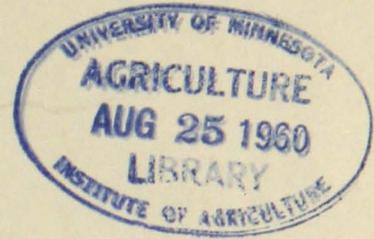


*Ralph P. Larson*

*nd)*

*misc*  
③

*file  
with  
1954*  
④



Condensed report of the  
Northeastern Minnesota - Northwestern Wisconsin  
Dairy Marketing Survey  
Three Cooperative Associations

Report prepared by the  
Agricultural Extension Service ②  
University of Minnesota ①

William H. Dankers - Extension Economist in Marketing  
Harold C. Pederson - Extension Economist in Marketing  
Fred Olson - Extension Marketing Assistant

This archival publication may not reflect current scientific knowledge or recommendations.  
Current information available from University of Minnesota Extension: <http://www.extension.umn.edu>.



## Reasons for Consolidation

Too many assumptions would have to be made to express the advantages of consolidation statistically. The advantages to be gained will to a large extent depend on the degree and type of consolidation. However, there is every indication from the study that procurement, processing and distribution efficiency for milk and dairy products could be materially increased. A consideration of the economic factors involved suggests that the advantages far outweigh the disadvantages. There are non-economic factors to consider, and to overcome, such as the inherent desire to conduct cooperative affairs locally, a suspicion that cooperative associations can be too big, suspicion and even enmity of "the other group" who has been a competitor, and a fear that "we might lose control". The members will eventually have the vote as to whether a consolidation will be effected. The economic advantages of consolidation should therefore be clearly outlined and presented to the members. Of special significance is the development of a pattern for the "consolidated" association which assures members in the various local areas of local participation and control.

Advantages of Consolidation. A number of ways of gaining advantage from consolidation can be outlined. There is further indication of a cumulative gain. The more closely the goal of complete consolidation is attained the greater will be the gain to the membership. The gain will not be alike for all three of the associations. One will gain more in one way and the others more in other ways. The following advantages could be gained:

1. Volume of operation. Processing equipment for milk and dairy products is expensive. To the extent that such equipment is used to capacity, the per unit processing cost will be less. All three associations would benefit from volume operation and lower operating costs if consolidation is achieved.
2. Lower capital requirements. This advantage from consolidation is closely related to volume of operation. The associations as a group have excess facilities but if consolidation is not effected one or two associations may soon have to make still further investments in machinery and equipment.
3. Flexibility in operation. This advantage from consolidation is closely related to volume of operation and lower capital requirements. Volume in individual associations does not justify obtaining equipment for processing a large variety of dairy products. With the combined volume, a maximum of flexibility could be attained. One association now has equipment for filling half gallons with milk. This equipment is sufficient to meet the needs of the now existing three associations. Consolidation would permit all producers in the area to share in this flexibility without additional investment in equipment.
4. More efficient use of necessary equipment. If all facilities and equipment were owned by one association and all milk supplies now handled by the three associations were pooled, the total operations could be much more effectively coordinated, and operating costs could be reduced. Time is now devoted to operating machines and cleaning up after operation of machines which could be saved if the necessary equipment were operated at or nearer to capacity. The information on available and needed equipment indicates that much of the machinery and equipment now regularly used at much below capacity would be needed only as stand-by equipment or would not be needed at all. There would be further value of operating machinery and equipment at capacity. More rapid

depreciation would result in a faster turnover of equipment in the necessary plants. This would make it possible to use, and to be more up to date, with modern, labor-saving machinery and equipment.

5. Merchandising efforts more effectively applied. There is much duplication in merchandising efforts at the present time. It is logical to assume that the cost of this effort could be reduced to nearly one-half through coordination. The costs of the present distribution system, of actual competition for handlers in the Duluth-Superior and Cloquet area and an overlapping in distribution to different handlers, but in the same town, could be materially reduced.
6. Administrative and management costs reduced. Member representation and control could be democratically arranged through local advisory committees. Advisory committee members would constitute the "representing members" for the association. These people would function on a voluntary, non-pay basis. With such an arrangement and consolidation of the three associations only one board of directors would be required. Only one general manager would be required with additional management personnel under his direction to keep the whole consolidated business and program closely coordinated. Such an arrangement should permit substantial reduction in administration and management cost even though the employed personnel would receive as good or better remuneration for their services.
7. Larger net return to producers. The margins between what the consumers pay for milk and other dairy products and what producers get always looms large. All of the items to which reference has been made under the preceding six points influence the marketing margins for dairy products in this area. If consolidation is effected and an opportunity is thereby provided to reduce the costs of these items a substantial reduction should be possible in the marketing margins, leaving a larger net return to producers.

### Areas Covered by the Study

A comparison was made of the organizational structure of the three associations. They are all of the centralized type and member patrons hold a direct membership even though two of the associations have several local processing plants. If consolidation were effected and a new association organized, it would merely require transfers of (1) all assets, (2) all liabilities and (3) all stock and other ownership claims from the three associations to the "consolidated" associations. No cash transactions would be required. Ownership claims which have arisen out of net margins should retain the same priority, by years, in the "consolidated" association which they now have in the individual three associations.

A review of the financial status of these associations indicates, that although there are some differences, the differences are not of sufficient significance to hinder consolidation.

All three of the associations have continuously had net margins and are in fairly favorable financial position. From information obtained and observations made, it seems quite clear that the net margins for this group of patrons could be increased through consolidation of the three associations and through a closer and more effective coordination of plants and processing facilities.

The milk and cream patrons of the three associations in 1953 were located according to their mailing address. Half of the patrons were within a 40 mile radius from the center of Duluth-Superior. Nearly 90 percent were within a 60 mile radius. The Grade A and Grade B patrons were located throughout the area. The cream patrons were located in Minnesota mainly around Cloquet and Floodwood.

Marketing costs include the costs of getting milk from producer to market, processing it into a variety of dairy products and getting them to the ultimate consumers. Costs of hauling milk from producer to the plant constitute an important part of total cost. An average distance of 92 miles was travelled per load of milk and cream. A comparatively high cost of procurement for the cooperative associations under study is indicated by the long routes.

A map of the milk routes of the three associations was drawn which showed overlapping in Minnesota and Wisconsin. Overlapping was most extensive in the Meadowlands area and Northern Douglas county. Through consolidation this overlapping can be eliminated and procurement costs reduced.

In 1953 Grade A milk accounted for 58 percent of total receipts of the three associations while Grade B milk was 36 percent and cream 6 percent.

Only slightly over half of the available supply of Grade A milk was used in Class I during 1953 by the handlers subject to the Federal Order. Any market requires a surplus of Grade A milk for the year in order to supply the requirements for Class I utilization during seasons of low milk production. However, the percent of Grade A milk used in Class I by all handlers operating in the Duluth-Superior-Cloquet market was only slightly in excess of 61 percent in January, 1953. In June it was at the low point of 37 percent, so that nearly two out of three pounds of Grade A milk were then utilized in manufactured dairy products. For 1953 the situation for all handlers in the market was as follows:

<u>Handler</u>	<u>Percent of Grade A Receipts in Class I Utilization</u>
A	51.6
B	38.2
C	47.2
-----	
ABC	43.5
-----	
<u>Other</u>	<u>76.5</u>
All Handlers	51.5

The forms and percentage in each form of butterfat sold was as follows:

	<u>Percent</u>
In small packages	14.0
Class I bulk to other handlers	11.7
Butter	59.6
Cheese	6.8
Ice Cream	1.1
Class II bulk to other handlers	6.2
Cottage cheese and powder	<u>.6</u>
	100.0

1018 wholesale outlets were served by the three associations. Eleven were served by all three and ninety more were served by two of the three associations. Practically all of this duplication was in Duluth and Superior. Another type of overlapping was in the servicing of towns outside of Duluth and Superior. Almost 13 percent of the towns were serviced by two of the three associations.

### Physical Facilities and Equipment

The duplication of facilities as shown on the table of the following page offers an excellent opportunity for savings through consolidation. The extent to which savings can be made will be largely determined by the kind and degree of consolidation. The following changes are suggested:

1. Consolidate milk and cream receiving operations.
2. Eliminate duplication of milk packaging equipment so as:
  - a. to save labor and plant space by having fewer lines.
  - b. to save plant space through consolidation and elimination of packing plants.
  - c. to save on royalties paid on packaging machines.
3. Close some processing plants entirely, close others seasonally and operate each plant at or as near capacity as possible.

Using plants and facilities at or near capacity makes it possible to depreciate facilities more rapidly. This would enable the association to use more modern equipment and newer and more modern processing facilities.

Table I also shows how many facilities are needed within a short time after consolidation and over the longer period after consolidation when more efficient methods of marketing have been adopted.

The savings shown are possible because most of the facilities are not used at or near capacity at the present time.

On the basis of an 80 hour week milk packaging equipment of the three associations was used to only 24 percent of capacity in 1953. Time was allowed in the calculations for cleaning and change-over.

Churning facilities were used at about 25 percent of capacity during the peak month of June in 1954, based on 16 hours per day and 7 days per week.

The capacity of the four driers is calculated at 575 thousand pounds per 21 hour day of which 462 thousand pounds is spray drying capacity and 113 thousand pounds is roller drying capacity. The spray drying capacity would have been adequate for all three associations in 1953 and 1954, except for the month of June. One spray drier has twice the capacity of the other. If consolidation is achieved, it will always be possible to use the unit which is most efficient for the volume to be dried. This will materially reduce the drying costs. A spray drier is now available to producers of two associations. Through consolidation the producers of the third association could benefit from the additional income of spray powder. During the season of peak production the surplus milk can be made into cheese.

Because market prices sometimes favor cheese over the butter-powder combination, cheesemaking facilities add diversity in handling milk. One association now has facilities for manufacturing cheddar cheese. If consolidation is achieved, this plant could serve as a useful standby plant for surplus milk, or the cheesemaking facilities could quite easily be moved to another plant.

Location of Milk Handling Facilities

Plants	<u>Receiving Facilities</u>			<u>Packaging Equipment</u>			<u>Manufacturing Equipment</u>					
	<u>Grade A</u>	<u>Grade B</u>	<u>Cream</u>	<u>Quart</u>	<u>1/2 Gal.</u>	<u>Glass</u>	<u>Ice</u>	<u>Cottage</u>	<u>Butter</u>	<u>Dried</u>		<u>Cheese</u>
	<u>Milk</u>	<u>Milk</u>		<u>(paper)</u>	<u>(paper)</u>		<u>Cream</u>	<u>Cheese</u>		<u>Skimmilk</u>	<u>Spray</u>	
<b>Duluth-Superior Area</b>												
Esko	x	x	x							x		
South Superior	x	x							xx		x	
Valley Brook						x		x				
Twin Ports Bottling				x								
Arrowhead Bottling				x	x	x	x	x				
<b>Minnesota Area</b>												
Floodwood	x	x	x	x			x	x	xx		x	
Wright		x										x
Kettle River		x	x						xx	x		
<b>Wisconsin Area</b>												
Benoit		x								x		x
Sanborn	x											
<hr/>												
<b>Total Facilities (now)</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>8</b>	<b>2</b>	<b>2</b>	<b>1</b>
<b>Total Facilities Needed after Consolidation</b>												
Short Time	2	4	1	1	1	1	1	1	2	2	0	1
Long Time	1	2	1	1	1	1	1	1	2	2	0	1
<hr/>												
Long Time Savings	3	4	2	2	0	1	1	2	6	0	2	0

A review of the plants and equipment owned and used by the three dairy marketing associations shows that consolidation and integration of physical facilities could result in substantial savings for the following reasons:

1. There is now an excess of receiving, packaging and processing facilities in the three associations, when viewed in terms of the need for the group.
2. Fewer well-equipped plants with facilities operated at or near capacity would result in lower "fixed" costs and lower costs of fuel, power and labor per unit of product manufactured.

## The General Market Situation

It is important to consider the over-all market situation in the areas. To do so require consideration of the Federal Milk Marketing Order covering Duluth-Superior and Cloquet, and the effect it has on the total market. Further, it is necessary to compare market conditions and prices within the Federal Order area with those prevailing in the surrounding consuming centers and areas of northeastern Minnesota and northwestern Wisconsin.

There are two reasons for the establishment of a Federal Milk Marketing Order: (1) to provide the framework for more orderly marketing of milk and other dairy products, and (2) to provide a more stable market. In order to provide an adequate supply of Class I milk for consumers, a premium price is permitted for Grade A quality milk. The price margin for Grade A milk over Grade B milk is intended to cover the extra production costs involved in producing the higher quality. Surplus Grade A milk which can not be utilized in Class I is utilized as Class II milk. Most of it is used in manufacturing butter, powder and cheese.

The price for milk utilized in Class II as established by formula under the order should be only slightly higher, if any, than the price paid for Grade B milk. The only reason for a price differential is the higher net return obtained in selling the product from such milk. When the Class II price is out of line with the price paid for Grade B milk and substantial proportion of the Grade A milk is used in Class II, the handlers, who are subject to the order are forced into a difficult competitive position.

Producers are frequently confused because they think in terms of prices established for Class I milk under the Order, when in effect the producers price for Grade A milk is a "blended price". The blended price is determined by the proportion of total monthly milk supplies utilized in Class I and Class II. The ideal market situation would exist for producers when the supply of Grade A milk is exactly equal to the Class I needs. However, if such a situation prevailed during the short supply months, the "blended price" to farmers for Grade A milk would still be substantially below the price for Class I milk in the months of "flush" production, because a substantial share of the Grade A milk would then be used for manufactured products. There was a substantial surplus of Grade A milk throughout the year in this area. Even in the season of short supply a substantial proportion of Grade A milk had to be utilized in manufactured dairy products. For this reason the blended price to farmers for Grade A milk was considerably below the price established under order for milk utilized in Class I, throughout the year.

Differences existed in the proportion of Grade A milk used in Class I by the three associations. More significant, was the much lower proportion of Grade A milk used in Class I by the three associations as a group, compared with other handlers in the area. Because the Duluth-Superior-Cloquet Federal Order is a market order and not a handler order the same minimum price must be paid to producers by all handlers. Differential payments must be made into the market pool if a comparatively large proportion of the Grade A supply received by a handler is utilized as Class I milk. However, if a handler is able to move a larger proportion of his Grade A supply into Class I use compared with other handlers, and thereby is able to obtain a more favorable margin, a significant difference may result in the amount of gross return per hundred weight of milk purchased. Such a handler could pay producers a higher price above the minimum required under the order or he would have a higher net margin at the end of the year.

A realistic view must be taken of Federal Orders to determine whether the milk prices established there under are out of line. If the price differential for Class I milk over Grade B milk is too large, the tendency over the longer period is an enlargement of the supply area and an encouragement in the production of Grade A milk in excess of needs. This expansion will come in four different ways, namely: (1) by producers who are already certified for Grade A milk, (2) by the shift of Grade B producers to the production of Grade A milk, and (3) by the shift of producers from the sale of cream to the sale of Grade A milk, and (4) by the shift of people in other farm enterprises to the production of Grade A milk. Unless demand for Class I milk is increased simultaneously with the increase in production of Grade A milk, the net effect is that a smaller and smaller percentage of the total supply of Grade A milk is utilized in Class I and hence the blended price for Grade A milk to farmers must be constantly decreased toward the price of Grade B milk. A further result is that a supply of Grade A milk from other areas not under Federal Order is invited to move into surrounding consuming centers which are not under the Federal Order, even though it may require long distance hauling and higher hauling costs. This is possible because the price paid to producers in outlying and distant areas is lower than the price paid to producers by handlers who are subject to the Order. This then further reduces the percentage of the total Grade A milk produced within the area which can be utilized in Class I. Even though the milk from outlying areas cannot be sold in the Duluth-Superior-Cloquet market, which is under order, it finds a ready market in other towns in the area that otherwise could be supplied by nearby producers. An attractive market in this general area which is not under the Order is the "Range". Some of the milk now marketed in the range towns is delivered from distant production areas. One of the three associations under study has made a serious attempt to compete for the "Range" market. It is required to pay the Federal Order Market price to its producers because it also sells milk and cream in the Duluth-Superior and Cloquet market. The competition from "outside" supplies has resulted in a retail price for packaged milk in some of the range towns that is a cent per quart lower than in Duluth-Superior and Cloquet. This cooperative association is in a "squeeze". It is required to pay its producers a price equivalent to that received by all producers selling to handlers who are under the Federal Order, but it receives a cent per quart less for packaged milk in the range towns than is received for milk in Duluth-Superior and Cloquet.

A study of the prevailing situation raises the question whether it is practical to limit a Federal Order to the cities of Duluth-Superior and Cloquet or whether the Federal Order should be extended to a wider area of Minnesota and Wisconsin. Producers in the range town area have been agitating for a separate Federal Milk Order. The small volume of milk in the immediate range area and a limited market area make this impractical. The administrative cost of such an order would be excessive. The question that follows is whether the range area and some of the heavily populated consuming centers of northwestern Wisconsin should be included in the Federal Order which is now limited to Duluth-Superior and Cloquet?

Regardless of the area that should logically be included under a Federal Market Order, it is all important that such a Market Order be established and adjusted in line with the real purposes of bringing about more orderly marketing, and a more stable market situation. Inclusion of monopolistic features as a protection for a limited number of producers in a limited area, to the disadvantage of other producers, will ultimately defeat the desirable effects of a Federal Milk Order.

### Procedures in Consolidation

Reference has been made in several sections of this report to the degree of consolidation and the probable resulting benefits. The initial step in consolidation should be to get an overall organizational structure arranged, so that ownership and the physical facilities of the three associations can be pooled. This step is absolutely essential but by itself could not result in any substantial savings. Savings would result from each of the steps that followed, of which some might be delayed until the benefits are more obvious, and until members and patrons begin to think more definitely in terms of being a part of a larger cooperative and a larger community. This focuses attention to what is practical and desirable for the more immediate future and what is practical and desirable over the longer period, and what should be the final goal. The following need careful thought and consideration.

1. Organizational structure. The fundamental principles of a cooperative association provide that those who use the association shall be the owners, or stated differently that members (owners) and patrons are one and the same group. The directors who are member-patrons are elected to carry out the program as fully as possible according to the wishes of the member-patrons. The directors function in the interim between membership meetings. As directors, they have no vested interests and no vested rights. However, the member patrons have assigned the responsible job of policy making to them. The directors respect different viewpoints and think in terms of the best interests of all the member patrons. They hire a manager. The manager follows through on the policies laid down by the directors, and plans and carries out the details, again, in terms of the greatest amount of good to all member patrons. A clear cut distinction should be made between management policies, which are determined by directors, and for which the responsibility rests with them, and actual management of an association which is the responsibility of the manager. For team work and efficient operation it is necessary to clearly understand these areas of responsibility.

To fulfill the basic purpose and carry out the fundamental principle of a cooperative association, namely, the greatest amount of good to all member patrons, a pattern of equitable local participation should be carefully arranged. Direct representation of nearly 3000 members is neither expedient nor necessarily democratic. Members living near association headquarters have a continuous advantage. They can attend meetings with less effort than those farther away. Direct individual representation by as large a group as the membership in the proposed association also lends itself more readily to special agitation and group representation rather than representation "in terms of the greatest amount of good to all member patrons." Well-informed member patrons (part of the responsibility of good directorship and good management) will know what is best for them. So that all areas and all groups are properly represented and so that the association is controlled by member patrons in their best interest and in terms of what they want, the following organizational pattern is recommended:

(a) Decide on a pattern of local units and define it in the By-laws of the new association. Members of such local units would have legal powers to elect an advisory committee of five or seven or nine members who would serve for a period of three years. Election should be staggered so that as nearly as possible an equal number are elected each year. An annual meeting should be held in each of the local units to elect members to the advisory committee, to hear reports from directors and the management of the association, and if so desired to present resolutions and suggestions to the association for consideration by its "representing members" and its directors.

Counties might serve best as local units. If local units are established in any other way, they should not be subject to change at will by the Board of Directors. If counties as such do not provide an equitable distribution, provision could be made in the By-laws for adjusting the number of local advisory committee members according to the number of patrons, or the pounds of butterfat sold by patrons in that county during the previous fiscal year. Such a provision would require a careful check on the number of patrons or the butterfat sold by patrons at the close of the fiscal year and sufficiently in advance of the annual meeting of the association. Also, as number of patrons change or as volume changed in a county from one year to another, the number of advisory committee members to be elected would also change. A minimum requirement should be established for local representation for counties that have only a small number of patrons or a small volume of butterfat. An advisory committee should be elected when they have reached the minimum requirement.

- (b) "Representing members". The advisory committees should constitute the representing members of the association and all members of all advisory committees should have one vote at annual and special meetings of the association. For example, if the association had a total of nine local units, county or other local units, and each unit had nine members on the local advisory committee, a total of 81 representing members would have power to vote at all meetings of the association.
  - (c) Directors. A director from each local unit should be elected from and by the advisory committee (representing members) of that unit. Allowances could be made for the number of patrons or volume of butterfat handled from that unit. For example, if a county had five or less "representing members" they would be entitled to one director, if they had between 5 to 10 they would be entitled to two directors, etc. If a pattern were established for a comparatively large Board of Directors, provision might be made for an executive committee and in turn for less frequent meetings of the Board of Directors. The power of the executive committee should be limited in the By-laws.
  - (d) Executive Committee. If the organizational pattern provides for an executive committee, it should be elected by the directors with a provision that the executive committee represent all geographical areas and all members as nearly as possible. Important policy decisions should rest with the entire Board of Directors, and not with the executive committee.
2. Plant Facilities. Processing facilities are in excess of needs for practically all of the products handled and sold. To effect savings to producers more of the milk and cream should be concentrated at one point where processing facilities could then be used more nearly at capacity.
  3. Management. An association of this size can justify and afford the best in technically trained and experienced personnel. Complete coordination can not be achieved unless one democratically elected board of directors is responsible for governmental and management policies of the consolidated association, and a general manager is employed. An assistant general manager should also be employed so that sufficient personnel is available to carry out the overall responsibility of the association. There is everything to be gained from specialization in management if it is properly coordinated. With this in mind management might place someone in charge of each of the following areas of responsibility:

- (a) Office
- (b) Procurement
- (c) Sales
- (d) Research and quality control
- (e) Plant facilities and equipment
- (f) Publicity and public relations

Depending on the type of personnel available and employed, the assistant general manager might assume responsibility for one of the six management areas mentioned above in addition to his responsibility as assistant general manager.

Headquarters for the "consolidated" association and for management personnel should obviously be in Duluth-Superior, and probably in Duluth. A plant foreman, responsible to the central management should have full responsibility for the personnel and facilities in his plant. Aside from the necessary day to day records, and procurement data, necessary from each receiving and processing plant, all records should be kept in the central office.

4. Brand names. Concern has been expressed about a probable loss of sales when well established brand names are combined. The information obtained does not provide much reason for such concern. As indicated in the section on wholesale distribution only 11 handlers, all in Duluth-Superior, were receiving milk from all three of the associations. Only ninety-four out of the total of 1018 outlets were receiving milk from different combinations of two of the three associations.

A single brand name appears to give the best merchandising results. However, in the early post-consolidation period all of the brand might be continued. As soon as the most desirable final brand name for the consolidated association has been decided on a system could then be followed whereby two brand names would be printed on the packages, namely the final one and the outgoing one. If by chance the outgoing brand name should have the largest current appeal, it could occupy the largest amount of space on the package for some time with the final brand name having a secondary position. As consumers became more familiar with the final brand name, the position of the two names could be reversed. The "outgoing" brand name could eventually be dropped. This is the system which has been followed with good success by many groups who consolidated.

A brand name is significant. For this reason it is suggested that careful thought and consideration be given to finding a final brand name which has appeal, and which is clearly distinguished from other brand names. This could be one of the already existing brand names, unless a more effective new brand name could be found.



UNIVERSITY OF MINNESOTA



3 1951 D02 589 343 P