PRICE PLANS FOR MARKETING MILK

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Circular 358
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Dairy products are the source of about 16 percent of the total gross income of farmers in the United States. In the five-year period 1924-1928 farmers received from the sale of milk about $2\frac{1}{2}$ billion dollars. This was greater than the income from hogs, from cotton, from poultry products, cattle, or any other farm product (Fig. 1).

About 50 percent of milk produced in the United States is used in fluid form. In the history of milk marketing the absence of a marketing structure by means of which milk could be bought and sold on a basis which both producers and distributors could recognize as fair has inevitably led to an unstabilized industry. Attempts to remedy this situation have resulted in the adoption of various types of plans designed to facilitate collective bargaining as to price between producers and distributors. Most of the price plans now in operation have been put into effect since 1920. Thus the Philadelphia plan went into effect in January, 1921; the New York plan in May, 1921; and the original Pittsburgh plan in May, 1922.

This circular describes briefly the ways in which milk-marketing plans have been used in attempts to adjust natural milk production so that it will conform more nearly to consumption. Particular attention is given to the three principal types of marketing plans in use at the present time.

**Attempts to Adjust Production Under a Flat-Price System**

Certain practices in handling milk cows have long since ceased to be consistent with the more recent situation in which the human demand for milk has been growing in nearly all seasons of the year and tending toward fairly uniform consumption.

During the pioneer days of dairying most milk was produced during the summer months. Farmers, in large part, accepted the natural order that cows should freshen in spring and early summer, thus allowing both dams and offspring the chance of getting into good condition during a warm season of abundant grass before compelling them to withstand the rigors of winter, when feed was difficult to obtain. Furthermore a cow ordinarily produced only enough milk to nourish a calf until it was able to shift for itself. Farmers stripped out what milk was available during the late spring, summer, and early fall and allowed their cows to go dry during the winter.

Butter and cheese factories located in regions where natural pro-
duction prevailed were closed during the winter months. Thus six butter and cheese factories in a dairy region in Cortland county, New York, on which data were procured for two years prior to 1906, received no milk during December, January, or February (Fig. 2). Factories were opened the latter part of March and closed the early part of November. The volume of milk received in June, the month of

![Figure 1: Average Annual Gross Income from Farm Products in the United States 1924-1928](image)

### Table 1: Monthly Variation of Milk Receipts at Butter and Cheese Factories in Cortland County, New York, 1904 to 1915

<table>
<thead>
<tr>
<th>Months</th>
<th>Daily average of milk receipts per factory</th>
<th>Six butter and cheese factories for two years prior to 1906</th>
<th>Seven butter and cheese factories 1906 to 1915</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average volume in pounds</td>
<td>Percent of nine months average volume</td>
</tr>
<tr>
<td>January</td>
<td></td>
<td>4,698</td>
<td>100</td>
</tr>
<tr>
<td>February</td>
<td></td>
<td>4,698</td>
<td>100</td>
</tr>
<tr>
<td>March</td>
<td></td>
<td>550</td>
<td>12</td>
</tr>
<tr>
<td>April</td>
<td></td>
<td>3,153</td>
<td>67</td>
</tr>
<tr>
<td>May</td>
<td></td>
<td>5,768</td>
<td>123</td>
</tr>
<tr>
<td>June</td>
<td></td>
<td>8,721</td>
<td>186</td>
</tr>
<tr>
<td>July</td>
<td></td>
<td>7,971</td>
<td>170</td>
</tr>
<tr>
<td>August</td>
<td></td>
<td>6,533</td>
<td>139</td>
</tr>
<tr>
<td>September</td>
<td></td>
<td>5,520</td>
<td>117</td>
</tr>
<tr>
<td>October</td>
<td></td>
<td>2,980</td>
<td>63</td>
</tr>
<tr>
<td>November</td>
<td></td>
<td>1,090</td>
<td>23</td>
</tr>
<tr>
<td>December</td>
<td></td>
<td>. . .</td>
<td>. . .</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>4,698</td>
<td>100</td>
</tr>
</tbody>
</table>

heaviest production, was 86 percent higher than the nine-month average and eight times the volume received during November.

In order to conform to the year-round demand for milk, definite action in the way of selection and feeding was necessary to increase production, and breeding had to be controlled to get winter production. Some stimulus was necessary to induce a farmer to take the necessary action. Generally speaking, feed costs are higher in winter than in
summer, and a producing cow requires better shelter and more care during the winter than a cow that is dry. Payment of a higher winter price was the only way to induce farmers to produce winter milk.\footnote{Recent farm-management studies indicate that fall-freshening cows produce a greater volume of milk at a unit cost no higher than that for spring-freshening cows. Winter production costs for the fall-freshening cows are, however, higher than summer costs for these same animals.}

Consequently milk distributors paid a price higher in winter than in summer, altho there was no marketing structure which took into consideration the different values of milk for different uses. For example, the price paid for milk at ten shipping stations in Cortland county, New York, from 1906 to 1915 averaged $1.77 per 100 pounds during November, December, and January, and $1.12 per 100 pounds for

\footnote{Recent farm-management studies indicate that fall-freshening cows produce a greater volume of milk at a unit cost no higher than that for spring-freshening cows. Winter production costs for the fall-freshening cows are, however, higher than summer costs for these same animals.}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Average Monthly Variation in Production in the New York, Chicago, and Pittsburgh Milksheds (See also Table 2)}
\end{figure}
May, June, and July. The winter price was 65 cents higher than the average price during the low months.

Stations shipping fluid milk forced butter and cheese factories within competing areas to keep open the year around in order to hold their milk supply. Thus butter and cheese factories in Cortland county, New York, from 1906 to 1915 received milk continuously throughout the year tho their volume in June remained more than four times as large as in November (Fig. 2).

Production Remains More Variable Than Consumption. Altho milk production during the winter months has been greatly increased, the monthly variation in milk production still remains far wider than the variation in milk consumption. Thus milk production in November, the month of lowest volume, in New York, Chicago, and Pittsburgh milksheds during a selected period (Fig. 3 and Table 2) was 79 percent of the average of the 12 monthly averages; and the production in June, the month of highest volume, averaged 137 percent of the year's average, or 58 percent higher than the November production.

Average sales of bottled and bulk milk in New York, Chicago, and

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Table 2.—Monthly Variation in Sales of Bottled and Bulk Milk and in Production in the New York, Chicago, and Pittsburgh Marketing Areas

(Year's average = 100)

<table>
<thead>
<tr>
<th>Month</th>
<th>Sales</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>98.7</td>
<td>90</td>
</tr>
<tr>
<td>February</td>
<td>99.4</td>
<td>95</td>
</tr>
<tr>
<td>March</td>
<td>100.6</td>
<td>103</td>
</tr>
<tr>
<td>April</td>
<td>100.4</td>
<td>113</td>
</tr>
<tr>
<td>May</td>
<td>100.1</td>
<td>130</td>
</tr>
<tr>
<td>June</td>
<td>102.8</td>
<td>137</td>
</tr>
<tr>
<td>July</td>
<td>99.0</td>
<td>111</td>
</tr>
<tr>
<td>August</td>
<td>96.7</td>
<td>92</td>
</tr>
<tr>
<td>September</td>
<td>100.5</td>
<td>85</td>
</tr>
<tr>
<td>October</td>
<td>102.0</td>
<td>83</td>
</tr>
<tr>
<td>November</td>
<td>100.8</td>
<td>79</td>
</tr>
<tr>
<td>December</td>
<td>98.4</td>
<td>82</td>
</tr>
</tbody>
</table>

Range from low month to high month: 6.1 58

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1Data on sales and production were obtained from the following sources:
1(1) Ill. Agr. Exp. Sta. Bul. 269. Table 18 (p. 495), average monthly sales in Chicago 1920 to 1922 = 100. Table 9 (p. 484), average monthly production in Chicago milkshed 1920 to 1922 = 100.
(2) U. S. D. A. Tech. Bul. 73. Table 11 (p. 73), monthly averages of quarts of grade B milk in the New York market 1919 to 1924 = 100.
(3) Cornell University, Farm Economics 2, 675. Seasonal changes in deliveries of milk to country plants in New York state, (Table 1, data for 1924).
(4) Pittsburgh data obtained thru courtesy of Dairymen's Cooperative Sales Company. Average monthly sales of bottled bulk milk 1922 to 1926 = 100. Average monthly production 1922 to 1926 = 100.
Pittsburgh during August, the month of lowest demand, were 97 percent of the average of the 12 monthly averages (Fig. 4 and Table 2). Fluid sales in these markets in June, the month of greatest demand, were 103 percent of the year's average, or 6 percent higher than those for August.

The maximum difference of 6 percent in sales in these markets is to be compared with a maximum difference in production of 58 percent, which is more than nine times the maximum variation in fluid sales.

Seasonal variation in production is a problem of the utmost significance in fluid-milk markets, as it gives rise to a large part of the "surplus." Surplus, as used in this discussion, refers to the volume of milk (in a fluid-milk market) which is not used for bottled or bulk-milk (and cream) sales.

Three Principal Marketing Plans

Milk-marketing plans have been designed to facilitate collective bargaining, as to price, between producers and distributors. It is usually safe to say that the plan used in any given market has been developed to solve certain problems which were most pressing in that market. Consequently marketing plans differ widely.
There are three principal types of milk-marketing plans. One of the most common types is the “classification,” or “use,” price plan. This serves as a standard for selling milk by producers’ cooperative associations to distributors at prices based upon the market value of the milk as diverted to its various uses; that is, when used as fluid milk or as cream, or when converted into evaporated milk, butter, or cheese. This type of plan is used in the New York market.

Another type is the “basic-surplus” price plan. Under this plan each producer is paid a higher price for a certain uniform production of milk and a lower price for any surplus over his uniform volume. This type of plan is used in the Philadelphia market.

A third type is the “combination” price plan. This is a combination of the classification, or use, plan and the basic-surplus plan. Under this combined plan milk is sold to distributors on a classified basis, and proceeds are so distributed that a producer receives higher returns for a uniform production than for a widely fluctuating production. This type of plan is used in the Pittsburgh, Baltimore, and Connecticut markets.

The classification price plan may be operated in two ways, as follows:

1. A market pool is arranged and an average price is paid to all organized producers in the milkshed. This “market-pool” plan is used in New York.

2. There is no pooling of all distributors; each distributor has in effect a separate pool. This “multiple-pool” plan is used in Boston.

The combination price plan may be operated as follows:

1. Each producer states his “basic” or “specified” volume, and penalties are deducted for any volume over or under the basic volume. The so-called Connecticut (combination) price plan exemplifies this method.

2. The basic volume is determined by each farmer’s actual production during certain selected months. By means of an association “adjustment” fund a balance is maintained between money received and money distributed. The Baltimore price plan is an example.

3. The basic volume is so determined that it corresponds closely to fluid sales. A fluid price is paid for this basic volume and a lower price for the surplus. This plan, called here the “equalizing-value” price plan, is used in the Pittsburgh market.

Classification Price Plans. A “classification” price plan is a structure by means of which milk is sold to buyers at a series of prices based upon the values of milk in different uses. Thus there may be one price for milk used in fluid form, another price for milk separated to be used as cream, and other prices for milk manufactured.

The fundamental reason for paying different prices for milk in different uses is that the value of milk for fluid needs at certain seasons
**New York Classification Price Plan**

### Production

<table>
<thead>
<tr>
<th>Producer</th>
<th>Lbs.</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>30,000</td>
<td>2.66</td>
<td>$80,000</td>
</tr>
<tr>
<td>B</td>
<td>55,000</td>
<td>2.58</td>
<td>$139,300</td>
</tr>
<tr>
<td>C</td>
<td>50,000</td>
<td>2.58</td>
<td>$129,000</td>
</tr>
<tr>
<td>D</td>
<td>56,000</td>
<td>2.58</td>
<td>$142,080</td>
</tr>
</tbody>
</table>

**Total Production**

- Fluid: 200,000 lbs.
- Cream: 120,000 lbs.
- Evaporated: 25,000 lbs.
- Butter: 12,000 lbs.
- Cheese: 11,000 lbs.

### Distribution

<table>
<thead>
<tr>
<th>Product</th>
<th>Lbs.</th>
<th>Price</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid</td>
<td>120,000</td>
<td>2.96</td>
<td>$355,200</td>
</tr>
<tr>
<td>Cream</td>
<td>32,000</td>
<td>2.32</td>
<td>$74,240</td>
</tr>
<tr>
<td>Evaporated</td>
<td>25,000</td>
<td>1.94</td>
<td>$48,500</td>
</tr>
<tr>
<td>Butter</td>
<td>12,000</td>
<td>1.62</td>
<td>$19,440</td>
</tr>
<tr>
<td>Cheese</td>
<td>11,000</td>
<td>1.90</td>
<td>$20,900</td>
</tr>
</tbody>
</table>

**Total Distribution**

- Fluid: $355,200
- Cream: $74,240
- Evaporated: $48,500
- Butter: $19,440
- Cheese: $20,900

**Grand Total**: $516,000

### Payment

- **Total Payment**: $516,000
- **Total Price**: $220,000
- **Net Proceeds**: $296,000

**Net Proceeds** are distributed to producers based upon each producer's contribution of volume proportionate to the total volume of milk.

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**Fig. 5.—Operation of New York Classification Price Plan**
is different from the value of surplus milk during those seasons. At certain seasons the fluid-milk value is considerably greater than the values of surplus milk; while at other seasons there is less difference in the respective values.

During the period of least surplus, such as September, October, November, and December, the volume of milk which goes into fluid uses is greater than that which goes into surplus uses. During this least-surplus period a higher price may be offered for milk for fluid needs than for milk for manufacturing purposes in order to encourage a large enough production to supply fluid needs at this period. The result is that the average price to producers during this least-surplus period is governed largely by the price necessary to encourage production for fluid needs.

During the season of greatest surplus, such as April, May, and June, the volume of milk in surplus uses is greater than that in fluid uses. Then the average price to producers is governed largely by the value of milk in surplus uses.

New York Classification Price Plan. The New York price plan has five main classifications for the different uses of milk. Milk sold to a large buyer may be divided into four or five uses. Most buyers have only three uses, and in some cases a distributor has only one use.

The five classifications on which milk is sold are (1) fluid form; (2) cream and ice cream; (3) evaporated whole milk, sweetened whole condensed, milk chocolate, whole-milk powder, soft and foreign cheese; (4) butter; and (5) American cheese.

Average Price Paid to Farmers. The price which each farmer receives for his milk depends upon its total market value as derived from its various uses. The way in which the average price to be paid to producers is calculated is illustrated in Fig. 5. In this case the market value of the milk used in fluid sales was $3,552; in cream and ice cream, $720; evaporated whole milk, sweetened whole condensed, milk chocolate, whole-milk powder, soft and foreign cheese, $485; in butter, $194; and in American cheese, $209, a total value of $5,160. Since the total volume sold was 200,000 pounds, the average price was $2.58 per hundred pounds. Association expense is deducted from the average price in calculating the net average price to be returned to producers. Each producer is paid the net average price according to the proportion which his volume constitutes of the total market volume. Thus the total payment to each producer in this illustration was 500 times $2.58, or $1,290. (Producers B, C, and D each had the same volume as Producer A. Hence, they also each received $1,290 for their milk.)

1To simplify discussion, no deductions are included in this illustration.
Summary of New York Plan.

1. The New York plan provides that the distributors throughout the entire market shall pay prices for milk that are based upon the various uses of the milk.

2. The plan treats all distributors in a market as a unit, instead of having as many different marketing units as there are distributors.

3. Payment of an average price to all dairymen penalizes producers having a relatively even production, to the benefit of those having a fluctuating production.

4. Raising and lowering an average price to regulate the flow of milk to meet market needs is a less-flexible method of regulating production than is the distribution of proceeds thru use of a two-price policy along with the classified basis for selling milk.

Basic-Surplus Price Plans

The “basic-surplus” price plan is a structure by means of which proceeds from the sale of milk are distributed to producers at two or more prices according to the market value contributed by each producer. As stated, the market value of milk in fluid uses is higher, on the average, than that for cream or for milk manufactured. There is the widest margin between the market value of milk in fluid and surplus uses during the least-surplus period, such as October, November, and December. During the most-surplus period May, June, and July there is the least difference between the market values of milk in its respective uses.

This price plan is based upon the principle that each producer in a milkshed should be paid a price during each season which represents the market value of the milk that he contributes at that season. If all producers had the same seasonal variation in production, the average of fluid and surplus prices during each season would represent the market value of each producer’s milk. But the seasonal variations in the productions of different dairymen result in seasonal variations in the market values of milk contributed by them. Since variations in market values are caused by differences in the market values of milk going into fluid uses as compared with that devoted to surplus uses, it is only fair that each producer should be paid a fluid price for that part of his milk going into fluid uses and a surplus price for that part used as surplus.

Some method thus becomes necessary by which the particular quantity of fluid milk and of surplus milk to be credited to each producer may be ascertained. This may be done by means of “basic-surplus” price plans, the basic production being that which closely corresponds to fluid needs, and the surplus production being the surplus over fluid needs. A higher price can be paid for that part of a farmer’s produc-
tion that can be used in fluid sales, known as "basic" volume, and a lower average price, corresponding to the market value of the surplus, can be paid for each producer’s surplus production.

**Philadelphia Basic-Surplus Price Plan**

Under the Philadelphia basic-surplus plan each producer receives two or more prices for milk, one price being paid for his "basic" milk, and the other prices for a surplus over this basic. The basic volume for each producer in the Philadelphia milkshed is the average milk production of October, November, and December. Thus in 1925 the directors of the Philadelphia producers’ organization announced that October, November, and December of 1925 would be taken as the basic months on which to compute milk payments during 1926. Otherwise expressed, the basic milk for each farmer during the first nine months of 1926 would be equal to the amount of his average production during the last three months of 1925. All milk produced above this basic amount would be paid for as surplus.

*Price Incentive for Even Production.* Since the price for basic production is always higher than the prices for surplus, there is an incentive under this plan for each producer to maintain throughout the year a more uniform production than the natural seasonal production. The producer who has the least surplus gets the highest average price for his milk. Thus, if Producer A produced 50,000 pounds, 4,000 pounds being surplus over his basic volume (Fig. 6), he would receive the highest average price for his milk; namely an average of $2.67 per 100 pounds as compared with $2.58, the average of all producers. Suppose Producer D produced 30,000 pounds over his basic production. Of this amount, 20,000 pounds would be classed as Surplus I, and 10,000 pounds as Surplus II. Since he would receive surplus prices for three-fifths of his total production, his average price would be only $2.38 per 100 pounds, as compared with $2.58, the average of all producers. Thus each producer is paid a lower price for his share of surplus over the basic volume, while he is paid a higher price if he effects a more even production.

*Summary of Philadelphia Plan.*

1. The more-uniform production resulting from paying a higher price to each producer for his basic volume than for his surplus results in a better adjustment of production to the consumption of milk.
2. The payment of a higher price for a basic production and a lower price for any volume above this comes nearer to approximating the value of each producer’s market contribution than does the payment of an average price.
3. The basic-surplus price plan fails to take into direct consideration the fact that milk in different uses has different values.
4. Lack of specific consideration of uses to which milk is put necessitates frequent modifications in the structure of the plan. Such frequent modifications tend to lessen confidence and stability within a market.

5. Lack of specific consideration of uses to which milk is put tends to limit the operation of the plan to the fluid needs of a market and to ignore the market uses of milk in the lower classes, such as milk used in ice cream.

**Equalizing-Value Price Plan**

Under the "equalizing-value" (combination) price plan, milk is sold to each distributor for its market value in its different uses, and proceeds are returned to each producer on the basis of his contribution to the market value. In developing this plan an attempt has been made...
to combine the sound elements of existing price plans with such new elements as seemed necessary in order to adhere to economic principles.

**Fig. 7.—**SEASONAL VARIATIONS IN PRODUCTION AND CONSUMPTION OF MILK IN RELATION TO THE EQUALIZING-VALUE PRICE PLAN, PITTSBURGH, 1928

Under the equalizing-value price plan each producer in the Pittsburgh marketing area had as his basic volume for each of the twelve months in 1929 seventy percent of his average production during October, November, and December, the three months of least surplus in 1928. For this basic volume he received, during each month in 1929, the price which the distributors agreed to pay for the milk which they should use in fluid sales. Why is 70 percent used to determine the basic volume for each producer? Because in this case distributors, during the month of lowest fluid sales of the preceding year, were able to dispose of a volume of fluid milk equivalent to only 70 percent of the volume which farmers produced during the months of lowest production during that year. (January fluid sales ÷ average production during October, November, and December = 70 percent.) By placing the basic at this low point, the chances are that a producer will get the fluid (Class 1) price for more than his basic volume rather than for less, for distributors in a market operating under this plan pay the fluid (Class 1) price for 100 percent of their fluid sales whether such sales are greater or less than the basic volume. The proceeds from the fluid sales that are in excess of the total basic milk are returned to farmers by adjusting the price for surplus.
Fig. 8.—Operation of Equalizing-Value Price Plan
This plan was put into operation in the Pittsburgh market on October 1, 1928.

**Sale of Milk to Distributors.** Under the equalizing-value price plan the different uses to which milk is put are classified on a basis similar to the New York classification plan. Market prices for milk in fluid uses are arrived at in price conferences of producers and distributors. Prices for milk going into manufactured products can be calculated on some such formula as is used in the Baltimore or Philadelphia price plans. Where standards for grade and quality are recognized and enforced, the price for cream can be determined on a formula basis. At present in some markets cream prices are arrived at in conference.

**Illustration of Classified Sale of Milk to Distributors.** Distributors in a market may pay prices and use milk in the ways shown in Fig. 8. Thus, of the total fluid (Class 1) sales, 50,000 pounds were used by Distributor A, 40,000 pounds by Distributor B, and 30,000 pounds by Distributor C. Distributor A used 10,000 pounds of the milk separated into cream; Distributor B used 24,000 pounds; and Distributor C used 30,000 pounds. Distributor A used no milk in butter; Distributor B used 6,000 pounds; and Distributor C used 10,000 pounds. The market value of the milk purchased was $3,360 for fluid; $1,472 for cream, and $328 for butter: a total of $5,160. Since the total volume was 200,000 pounds, the average price was $2.58 per 100 pounds.

**Illustration of Two-Price Basis of Paying Producers.** Under the equalizing-value plan proceeds are not distributed by an average pool price. Two prices are used in paying producers:

1. A basic price, which usually is the fluid (Class 1) price that is paid to producers for basic milk.
2. A farmers' surplus price, which usually is a weighted price of the proceeds returned for distributor's surplus plus the proceeds returned for excess of fluid sales over farmers' basic quantity.

Thus if the fluid price were $2.80 per 100 pounds, as shown in Fig. 8, Producer A would receive this price for 52,800 pounds, which was his basic volume, and Producer B would receive it for 65,280 pounds, which was his basic volume. (The method of arriving at each farmer's basic quantity is shown in Fig. 7.)

**Summary of Equalizing-Value Price Plan.**

1. Each distributor pays the market value for the milk which he receives, and each producer is paid for the market value of the milk which he contributes. This encourages the economic production and distribution of milk.

2. By its two-price basis of payment, this plan encourages a production which corresponds more closely to market sales. Use of this feature in conjunction with the flexible price feature in sale of milk to distributors makes possible the direct control of production at all
periods of the year. This is of special importance in preventing shortages or overproduction.

3. This plan works automatically from year to year in adjusting farmers' basic quantities to fluid sales. This obviates the necessity of frequent modifications in the structure of the plan.

4. The plan is sufficiently broad in scope so that it can include buyers dealing exclusively in surplus milk as well as those whose sales are largely of fluid milk.

5. The plan can be adapted to use in two or more adjacent markets without penalizing or benefiting producer or distributor groups in any of the markets. This feature is of special importance in view of the probable consolidation of producers' associations in some markets that now overlap.

6. The use of two prices in paying each producer requires more calculations than does a one-price basis of payment.

7. Each producer is rewarded for an even production and penalized for an uneven production. Consequently if a producer is to realize the greatest return for his product, he is forced to watch changes in total fluid-milk demand in relation to total supply of milk.

Sound Marketing Structure Essential to Stabilized Fluid-Milk Industry

Some marketing plans fail to distinguish value as contributed by one producer from that contributed by another. Others fail to recognize the difference in values of milk as utilized by different distributors. No price plan can operate on a strictly economic basis until it includes provisions for the sale of milk to distributors on the basis of the values in the uses to which it is put, and for the distribution of proceeds to each producer on the basis of value contributed.

During their entire period of operation of price plans, producers' cooperative associations have been enjoying the public sympathy which prevails when farm prices are low in relation to consumers' purchasing power (Fig. 9). Constructive leaders of the associations should recognize two facts of fundamental importance at the present time: (1) that the majority of milk-marketing plans now in operation are not on a strictly economic basis; and (2) that public sympathy now extended to producers' cooperative associations may be of a temporary nature. Public indifference or antipathy to these associations is practically certain to follow when consumer purchasing power has a severe decline.

Social as well as economic progress of all groups interested in the dairy industry depends upon correct solution to problems of marketing milk. Much constructive work has been done thru cooperative efforts of producers' associations and distributors. In some markets, consumer groups have given their united support to improving conditions.
The greatest progress at the present time lies in combining the sound elements which these groups have initiated, with such additional elements as are necessary in order to stabilize and otherwise promote the best interest of all concerned.