may arise in employing such outside sales service, a contract is drawn up stating specifically the duties of both parties. The following sets forth the main points of the contract under which this service was furnished for the Minnesota Potato Exchange: (1) The shipper (Minnesota Potato Exchange) appoints the Exchange (North American Fruit Exchange) its sole sales agency for potatoes and other vegetables owned, controlled, and handled by the shipper in carlots for a period of 3 years, each party having the privilege to terminate the contract in June of any year.

(2) The shipper is required to properly pack, grade, and furnish the Exchange accurate manifest and description of the contents of its shipments when loaded.

(3) The Exchange agrees to furnish a sales manager for the selling of the products, f.o.b., in transit or delivery, working directly through its officers, f.o.b. sales to be collected by shippers draft on buyer unless arranged otherwise.

(4) The disposition and sale of all products is subject to the judgment of the Exchange, but they must at all times consult the shipper in matters of price and marketing information.

Prior to the confirmation of a sale, the shipper may instruct the Exchange to decline the offer.

(5) The Exchange must render the net proceeds on all cars which it sells and make collections after deducting selling expenses.

(6) Each party must prepay its own telegrams, the Exchange paying all telegrams connected with the sale of the products.

(7) The Exchange must furnish the shipper bonds for \$50,000 for faithful fulfillment of its contract.

(8) The shipper is required to pay all brokerage promptly.

(9) The Exchange shall receive for its services \$10 for all cars sold for cash at shipping point or at Minneapolis whether sold by the Exchange or shipper. For sales for which collections are made by drafts on buyers the Exchange shall receive \$22.50 for the first thousand cars; \$20 for the second; \$18.50 for the second two thousand; or, if the total exceeds 4000 cars, a flat sum of \$18.50 per car. For cars sold at destination on which the Exchange assumes responsibility for collection they shall receive a commission of 5 per cent.

(10) The records of the Exchange must at all times be open for inspection by the shipper, or state or federal Bureau of Markets.

(11) The Exchange must furnish such inspection service for all cars arriving in its branch office markets as may be necessary to support claims against carriers for deficiencies, breakage loss or damage.

(12) The Exchange is required to do suitable advertising for the shipper's product.



(13) Finally the Exchange agrees not to buy or sell potatoes or vegetables on its own account.

With the facilities offered by an independent brokerage concern and a contract stating definitely the duties of each party, there is at least provided a system whereby products may find a market.

Distribution of Sales. The map in Figure 3 shows the distribution of 2349 cars as handled during the season of 1920-21.

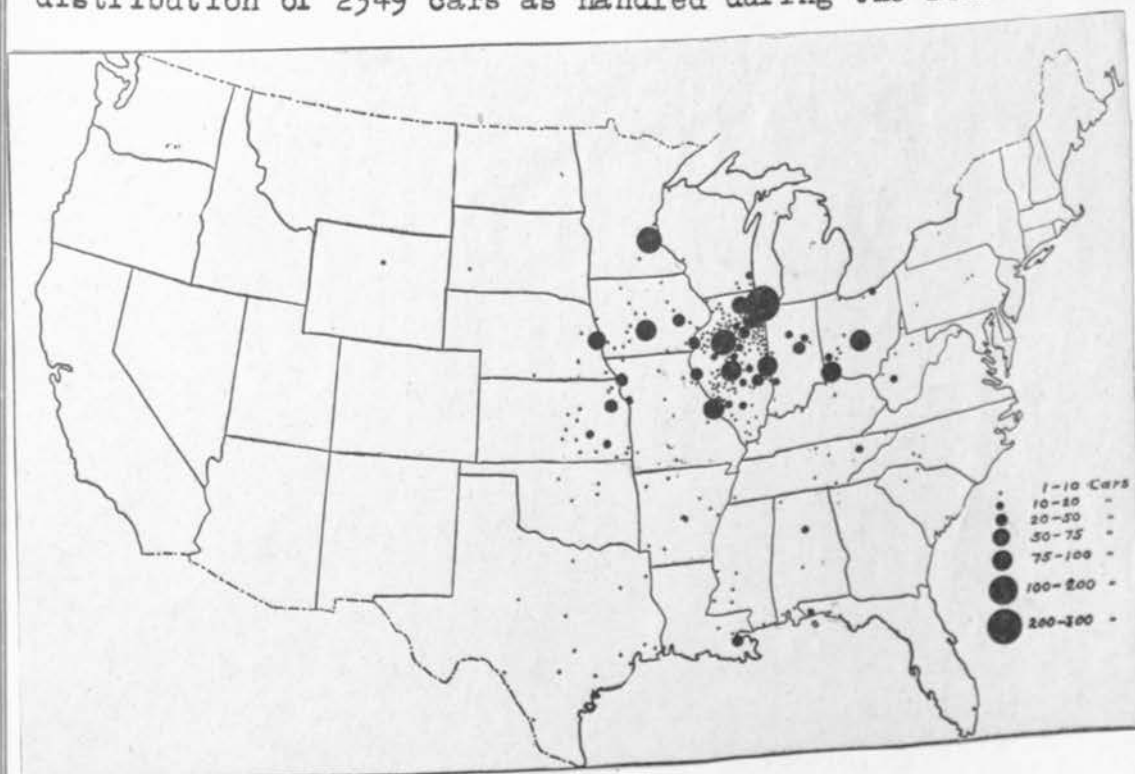


Fig. 3 Distribution of 2349 Cars of Potatoes Sold Through the Exchange in 1920.

Table X gives this information by states and in addition the number of towns and buyers in each state. It will be noted that 1095 cars were sold in Illinois. This state is a large buyer of potatoes for table use. Ohio ranks second with a total of 201 cars. Most of the shipments going into Ohio are Red River stock and are used for seed purposes. Missouri is another large market for Red

River seed stock, particularly in the region surrounding Kansas City. Iowa ranks third, taking most of its purchases for seed. The sales in the far south are mostly Burbanks and also go for seed purposes. It is estimated by Mr. Aamodt, manager of the Minnesota Potato Exchange, that between 40 and 50 per cent of the sales through the Exchange were for seed purposes. In case of the Red River stock, he estimates that perhaps 70 per cent is used for seed. The market for table stock from Minnesota is not so very large, being centered in Illinois and extending into the eastern part of Iowa and Missouri, western Indiana, and northern Kentucky.

TABLE X. DISTRIBUTION OF 2349 CARS OF POTATOES SOLD THROUGH THE MINNESOTA POTATO EXCHANGE

State	Cars	Towns	Buyers
Alabama. . . . .	27	6	12
Arkansas . . . . .	51	8	14
British Columbia . . . . .	1	1	1
Colorado . . . . .	5	1	3
Florida. . . . .	15	2	4
Georgia. . . . .	1	1	1
Illinois . . . . .	1095	123	216
Indiana. . . . .	97	10	21
Iowa . . . . .	170	16	27
Kentucky . . . . .	21	16	27
Louisiana. . . . .	25	2	11
Manitoba . . . . .	16	2	6
Minnesota. . . . .	136	3	18
Mississippi. . . . .	11	6	9
Missouri . . . . .	166	16	40
Nebraska . . . . .	83	5	15
New York . . . . .	3	2	2
North Carolina . . . . .	3	3	3
North Dakota . . . . .	1	1	1
Ohio . . . . .	201	11	38
Oklahoma . . . . .	17	6	9
Pennsylvania . . . . .	11	4	4
South Carolina . . . . .	5	3	4
South Dakota . . . . .	1	1	1
Tennessee . . . . .	34	7	22
Texas. . . . .	32	14	28
Washington . . . . .	2	2	2
West Virginia. . . . .	22	5	12
Wisconsin. . . . .	23	6	11
Total . . . . .	2349	292	581

This area depends somewhat on the production in other areas. When Colorado and Nebraska have a good crop the Minnesota market is probably pushed somewhat to the east. And in the opposite direction when the eastern states have a large production.

The seed area for Minnesota stock has a wider distribution, ranging from Washington, where two cars were sold, to eastern Pennsylvania, and then south to the Gulf. The seed market is the most profitable market to follow, as it usually offers a premium of about 20 per cent for good stock. It is important to know just what any market is using its purchase for to best understand the distribution of the crop.

This table shows that 136 cars were sold in Minnesota, "of which 51 cars were sold to shippers who reshipped to outside buyers on straight cars, 61 cars were sold Minneapolis dealers who unloaded at Minneapolis, and 24 cars were mixed cars and sold to dealers who could reload with other cars or warehouses for mixed car trade." (53)

Table XI shows that 716 cars, or only 30.4 per cent were marketed in the 10 largest cities. Chicago ranks first with 268 cars. Chicago is not always a good market, as it often serves as a dumping ground for various shippers knowing no other place to which to ship this product.

TABLE XI. NUMBER OF CARS AND PER CENT OF TOTAL SHIPMENTS FOR THE TEN LARGEST RECEIVING CENTERS

City	Number of Cars	Per Cent	City	Number of Cars	Per Cent
Chicago	268	11.45	Omaha	65	2.76
Columbus	78	3.32	Indianapolis	39	1.66
St. Louis	76	3.23	New Orleans	23	.97
Cincinnati	76	3.23	Kansas City	14	.59
Des Moines	75	3.12	Pittsburg	2	.08

Total: 716 cars or 30.4 per cent of total shipments.

(53) From sales manager's report, Little Falls, May 10, 1921.

To the first of May, 1921, the Potato Exchange rolled 271 cars, "of which 24 were mixed varieties which could not fit orders, 41 were off grade and could not apply on orders." Of these 271 cars sold as rollers, "208 were sold before arrival or under the directions of" the office of the Exchange "on arrival at an agreed price."<sup>(54)</sup> The balance or 63 cars were sold on track to peddlers and various dealers as shown in Table XII.

TABLE XII. DISTRIBUTION OF 63 ROLLED CARS SOLD ON TRACK TO PEDDLERS, ETC.

City	No. Cars	City	No. Cars
Chicago	17	Danville	1
Rockford	3	Des Moines	3
Peoria	1	Kansas City	6
St. Louis	6	Omaha	5
Cincinnati	9	Springfield, Ill.	3
Columbus	1	Springfield, Mo.	8

The practice of rolling cars with the hope of receiving better prices for them than through f.o.b. sales is rather speculative, particularly in seasons of falling prices. It seems a simple matter to review the market quotations in various markets and consider freight rates to them and then roll the car to the market giving the highest net return. The difficulty arises from the fact that all shippers rolling cars are following this same practice and as a result oftentimes when these cars arrive, this particular market may be the lowest of all. In many cases one would be as well off to pick out the lowest market as the highest. It is difficult to control this situation without knowledge of the cars being rolled towards any particular point. Were the large majority of the shipments handled by a few large cooperative organizations it might be possible to eliminate some of this

(54) Ibid.

difficulty. Under a falling market it probably is advisable to roll as few cars as possible. As previously stated, the situation is different on a rising market. It may be impossible to pick the best market, but they may all be better at the time of arrival than at the time of shipment.

Cost of Sales Service. The contract between the Potato Exchange and the North American Fruit Exchange as previously given provided five rates of brokerage. Table XIII summarizes the shipments under these various rates.

TABLE XIII. BROKERAGE RATES ON 2277 CARS.

Number of Cars	Per Cent of Total Cars	Brokerage Rate Per Car	Total Cost
825	36.0	22.50	\$18,450.00
837	36.8	20.00	16,740.00
267	11.8	18.50	4,939.50
181	7.9	10.00	1,810.00
172	7.5	(31.50)	5,418.00
2277	100	(at 5%)	\$47,357.50

\$20.80 average cost per car at 600 bu.  
per car equals \$ .0346 per bushel

It is evident from this table that sales requiring collections to be made by the North American Fruit Exchange run rather high averaging on the 5 per cent basis \$31.50 per car. The large number of this type of sales is largely due to the large percentage of rejected cars. The ten-dollar brokerage rate is used on cars sold for cash at Minneapolis or at the shipping points, whether by the North American or by the Exchange. The 2277 cars shown in this table show an average charge of \$20.80 per car or, upon a basis of 600 bushels per car, 3.46 cents per bushel.

As previously stated, the North American Fruit Exchange makes sales through its own agents or through a number of brokers.

Under the present contract, the same rate of brokerage is charged regardless of which method is used. It is estimated that 25 per cent is sold direct, or not handled by outside brokers. Michigan has a contract with a sales organization which charges only \$10 per car for cars sold direct or where outside brokers or commission merchants are not used. Their contract further provides that not more than 25 per cent of the cars can be sold through such agencies. This system has the advantage of a smaller brokerage fee, and in some seasons may be desirable. The success of this system depends to a large extent on the number of representatives which the selling organization has of its own in the field. Where this number is small and the potato crop is large it may not be advisable to limit the use of outside brokers, in fact it may be necessary to use all sources available to find sufficient outlet for the crop. It is not so much a disadvantage to use outside brokers when they are able to secure a better price than the sales organization. Mr. Prater, sales agent for the North American Fruit Exchange, working with the Minnesota Potato Exchange, claims that these brokers are used only when they can secure higher prices.

Satisfaction of Sales Service. At a special meeting of the Potato Exchange held at Little Falls on May 10, delegates were given a chance to express their opinions regarding the Potato Exchange and the sales service. Particular emphasis was devoted to the questions whether or not the Potato Exchange should employ this agency for its second year, whether or not it should employ the services of another agency, and whether or not it should develop its own sales department. Twenty-six delegates offered

objections and suggestions which are classified in Table XIV.

TABLE XIV. SUGGESTIONS AND OBJECTIONS GIVEN BY 26 DELEGATES AT SPECIAL MEETING

Objection	Number of Delegates	Sales Agency Suggestions	Number of Delegates
General dissatisfaction	7	Favor some outside sales agency	2
Slow returns	7	Prefer N.A.F.E.	2
Brokerage too high	3	Favor own agency; otherwise N.A.F.E.	2
Prefer commission to brokerage	2	Favor own agency; otherwise new private agency	3
Too many cars rejected	1	Want own sales agency	3
Poor adjustments	1	Prefer union with other states	2
Oppose 100 % crop contract	2	Leave matter to Exchange Board of Directors	5
		Well satisfied	3

It is evident from this table that there was considerable dissatisfaction with this service. Many of these complaints may be justified but it must be remembered that this was the first year for the Potato Exchange and its name was not known in the terminal market. It is also difficult for any agency to furnish satisfactory service its first year. The market for Minnesota potatoes has a wide field and is not well-known by most agencies. The greatest difficulty of course arose from the large production which, by making a falling market, led buyers to reject cars on any excuse they might find. Furthermore, the quality of Minnesota stock during the 1920 season was rather low, and with a lax grading system, it is to be expected that there would be considerable dissatisfaction. A large number of these objections, as will be noticed, are not concerning the sales agency, but are faults of the Potato Exchange itself. The slowness of returns occurred in the early season, because shipments started before the office force and office equipment were ready for operations. Later, the large

number of rejected cars made it difficult to estimate a safe advance payment and delayed final payments. The real remedy lies in putting a product on the market so graded that these difficulties will not arise.

Another difficulty resulted from the reconditioning of cars. There were about 300 cars reconditioned during the season. This means resacking, hand sorting, and reloading into other cars, unless it is done in the terminal market. A considerable number of such cars were sold out in Minneapolis. Caring for such cars entails a large expense. A warehouse in Minneapolis where these cars could be directed and reconditioned would undoubtedly be a desirable move.

Private vs State or National Sales Agency. As previously pointed out, there is no question that the sales service of a potato marketing organization must be connected with the various markets by some system of representation. A private agency can be hired to do this; or a department may be developed to handle this work. Most potato exchanges on organizing intend to develop this particular end of the business but to start with employ the services of private agencies. Some organizations later take over the service themselves and others change agencies.

There are certain objections offered to employing the sales service of private brokers. Perhaps the argument most commonly put up in opposition to this service is that an organization working on a brokerage basis of a definite sum per car does not secure the best prices for the products. In other words, their profits are made in proportion to the cars they sell regardless of



the prices for which they sell these cars. There is probably a degree of truth in this argument. The suggestion is sometimes made to employ this service on a commission basis instead of a brokerage basis with the idea that the seller would work harder to get the best price when his commissions are based on selling price. Undoubtedly a commission merchant would get the best price possible did it not cost him any more or require more effort than for a smaller price. Such, however, is not always the case. To get better prices may require additional wires and other expenses. After all, the increased earnings of a commission merchant are not greatly increased by increased prices they might get from making better sales. For instance, take a 600-bushel car of potatoes which is handled on a 5 per cent commission: if it sells for one dollar per bushel the commission is \$30 per car and if the commission agent could by additional wires get ten cents more per bushel he would only increase his commission on the car by 50 cents. Another disadvantage to this service is the high charges when potatoes are high in price. The costs of selling high-priced potatoes are probably less than cheap potatoes. Furthermore, agents prefer handling potatoes on a brokerage basis than on a commission basis. They are interested in being able to estimate ahead of time their profits for the year. It is much more easy to estimate the number of cars which they may handle than it is to estimate the price these cars will bring.

Another objection given to employing private sales service, particularly brokers, is that their sales are often turned over to other brokers or commission men and the sales returns so

fixed up that this practice cannot be detected. There is undoubtedly much of this done with cars which are sold subject to collection by the broker. It may often be true that better prices are secured in some cases in this way, but when additional agents are used there is not so much gain to be made by employing a private agency to take charge of the sales work.

The charges for sales service are often considered to be rather high. Whether or not this is true depends somewhat on the degree of competition for this service. The fact that most large brokerage distributing organizations combine the sale of other vegetables and fruits with the sale of potatoes makes it possible for them to develop this service at less cost than a smaller organization handling potatoes alone. This is a strong taking point for these organizations. They have a further advantage, after being in business for some time, in knowing the characteristics of various markets and should be in a good position to know the demands of such markets. Many of these organizations collect and disseminate market information for the use of organizations employing their services. There is some question, however, as to the ability of a strictly brokerage organization to feel out the market and be in a position to give the best information concerning prices. Organizations which are dealers claim to be in closer touch with prices in that they deal in these products themselves.

While a brokerage concern may be able to operate at a less expense by combining the sale of other vegetables and fruits with potatoes, it may be that potatoes do not require as large a distribution of market agents as do these other products. But if

the areas for potatoes, fruits, and other vegetables overlap at all there will be economy in the combination. The map in Figure #3 shows that the area over which Minnesota potatoes are distributed is rather large, requiring a considerable amount of market representation. The handling charge may not, of course, be properly distributed between potatoes and other products, but even so the charges may be less than what it would cost a cooperative organization handling potatoes alone.

Granting that a cooperative organization can develop a sales and market representative service which, so far as disposing of the crop is concerned, would be as successful as a private agency, the question arises as to the costs of developing it compared with the cost of hiring the service from an agency already developed. It was shown in table XIII that in handling 2277 cars the average cost of sales service per car was \$20.80 or, on the basis of 600 bushels per car, on an average of 3.46 cents per bushel. Had the volume of business reached 4,000 cars and the same proportion of cars handled on the \$10 basis and on the commission basis, this cost would have been \$18.50 per car or 3.13 cents per bushel. This shows a saving of 10 per cent by increasing the volume of business. On 4000 cars this cost would be \$75,214. The 4000 car basis is used because this was the basis upon which the contract with the North American Fruit Exchange was made, and it is furthermore believed that this business will reach that figure shortly. Could the Potato Exchange save enough out of this amount each year to pay the cost of developing a sales organization of its own?

Let us take a typical brokerage organization which handles both fruits and vegetables. Outside of the salesmen who work directly with various marketing organizations, such an organization will have not more than 20 salaried representatives. The rest of the selling is handled through contracted and bonded brokers. If twenty salaried representatives can handle the sales of both fruits and vegetables marketed throughout the entire United States, it seems that five salaried representatives could easily look after the sales of the potatoes for one marketing organization selling in a more restricted territory. The balance of the sales could be conducted through contracted local brokers the same as the private sales organizations operate. There may be some question as to making contracts with these agencies but it should be possible. These agencies contract with the large distributing organizations for \$10 per car, and undoubtedly a cooperative organization could use them at the same figure.

It is not proposed in this discussion to determine conclusively whether or not the Exchange could have performed its own sales service more economically than through an outside agency, but to point out the factors which must be taken into consideration in establishing this service. A competent sales manager probably could not be hired for less than \$10,000 a year. Fifteen thousand dollars would probably cover the salaries of five market representatives. It may be safe to assume that 50 per cent of the 4000 cars could be sold through these representatives and by direct sales. This leaves 2000 cars to be sold through brokers at \$10 per car or a total of \$10,000. Whether or not this service could be maintained

for \$75,000 depends on whether or not the remaining \$40,000 is sufficient to cover office and field expenses of the representatives, telegram expenses, expense of collecting market information and numerous other selling expenses. The answer to this question lies in a more thorough analysis of these costs.

During the past year there has been considerable agitation for a national sales agency which would furnish service for the various state and district organizations. Recently a convention was held in Chicago attended by members from the Exchange of Minnesota, Michigan, and representatives from New York, New Jersey, and North Dakota. The advisability of a national sales agency was discussed and steps were taken in this direction by appointing a committee representing the various states.

On first consideration it might appear that a national organization given a large business might operate more efficiently than a smaller unit. This for a large part is undoubtedly true, but it must be remembered that the problems and markets of the various states are different. Minnesota does not market to any large extent in the territories in which Maine, New Jersey and Virginia operate. Michigan's territory is also on the whole farther east than that of Minnesota. These territories overlap to a considerable extent but not entirely. Where the marketing problems are divided in this way it is doubtful if any particular advantages can be gained through the immediate formation of a national marketing organization. The Exchange might unite with similar organizations in Michigan and Wisconsin to some advantage. An organization of this kind might be able to study the market

demands more thoroughly and avoid competition in disposing of their product. After such district organization had proven its worth several similar organizations might to advantage federate into a national agency.

Before such steps are taken it also seems advisable that the state exchanges should first be made more efficient. At the present time this will require, at least in Minnesota, a thorough checking up of the efficiency of the local units. At the present time, the operating costs of the local units range from 12 cents to 40 cents per hundredweight. It is not wise to go ahead with a still larger cooperative marketing unit until the smaller units are made efficient. After this has been done it may be advisable to expand by developing a sales service and later perhaps uniting the various organizations into a national marketing service.

Chapter IX

TRANSPORTATION PROBLEMS

The potatoes handled by the Potato Exchange in 1920 were assembled from 76 shipping points, and distributed to 292 different destinations. An undertaking of this size introduces some important transportation problems, such as figuring freight rates and freight differentials, routing cars, protecting cars in cold weather, tracing car movements, collecting railroad claims, looking after car shortage and the like. All transportation problems, as stated in Chapters IV and V, are handled by a special traffic department.

Freight Rates and Differentials, and Car Routing. When a local association notifies the exchange that it has a car of potatoes on track to be sold, one of the factors determining where this car will go is the freight rates to the various markets. Oftentimes larger offers are made for potatoes at more distant markets, but the increased freight rates or poor train connections make it more profitable to sell elsewhere. Where there are several cars for sale and several orders, considerable cars can be saved by combining the sales in such a way as to get the smallest possible freight cost. Other things being equal, sales are made after considering the two factors, f.o.b. price and freight rates. Oftentimes a more distant market may make a seemingly better offer after considering freight rates, but because of the greater distance more risk is involved in transit. This is particularly true in hot weather or cold weather shipments. Another consideration is of course the general trend of market prices. This is more true of

cars handled as "rollers" than f.o.b. sales, but even in the latter case under falling prices long hauls give a longer time for prices to change and if the fall in price is great the buyer is more apt to reject the shipment.

In case two railroads have the same rates on the shipment of a car, providing other things are equal, it is a wise policy to divide the shipments between roads as much as possible. Oftentimes two roads have the same rates but one offers better service or its yards are more accessible in Minneapolis. Under such circumstances of course, the best service should be selected.

In Chapters V and VI mention was made of freight differentials. Where a pooling system is to be used in the marketing of a product from a large number of local associations, it is essential that each local association be given any advantage it may have in freight rates. It would not be fair to pool a car from Lancaster in Kittson county with a car from Jasper in Pipestone county without giving the latter the advantage which it has by reason of location. The movement of car shipments is southward and the southern shipping points usually have smaller freight rates into the terminal markets. To take care of this situation and at the same time pool between local associations some system of freight differentials must be worked out. Before sufficient sales had been made to determine the exact markets to which Minnesota potatoes go, the Exchange worked out its freight differential on the basis of the commodity tariff on potatoes from Minnesota to the six destination groups as given in the tariff guide. On this basis the average freight was figured from each shipping point to each of the six destination



groups. The lowest average for the various shipping points was called the base or zero. The differential over this base is easily determined. Table XV shows these differentials as figured for 4 shipping points. A town with a differential of 15 cents means that the shipments from this point must receive 15 cents less per hundredweight than a town with a zero differential.

TABLE XV. METHOD BY WHICH FREIGHT DIFFERENTIAL IS DETERMINED.

Shipping Points	Freight Per Hundredweight to Group Destinations						Ave.	Freight Differential
	1	2	3	4	5	6		
Aldrich	.44	.475	.495	.505	.525	.56	.500	16
Elk River	.29	.325	.325	.34	.405	.44	.344	0
East Grand Forks	.465	.50	.515	.535	.545	.58	.523	18
Wadena	.44	.475	.495	.505	.525	.56	.50	16

This method of determining freight differential was used for a considerable period until sufficient sales had taken place to determine more accurately to what markets the Minnesota crop went. Later the differential was determined in the same way, but instead of using territorial groups as destinations, the actual destinations were used. The reason for making this change was to have the differential built up on a larger territory. The destination territory from which the group basis was used only covered a small number of states.

A further need for the change from the group destination to actual destinations is that the latter gives a more representative basis. Under the first system, certain shipping points did not get the advantage of through rates to certain points. Consequently the freight from the local point had to be added to the Minneapolis through rate. This resulted in giving the local association a higher differential in such cases. The latter system

combines the destinations in such a way that the final differentials takes this point into consideration.

This system of determining freight differential is undoubtedly as equitable as possible. Only under very unusual circumstances can any degree of injustice result, such as the following for example: The market for a certain variety of potatoes is either entirely close by or far away and an association shipping this variety exclusively pools with another association which ships only a small quantity of this variety, but more of other varieties for which market distances are reversed. In such a case the association shipping the one variety alone would be at a disadvantage if its markets were close by and at an advantage if its markets were more distant.

Cold Weather Shipments. Many Minnesota potatoes are shipped during cold weather and consequently need protection in transit. This service can be handled by the shipper or by the carrier. From October 15 to May 15 railroad companies will furnish protective service on Minnesota potatoes to all points west of eastern Illinois. During the winter months, Minnesota potatoes usually are marketed in the states of Illinois, Iowa, Missouri and Kansas; therefore protective service can be obtained if desired. This service consists of the furnishing of car lining, false bottoms, car stoves and fuel and a man to messenger the cars while enroute from shipping point to destination.

Under the carriers protective service, all car linings, false bottoms, stoves and fuel are furnished by the company. A messenger is also put in charge of one or more cars. Any losses

resulting from freezing in transit while under carriers protective service are borne by the railroad company. During extreme cold weather railroad companies often advise shippers not to ship and very often refuse to furnish the service.. This practice is perfectly reasonable, for during very low temperatures it is almost impossible to prevent freezing. The costs of this service average about six cents per hundredweight.

Under the shippers protective service, the shipper furnishes his own car lining, false bottoms, stoves, and fuel and the messenger to go with the cars. He can buy this material where he sees fit and if he desires it returned he must notify the buyer to that effect, in which case he pays the freight on arrival. Under this type of service the Minnesota Potato Exchange requires its local associations to equip their own cars and to messenger them as far as Minneapolis. At Minneapolis they are taken over by the Exchange and put in charge of their own messenger. It is desirable when shipping cars in cold weather that the sales be grouped at one destination so that a messenger can look after several cars in a train and thereby reduce expenses. Another saving can be made between the shipping points and Minneapolis by ordering cars in such a way that a messenger may start from the farthest point and pick up the cars at the various shipping points on the line. This practice is followed where possible, but it is difficult to make a very large collection. The same thing is true from Minneapolis to the destination points. Orders do not always come as they are desired. The costs of this type of service averages about \$20 per car from Minneapolis to destination, and a flat rate of thss

amount is assessed against all cars handled in this way. To this charge must be added the expense of equipping the cars, the messenger cost to Minneapolis and then a margin to cover risk. Taking everything into consideration, it is more expensive and less satisfactory for shippers to perform this service themselves than to hire the services of the carrier. The Exchange handled about 600 cars which required protection in transit; 95 per cent of these were shipped under carriers protective service.

Railroad Claims. One of the greatest services that local associations can get through federating into a central exchange is that of collecting railroad claims. Undoubtedly one of the greatest weaknesses of the local organizations was their lack of knowledge concerning transportation problems and their inability to collect just claims against railroads. It is one thing to know just what claims can be collected from these companies and another thing to know how to make the collections. There are several classes of claims which a shipper can collect where the proof of his claim is properly substantiated. Among the more important of these claims are claims for shortage or loss, claims for damaged goods, claims for losses resulting from delays in transit, and claims for overcharges made on freight rates and other services.

Losses or shortages resulting in transit are quite common. This shortage may be the result of a miscount either at the shipping point or destination or it may be that the car has been actually broken into and the potatoes stolen. These losses are very often 10 sacks; this probably means that a miscount was made. In either case, the railroad makes a count at both ends of the line

so that there is every reason to make the claim. This type of claim is usually rather difficult to collect, but where care is taken to file the claims properly and substantiate them by proper affidavits, they are usually collectible. Claims for damages and claims against delays in transit may be considered together because their collection is similar in that the exact amount of such claims is rather difficult to determine. Claims are frequently made altogether too large and are not collectible unless reduced. Railroad companies do not contract to deliver goods for any particular market, and so do not pay delay claims based on losses resulting from a decline in market price. Delay claims may, however, be collected for any deterioration in the product caused by the delay.

Both damage and delay claims are rather difficult to collect in full

Claims for overcharges may be on freight or various other car charges. They are rather numerous, but often not very large in amount. Their amounts are definite and for this reason rather easy to collect. Claims of this nature are usually paid promptly because regulations require that 6 per cent interest may be collected on overcharge if not paid in 60 days.

In making claims against railroads, the exchange uses the uniform Form No. 12 for all types of claims. This form requires the submittal of various information; namely, the original bill of lading, the original paid freight bill, the original invoice or certified copy, and any other particulars obtainable in proof of loss or damage claims. In order to collect for delays and to keep itself constantly informed as to the location of its cars at all times, the Exchange has been following a policy of tracing car

movements by postal card service. Most of the roads over which they ship have offices in the Twin Cities and through them it is possible to get daily information by post card as to the movement of any car.

Tables XVI and XVII summarize the results of railroad claims filed by the Minnesota Potato Exchange. Table XVI shows that there was a total of \$22,306.98 of claims filed and that \$7,031.58 or 31.4 per cent was collected by June 15. Prior to May 1, 287 of the 423 claims were collected, or 67.8 per cent; or \$6,772.92 of a total of \$17,216.75, or 30.9 per cent. It is evident that the smaller claims were the easiest to collect.

TABLE XVI. SUMMARY OF RAILROAD CLAIMS FILED BY THE MINNESOTA POTATO EXCHANGE

Period	Kind of Claim	Filed		Collected			Per cent of Amt. Claimed	
		No.	Amount	No.	Amount	Percent	Withdrawn	Reduced
Prior to 5/1/1921	Shortage of Goods	58	1453.67	42	792.21	54.5		.003
Prior to 5/1/1921	Damage (Includes delay claims)	53	8252.72	15	750.79	9	3	1.5
Prior to 5/1/1921	Overcharge	312	7510.36	230	5229.92	70	2	
May 1 to June 15	Shortage, Damage & Overcharge	90	5090.23		258.66			
Total		513	22306.98	287*	7031.58	31.4		

\*To May 1, 1921

Of the 423 claims filed prior to the first of May, 58 were for shortage of potatoes, 53 for damage done in transit and for delays and 312 were for overcharge of freight and other transportation expenses. A collection of 70 per cent was made on the overcharge claims, 54.5 per cent on the shortage claims and only 9 per cent on the damage claims. The 5 claims which were withdrawn

represent 3 damage, and 2 overcharge claims. They were afterwards found to be without justification. Claims were reduced to the extent of 1.5 per cent on shortages and damages.

Table XVII shows that claims filed to December 1 or before protection was required in transit were very nearly all collected. During this period, over two-thirds of the shipments were made showing that by far the greater number of claims are filed during the winter months.

TABLE XVII. SUMMARY OF RAILROAD CLAIMS BY MONTHS SEPTEMBER TO MAY

From	To	No. Filed	No. Collected	No. Reduced	No. Canceled	Number Unpaid			
						Total	Damage	Over-charge	Short- age
9/7	10/1	8	8	1					
10/1	11/1	1	1	1				3	
11/1	12/1	41	37	1	1	3		5	
12/1	1/1	50	44			6	1	4	7
1/1	2/1	72	49	2		23	12	10	2
2/1	3/1	55	36			19	7	1	2
3/1	4/1	45	21		1	23**	11	56	7
4/1	5/1	151	79			72	9		
		423	275*	5	2	146	40	77	18

\*This figure does not agree with number of collections to May 1, in Table XVI.

\*\*The distribution of the unpaid claims does not check with the total.

Some care must be used in interpreting this table, however, because the dates given apply to the date that the claims were filed and not to the dates at which the cars were shipped. Most claims were promptly filed, so that the general statements made still hold true. Seventy-seven of the 146 claims yet unpaid represent overcharges and a considerable proportion of these will be collected. Many of the damage claims will never be collected because of the difficulty of determining the amounts of such damage. Many of these are claims against freezing in transit.

On May 1, there were 11 claims yet to be filed, 5 for shortages, 4 for damages and 2 for overcharges. These claims were delayed because of incomplete investigations and difficulty in securing necessary data to substantiate them. The filing of these claims will complete the years business, as shipments are complete.

Car Shortage. Considerable difficulty has been experienced in the past BY some of the local associations in securing sufficient cars when desired to move the crop. The trouble is usually worst in October and gradually eases off during the winter months. This trouble has been more generally felt at the shipping points at some distance from the Twin Cities, particularly in the Red River Valley section. In some seasons it has caused a great deal of loss and inconvenience. The warehouses of local associations become filled, and associations are obliged to turn away their own members. This situation is the result in most cases of a general car shortage.

There has been much complaint by some associations as to the system used in distributing the cars at the local point. When an order is placed for a car, an association having a large volume of business is given no more preference in securing cars than a buyer handling few cars. As a result, a buyer may get all of the cars he needs for his volume and the associations run short. Associations have tried to avoid this difficulty by having private members order cars; but when the members asked that the car be "spotted" at the farmers warehouse, the car has been applied against the associations order. It seems that there should be some system of distributing cars on the basis of the volume represented.



The exchange cannot do anything to relieve this particular situation.

The Michigan Exchange had some success in relieving the general local car shortage by taking matters up with the car distributors of the various railroads. There has been much more trouble over car shortage on some roads than on others. During some seasons, some roads will not permit their cars to go off their own line, thus greatly affecting the shipment of potatoes. During the past year, there has been practically no difficulty in securing sufficient cars. This is the result for the most part of the present economic situation.

A more complete analysis of the traffic problems brought out in this chapter would require a thorough knowledge of traffic regulations. Their importance, however, cannot be over-estimated to an organization marketing a perishable product like potatoes which must be distributed over a wide territory.

Chapter X

PROBLEMS OF THE PURCHASING DEPARTMENT

The by-laws of the Exchange provided for establishing a purchasing department for the handling of supplies wanted by the various local associations. (55) This department was soon organized and put under the supervision of a departmental manager. Table XVIII gives a summary of the operations of this department to the first of May, 1921.

TABLE XVIII. STATEMENT OF COMMISSIONS RECEIVED AND TRANSACTIONS THROUGH THE PURCHASING DEPARTMENT OF THE MINNESOTA POTATO EXCHANGE TO MAY 1, 1921

Commissions.	
On all purchases -----	\$1,831.28
On rutabagas and hay sold-----	215.14
Accrued - On sacks -----	666.88
Accrued - On spraying materials-----	872.80
	<u>\$3,586.10</u>
Losses to May 1 -----	932.47
Balance -----	<u>\$2,653.63</u>
Transactions.	
Number of transactions -----	1214
Cars flour and feed -----	40
L.C.L. cars flour and feed -----	13
Cars apples -----	12
Cars rutabagas and hay sold -----	19
Number sacks sold -----	508800
Potato car stoves -----	169
Rolls car linings -----	468
Pounds formaldehyde -----	541
Pounds corrosive sublimate -----	485
Rods barb wire -----	14400
Rods woven wire -----	390
Hand graders -----	10
Warehouse trucks -----	6
Scales -----	1
Sprayers -----	1
Orders for potato carriers -----	3
Pounds spraying materials ordered -----	32000
Miscellaneous bookkeeping supplies, tags for sacks, twine, needles, etc., not specified.	

(55) Article I, Sec. 10. Appendix II.

This table suggests three important questions: First, is it a desirable practice to combine the handling of supplies with the handling of potatoes? Second, if supplies are to be handled, what types of supplies are best suited to this business combination? And third, on what basis shall these supplies be handled?

Should a Potato Exchange Handle Supplies? Many local associations, both exchange members and non-members, handle supplies through their warehouses. This is particularly true of the older associations of the state. Whether or not it pays these associations to combine the supplies business with their potato business is a local problem and depends largely upon the following six factors: "First, upon how large a business in supplies the association can expect to do; second, upon how much of the year the warehouse must be kept open to handle potatoes; third, upon whether or not the warehouse stores potatoes; fourth, upon whether or not a competent manager can be secured for only part of a year; fifth, upon how much extra pay such a manager will require if a supply business is added; and sixth, upon how economically the regular merchants are handling supplies."<sup>(56)</sup> Some associations may find it profitable to handle supplies and others may not. At any rate, several associations have built up a large supply business in the past, and they have done it without the aid of a central organization. Others have always done a limited business.

With this basis to work upon, whether or not an Exchange should handle supplies for these locals, depends on two factors: First, upon whether or not it is able through its larger volume of business to buy supplies from dealers at a less figure than the

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(56) Local Cooperative Potato Marketing in Minnesota. P. 56.

associations can buy them; second, assuming that purchases can be made at saving, whether or not this saving is sufficiently large to cover the additional costs of this service.

Table XIX summarizes the savings as certain commodities that the Minnesota Potato Exchange was able to get from dealers. These reduced prices in some cases require the placing of an order in advance of delivery at a definite price. In other cases dealers will fill orders as they are sent in by the Exchange on basis of the current special quotations. Many of these savings are considerable and if a large volume of business was handled, the business might become a profitable undertaking. There are other advantages besides these savings. Many local associations are not in a position to get in touch with the various dealers and do not know where they can make their purchases. In some commodities, a central organization might be in a better condition to know when is the cheapest time to make purchases. The practice of local associations selling their potatoes through the Exchange has relieved the local managers of considerable contact in terminal markets and at the same time they have lost contact with dealers handling supplies.

Costs of the Service. The costs of an organization maintaining two departments ordinarily should be divided between the departments on the most logical basis possible. These costs or expenses are both direct and indirect; that is, as viewed from the basis of the two departments. Labor costs is one of the direct expenses of the purchasing department. In case of the Exchange, this includes salaries of the department manager, stenographer,

clerical help and part of the accountants salary. These costs ordinarily would be assessed against this department on the basis of the time the services of these employees were used in the department. Other direct departmental expenses are office materials, telegrams, telephone expense, etc. If a cost system were installed each department would be assigned all the direct expenses connected with its operation.

TABLE XIX. GROSS SAVING ON VARIOUS COMMODITIES--DIFFERENCES IN DEALERS' PRICES TO LOCAL ASSOCIATIONS AND TO THE EXCHANGE

Item	Saving
Flour	5 to 10 cents per barrel.
Feed	25 to 50 cents per ton.
Apples	\$15 to \$25 per car.
Sacks	\$2 to \$4 per M. in carlots, and about \$5 per M. in more than carlots. Very few associations want carlots.
Car stoves	35 cents per stove.
Car linings	10 cents per roll.
Spray material	
a. formaldehyde	
b. corrosive sublimate	3 cents per pound in carlots; 5 to 6 cents per pound in 3-carlots, or more.
c. Paris green and arsenic compounds	
Barb wire	10 cents per roll.
Woven wire	1 to 3 cents per rod.
Warehouse equipment	No particular saving, as each warehouse has special requirements; 15 per cent on some graders.
Sprayers	No reduction on standard makes; 5 per cent below jobbers prices on new makes manufactured outside the state.
Fertilizers	No reductions as yet, but expect considerable.
Farm Machinery	No reduction on standard makes.

Besides the direct expenses to be carried by a department is the proportional share of the indirect or overhead expenses. In case of the Exchange these expenses consist of organization and field expense not directly caused by any particular department, directors expenses, general manager's salary, rent, light, insur-

ance, depreciation, publications, etc. A common method of dividing these expenses between departments is on the basis of the direct expenses of the departments. That is, if there were \$10,000 of indirect expenses to distribute between the potato department having direct expenses of \$24,000 and the purchasing department having a direct expense of \$6,000, the potato department would carry \$8000 of the overhead and the supplies department, \$2,000.

The above division of costs is applicable to a departmental business in which both departments are thriving. But where one department is just being developed, such a system of distribution may be detrimental. In the case of the Exchange such a distribution would lower the costs on potatoes, but it would kill the supplies business; for this reason it would be an unwise system to use in case the department is desired to grow.

When a business is primarily organized to handle potatoes and the supplies business is considered as a side line, it may be advisable in the beginning at least, to let the potato department carry all of the overhead costs. This policy would not in any way strengthen the financial condition of the business, but it would enable members to get their supplies more cheaply and as a result cause this department to grow. It would not reduce the costs of handling potatoes. If all members handled supplies and potatoes in about the same proportions there would be no injustice to this system.

After this policy has been followed for some time the supplies department may develop into the largest business of the two. As this department develops it should gradually take over its share

of the overhead expenses. The fact that many of the large potato shipping associations do not buy their supplies through the Exchange and that some of the associations who sell but few potatoes, buy a large amount of supplies, calls for a careful distribution of the costs between departments. The patronage dividends in supplies and potatoes must be kept separate and so must the departmental expenses. In no case should any department be made to carry the direct expenses of another department.

The Minnesota Potato Exchange made no division of the overhead expenses but assessed them all on the potato department. There was no system used in determining the direct costs of the purchasing department. This department was assigned the salary of the purchasing department manager who spent most of his time in the potato department. This was the only expense carried by this department. The reason for this was that the department was just getting organized and there was very little business over which to distribute the expenses and no patronage dividends were calculated. Next year a system of accounting is to be installed whereby the department will probably carry all of its direct expenses and perhaps some of the general overhead.

The Michigan Potato Growers Exchange of Cadillac, Michigan and the South Carolina Produce Association, both handle some supplies for their members. The Michigan organization handles similar supplies to those mentioned in Table XIX. Their manager states that the supplies department carries a reasonable proportion of the organizations overhead expenses and that supplies have been handled on a 1 per cent margin. No patronage dividends have been accumulated. The Carolina association has no local associations as mem-

bers and limits its supplies to seed potatoes and potato barrel covers. They do not have a special supply department and all expenses are carried by the potato business. (57)

Whether or not an Exchange should develop a supplies department depends on the savings mentioned in Table XIX and the costs which have just been discussed. The savings shown seem to be sufficiently large to grant the taking on of the work. The costs of this service will depend largely on the volume of business that can be expected. A large business volume may result in a considerable saving to the local associations. This volume will depend first on the kinds of supplies that are handled and second on the method by which they are handled.

What Supplies Shall Be Handled? The kinds of supplies that can best be handled are those which can be handled through the local warehouses. This will depend on whether or not the warehouse is used for storage. If a warehouse is used for storage of potatoes this will interfere with the handling of feed in the winter time. Farm machinery, small hardware, and groceries are not good lines to handle.

If the warehouses are accessible a considerable variety of supplies may be handled. Those most commonly handled by the larger local associations are feed, salt, coal, spray materials, fencing, sacks, and some farm machinery, etc. The exchange might develop a large supply business and handle almost any kind of supplies that the local associations desired. Such a business would necessitate a special department and require a very careful distribution of the various costs. If the handling of these supplies

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(57) Information concerning potato exchanges other than the Minnesota Potato Exchange was collected by correspondence with these organiza-



was successful a large and well paying business might result.

Another method which might be used is to handle only such supplies as are connected with the growing and marketing of potatoes. This would include spray materials, sacks, warehouse equipment, car linings, car stoves, and potato machinery, etc. Such a policy would limit the exchange's operations to strictly potato growers. If potato machinery were excluded from the list there would be no particular injustice resulting even if expenses were not correctly assigned to the handling of supplies. This system would not necessitate a special supplies department. The supplies work could be concentrated to a slack period of the year and could be handled by one of the regular office force. Whether or not limiting the field of supplies to potato supplies only would be satisfactory to all of the local associations is difficult to determine. It seems, however, that such a policy would have the organization free to concentrate its efforts on the marketing of potatoes for which it was originally organized.

On What Basis Shall Supplies Be Handled? There are two general methods of handling supplies, one in which orders are solicited before hand and pooled together, and the other in which supplies are purchased and carried in stock. Many of the local associations follow the latter system and carry a large supply of goods in their warehouses. Others make purchases only when they are covered by grower's personal orders.

The order system for either a local or a central organization has certain advantages and disadvantages. It has the advantage of being simple insofar as price determinations are concerned. All costs and expenses can be assigned to each order, a margin

added to cover the expenses of the central organization and the selling price is determined. There are no risks involved in price fluctuations if the order is covered with cash or trade acceptances. There are, furthermore, no difficulties connected with financing of purchases made in this way. The disadvantage of this system is that it is slow. In order to pool the orders of the various locals, the local associations, if they are following a similar method, must pool their growers' orders. All this takes time. Growers do not like to order ahead of time and so wait until the last minute and then expect prompt service. If a large amount of supplies are used by a local association it might better carry them in stock, for even if the central organization followed the stock method, it could not fill its orders on many kinds of supplies without some delay. If the exchange limited its supplies to potato materials only, it could perhaps induce its associations to ordering ahead of time. When once this policy was adopted, the supplies work could be out of the way in a short time.

The policy of purchasing supplies and carrying them in stock is not a desirable policy for a central organization to use. It would require large warehouse facilities and a large amount of working capital. There would also be great risks involved in price fluctuations. The goods would have to be sold at competitive prices and many times at a considerable loss. There is a further difficulty of determining a just margin on all commodities.

The policy used by the Exchange has been to have all of its orders covered by cash or trade acceptances. On the basis of these orders, arrangements have been made with various dealers to ship direct to the associations. In some cases, these arrangements

can be made only when orders are received in advance. In other cases, dealers give reduced prices and take the orders as they come in from the locals. The locals make their orders through the Exchange, which refers them to the dealer where they are filled. The dealer draws a draft on the local for the full amount, turning a commission over to the Exchange. This system works very satisfactorily when the right kind of arrangements can be made with the dealers.

Another problem involved in handling of supplies is the matter of prices. One method is to sell the supplies to the locals at the smallest price possible and let the locals sell on the same basis to the growers. If this price is below the local dealer's price a large amount of supplies will be handled, and the growers realize at once the benefits of their organization. One difficulty with this system is that many dealers object to having local associations undersell other local dealers. Some dealers claim they are in danger of being boycotted if they sell their supplies to cooperative organizations who undersell local merchants. There is also some danger in selling on too narrow a margin and losing money on supplies.

The other system is the Rochdale system, in which supplies are sold at local competitive prices and if any surplus arises a patronage dividend is declared. This system is equitable but does not seem to work very well with Minnesota cooperatives. The farmers are going to buy where they can get the best price at the time of purchase. They have but little faith in patronage dividends. They object to ordering their supplies ahead of time and then pay local prices with the hope of a few dollars in six months or a year after.

The total saving to one farmer is not enough to make much difference. He believes that "a bird in the hand is worth two in the bush."

The policy of the Exchange has been to sell to local associations at the same price that they would have to pay dealers and to hold back the margins shown in Table XIX. This practice has not been satisfactory. Many local growers claim that they could have bought supplies more cheaply of local dealers than from their associations, but expecting a patronage dividend, they stuck to their organization. And there have been no patronage dividends declared during the year.

Patronage Dividends. Under the order system, patronage dividends result from assessing too large margins to cover expenses. Where supplies are purchased they result from selling supplies at too high prices. Surpluses created in this way should be kept separate from those accumulated on potatoes so that patronage dividends can be declared separately.

The state law requires that non-members must receive one-half the rate of patronage dividend as members. Adjustment can be made for this the same as in the handling of potatoes or by charging non-members higher prices for their supplies than members.

Should Locals Contract to Buy Their Supplies Through Exchanges? The success of the crop contracts in the handling of potatoes suggests the idea that such a system might be used in the handling of supplies. Both the Minnesota and Michigan exchanges have thought that such a system would be desirable. This suggestion usually arises from the central organization as a solution to the lack of patronage of their supplies department. If the organi-

zation was primarily a supplies business and a large amount of overhead expense was incurred the contract might be used for a short period, but even in this connection its advisability is questionable. Local associations and members of local associations prefer doing their buying where they can get the most for their money and would not subject themselves to a contract requiring that they make their purchases through their potato organization. Some supplies are handled as a sideline by local merchants and in this way are made as "leaders" in getting trade. A contract would prohibit growers from taking advantages of such bargains.

Summary. In this chapter, three questions have been considered; first, whether or not an exchange should handle supplies; second, what kind of supplies should it handle? and third, upon what basis should they be handled? The answer to these questions depends to some extent upon what arrangements can be made with dealers and upon various other local factors.

Upon the basis of the information that has been gathered it seems that the margins obtainable are sufficiently high to justify an exchange taking over this service for its local associations. A rather complete line of supplies, as shown in Table XIX can be handled without owning a warehouse or without carrying of these supplies in stock. It would require, however, a special department involving considerable expense. It would necessitate careful distribution of expenses within departments. Where this system is followed, the department must carry its own share of the general overhead as well as its own direct expenses. The policy of limiting the supplies handled to potato supplies only, excluding machinery, would limit the business to potato associations only.

There would be less need for a special department, for by following an order system, the work of handling the few supplies needed could be crowded into the slack season and be out of the way during the rush season. In this way the supplies could be handled without extra help. Either of these policies is workable and the one to use will depend on the particular circumstance under which the organization is operating.

Chapter XI

THE ACCOUNTING SYSTEM

The purpose of this chapter is to present the accounting system used by the Minnesota Potato Exchange, the classification of accounts, the various forms and their use, and a brief criticism of the system in general. It is beyond the scope of this thesis to analyze fully the accounting needs of the organization and to present an accounting system which will adequately meet these needs.

Classification of accounts. The following classification of accounts is taken from the general ledger of the exchange. Some minor changes are made in naming certain accounts to avoid unnecessary explanations. On the whole, these accounts are self explanatory. It is believed that the discussion following the classification will clear up any peculiarities in the accounts named.

Balance Sheet Accounts (See appendix IV)

Assets

Liabilities

Current:

Bank account  
Petty cash  
Advances to association  
Miscellaneous association  
charges  
Accounts receivable  
Retention fees  
(Brokerage receivable)  
Railroad claims  
Bills receivable  
Trade acceptances

Current:

Accounts payable  
Net returns  
Drafts  
Unfilled purchase department  
contracts

Accrued:

Payroll  
Telegraph accruals

Inventories:

Stationery and printing  
Purchase department supplies

Reserves:

Reserve for depreciation - Auto  
Reserve for depreciation -  
furniture and fixtures

Fixed:

Net worth:

furniture and fixtures  
Auto truck  
Organization expense

Capital stock  
Surplus  
Loss and gain

Deferred:

Interest accrued on notes receivable  
Prepaid insurance  
Prepaid premiums on security bonds

Income and Expense Accounts (See appendix IV)

Income Accounts:

Brokerage . . . . . (1 Reserved for selling expense 7¢  
  )2 Reserved for adjustments 2¢  
  )3 Reserved for publicity and education 1¢  
Income from freight adjustments  
Income from car protection service  
Purchase department commissions  
Subscriptions to weekly

Expense Accounts:

Brokerage N.A.F.E.  
Salaries  
Rent  
Stationery and printing  
Postage  
Traveling expense  
Telegraph " "  
Telephone " "  
Auto " "  
Warehouse " "  
Publicity and education expense  
Publicity expense  
C.N.D. service  
Advertising  
Miscellaneous freight expense  
Directors  
General expense  
Depreciation on furniture and fixtures  
Depreciation on auto truck

Accounting forms. Various office forms used by the exchange were presented in Chapter V and the pool sheet in Chapter VI. These forms will be considered here only in so far as is necessary to explain the basis for journal entries.

Combined cash book and journal. The combination cash book



and journal (page 169) used by the exchange is the only journal form used. This form gives eight special debit and credit columns in addition to the general ledger columns. There is a debit and credit column for each of the following accounts: Freight Differential, Net Returns, Drafts, Bank, Association Net Returns and Advances, and General Ledger. In addition, there are two blank columns a debit "Collection and discount" column and a credit "Brokerage" column. The two columns under "Association accounts" are control accounts over the various association accounts. They are separated this way in order that advances may be kept distinct from other charges or credits to association accounts.

In order that the operation of the journal may be made more clear, the information shown on the pool sheet (page 100) is here carried thru the journal. The journal entries for each car are purposely grouped together. Entries for one car might be sufficient for illustrating, but in order to show the final settlement of the pool, all of the cars are considered.

The following explanation of the transaction for the first car, lot 677, shows the general operation of the journal. A draft is drawn on the car for \$732.57. The bank account is debited, and drafts credited (see page 94). The draft is carried as a liability against the deposit until paid or returned. An advance is made to the local association for \$580, "advances" is debited and the bank credited. Advances are treated as a loan rather than a payment for produce. This car was rejected at the original invoice price, but the draft accepted with the understanding that an adjustment be made for \$96.00. Drafts are debited for \$732.57, Net Returns credited \$636.57, and Accounts Payable credited \$96.00. The account is then

paid (a debit to Accounts Payable \$96.00 and a credit to the Bank \$96.00). Had the car been accepted without an adjustment, "Net Returns" would have been credited with \$732.57. The "Net Returns" account must, however, be credited with the actual net returns for the car, plus any deductions chargeable to the association. The car is in a pool, and the pool price is figured from the net returns as determined from the original sale price; consequently the adjustment entries at the right of the pool sheet must be journalized. The association net returns is debited and "Net Returns" credited. The net returns column on the pool sheet (page 100) is made to agree with the net returns account in the ledger and from here the pool price is determined. Adjustments are made on the pool price for freight differentials and the price to each association, and their amount determined (see page 95). The pool sheet also details all of the charges against the gross amount going to any car. From this information, the patron's voucher (form No. 8) is made out. This information is then carried to the journal as follows: "Net Returns" is debited for \$684.00, "Advances" credited for \$580.00, "Brokerage" credited for \$48.00, "Association Net Returns" credited for \$96.00, and "Association Net Returns" debited with \$40.00. The last entry shows that the advance of \$580 exceeds the total returns for the car by \$40.00.

In this pool the credit balance of the Net Returns account before the final settlement for the cars is \$6180.52. This figure is used in determining the pool price, but since the price is not figured nearer than the half-cent, an undistributed balance, \$49.20, results. (See page 97) In order that the pool can be

completely closed and the Net Returns account balanced, "Net Returns" is debited, and "Freight Differential" credited \$49.24. The undistributed balance carried in the Freight Differential account is an income to the exchange, in this pool amounting to nearly \$5.00 per car.

The following summaries give the results of posting the entries of this pool:

Bank		Drafts	
8232.27	7916.81	6245.58	6245.58
	315.46		
8232.27	8232.27		
Bal. 315.46		Net Returns	
Association Control Accounts:		6206.25	6206.25
1. Advances		Accounts Payable	
4905.00	4905.00	96.00	96.00
2. Net Returns		Central States	
1343.99	1202.50		18.00
	141.49	Brokerage	
1343.99	1343.99		424.96
Bal. 141.49		Freight Differential	
North American Fruit Exchange			49.24
35.25			

Bank	\$315.46
Association N.R.	141.49
N.A.F.E.	35.25
	\$492.20

Central States	\$ 18.00
Brokerage	424.96
Freight Differential	49.24
	\$492.20

The Bank, Drafts, Net Returns, Advances, and Accounts Payable accounts are balanced. Assets are increased \$492.20. The \$18.00 is an account payable to Central States. This leaves a gross income in the Brokerage, and Freight Differential Accounts of \$474.20

No information is shown as to the expenses of handling these cars. On page 124, it is shown that the average brokerage

paid the North American Fruit Exchange was \$20.80 per car. Assuming that \$208.00 was paid as brokerage on these ten cars, there is \$266.20 left to cover the expenses of the exchange. From these figures, the proportion of the overhead expense to the brokerage paid is over 100 per cent. While this is somewhat of an estimate, it is closer to the facts than might be supposed, because we know rather definitely the brokerage paid and the brokerage earned; and the indome, freight differentials, averaged between \$4 and \$5 for all cars handled.

The Pool Sheet. The use of a pool sheet, made necessary by the pooling business practice, greatly complicates the bookkeeping system of the exchange. The primary object of such a form is to show all the necessary information concerning each car in a pool. As the form is now used by the exchange, it serves only as a computation record. The question might well be asked as to the necessity of transferring to the journal all of the information shown on this form. In other words, could not the pool sheet also serve as a special journal, thus avoiding duplication in bookkeeping? The writer is of the opinion that this form might be so devised as to serve this additional function.

The pool sheet gives the gross credit to "Net Returns", but a vast number of adjustments resulting from rejected cars make it difficult to so arrange the debit columns that the form might be self balancing. For this reason, it is probably better to take the credits to net returns from the cash journal, cash being the principal debit account when net returns is credited.

The situation is different, however, in handling the debits to the net returns account. The amount of the pool creditable to any

association (Amount Pool) as determined from its pool price is a debit to net returns. Associations receive credit for the amount of the advance and for adjustments which have previously been charged to their accounts. A credit is made to Brokerage, and the balance is charged on credited to the associations. Now while there are several credits representing the gross charge to Net Returns, there are not the constant adjustments to be made on Net Returns debits as is the case with Net Returns credits. This makes it possible to consider this part of the pool sheet as a journal. The "Pool Amount" can be posted directly as a debit to Net Returns, "Advance" can be credited with the total of the "Amount" advanced, "Association Net Returns" (control) credited with the amounts shown in the "Car Charge" column, "Brokerage" credited in one total, and "Association Net Returns" credited or debited with the final balance due or chargeable to the associations. "Advances" and "Association Net Returns" are control accounts, which fact necessitates additional folio columns in order that the association accounts can be properly debited and credited.

Such a change in the use of the Pool Sheet has an advantage in avoiding various journal entries, but this advantage may be offset by the disadvantage of not having in one journal entry the final settlement for each car, as is shown under the explanation "Final", given for each car in the pool.

Special Journals. As previously stated, the combination cash journal is the only journal form used by the exchange, The purchasing department offers one exception to this statement; but owing to the fact that the various forms used in this department

have not as yet been definitely decided upon, they will not be considered in this thesis. This Purchasing Department is but a part of one organization, which of course necessitates that its accounts connect with the general accounts of the business as a whole.

One difficulty of the present combination journal is in the handling of cash received. No record is shown of cash until it is deposited. An audit report advises strongly that the exchange use a special cash journal to enable them to keep in one place all cash transactions.

The "Brokerage" account appearing as an income in the classification of accounts is credited with 10 cents per hundred-weight for all cars handled. This account is then closed out to the following accounts: "Reserve for Selling Expense", 7¢ per cwt, "Reserve for Adjustments or Sinking Fund" 2¢ per cwt, and "Reserve for Publicity and Education" 1¢ per cwt. These so-called reserve accounts are purely divisions of the gross income (brokerage) account. They are merely temporary accounts against which expenses of different nature may be assessed. In closing the books, the net balances of these accounts are carried to surplus. In drawing up income statements, two methods are followed. Sometimes the Brokerage account is carried on the report as a total, at other times it is divided as above. In the latter case, expense items are also divided.

All expenses other than the direct expenses of the purchasing department, publication expense, and various adjustments, are carried against the "Reserve for Selling Expense". The "Reserve for Publicity and Education" account carries all expenses relating to the publication of the official organ and similar items. This

leaves the "Reserve for Adjustments or Sink Fund" account as a place to dump any irregularities or adjustments which do not seem to fit into any other account in the classification. Instead of setting up definite expense accounts, the adjustments are charged directly to this reserve.

Railroad Claims. The handling of railroad claims further illustrates how the "Reserve for Adjustments or Sinking Fund" account is used. It will be noticed that "Railroad Claims" appears in the assets in the classification of accounts given. Where the amount of a claim is thought definitely to be collectable, the exchange prepaid the item, thus crediting "Net Returns" and debiting "Railroad Claims". This makes the claim purely their asset. In other cases, the claim is allowed but instead of charging "Railroad Claims" and carrying the amount as an asset, the charge is made against the reserve. In some cases where an adjustment is made to the buyer, a claim is filed, but because of great uncertainty as to the justice of the claim, the amount is charged against the car. If the claim is paid later, the local association is given credit. When a claim is paid which is not carried on the books as an asset, and which has not been charged against the car, the sinking fund account is given the credit.

While most adjustments are made on the Sinking Fund Account, many are charged directly to the Freight Differential Account. This is particularly true when the sinking fund becomes rather depleted. There is no particular uniformity in the handling of adjustments of like nature. This can be justified to a certain extent. In the first place, railroad claims are of different natures;

furthermore, while a railroad company may be liable to a certain degree, the exchange may be at fault in the way it routed or protected the car. If all claims were classified and those of like nature handled in the same way, a great deal of difficulty might be avoided.

It has been stated that railroad claims which have been charged to local associations or which have been allowed by making an adjustment on the sinking fund account do not appear on the financial records of the exchange. Table XX shows that at the close of the fiscal period there were 124 of these claims amounting to \$11,794.71.

TABLE XX

Unpaid Railroad Claims Not Carried on the Financial Records of the Exchange.

Kind	Number	Amount
Overcharge	11	\$ 254.08
Refund of passenger fare overcharge	35	5,700.02
Over allowance	16	737.91
Loss	16	717.71
Damage	44	9,412.60
Balance on claims allowed	2	48.39
Total	124	\$11,794.71

Part of these claims are an asset to the exchange. Collections made on some of them are to be paid to local associations. The financial records should show this information. The gross amount might be carried as an asset and a liability set up for the amount payable to local associations in case of collection. A careful estimate of the balance would justify carrying as a reserve, in the nature of a surplus, the amount thought collectable. The remainder could be carried in a "Reserve for Uncollectable Claims"



account. When a claim is collected, the proper adjustments could easily be shown.

Another method might be to carry on the book only those claims which are collectable to the account of the exchange. If this is done, the practice of allowing part of a claim and charging the balance to an association would give rise to difficulties. This practice of allowing part of a claim is followed in several cases, but in most cases the balance is not charged against an association.

General Criticism. From the foregoing discussion it is evident that certain fundamental criticisms may be made against the accounting system as used by the exchange. These criticisms can briefly be summed up as follows: First, the various journals and pool forms as used require considerable unnecessary bookkeeping. Second, the journals do not give the necessary information concerning the receipts and disbursements of cash. Third, the classification of accounts shows many items which are misnomers. Fourth, the practice of making various adjustments thru the Sinking-fund and Freight Differential Accounts has lead to confusion, making it impossible to determine what these accounts really mean. Fifth, many items in the assets, particularly association charges, are doubtful of collection. Sixth, outstanding railroad claims should appear on the books. These items should be carefully investigated, and their real worth determined. Seventh, journal entries are made with no explanation, and drafts deposited in bunches, thus making it almost impossible to trace transactions thru the books. Eighth, the office records and routine lack system, thereby giving rise to a large number of errors and disputes.

MINNESOTA POTATO EXCHANGE—COMBINED CASH BOOK AND JOURNAL

AMERICAN PRINTERS, ASKOV, MINN.

POOL DIF.	NET RETURNS	DRAFTS PAID & RETURNED	COL. & DISC'T	BANK	ASSOCIATION ACCOUNTS		GENERAL LEDGER	Post-ings	GENERAL LEDGER	Post-ings	ASSOCIATION ACCOUNTS		BANK	DRAFTS ISSUED	BROKER-AGE	POOL DIF.	NET RETURNS
					NET RETURNS	ADVANCES					ADVANCES	NET RETURNS					
				73257				10/10						73257			
		73257			58000			X. 10/13	Gonovick	Adv.			58000				63657
								10/25	Afc Payable	6.84 Hayer Adjustment	20	9600					9600
								11/4	Afc Payable	6.84 Hayer Adjustment			9600				
	68400				9600			12/31	Gonovick	Adjustment					4800		
				73258	4000			12/31	Gonovick	Final		58000	9600				73258
								10/10		Draft Lot 678							
								P. 10/13	Park Rapids	Adv.			58400				73258
	68400							11/6		Draft paid							
								12/31	Park Rapids	Final		58400	5200		4800		
				59285				10/10		Draft Lot 688							
								I. 10/13	Long Prairie	Adv.			47300				59285
								10/27		Draft paid							
	30							11/6		Collection			30				
	53100							11/21	Long Prairie	Final		47200	2800		3600		
								10/10		Draft Lot 677							
				64560				W. 10/10	Wadena	Adv.			51500				
								11/8		Draft returned			07560				
								12/31		Returns							43930
					18900			W. 12/31	Wadena	Adjustment							18900
					14750			W. 12/31	Wadena	Final		51500	18900		4200		
	59850							10/10		Draft Lot 690							
								B. 10/14	Braham	Adv.			48800				
								11/4		Draft returned			61324				
								11/6		Returns							
								11/20		Switching			400				
	400							B. 12/31	Braham	Adjustment		488	12600				12600
					7940			B. 12/31	Braham	Final							
	57060							10/10		Draft Lot 673							
								W. 10/14	Wadena	Adv.			52800				
								10/27		Draft paid							
								11/3		Collection			68				
	68							11/5	Afc Rec.	Costs 24 percent							
	1800							12/31	Wadena	Final		52800	2850		4200		
	59850							10/10		Draft Lot 768							
								M. 10/10	Monroemen	Adv.			41400				
								10/27		Draft returned							
								11/10		Returns							
								11/10		Additional Int.				200			
	200							M. 12/31	Monroemen	Adjustment		41400	24975				24975
								M. 12/31	Monroemen	Final							
	59643							10/10		Draft Lot 837							
								W. 10/10	Wadena	Adv.			45800				
								10/23		Draft paid							
								10/30		collections				75			
	75							12/31	Wadena	Final		45800	9850		4200		
	59850							10/10		Draft Lot 832							
								P. 10/14	Park Rapids	Adv.			35000				
								11/15		Draft returned			45665				
								11/15		Returns							
								14 12/2	NA.F.E	Adjustment							
								P. 12/31	Park Rapids	Adjustment		350	6982				
								14/31	Park Rapids	Final							
	51300							10/10		Draft Lot 877			51600				
								10/19	Leaf River	Adv.			67399				
								11/9		Draft returned							
								11/9		Returns							
								11/20	Leaf River	Adjustment		51600	31254				
								12/31	Leaf River	Final			51		5300		46175
	78300							12/31		10 close Pool No. 10							21224
	4924										11400	490500	1202	791681	50	4924	620625
	620625	624538			823227	134399	490500	13125						624538	42496	4924	620625

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APPENDIX I

Group A

Associations shipping during season of 1920-21  
(95 associations)

\*Members of Minnesota Potato Exchange

Association	Town	County
*Bay Lake Fruit Growers' Association . . . . .	Aitkin	Aitkin
*Akeley Potato Growers' Association. . . . .	Akeley	Hubbard
*Aldrich Potato Shipping Association . . . . .	Aldrich	Wadena
Alexandria Farmers' Potato Warehouse Association	Alexandria	Douglas
*The Produce Association . . . . .	Askov	Pine
*Farmers' Produce Association. . . . .	Audubon	Becker
Averill Potato Growers' Association. . . . .	Averill	Clay
Avon Farmers' Potato Shipping Association. . . . .	Avon	Stearns
*Backus Potato and Produce Association . . . . .	Backus	Cass
*Bagley Cooperative Company. . . . .	Bagley	Clearwater
Beltrami Farmers' Produce Company. . . . .	Beltrami	Polk
*Northern Produce Exchange . . . . .	Bemidji	Beltrami
Bertha Farmers' Produce Company. . . . .	Bertha	Todd
*Blackduck Potato Association. . . . .	Blackduck	Beltrami
Borup Produce Company. . . . .	Borup	Norman
*Farmers' Produce Association. . . . .	Braham	Isanti
Potato Growers' Association. . . . .	Bronson	Kittson
*Cambridge Cooperative Produce Company . . . . .	Cambridge	Isanti
*Farmers' Cooperative Association. . . . .	Carlton	Carlton
*Farmers' Cooperative Produce Company. . . . .	Clarissa	Todd
Climax Shipping Association . . . . .	Climax	Polk
*Cohasset Farmers' Cooperative Shipping Assoc'n.	Cohasset	Itasca
*Dale Farmers' Elevator Company . . . . .	Dale	Clay
*Detroit Cooperative Association . . . . .	Detroit	Becker
*Eagle Bend Produce Association. . . . .	Eagle Bend	Todd
*Farmers' Cooperative Marketing Association. . . . .	East Grand Forks	Polk
*Elk River Potato Exchange. . . . .	Elk River	Sherburne
Farmers' Cooperative Produce Association . . . . .	Fertile	Benton
*Foley Potato Shipping Association . . . . .	Foley	Benton
Frazees Farmers' Equity Warehouse & Produce Assoc	Frazees	Becker
*Fosston Potato Growers' Association . . . . .	Fosston	Polk
Farmers' Potato Warehouse Association. . . . .	Garfield	Douglas
Farmers' Potato Association. . . . .	Gary	Norman
Genola Farmers' Produce and Potato Association	Genola	Morrison
*Farmers' Produce Exchange . . . . .	Grand Rapids	Itasca
*Farmers' Potato Warehouse Association . . . . .	Gonvick	Clearwater
*Grandy Produce Shipping Association . . . . .	Grandy	Isanti
*Halstead Elevator Company, Inc. . . . .	Halstad	Norman
Halstad Potato Growers' Association. . . . .	Halstad	Norman
*Hampton Potato Growers' & Shippers' Assoc'n. . . . .	Hampton	Dakota
*Hawley Potato Growers' Association. . . . .	Hawley	Clay
*Hendrum Potato Growers' Association . . . . .	Hendrum	Norman
Hewitt Farmers' Society of Equity. . . . .	Hewitt	Todd

Equity Cooperative Warehouse Association . . .	.Hinokley	Pine
*Isanti Cooperative Produce Association. . . .	.Isanti	Isanti
*Jasper Potato Growers' Association. . . . .	.Jasper	Pipestone
*Farmers' Cooperative Exchange . . . . .	.Jenkins	Crow Wing
*Karlstadt Potato Growers' Association . . . .	.Karlstad	Kittson
*Kelliher Produce and Shipping Association . .	.Kelliher	Beltrami
*Lake Park Produce Association . . . . .	.Lake Park	Becker
*Lancaster Potato Growers' Association. . . . .	.Lancaster	Kittson
*La Porte Potato Growers' Association. . . . .	.La Porte	Hubbard
*Lengby Cooperative Produce Association. . . . .	.Lengby	Polk
*Darling Cooperative Produce Association . . . .	.Little Falls	Morrison
*Long Prairie Potato Growers' Exchange . . . .	.Long Prairie	Todd
*McGrath Potato & Produce Association. . . . .	.McGrath	Aitkin
*McIntosh Cooperative Potato Association . . . .	.McIntosh	Polk
*Farmers' Society of Equity. . . . .	.Mahnomen	Mahnomen
*Hennepin Growers' Exchange. . . . .	.Minneapolis	Hennepin
Northern Potato Growers' Sales Company . . . .	.Moorhead	Clay
*Farmers' Cooperative Produce Association. . . .	.Moose Lake	Carlton
*Mora Cooperative Potato & Produce Association	.Mora	Kanabec
Potato Shipping Association. . . . .	.Motley	Morrison
Nelson Potato Warehouse Company. . . . .	.Nelson	Douglas
*North Branch Farmers' Produce Association . .	.North Branch	Chisago
*Oak Park Cooperative Potato & Produce Shipping Association	.Oak Park	Benton
*Ogema Produce Association . . . . .	.Ogema	Becker
*Cloverleaf Potato Shipping Association. . . . .	.Ogilvie	Kanabec
*Farmers' Produce Exchange . . . . .	.Park Rapids	Hubbard
*Pequot Farmers' Produce Shipping Association.	.Pequot	Crow Wing
Farmers' Society of Equity . . . . .	.Perham	Otter Tail
*Pillager Shipping Association . . . . .	.Pillager	Cass
*Equity Exchange of Pine River . . . . .	.Pine River	Cass
*Potato Growers' Association . . . . .	.Randall	Morrison
*Brooks Potato Association . . . . .	.Red Lake Falls	Red Lake
Farmers' Cooperative Produce & Shipping Assoc'n.	.Remer	Cass
*Round Prairie Produce Exchange. . . . .	.Round Prairie	Todd
Rush City Market Company . . . . .	.Rush City	Chisago
*Pennington County Produce Association . . . .	.St. Hilaire	Pennington
*Cooperative Produce Association of Sawyer . .	.Sawyer	Carlton
*Sebeca Cooperatige Company. . . . .	.Sebeca	Wadena
*Shelly Potato Growers' Association. . . . .	.Shelly	Norman
Farmers' Cooperative Warehouse Company . . . .	.Solway	Beltrami
*Shovel Lake Shipping Association. . . . .	.Shovel Lake	Aitkin
Stillwater Market Company. . . . .	.Stillwater	Washington
Farmers' Cooperative Produce Company . . . . .	.Swanville	Todd
*Turtle River Shipping Association . . . . .	.Turtle River	Beltrami
*Twin Valley Potato Growers' Association . . . .	.Twin Valley	Norman
*Farmers' Exchange . . . . .	.Verndale	Wadena
Farmers' Cooperative Warehouse Association . . .	.Vergas	Otter Tail
*Equity Cooperative Creamery-Milling Shipping Association.	.Wadena	Wadena
*Leaf River Potato Growers' Association. . . . .	.Wadena	Wadena
*Westbury Produce Company. . . . .	.Westbury	Becker
Winger Cooperative Potato Growing and Marketing Association.	.Winger	Polk
*Potato Growers' Association of Wrenshall. . . .	.Wrenshall	Carlton

Group B

Associations not shipping during 1920-21  
(40 Associations)

These associations may not be operating for any of the following reasons: failure of potato crop, organization not completed in time for this seasons's business, renting warehouse to buyers, temporarily discontinuing business (some of these may never start again)

\*Members of exchange. \*\*Organization not complete.  
\*\*\*Renting warehouse to buyers.

Association	Town	County
*Adolph Potato Growers' Association. . . . .	Adolph	St. Louis
*Farmers & Merchants' Elevator Company . . . . .	Argyle	Marshall
Aurora Potato Exchange . . . . .	Aurora	St. Louis
***Barnum Farmers' Cooperative Company . . . . .	Barnum	Carlton
*Farmers' Produce Association. . . . .	Big Fork	Itasca
The Farmers' Cooperative Warehouse Association	Big Lake	Sherburne
*Farmers' Cooperative Warehouse Company. . . . .	Bock	Mille Lacs
*Farmers' Produce Association. . . . .	Boy River	Cass
*Brookston Produce Exchange. . . . .	Brookston	St. Louis
***Farmers' Potato Warehouse Association . . . . .	Cedar	Anoka
Farmers' Cooperative Produce Association . . . . .	Clearbrook	Clearwater
Farmers' Shipping Association. . . . .	Clear Lake	Sherburne
*St. Louis River Produce Association . . . . .	Cloquet	Carlton
*Cook Produce Association. . . . .	Cook	St. Louis
*Farmers' Produce Association. . . . .	Cromwell	Carlton
Detroit Cooperative Dairy Association. . . . .	Detroit	Becker
*Dorset Produce Association. . . . .	Dorset	Hubbard
Duluth Produce Growers' Association. . . . .	West Dueth	St. Louis
*Wolf Potato Exchange. . . . .	Eveleth	St. Louis
*Forbes Potato Exchange. . . . .	Forbes	St. Louis
Cook County Cooperative Warehouse Association	Grand Marais	Cook
*Farmers' Produce & Shipping Association . . . . .	Groningen	Pine
*Hackensack Potato Association . . . . .	Hackensack	Cass
***Farmers' Equity Potato Warehouse. . . . .	Hasty	Wright
Potato Growers' Association. . . . .	Hillman	Morrison
*Hines Produce Association . . . . .	Hines	Beltrami
*Holyoke Produce Association . . . . .	Holyoke	Carlton
*Leonard Cooperative Produce Association . . . . .	Leonard	Clearwater
*Little Falls Potato Growers' Association. . . . .	Little Falls	Morrison
Little Fork Potato Warehouse Association . . . . .	Little Fork	Koochiching
Potato Growers' Association. . . . .	Little Sauk	Todd
*Meadowlands Cooperative Creamery Company. . . . .	Meadowlands	St. Louis
*Munger Potato Growers' Association. . . . .	Munger	St. Louis
*Puposky Potato Association. . . . .	Puposky	Beltrami
**Produce Association. . . . .	Rutledge	Pine
Equity Cooperative Produce Company . . . . .	Shafer	Chisago
*Thompson Produce Exchange . . . . .	Thompson	Carlton
*Farmers' Produce Exchange . . . . .	Warba	Itasca
*** * Farmers' Cooperative Association. . . . .	Walker	Cass
Williams Cooperative Produce Company . . . . .	Williams	Beltrami

APPENDIX II

ARTICLES OF INCORPORATION OF  
The Minnesota Potato  
Exchange

We, the undersigned, for the purpose of forming a co-operative association pursuant to the provisions of Chapter 382, Session Laws of 1919 (and acts amendatory thereof and supplementary thereof), do hereby associate ourselves as body corporate and do hereby severally sign and acknowledge the following articles of incorporation:

ARTICLE I

The name of this association shall be THE MINNESOTA POTATO EXCHANGE.

The general nature of its business shall be to conduct an agricultural, mercantile and manufacturing enterprise upon the co-operative plan. It shall have the power to buy and sell its own products, or those of its members or of other co-operative associations as it, or its members, or other co-operative associations may determine, either individually or collectively as the case may be. It shall also for the above purpose have 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, and to erect buildings upon its own lands or leased grounds.

ARTICLE II

The principal place of transacting the business of this association shall be as designated by the Board of Directors and within the state of Minnesota.

ARTICLE III

The time for the commencement of this association shall be February 3d, 1920, and the period of its duration shall not exceed thirty (30) years without renewal.

ARTICLE IV

The names and places of residence of the incorporators of this association are:

Harry B. Plummer, Hawley, Minn.  
E. P. Nauertz, Little Falls, Minn.  
Ludvig Mosbaek, Askov, Minn.  
James Cumming, East Grand Forks, Minn.  
Joseph Hoffman, Ogilvie, Minn.  
John W. Erickson, Aitkin, Minn.  
M. J. Thompson, Wadena, Minn.  
E. E. Schulke, Tenstrike, Minn.

ARTICLE V

The management of this association shall be vested in a board of not less than nine (9) directors. The names and address of the first board of directors are:

Harry B. Plummer, Hawley, Minn.  
E. P. Nauertz, Little Falls, Minn.  
Ludvig Mosbaek, Askov, Minn.  
James Cumming, East Grand Forks, Minn.  
Joseph Hoffman, Ogilvie, Minn.  
John W. Erickson, Aitkin, Minn.  
H. O. Bjorge, Lake Park, Minn.  
M. J. Thompson, Wadena, Minn.  
E. E. Schulke, Tenstrike, Minn.

The first officers of this association shall be: President, Ludvig Mosbaek; Vice President, James Cumming, and Secretary-Treasurer, Harry B. Plummer.

All of the above named officers and directors shall hold their respective offices until the annual meeting of the association to be held the first Monday after the first Tuesday in July, 1920, at which time a board of directors shall be elected by ballot by and from the stockholders of the association. The annual meeting of this association shall be held at its principal place of business on the first Monday after the first Tuesday in July in each year. As soon as practicable, after their election, the directors shall meet and elect from their number a president, vice-president, and secretary-treasurer.

ARTICLE VI

The amount of the capital stock of this association shall be Fifteen Thousand Dollars (\$15,000), which shall be paid in money or property or both in such manner and in such amounts as the board of directors may order. The capital stock shall be divided into one hundred fifty (150) shares of the par value of One Hundred Dollars (\$100) each.

ARTICLE VII

The highest amount of indebtedness or liability to which this association shall at any time be subject shall not exceed the authorized capital stock.

ARTICLE VIII

These articles may be amended in the manner provided by law.

IN TESTIMONY WHEREOF, we have hereunto set our hands this 27th day of January, 1920.

JOSEPH HOFFMAN,  
JOHN W. ERICKSON,  
M. J. THOMPSON,  
E. E. SCHULKE.

HARRY B. PLUMMER,  
E. P. NAUERTZ,  
LUDVIG MOSBAEK,  
JAMES CUMMING,



Signed, sealed and delivered in the presence of:

WARREN GIBSON,  
Notary Public, Morrison County, Minn.  
My Commission expires October 17, 1920.

State of Minnesota, County of Morrison--ss.

On this 27th day of January, 1920, before me, a Notary Public, within and for said County, personally appeared Harry B. Plummer, E. P. Nauertz, Ludvig Mosbaek, James Cumming, Joseph Hoffman, John W. Erickson, M. J. Thompson, E. E. Schulke, to me known to be the persons described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

WARREN GIBSON,  
Notary Public, Morrison County, Minn.  
My Commission expires October 17, 1920.

BY-LAWS OF THE MINNESOTA POTATO EXCHANGE AS ADOPTED  
AT LITTLE FALLS, MINNESOTA, JANUARY 27, 1920,  
AND AMENDED AT WADENA, MINN., ON July  
12, 1920.

ARTICLE I

Objects.

Section 1. The objects of this Exchange shall be:

- (1) To provide such facilities and equipment and establish such agencies as are necessary for the development and maintenance of an efficient and economical system of selling and distributing the products of its members.
- (2) To collect and disseminate information among its members relative to crop conditions, prospective yields, and final crop estimates in Minnesota and other producing sections, and to co-operate with State and Federal agencies in an effort to make this information reliable.
- (3) To collect and to furnish to the members current information relative to the state of the various markets for potatoes and other farm products, and to show the movement of these products to such markets as completely as possible.
- (4) To secure improved conditions and service in transportation especially as regards the securing of cars, prompt deliveries, just and equitable freight rates and uniform methods of insulation and frost protection on winter shipments.
- (5) To establish a claim department for the collection and adjustment of all claims of members against transportation companies, purchasers and others.
- (6) To establish and adopt uniform grades and standards in connection with the handling, storing, and marketing of potatoes and other farm crops.

(7) To correct trade evils and abuses by discouraging all customs and practices not in accordance with sound business principles

(8) To extend and develop carlot markets for Minnesota potatoes and other farm products and specifically endeavor to open new markets.

(9) To strive to increase by judicious and scientific advertising the demand for Minnesota potatoes and other farm products.

(10) To furnish an agency for buying farm supplies co-operatively.

(11) To co-operate with State and Federal Agencies along such lines as may tend to benefit the agricultural interests of Minnesota

(12) Generally to do any other lawful work for the benefit of the members and the building up of the agricultural interests of Minnesota

## ARTICLE II

### Membership

Section 1. Any local co-operative potato or produce shipping organization in Minnesota that is duly incorporated under the laws of this state, may become a member of this Exchange by agreeing to comply with the requirements of these by-laws and by becoming the owner of at least one(1), but not more than ten (10) shares of the capital stock.

Such local must, in evidence of its co-operative character, comply with the following essentials of co-operation.

(1) Adhere to the principle of one vote to each stockholder regardless of the number of shares held.

(2) Limit the dividends on capital stock to a reasonable rate of interest.

(3) Pro-rate earnings among the members or patrons on the basis of business furnished.

Section 2. Each local association affiliating with this Exchange shall elect a representative and alternate to this Exchange who shall hold office until the local shall certify to the Exchange the election of their successor.

Section 3. Each local association affiliating with this Exchange shall enter into a contract with this Exchange in the form required by the Board of Directors. Said contract shall specify, among other things:

(a) That the local association appoints the Minnesota Potato Exchange its sales agent to sell all potatoes and products contracted to said Exchange by the local association, and that it binds itself to deliver such products to the Exchange for sale at such time and place as may be agreed upon by said local and this Exchange.

(b) That the contract shall run continuously, but that if the local wishes to withdraw from membership it may cancel such contract on the first of July of any year by giving to the Exchange a notice in writing at least thirty days prior to the said July 1st.

(c) That if the local fails to live up to its agreement, or fails or refuses to deliver to the Exchange for sale the pledged

products, it shall pay to the Exchange liquidated damages, as provided in the contract, for each hundredweight of produce not delivered by it, as the contract may determine; said sum may be deducted from any money in the possession of the Exchange due to said local and that such claim shall be a charge against the loan note of the local association.

Section 4. At the time of becoming a member of this Exchange each local association shall give a negotiable promissory note, payable on demand, to the order of this Exchange. Such note shall be a non-interest-bearing note for the sum of five hundred dollars (\$500).

Such note shall be the property of the Exchange for the purpose of being pledged by the Board of Directors as collateral security for any loans that may be necessary in the business of the Exchange. Any association's note shall also be available in the settlement of any liquidated damages that may result from the failure of said local to live up to its contract with this Exchange.

### ARTICLE III

#### Rights and Duties of Members

Section 1. The local associations shall not sell any potatoes or other farm products contracted to this Exchange to any outside party, except as provided in the contract entered into between said local and this Exchange.

Section 2. Each local shall have a number or mark which shall be permanently stamped on every sack, box, barrel, crate, basket, or other package packed by it, or under its direction, for shipment through the Exchange. Any loss occasioned by improper handling or grading shall be charged to the local whose mark is found on such package.

Section 3. On or before July first of each year each local shall report to the Exchange the acreage of potatoes and other products to be grown by its members that year and the acreage, the products of which it promises to market through the Exchange. During the growing season, each local shall furnish such information concerning the crops pledged to the Exchange, as may be requested by the Manager.

Section 4. No local shall own more than ten (10) shares of capital stock of the Exchange at any one time, and no member shall have more than one (1) vote, regardless of the number of shares owned by it.

Section 5. Every local upon uniting with this Exchange agrees that in case it desires to dispose of its shares of stock in the Exchange it shall give the Exchange the first opportunity to purchase it at par, or at its book value if above par. If the Exchange waives its right of purchase by failure to act within thirty (30) days, a member association may sell its stock to any association eligible to membership.

Section 6. Any local may withdraw from the Exchange at any time between the first of June and the first day of the following July and cancel its contract as provided in Article II, Section 3,

provided that such withdrawal shall not affect any right or lien which the Exchange has against the retiring local or its property until its indebtedness to the Exchange is fully paid. Having satisfied all claims of the Exchange, said retiring member association shall receive from the Exchange its loan note provided for in Article II, Section 4, and may dispose of its stock in the Exchange as provided in Article III, Section 5.

Section 7. At any time, if a local shall cease to be a shipper of farm products, or shall, for a period of two (2) consecutive years, fail to patronize the Exchange or shall fail to comply with the requirements of these by-laws, the Exchange may elect to purchase the shares held by said local, cancel its contract and its membership upon tender to it of the par value, or book value if higher, of its shares, together with any interest or refunds due and unpaid, and upon returning to it the member's loan note less any indebtedness then due the Exchange.

#### ARTICLE IV.

##### Meetings.

Section 1. The annual meeting of the Exchange shall be held on the first Monday after the first Tuesday in July of each year, at such time and place as may be determined upon by the Board of Directors.

Section 2. Notice shall be given of all meetings of the membership by a notice in writing mailed to each member association at least ten (10) days before the date set for such meeting.

Section 3. The president shall call a special meeting upon the majority vote of the directors or the written request of ten (10) per cent of the members. The notice for such special meeting shall state the time, place and purpose as provided by law.

Section 4. The president of the Exchange shall preside at all meetings of the members, and shall cast the deciding vote in all cases of a tie.

Section 5. A majority of members shall constitute a quorum for the transaction of business, when the total number of members does not exceed one hundred (100), and twenty-five (25) per cent of the total number of members in all other cases, provided that in the latter case the total number present shall not be less than fifty (50).

Section 6. The Board of Directors shall hold at least four regular meetings each year, the exact time and place to be determined by the president.

Section 7. Special meetings of the Board of Directors may be called by the president or any three (3) of said Board. Each member of the Board of Directors shall be duly notified of all such meetings. No business except that mentioned in call for special meeting of the Board of Directors shall receive final action at said meeting.

Section 8. A majority of the directors shall constitute a quorum at all meetings of the Board, and a majority vote of the members present shall decide all questions except the transfer of

grounds and buildings which shall require the presence of the whole Board and a majority vote thereof.

Section 9. The order of business at the annual meeting, and so far as possible at all other meetings of the members, shall be:

- (1) Calling of roll.
- (2) Proof of the notice of meeting.
- (3) Reading and disposal of all unapproved minutes.
- (4) Annual reports of officers and committees.
- (5) Election of directors.
- (6) Unfinished business.
- (7) New business.
- (8) Adjournment.

#### ARTICLE V.

##### Directors and Officers.

Section 1. Directors of the Exchange shall be members in good standing of their local associations and shall be elected by the body of delegates. The election of a delegate of a local association to the directorate of this Exchange shall thereby vacate the office of delegate and a successor shall be appointed to said vacated office in the manner provided in the by-laws of said delegate's local association. All directors of this Exchange shall be delegates at large for and during the term of their office as directors and may exercise all the powers of delegates.

The directors shall be elected at each annual meeting of this association and shall hold office until their successors shall have been elected and qualified. The elections shall be by ballot, in the manner prescribed by law, and each member of record shall be entitled to cast one vote, and only one vote, for each director to be elected.

Section 2. The Board of Directors shall meet within ten (10) days after the first election, and within ten (10) days after each annual election thereafter, and shall elect by ballot from their number a President and a Vice-President, and a Secretary-Treasurer, Directors and officers shall hold office until their successors shall have been elected and qualified and shall enter upon the discharge of their duties.

Section 3. Any vacancy in the Board of Directors shall be filled by the remaining members of the board to service until the next annual meeting. If any director shall cease to be a member of his local association his office as director shall be declared vacant.

Section 4. The compensation of the directors and officers, other than the Manager and Secretary-Treasurer, shall be eight dollars (\$8.00) per day, together with the necessary expenses incurred while in the actual service of the Exchange. The compensation of the Secretary-Treasurer and of the Manager shall be as fixed by the Board of Directors.

Section 5. Any director of the Exchange may, for cause, at any annual or at any special meeting called for the purpose, at which a majority of the delegates shall be present, be removed from office by vote of not less than two-thirds of the delegates present

Such director shall be informed in writing of the charges preferred against him at least ten (10) days before such meeting and at such meeting shall have an opportunity to be heard in person, or by counsel and by witnesses in answer thereto.

#### ARTICLE VI

##### Duties and Powers of Directors

Section 1. The Board of Directors shall manage the business and the affairs of the Exchange, and make all necessary rules and regulations not inconsistent with law or with these by-laws, for the management of the business and the guidance of the officers, employees and agents of the Exchange.

Section 2. All potatoes and other farm products grown by the members of local associations for sale through the Exchange shall be handled and graded in accordance with the rules of the Exchange subject to such inspection as may be established by the Board of Directors.

All brands, labels, trademarks, and the like established by the Exchange shall be registered and become its property and they shall be attached only to such grades as shall be ordered by the Board of Directors.

Section 3. The Board of Directors shall have the power to employ and to dismiss a business manager, and to fix his compensation.

Section 4. All directors, officers, agents, and employees charged by the Exchange with responsibility for the custody of any of its funds or property shall give bonds for the faithful performance of their official duties. Such bond shall be furnished by a responsible bonding company, or other surety suitable to the Board of Directors, and the cost thereof shall be paid by the Exchange.

Section 5. The Board of Directors shall be responsible for the installation of a thoroughly adequate and scientific system of accounts in the Exchange, and for the provision of such other accounting appurtenances that may be necessary to conduct the business in a safe and orderly manner. It shall be the duty of the Exchange to furnish at cost a uniform standard system of accounts for the locals and to assist in installing the same.

Section 6. The Board of Directors shall be responsible for the annual auditing of all records and accounts of the Exchange. This audit shall be made by a competent accountant during the thirty (30) days preceding the annual meeting. Special audits shall be made at any time upon the written request of the Board of Directors or a majority of the members in the manner above described.

#### ARTICLE VII

##### Duties of Officers

Section 1. The President shall:

(a) Preside over all meetings of the Exchange and of the Board of Directors. Be ex-officio member of all committees.

(b) Sign as President, with the Secretary-Treasurer, all notes, deeds, and conveyances of real estate, as well as all certificates of stock of the Exchange.

Section 2. In the absence or disability of the President the Vice-President shall preside and perform the duties of the President.

Section 3. The Secretary-Treasurer shall:

(a) Keep a complete record of all meetings of the Exchange and of the Board of Directors.

(b) Sign as Secretary-Treasurer, together with the President all notes, deed and other instruments on behalf of the Exchange.

(c) Serve all notices required by law and by these by-laws.

(d) Perform such other duties as may be required of him by the Exchange or the Board of Directors and shall receive such compensation therefore as the Board of Directors may determine.

#### ARTICLE VIII Duties of Manager

Section 1. Subject to the order of the Board of Directors, and the by-laws and rules of the Exchange, the Manager shall have entire charge of the marketing of all the products and supplies handled by the Exchange. He shall secure information as to production and marketing conditions and shall furnish the same to the members on request.

He shall encourage the production of the varieties of produce best adapted to the producing area and in greatest demand by the trade. He shall, as may be required by the Board of Directors, conduct packing schools, in order that member associations may become acquainted with the best methods of grading and packing and labeling their products. He shall have charge of the grading, packing and inspection of all products handled by the Exchange and shall have control of the brands and labels as their use on such products in accordance with the rules of the Exchange, and shall perform such other duties as the Board of Directors may prescribe.

Section 2. Under the direction of the Board of Directors, the manager shall employ and discharge all employees, agents, and laborers.

#### ARTICLE IX. Corporate Practice

Section 1. Certificates of stock shall be issued to each holder of full paid stock. Each certificate shall state the par value of the stock, the number of shares represented, the name of the members to whom issued, and shall bear the name of the President and Secretary-Treasurer of the Exchange and be numbered and issued in numerical order from the stock certificate book. A record of each certificate shall be kept on the stub thereof.

Section 2. Transfers of stock shall be made only on the books of the Exchange and before a new certificate is issued the old certificate must be surrendered for cancellation. No stock shall be transferred unless any and all indebtedness owing to the Exchange by the member shall first be paid. The stock books of the Exchange shall be closed for transfer ten (10) days before the annual mem-

bership meeting and ten (10) days before the time set for payment of interest and patronage refunds.

Section 3. Stock shall be assessable to twenty (20) per cent of its par value, but no assessment shall be made to exceed five (5) per cent of the par value of the stock of any one time. No assessment shall be levied except at a regular or special meeting of the stockholders, notice of which shall have been given in writing to each member at least ten (10) days prior to such regular or special meeting.

Section 4. The treasury stock of this Exchange shall consist of such issued and outstanding stock of the Exchange as may be donated to it or otherwise be acquired by it, and shall be held subject to disposal by the Board of Directors.

Section 5. The promissory notes required from local associations under Article II, Section 4, of these by-laws, shall be assets of this Exchange, but they shall not be pledged save as collateral for the establishment of working capital, nor shall they be sold except for the purpose of liquidating damage suffered by violation of contract by a local association. Upon such violation of contract by a local association the Exchange may recover damages from the proceeds of sale of the collateral of said local. Any remaining proceeds from such sale shall be returned by the local, which shall be required immediately to negotiate a new note to the order of the Exchange.

#### ARTICLE X

##### Business Practice

Section 1. The local associations shall receive payment after each shipment through the Exchange upon the receipt of the proceeds by the Exchange or at the end of each pooling period.

Section 2. The Exchange may make individual sales for each local association, and at the discretion of the Board of Directors the Exchange may pool all products of the same grade and quality for such periods as the Directors shall decide. When this method of sales is adopted all locals shipping products of the same grade and quality shall receive exactly the same price. Returns to the locals shall be on the basis of an average price for each grade during the pooling period. The total amount available for payment to the locals after each pooling period, or after each shipment, shall be the net proceeds to the Exchange from a shipment, or shipments, as shown by the account, or accounts, of sales, less the deductions provided for in Section 3 hereof. These deductions may be made, in the discretion of the Board of Directors, as a fixed percentage charge upon the returns for products sold, or as a fixed charge per one hundred pounds or per ton of products shipped.

Section 3. The charge provided for in Section 2 hereof shall be adequate to cover the following items:

- (a) Current operating expenses.
- (b) Accrued operating expense. This deduction shall be adequate to cover such items of expense as wages and salaries, insurance, taxes, repairs, renewals, and replacements, depreciation, interest, and other items.



(c) Surplus reserve. The amount of this deduction shall be determined by the Board of Directors and shall be continued until the earnings thus retained in the business shall amount to at least thirty (30) per cent of the paid-up capital stock. This surplus shall be employed in the business for a legitimate purpose.

(d) Dividends on capital stock. This deduction shall be sufficient to pay a rate of six (6) per cent.

(e) Miscellaneous. This deduction shall be for any other purpose, at the discretion of the Board of Directors.

Section 4. If the Board of Directors shall so decide, the Exchange may purchase merchandise and supplies for the locals; provided, that each local ordering such supplies or merchandise shall pay for the same at the time of ordering it or shall deposit a sum sufficient to cover the payment with some bank, approved by the Board of Directors. The Exchange shall handle such business upon a margin sufficient to cover all expenses and other items as indicated in Section 3 hereof.

Section 5. The Exchange may handle products of non-members, at the discretion of the Board of Directors, and under such provisions as the Board may direct.

Section 6. At the end of the fiscal year any earnings resulting from an over estimation of expenses and handling costs shall be disbursed to member associations and to non-members in such a manner as to comply with the law, on the basis of the patronage or business done by each.

#### ARTICLE XI Sundry Provisions

Section 1. The fiscal year of this Exchange shall commence July 1st, and end on the 30th day of the following June.

Section 2. These by-laws may be amended, repealed, altered in whole or in part, at any regular meeting of the members, or at any special meeting, when such action has been duly announced in the call, by a majority vote of the members present and voting.

Section 3. These by-laws shall be revised by the Board of Directors, and such revision shall be submitted at the first annual meeting of this Exchange.

LUDVIG MOSBAEK,  
President.

HARRY B. PLUMMER,  
Secretary-Treasurer.

Subscribed and sworn to before me this 27th day of January,  
1920.

WARREN GIBSON,  
Notary Public, Morrison County, Minn.  
My Commission expires October 17, 1920.

THE MINNESOTA POTATO EXCHANGE

LOCAL ASSOCIATION BY-LAWS\*

Article I

Membership

Section 1. (Qualifications). Any producer of farm products, including both landlord and tenant, in territory tributary to the center served by this Association, may become a member of the Association by agreement to comply with the requirements of these by-laws and by becoming the owner of one, but not more than . . . . shares of stock of the Association. Application for stock must be submitted to and approved by the Board of Directors.

At the time of becoming a member of this Association, each member shall give a negotiable promissory note, payable on demand, to the order of this Association. Such note shall be a non-interest bearing note for the sum of One Hundred (\$100.00) Dollars.

This note shall be the property of the Association and shall be available in the settlement of any liquidated damages that may result from the failure of said member to live up to his contract with this Association.

This section shall not prevent the Board of Directors, at their discretion, from accepting for membership any person who has special qualifications for acting as secretary-treasurer of this Association, provided that his membership shall continue only during the period that he is acting as secretary-treasurer.

Section 2. (Contracts and Agreements).

(a) (Form of Contracts). Each grower upon becoming a member of this Association shall enter into a contract with the Association in the form required by the Board of Directors. Said contract shall specify, among other things, that the grower appoints the Association his agent for the purpose of handling, storing, grading, and marketing, all the potatoes and other products contracted for and delivered to it and that he binds himself to deliver to this Association such products at such time and place as may be mutually agreed upon.

(b) (Duration of contract). The period of said contract shall extend indefinitely, provided that a grower wishing to withdraw his membership may cancel his contract on the first of July of any calendar year upon giving thirty (30) days notice to the Association.

(c) (Liquidated damages). That if the Grower fails or refuses to deliver to the Association for marketing and distributing, the potatoes and other farm products required by this contract, he shall pay to the Association, as liquidated damages, an amount equal to the service charges of the Association as determined under the provisions of Sections 2 and 3, of Article VII., for each cwt. of potatoes and other farm products not so delivered. Furthermore, such claim shall be a lien upon the grower's stock in the Association; and upon his collateral note furnished as security for performance of contract.

Section 3. (Terminations). At any time, if a member shall cease to be a producer of farm products, or shall remove from the territory tributary to the center served by this Association, or shall, for a period of two (2) consecutive years, fail to patronize it or shall fail to comply with the requirements of these by-laws the Association may elect to purchase his shares of stock and cancel his membership upon tender to him of the par value, or market price if higher, of his shares together with any interest or refunds due and unpaid, less any indebtedness then due the Association. Such shares shall then become treasury stock of the Association.

Section 4. (Restrictions). No member shall own more than . . . . shares of the capital stock of the Association at any one time, and no member shall have more than one (1) vote regardless of the number of shares owned.

Every member upon uniting with this Association, agrees that in case he desires to dispose of his shares of stock in the Association, he shall give the Association the first opportunity to purchase it. If the Association waives its rights of purchase by failure to act within thirty (30) days, a stockholder may with the consent of the Board of Directors sell the stock to anyone eligible to membership.

## Article II Directors and Officers

Section 1. (Election of directors). Directors of the Association shall be members of the Association and shall be elected by the members in annual meeting assembled. The directors shall be elected at the first annual meeting; to serve for one year and until their successors are elected and have qualified. The elections shall be by ballot and each member of record shall be entitled to cast one vote, and only one vote, for each director to be elected.

Section 2. (Election of Officers). The Board of Directors shall meet within ten (10) days after the first election, and within ten (10) days after each annual election thereafter and shall elect by ballot from among themselves a President, a Vice-President and a Secretary-Treasurer, Directors and officers shall hold office until their successors shall have been elected and qualified and shall have entered upon the discharge of their duties.

Section 3. (Vacancies). Any vacancy in the Board of Directors shall be filled by appointment by the president. If any director shall cease to be a member, his office shall be declared vacant.

Section 4. (Compensation). The compensation, if any, of the directors and officers, other than the manager, shall be determined by the members of the Association at any regular or special meeting of the Association.

Section 5. (Removal). Any director of the Association may, for cause, at any annual or at any special meeting called for the purpose, at which a majority of the members shall be present, be removed from office by vote of not less than two-thirds of the members present. Such director shall be informed in writing of the

charges preferred against him at least ten (10) days before such meeting, and at such meeting shall have an opportunity to be heard in person, or by counsel and by witnesses in answer thereto.

### Article III

#### Duties and Powers of Directors

Section 1. (Management of business). The Board of Directors shall manage the business and the affairs of the Association, and make all necessary rules and regulations not inconsistent with the law or with these by-laws, for the management of the business and the guidance of the officers, employees and agents of the Association.

Section 2. (Employment of Manager). The Board of Directors shall have the power to employ and to dismiss a business manager, to fix his compensation, and to outline his duties.

Section 3. (Bonding of Manager and Officers). The Board of Directors shall require the manager and all other officers, agents, and employees charged by the Association with responsibility for the custody of any of its funds or property to give bond for the faithful performance of their official duties. Such bond shall be furnished by a responsible bonding company, or other surety suitable to the Board of Directors, and the cost thereof shall be paid by the Association.

Section 4. (Audits). The Board of Directors shall audit all accounts at their regular meetings at least four (4) times a year, and shall be responsible for the annual auditing of all records and accounts of the Association. This audit shall be made by a competent accountant during the thirty (30) days preceding the annual meeting. Special audits shall be made at any time upon the written request of the Board of Directors or a majority of the members in the manner above described.

### Article IV

#### Duties of Officers

Section 1. The President shall:

- (a) Preside over all meetings of the Association and of the Board of Directors. Be ex-officio member of all committees.
- (b) Sign as President, with the Secretary-Treasurer, all notes, deeds, and conveyances of real estate, as well as all certificates of stock of the Association.

Section 2. In the absence or disability of the President the Vice-President shall preside and perform the duties of the President.

Section 3. The Secretary-Treasurer shall:

- (a) Keep a complete record of all meetings of the Association and of the Board of Directors.
- (b) Sign as Secretary-Treasurer, together with the President, all notes, deeds and other instruments on behalf of the Association.
- (c) Serve all notices required by law and by these by-laws.

(d) Perform such other duties as may be required of him by the Association or the Board of Directors and shall receive such compensation therefore as the Board of Directors may determine.

#### Article V

##### Duties of Manager

Section 1. (In General). Subject to the order of the Board of Directors, and the by-laws and rules of the Association the Manager shall have entire charge of the marketing of all the products and supplies handled by the Association. He shall secure information as to production and marketing conditions and shall furnish the same to the members on request.

He shall encourage the production of the varieties of produce best adapted to the producing area and in greatest demand by the trade. He shall be responsible for the proper grading, packing, and inspection of all products handled by the Association, and shall perform such other duties as the Board of Directors may prescribe.

Section 2. (Control of Help). Under the direction of the Board of Directors, the Manager shall employ and discharge all employees, agents, and laborers.

#### Article VI

##### Corporate Practice

Section 1. (Certificates). Certificates of stock shall be issued to each holder of full-paid stock. Each certificate shall state the par value of the stock, the number of shares represented, the name of the person to whom issued, and shall bear the name of the President and Secretary of the Association and be numbered and issued in numerical order from the stock certificate book. A record of each certificate shall be kept on the stub thereof.

Section 2. (Stock transfers). Transfers of stock shall be made only on the books of the Association and before a new certificate is issued, the old certificate must be surrendered for cancellation. No stock shall be transferred unless any and all indebtedness owing to the Association by the member shall first be paid. The stock books of the Association shall be closed for transfer ten (10) days before the annual membership meeting and ten (10) days before the time set for payment of interest and patronage refunds.

Section 3. (Assessability). Stock shall be assessable to twenty (20) per cent of its par value, but no assessment shall be made to exceed five (5) per cent of the par value of the stock at any one time. No assessment shall be levied except at a regular or special meeting of the stockholders, notice of which shall have been given in writing to each stockholder ten (10) days prior to such regular or special meeting.

Section 4. (Treasury stock). The treasury stock of this Association shall consist of the unsold stock and such issued and outstanding stock of the Association may be donated to it or otherwise be acquired by it, and shall be held subject to disposal by the Board of Directors.

Section 5. (Use of Member's Loan Notes). The promissory notes required from Growers under Article 1, Section 1, of these by-laws shall be assets of this Association, but they shall not be pledged save as collateral for the establishment of working capital, nor shall they be sold except for the purpose of liquidating damage suffered by violation of contract by a Grower. Upon such violation of contract by a Grower the Association may recover damages from the proceeds of sale of the collateral of said Grower. Any remaining proceeds from such sale shall be returned by the Grower, which shall be required immediately to negotiate a new note to the order of the Association.

## Article VII

### Business Practice.

Section 1 (Payments, when made). Growers shall receive payment after each shipment by the Association upon the receipt of the proceeds by the Association or at the end of each pooling period.

Section 2. (Returns to the Grower). The Association may make individual sales for each Grower, and at the discretion of the Board of Directors, the Association may pool all the products of the same grade and quality for such periods as the Directors shall decide. When this method of sales is adopted all Growers shipping products of the same grade and quality shall receive exactly the same price. Returns to the Grower shall be on the basis of an average price for each grade during the pooling period. The total amount available for payment to the Grower after each pooling period or after each shipment, shall be the net proceeds to the Association from a shipment, or shipments, as shown by the account, or accounts, of sales, less the deductions provided for in Section 3 hereof. These deductions may be made, in the discretion of the Board of Directors, as a fixed percentage charge upon the returns for products sold, or as a fixed charge per one hundred pounds or per ton of products shipped.

Section 3. (Deductions). The charges provided for in Section 2 shall be adequate to cover the following items.

(a) Current operating expenses.

(b) Accrued operating expenses. This deduction shall be adequate to cover such items of expense as wages and salaries, insurance, taxes, repairs, renewals and replacements, depreciation, interest and other items.

(c) Surplus reserve. The amount of this deduction shall be determined by the Board of Directors and shall be continued until the earnings thus retained in the business shall amount to at least thirty (30) per cent of the paid up capital stock. This surplus shall be employed in the business for a legitimate purpose.

(d) Dividends on Capital Stock. This deduction shall be sufficient to pay a rate of 6 per cent on stock.

(e) Miscellaneous. This deduction shall be for any other purpose, at the discretion of the Board of Directors.

Section 4. The Board of Directors may at their discretion deduct from the net proceeds for potatoes and other vegetables 5¢ for each cwt. handled for the individual member. The sums derived therefrom to be applied to pay for additional shares for each member. These shares to release temporary loans for working capital or to create funds for additional buildings and equipment as needed

(By adopting this provision the larger producers will carry the largest amount of shares, which is proper and right and many bankers have declared that by this provision carried out, they will be willing to extend the necessary credit to the associations for these purposes thereby helping to develop the agricultural resources of their community. That means cooperation not charity.)

Section 5. (Supplies and Merchandise). If the Board of Directors shall so decide the Association may purchase merchandise and supplies for Growers; provided, that each Grower ordering such supplies or merchandise shall pay for the same at the time of ordering it or shall deposit a sum sufficient to cover the payment with some bank, approved by the Board of Directors. The Association shall handle such business upon a margin sufficient to cover all expenses and other items as indicated in Section 3 hereof.

Section 6. (Patronage refunds). At the end of the fiscal year any earnings resulting from an over estimation of expenses and handling costs shall be disbursed to members and non-members in such a manner as to comply with the law, on the basis of the patronage or business done by each.

## ARTICLE VIII

### Meetings

Section 1. The annual meeting of the Association shall be held on the . . . . . day of . . . . . of each year.

Section 2. Ten (10) days notice shall be given of all meetings of the shareholders by publishing notice thereof in the local paper, and by circular notice mailed to each shareholder.

Section 3. The president shall call a special meeting upon the majority vote of the directors or the written request of ten (10) per cent of the stockholders. The notice of such meeting shall state the time, place and purpose as provided by law.

Section 4. No stockholder shall be allowed to vote by proxy. Any stockholder may vote by mail as well as in person at any regular or special meeting of the stockholders, provided that such stockholder shall have received a copy of the exact text of the motion or resolution or amendment, and that a copy of the same be forwarded with and attached to the vote as mailed by absent stockholders. All members voting by mail shall be counted as present in determining a quorum for the consideration of a specific question. All officers shall be elected by ballot.

Section 5. (Members' Quorum). A majority of members shall constitute a quorum for the transaction of business, when the total number of members does not exceed one hundred (100), and ten (10) per cent of the total number of members in all other cases, provided that in the latter case the total number present shall not be less than fifty (50)

Section 6. (Regular meetings of Board). The Board of Directors shall hold at least four (4) regular meetings each fiscal year, the exact time and place to be determined by the president.

Section 7. (Special Meetings of Board). Special meetings of the Board of Directors may be called by the president or any three of said Board. Each member of the Board of Directors shall be duly notified of all such meetings. No business except that mentioned in call for special meeting of the Board of Directors, shall receive final action at said meetings.

Section 8. (Directors' Quorum). Any three of the directors shall constitute a quorum at all meetings of the Board, and a majority vote of the members present shall decide all questions except the transfer of grounds and buildings which shall require the presence of the whole Board and a majority vote thereof.

Section 9. (Order of Business). The order of business at the annual meetings and so far as possible at all other meetings of the members, shall be:

- (1) Calling of roll.
- (2) Proof of the notice of meeting.
- (3) Reading and disposal of all unapproved minutes.
- (4) Annual reports of officers and committees.
- (5) Election of directors.
- (6) Unfinished business.
- (7) New business.
- (8) Adjournment.

## ARTICLE IX

### Sundry Provisions

Section 1. (Fiscal year). The fiscal year of this Association shall commence June 1st, and end on the 31st of May of the following year.

Section 2. (Amendments). These by-laws may be amended, repealed, altered in whole or in part, at any regular meeting of the members, or at any special meeting, when such action has been duly announced in the call, by a two-thirds vote of the members present and voting, including those voting by mail.

Section 3. These by-laws shall be revised by the Board of Directors, and such revision shall be submitted at the first annual meeting of this Association.

\* These By-Laws Prepared by the State Department of Agriculture, Feb. 20, 1920.



APPENDIX III

EXCHANGE AGREEMENT

(This Agreement Was Drafted by and Has the Approval of the U. S. Bureau of Markets.)

THIS AGREEMENT, made and entered into this . . . day of . . . A.D. 192... between the Minnesota Potato Exchange, a corporation formed under the laws of the State of Minnesota, having its principal place of business at Minneapolis, in the said State (hereinafter referred to as the Exchange and the . . . Local . . . Association . . . , Minnesota formed under the laws of the State of Minnesota (hereinafter referred to as the Association.)

WITNESSETH: That for and in consideration of the outlays incurred by the Exchange in providing means for the marketing and distribution of potatoes and other farm products controlled by the Association, including the expense to which it has been put for organizing and finding and establishing markets, and in further consideration of the mutual obligations of the respective parties hereto, it is hereby agreed as follows:

1. That the Association appoints said Exchange its agent for the purpose of marketing and distributing all the potatoes and other farm products which shall be delivered to said Association, for marketing and distributing by said Association, in such quantities and condition and at such time as may be agreed upon between the Exchange and the said Association, during the year 1921 and every year thereafter continually. On or before the first day of July of each year the Association shall report to the Exchange the acreage to be grown by its members that year of the Potatoes and other farm products covered by this contract. During the growing season the Association shall furnish such information concerning said potatoes and other farm products as may be requested by the Exchange.

2. That either party may cancel this contract on the first day of July of any year by giving notice in writing to the other party at least thirty (30) days prior to said date of the desire to cancel this contract. Upon such notice, the Association shall, prior to said first day of July pay any indebtedness then due from it to the Exchange and deliver its copy of said contract to said Exchange and the same shall thereupon be cancelled, but such cancellation shall not effect any incompleated sales or transactions between the parties hereto nor release either from any indebtedness then unpaid or thereafter accruing under this contract, nor relieve the Association from its obligation to sell through the Exchange, nor the Exchange of its obligation to market and distribute, all the potatoes and other farm products described in paragraph 1 which were delivered to said Association for marketing during the preceding season.

3. That the grading, inspecting, marketing and distributing of the potatoes and other farm products shall be done in accordance with the by-laws and rules of the Exchange now in existence or hereafter in effect.

4. That all potatoes and other farm products delivered by the Association may be marketed in assorted lots or with other potatoes and other farm products of like character and the proceeds of any and all shipments prorated with the proceeds of any other potatoes and other farm products of like variety and grade marketed by the Exchange, during such period as the Board of Directors from time to time may determine.

5. That the Exchange shall have a lien upon the potatoes and other farm products hereby contracted by the Association to be delivered to the Exchange for any indebtedness of any kind owing by it to the Exchange, and such indebtedness shall be deducted out of the net proceeds of the sale of such potatoes and other farm products.

6. That the Association will not sell or otherwise dispose of its potatoes and other farm products covered by this contract to any purchaser except through the Exchange, unless such potatoes and other farm products be rejected by the Exchange. In case this Association is offered a price in excess of a price then obtainable by the Exchange, such offer shall be turned over to the Exchange to be filled from the potatoes or other farm products covered by this contract.

7. That the potatoes and other farm products covered by this contract shall be sold and marketed by the Exchange wherever a market may be found which in its judgment and in accordance with its by-laws and rules shall justify such marketing. The Exchange shall not be liable for any damage that may be sustained through act of God or public enemy, or accidents in shipments or storage, or unavoidable failure to secure suitable storage or market for the proper marketing and distributing of said potatoes and other farm products, provided that the Board of Directors of the Exchange shall create such contingent funds as they deem necessary to protect the members of the Exchange against unavoidable losses. Any loss occasioned by the Association through improper handling or grading or otherwise shall be borne by said Association.

8. That the Association will pay the Exchange its regular charges for its services, including shipping and marketing, which charges are to be fixed by the Board of Directors of the Exchange, and which shall be in amount sufficient to pay all expenses of rendering such service, including the overhead expenses of the Exchange and a contingent fund provided for in Section 7. The Association gives the Exchange the right to deduct the amount necessary to cover such charges from the returns received for its potatoes and other farm products paying the said Association the balance

9. That in case the Association shall at any time fail to fulfill any of its obligations under the provisions of this contract, including the failure to deliver the said potatoes and other farm products to the Exchange as hereinbefore provided, any claims arising from such failure to meet its obligations, shall be a charge against the Association's note, given by it to the Exchange in accordance with its by-laws, and

That if the Association fails or refuses to deliver to the Exchange for marketing and distributing the potatoes and other farm products as required by this contract, it shall pay to the Exchange

as liquidated damages, the sum of . . . 10 . . . cents for each cwt. of potatoes and other farm products not so delivered. Said sum may be deducted from any money in the possession of the Exchange due the Association.

IN WITNESS WHEREOF, the said parties have executed this contract in duplicate.

THE MINNESOTA POTATO EXCHANGE.

By . . . . . President

By . . . . . Sec'y.  
Treasurer

. . . . . ASSOCIATION

By . . . . . President

By . . . . . Secretary

undersigned Grower may agree upon, during the life of this contract.

On or before July 1st of each year the Grower shall report to the Association the acreage to be grown by him that year, of potatoes and other farm products covered by this contract. If the Grower reports of vegetables, not specially mentioned above in this contract, such report shall be construed and accepted to indicate his intention to include such produce in his contract in the future on the conditions and terms covered by this contract. During the growing season the Grower shall furnish such information concerning said potatoes and other farm products as may be requested by the Association.

2. That either party may cancel this contract on the first day of July of any year, after giving notice in writing to the other party of the intention to do so, such notice to be given at least thirty (30) days prior to said date. Upon such notice, the Grower shall, prior to said first day of July pay any indebtedness then due from him to the Association, and deliver his copy of said contract to said Association, and the same shall thereupon be canceled but such cancellation shall not affect any incompleted sales or transactions between the parties hereto, nor release either from any indebtedness then unpaid or thereafter accruing under this contract nor release the Grower from his obligation to sell through the Association, nor the Association from its obligation to handle all the potatoes and other farm products described in Section 1, which were grown during the preceding season.

3. That harvesting, grading, inspecting, storing and shipping of the potatoes and other farm products shall be done in accordance with the by-laws and rules of the Association now in existence or hereafter in effect.

4. That all potatoes and other farm products delivered by the Grower may be marketed in assorted lots or with other potatoes and other farm products of like character and the proceeds of any or all shipments may be prorated with the proceeds of any other potatoes and other farm products of like variety and grade marketing by the Association, during such periods as the Board of Directors from time to time may determine. Provided that nothing in this paragraph, nor elsewhere in this contract shall be construed to deny or abridge the right of the Grower; to deliver to the Association for sale on separate account any potatoes or other farm products that said Grower may elect to withhold from the above provided for pooling arrangements.

5. That the Association shall have a lien upon the potatoes and other farm products hereby contracted by the Grower to be delivered to the Association, for any indebtedness of any kind owing by him to the Association, and any such indebtedness shall be deducted out of the net proceeds of the sale of such potatoes and other farm products.

6. That the Grower will not sell or otherwise dispose of his potatoes and other farm products covered by this contract (see also section 1) to any purchaser except through the Association, unless such potatoes and other farm products be rejected by the Association. In case the Grower is offered a price in excess of the price then obtainable by the Association, he shall turn over such offer to the Association to be filled by it from said Grower's potatoes or other farm products covered by this contract.

7. That the potatoes and other farm products covered by this contract shall be marketed by the Association wherever a market may be found which in its judgment, and in accordance with its by-laws and rules shall justify such marketing. The Association shall not be liable for any damage that may be sustained through act of God or public enemy, or accidents in shipment or storage, or unavoidable failure to secure suitable storage or markets for the proper handling and storing and marketing of said potatoes and other farm products. Any loss to any shipment occasioned by a Grower through improper packing, grading or otherwise shall be borne by said Grower.

8. That the Grower will pay the Association its regular charges for its services, including handling, storing, shipping and marketing, which charges are to be fixed by the Board of Directors of the Association, and which shall be in amount sufficient to pay all expenses of rendering such services, including the overhead expenses of the Association. The Grower gives the Association the right to deduct the amount necessary to cover such charges from the returns received for his potatoes and other farm products paying him the balance.

9. That in case the Grower shall at any time fail to fulfill any of his obligations under the provisions of this contract, including the failure to deliver the said potatoes and other farm products to the Association as hereinbefore provided, any claims arising from such failure to meet his obligation, shall be a charge against the Grower's note, given by him to the Association in accordance with its by-laws, and

That if the Grower fails or refuses to deliver to the Association, for marketing and distributing, the potatoes and other farm products required by this contract, he shall pay to the Association, as liquidated damages, an amount equal to the service charges of the Association as determined under the provisions of section 8, for each cwt. of potatoes and other farm products not so delivered. Said sum may be deducted from any money in the possession of the Association due the Grower, and shall also be a charge against the Grower's note as above provided.

IN WITNESS WHEREOF, the said parties have executed this contract in duplicate, this . . . . day of . . . . , 192 . . .

By . . . . . Association  
By . . . . . President  
. . . . . Secretary  
. . . . . Grower

APPENDIX IV

MINNESOTA POTATO EXCHANGE

INCOME STATEMENTS.

For 11 Months, Ending June 30th, 1921.

Gross Brokerage Income	\$100231.13	
(10¢ per cwt. on all cars shipped)		
Less adjustments	14005.34	\$86225.79
Income from freight adjustments		9021.03
Income from car protection service		462.67
Gross Operating Income		<u>95709.49</u>
Less Selling Expense		
North American Fruit Exchange Brokerage		50232.74
Net Brokerage Income		<u>45476.75</u>
Less Operating Expense		
Salaries	24802.67	
Rent	1110.00	
Stationery & Printing	3204.91	
Postage	1062.04	
Traveling Expense	3011.85	
Telegraph Expense	1590.31	
Telephone Expense	702.50	
Auto Expense	492.42	
Warehouse Expense	300.00	
Publicity & Education Expense	1771.21	
Weekly Publications		
Cost of Publishing	4019.85	
Less Income from subscriptions	<u>578.08</u>	3441.77
C.N.D. Service (Market Letters)		28.99
Advertising		10.00
Miscellaneous Freight Expense		98.36
Interest & Exchange		255.98
Directors' Expenses		4532.16
General Expense (see Schedule #B-1)		<u>1255.36</u>
		47670.53
Net Operating Deficit		2193.78
Other Income -		
Purchase Dept.- Profit on Direct Sales	164.89	
Add Commissions Earned	<u>1828.27</u>	
		1993.16
Less Direct Expense		278.09
		<u>1715.07</u>
Labor Income	17.96	
		<u>1733.03</u>
		460.75
Deductions from Income -		
Depreciation on Furniture & Fixtures	596.93	
Depreciation on Auto Truck	<u>68.75</u>	
		<u>665.68</u>
NET DEFICIT FOR THE PERIOD		1126.43

MINNESOTA POTATO EXCHANGE

BALANCE SHEET

as at June 30th, 1921

ASSETS

Current

Cash, (Lincoln Natl. Bank)(Schedule C-1)	815.73	
Petty cash (Schedule C-2)	4.19	
Advances to Associations	6901.12	
Miscellaneous Assn. Charges	2290.98	
Accounts Receivable (Schedule C-4)	1665.67	
Retention fees (Brokerage Receivable)	478.56	
Railroad Claims (Schedule C-5)	2015.51	
Bills Receivable (Schedule C-6)	1768.04	
Trade Acceptances	15880.54	
Less Trade Accept. Discounted	<u>12628.29</u>	
Trade Accept. on hand(Sched. C-7)		3252.25

Inventories

Stationery & Printing	735.00	
Purchase Dept. Supplies(Sch. C-8)	<u>1410.73</u>	<u>2145.73</u>

21937.78

Fixed

Furniture & Fixtures (Schedule C-9)	4756.60	
Less Reserve for Depreciation	<u>596.93</u>	4159.67

Auto Truck	275.00	
Less Reserve for Depreciation	<u>68.75</u>	206.25

Organization Expense	<u>460.70</u>	
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4826.62

Deferred

Interest Accrued on Notes Receivable (Schedule C-6)	52.11	
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Unexpired Insurance premium (Schedule C-10)	67.64	
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Unexpired premium on Surety Bonds(Sch. C-11)	<u>46.56</u>	<u>166.31</u>
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26930.71

LIABILITIES AND CAPITAL

Current Liabilities

Accounts Payable		
Sundry Creditors (Schedule C-12)	\$1973.41	
North American Fruit Exchange	2508.23	
North Dakota Potato Exchange	<u>7.34</u>	4488.98
Net Returns - Due Growers on Cars Not pooled to Date		75.27
Drafts at Bank for Collection		337.60
Salaries Accrued		279.29
Reserve for Telegraph Expense Account		35.00
Unfilled Purchasing Department Contracts		<u>13241.00</u>
		18457.14
Capital Stock		9600.00
Less Deficit for Period		<u>1126.43</u>
Net Worth		8473.57

26930.71



APPENDIX V.

UNITED STATES GRADES FOR POTATOES  
Recommended by the United States Department of Agriculture\*\*

U. S. Grade Fancy

"This grade shall consist of sound potatoes of one variety which are mature, bright, smooth, well shaped, free from dirt or other foreign matter, frost injury, sunburn, second growth, growth cracks, cuts, scab, blight, soft rot, dry rot, and damage caused by disease, insects, or by mechanical or other means. The range in size shall be stated in terms of minimum and maximum diameter or weight following the grade name,\* but in no case shall the diameter be less than two inches.

"In order to allow for variations incident to commercial grading and handling, five per centum by weight of any lot may vary from the range in size stated, and, in addition, three per centum by weight of any such lot may be below the remaining requirements of this grade; but not more than one-third of such three per centum, that is to say, not more than one per centum by weight of the entire lot, may have the flesh injured by soft rot.

U. S. Grade No. 1.

"This grade shall consist of sound potatoes of similar varietal characteristics which are practically free from dirt or other foreign matter, frost injury, sunburn, second growth, growth cracks, cuts, scab, blight, soft rot, dry rot, and damage caused by disease, insects, or mechanical or other means.

"The diameter of the potatoes of the round varieties shall not be less than one and seven-eighths inches, and of potatoes of long varieties one and three-fourths inches.

"In order to allow for variations incident to commercial grading and handling, five per centum by weight of any lot may be under the prescribed size, and, in addition, six per centum by weight of any such lot may be below the remaining requirements of this grade; but not more than one-third of such six per centum, that is to say, not more than two per centum by weight of the entire lot, may have the flesh injured by soft rot.

U. S. Grade No. 2.

"This grade shall consist of potatoes of similar varietal characteristics which are practically free from frost injury and soft rot, and which are free from serious damage caused by sunburn, cuts, scab, blight, dry rot, or other disease, insects, or mechanical or other means.

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\*Such statements as the following will be considered as meeting this requirement: 'U.S. Grade Fancy, 2 to 3 1/2 inches;' 'U.S. Grade Fancy, 10 to 16 oz.;' 'U.S. Grade Fancy, 2 inches and larger;' 'U.S. Grade Fancy, 10 oz. and larger.'

"The diameter of potatoes of this grade shall not be less than one and one-half inches.

"In order to allow for variations incident to commercial grading and handling, five per centum by weight of any lot may be under the prescribed size, and, in addition, six per centum by weight of any such lot may be below the remaining requirements of this grade; but not more than one-third of such six per centum, that is to say, not more than two per centum by weight of the entire lot, may have the flesh injured by soft rot."

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\*\*United States Department of Agriculture Department Circular 96.