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# Marketing Policies and Practices of Country Egg Dealers in Eastern South Dakota

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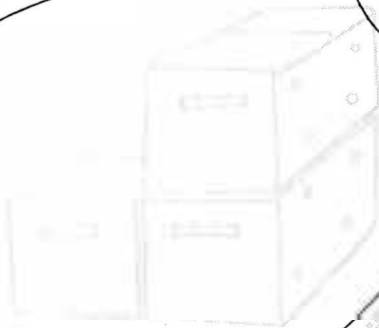
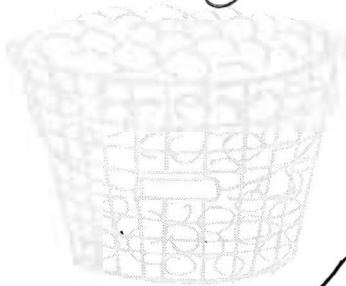
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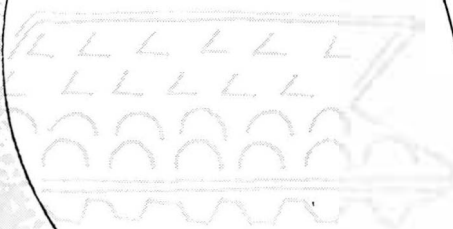
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MARKETING POLICIES AND PRACTICES OF

# country egg dealers

IN EASTERN SOUTH DAKOTA



AGRICULTURAL ECONOMICS DEPARTMENT

AGRICULTURAL EXPERIMENT STATION

SOUTH DAKOTA STATE COLLEGE, BROOKINGS

## **Tentative Recommendations for Improving the Efficiency of Egg Marketing in Eastern South Dakota**

1. The existing price mechanism is based on traditional Eastern markets. With the increasing movement of South Dakota eggs to Southern and Western areas, price quotations from these regions should be made available to dealers and producers.

2. Price differentials between high grade eggs and current receipts are not great enough throughout the year to encourage quality production. A marketing federation of dealers selling under a common brand may stimulate producers toward higher quality production. This could be accomplished by a program of quality control and efficient handling practices by the federation.

3. A large number of dealers are now purchasing eggs as a service to the rest of their business. By increasing the license fee many marginal dealers who have little interest in egg marketing may discontinue operations. This will tend to reduce the duplication of trade areas and consequently work toward increasing market efficiency.

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Marketing Policies and Practices of

# Country Egg Dealers

in Eastern South Dakota

By TURNER OYLOE<sup>1</sup>

Two major problems of the poultry industry are low quality products and inefficient marketing. Quality production does not insure the success of a poultry enterprise. Poor handling practices in the market channel and high costs of processing and marketing eggs reduce the producers' returns.

### Reasons for Undertaking the Study

The problem of pricing eggs at country points to reflect consumers' preferences for various qualities is important to producers if they are to receive the highest possible prices for producing high-quality eggs. Sellers and buyers must be acquainted with market structure and pricing mechanisms to insure the maximum income above expenses for producers' eggs.

Because pricing policies vary between markets, it is important to study each market individually to gain an insight into the pricing problems.

This study was made with the following objectives: (1) to deter-

mine the market organization and structure among egg dealers in eastern South Dakota; (2) to discover the effects of different market practices on egg prices; (3) to determine the relationship between the nature of dealer operations and various pricing policies and practices; (4) to discover the influence of terminal market prices and grades on country egg dealers' operations.

### Procedure

The data for this report were obtained from country egg dealers in two areas in Eastern South Dakota. One hundred and eighty-seven dealers were interviewed in the summer and fall of 1956. All known dealers in the two areas shown in figure 3 were included. A list of licensed egg dealers was obtained from the South Dakota Department of Agriculture.

The two areas chosen for the study were considered to be representative of egg marketing

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operations throughout Eastern South Dakota. The Southeastern and Northeastern areas were first studied individually. However, differences in country egg dealers' policies and practices were found to be more closely related to type and size of business, rather than geographical location. Therefore, the data from the two areas were analyzed together. One exception to this procedure was prices paid producers, which were kept separate due to the different dates in which prices were checked in the two areas.

#### **Importance of the Egg Industry in South Dakota**

South Dakota continues to be the major surplus egg producing area in the Northern Great Plains Area. Much of the surplus production is concentrated in eastern South Dakota.

Approximately 5% of South Dakota's farm income originates from eggs. Cash income received from eggs in 1957 amounted to \$24,571,000.<sup>2</sup> Also, during this period South Dakota had the second largest per capita egg production in this area (see figure 1). In recent years, approximately 79% of all South Dakota eggs have been marketed outside the state.

There are two fairly distinct production areas in South Dakota. West of the Missouri River is the area of low production where consumption and production are nearly equal. Over 90% of the eggs are produced east of the Missouri River (see figure 2). The surplus produc-

tion area roughly includes the area east of a north-south line from Aberdeen to Huron to Lake Andes.<sup>3</sup>

There has been a tendency in the southeastern section of the state to change from small farm-flock production to larger commercial egg production in recent years. The number of poultry farms with over 1,000 layers has increased steadily in the last few years. Commercial egg production in general is much less developed in the western sector of the state. The extreme eastern and southeastern sectors are the most highly commercialized poultry sections in South Dakota.

Egg production in central South Dakota is somewhat less uniform than in either western or eastern sections. In general, however, there are fewer large commercial producers with the average size flock being larger than in the west but smaller than in the east. With respect to intensity of egg production, central South Dakota falls somewhere between the western and eastern egg production areas.

#### **Market Channels for South Dakota Eggs**

In recent years there has been a shift away from traditional market outlets for South Dakota eggs. A combination of factors including population movements and relative

<sup>2</sup>*South Dakota Agriculture, 1956*, South Dakota State-Federal Crop and Livestock Reporting Service, Sioux Falls, South Dakota, p. 75.

<sup>3</sup>*South Dakota Poultry Production and Marketing*, Crop and Livestock Reporting Service, Sioux Falls, South Dakota, 1956, p. 3.

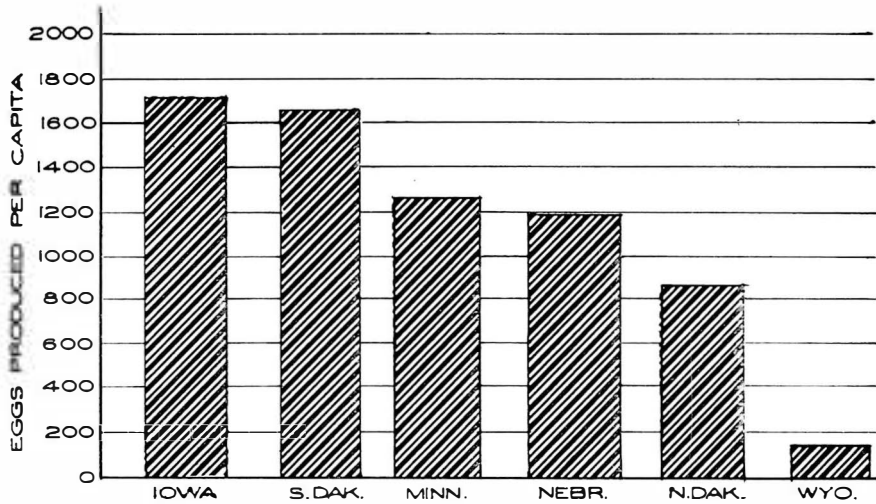


Figure 1. Average annual egg production per capita in six selected states.

increases in egg production near major consuming areas has been found to be important in the shifting of market channels for South Dakota eggs.

Population in the United States increased 17% from 1940 to 1950, compared with a 7% increase in the preceding decade. The greatest increase was in the Pacific coast area.

Egg production has changed from small flocks of less than 100 birds to large commercial flocks with layers numbering into the thousands. This is especially true in states having dense populations. For instance, in New Jersey, 61.6% of the farm flocks in 1930 had 400 or more birds; in 1950, the percentage had increased to 90.7%.<sup>4</sup> Along with increase in size of flocks, production has also shown a considerable upswing. This increase in production along with the relative

minor increase in population of the eastern cities of New York and Boston tended to make these areas less dependent upon surplus eggs from South Dakota. However, the Pacific coast areas and some Southern cities have grown faster than their egg supply. This factor has been important in the shift in markets for Midwestern eggs from the East to the South and Pacific Coast areas.

South Dakota's proportionate share of the central egg markets in Boston, New York, and Chicago has steadily declined since the 1930-34 period. During this time, however, the New Orleans, San Francisco, and Los Angeles markets have in-

<sup>4</sup>Trends in the Poultry Industry and the Effects Upon the Midwest, NCR regional Publication No. 73 (Wisconsin Bulletin 523), Agricultural Experiment Station, University of Wisconsin, June 1956, p. 67.



creased their purchases of South Dakota eggs (see table 1). If the last few years are indications of a trend in marketing eggs, it can be assumed that the Pacific Coast and Southern market outlets will continue to grow in importance to South Dakota egg producers and marketing agencies.

**Transportation of Shell Eggs to Central Markets**

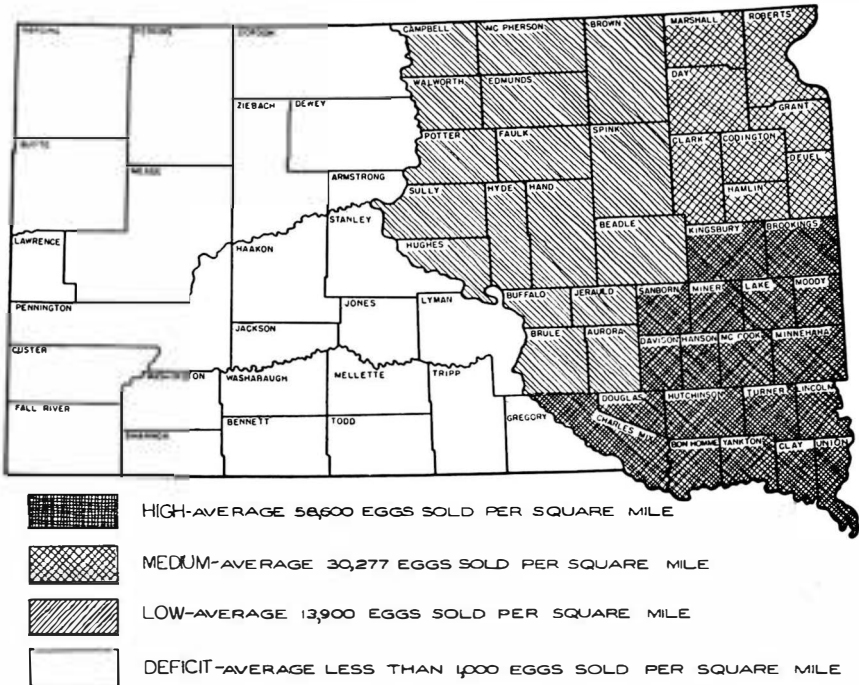
Railroads and truck lines are the two types of transportation most commonly used in interstate movement of shell eggs. In the past, railroad transportation was used predominantly in moving shell eggs to

**Table 1. Shell Eggs: Receipt of South Dakota Eggs at Certain Markets As a Percentage of Total Receipts**

City	Years				
	1930-34	1935-39	1940-44	1945-49	1950-54
Boston	3.6	1.9	0.6	0.7	0.1
New York	1.5	0.6	0.5	0.6	*
Chicago	8.8	3.6	2.4	1.6	1.1
San Francisco	---	---	.2	.7	1.2
Los Angeles	---	---	.2	.7	2.6
New Orleans	---	---	---	2.1	6.7

\*Less than 0.1 percent of the market.

**Figure 2. Intensity of egg production in South Dakota, 1956.**



out-of-state consuming centers. However, trucks have become increasingly important with the addition of better highways and large transportation units.

Truck transportation offers a number of distinct advantages to egg shippers, including faster delivery than railroads, and availability of trucks for shipments when needed by firms marketing eggs. Factors contributing to the use of truck transport over railway are cost and convenience.

There are two methods of shipping eggs by rail—express and freight. Express shipments compare favorably with truck transportation in time consumed from point of origin to destination. However, high costs prohibit extensive use of this type of transportation in marketing eggs. Railway freight charges are lower than express rates, but time in transit is longer.

Truck rates are also divided into two groups—common carriers and exempt commodity carriers. Common carriers include trucks engaged in interstate commerce. The Interstate Commerce Commission controls rates, routes, and safety procedure to be followed by these carriers. Exempt commodity carriers' rates and routes are not regulated by the Interstate Commerce Commission. Therefore, exempt commodity carriers are free to bargain independently with egg marketing agents. In some instances, common carriers are able to compete price-wise with exempt carriers. This is especially true where common carriers are able to con-

tract for backhaul. A case of this nature might arise when a trucking firm is engaged in hauling manufactured goods from New York to South Dakota, and in order to make as large a profit as possible, will transport shell eggs from South Dakota to New York City as a backhaul. However, the benefits of free movement and rate contract between the transportation firm and marketing agents tend to favor the exempt commodity carriers in transporting shell eggs. Due to the independent manner of contracts between egg wholesalers and exempt commodity carriers, uniform prices do not exist. Discussions with egg wholesalers, however, have yielded information on average prices paid in the movement of shell eggs from South Dakota to selected central markets (see table 2). Although these prices are subject to change, the ratios are believed to remain constant between the modes of transportation and charges per case.

### **Country Egg Dealers**

A survey was conducted of all dealers within the area shown in figure 3. The area chosen for survey includes two major sections of South Dakota egg producing areas.

**Description of Country Egg Dealers.** Purchasing eggs from producers is carried on by diverse types of businesses (see table 3). The most numerous group in the areas studied was retail grocers.

Retail grocers regarded egg buying activities as a service to producers, and as a source of eggs for

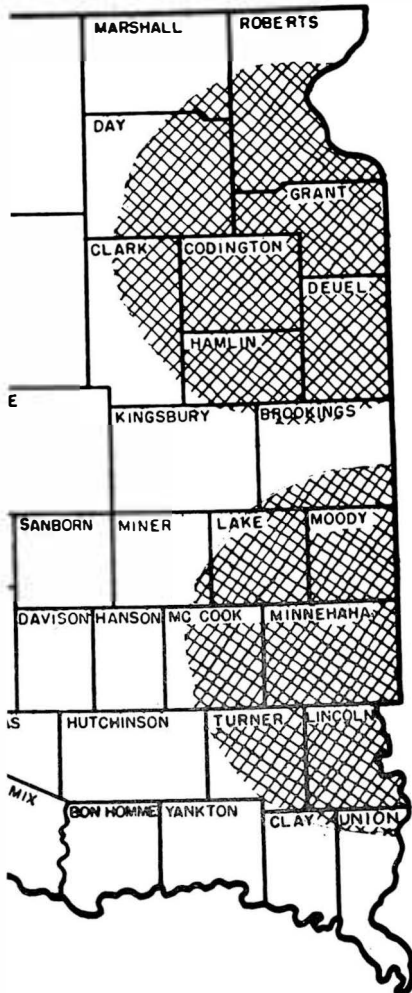
**Table 2. Comparison of Rates Charged per Case of Shell Eggs Between Rail Express, Railroad Freight, Transport Exempt Commodity Carrier**

From Sioux Falls, South Dakota, to:	Rail		Truck	
	Ex-press (\$)	Freight (\$)	Com-mon Car-riers (\$)	Ex-empt Com-modity Carrier (\$)
Chicago .....			.39	.32½
Los Angeles, Calif.	4.89	1.36	2.85	.90
New York, N. Y.	4.03	1.40	1.32	.90
Denver, Colo.	2.75	1.00	1.47	.50
New Orleans, La. ...	3.60	1.40	1.75	.60
Ft. Worth, Tex. ....	3.02	1.13	1.38	
South Texas ..				.60

retail sales. Income from egg sales was not usually a primary source of revenue. Rather, egg purchasing activities were looked upon as good-will expense in business operations. The majority of retail grocers engaged in egg buying operations were located in rural communities. Characteristics of these firms included individual ownership and use of family labor in business operation. The primary source of eggs purchased by retail grocers was producers. Secondary sources of eggs purchased included local produce stations, egg assembly plants, and creameries. Retail grocers sold the bulk of eggs purchased from producers directly to consumers. Local egg supplies were not always equal to consumers' purchases. During seasons of short

local production, retail grocers supplemented eggs purchased from producers with eggs supplied by other dealers. In the seasons of excess local production, the reverse was found to be true.

**Figure 3. Two areas in Eastern South Dakota included in the country egg dealers survey, 1956.**



Local produce stations marketed eggs as a primary portion of their business operation. Their main suppliers were producers. Other sources of supply included retail grocers and branch and feeder stations.

Truckers engaged in country egg buying activities purchased eggs directly from producers. They in turn sold their eggs to wholesale dealers. Usually, truckers had regular routes on which they picked up eggs from producers.

Egg operations of creameries were similar to other country egg dealers with the exception of retail grocers. Added operations performed by egg assembly plants included freezing eggs and preparation of shell eggs for cold storage. Egg assembly plants were marketing agents for eggs shipped to buyers out of state. One dealer also sold eggs to the army.

The hatchery demand for eggs is at a peak during late winter and early spring. Hatcheries tended to buy eggs from a limited number of producers. In order to insure an adequate supply of eggs during hatching season, they purchased their producers' egg output over a 12-month period. Eggs not used for hatching were sold to other dealers.

**Ownership.** Seventy percent of the dealers in the areas studied were individual proprietorships (see table 4). Most local produce stations, retail grocers, and truckers were in this category. This group is the most diversified in egg marketing operations. Individual proprietors varied from small retail

grocers handling under 500 cases of eggs yearly to large egg assembly plants processing over 50,000 cases of eggs yearly. Partnerships tended to show the same characteristics as independent proprietors in market organizations.

Cooperatives and other corporations served as egg wholesalers to smaller country egg buyers and tended to be the main channels of egg sales to out-of-state markets. Cooperatives and corporations account for 9.0 and 10.2% respectively of the country egg buyers in the two areas studied.

**Table 3. Number of Egg Dealers by Type of Business Operated in Two Areas in Eastern South Dakota, 1956**

Type of Business	Number	Percentage of Total
Retail Grocers .....	88	49.7
Local Produce Stations	52	29.4
Creameries .....	13	7.3
Branch and Feeder Stations .	8	4.5
Hatcheries .....	5	2.8
Egg Assembly Plants ...	6	3.4
Truckers and Others* ..	5	2.8
<b>Total</b> ....	<b>177</b>	<b>100.0</b>

\*Include seed, feed, fertilizer dealers.

**Table 4. Number of Egg Dealers by Type of Ownership in Two Areas in Eastern South Dakota, 1956**

Type of Ownership	Number	Percentage of Total
Individual		
Proprietorship .....	125	70.6
Profit Corporation .....	18	10.2
Partnership .....	18	10.2
Cooperative .....	16	9.0
<b>Total</b> .....	<b>177</b>	<b>100.0</b>

**Volume of Eggs Marketed.** Nearly one half of country egg dealers marketed less than 1,000 cases of eggs yearly and nearly two-thirds of them handled less than 5,000 cases of eggs yearly (see table 5).

**Table 5. Number of Egg Dealers by Volume of Egg Business in Two Areas in Eastern South Dakota, 1955**

Cases of Eggs Handled in 1955	Number of Buyers	Percentage of Total
Less than 1,000	81	48.5
1,000—4,999	27	16.2
5,000—24,999	45	26.9
25,000—over	14	8.4
<b>Total</b>	<b>167</b>	<b>100.0</b>

Produce stations had the greatest spread in volume of eggs purchased. However, over half of the produce stations observed purchased 5,000 to 24,999 cases of eggs yearly. Egg assembly plants handled the largest volumes of eggs. Five of the six plants purchased in excess of 25,000 cases of eggs yearly. Branch and feeder stations, creameries, and truckers are inter-

mediate egg purchasers with volumes ranging from 2,000 up to nearly 25,000 cases of eggs purchased per year. Creameries were equally divided between firms purchasing over 25,000 cases and from 5,000 to 25,000 cases of eggs yearly (see table 6). Dealers whose egg volumes exceeded 1,000 cases yearly generally were interested in egg marketing as a source of direct income, not as a service to other sectors of their business. Because of their financial interest in egg marketing, large volume operators played an important part in determining egg pricing policies in the area studied.

#### Marketing Practices

Marketing practices include the operations of country egg buyers from the time of purchase to the sale of eggs and egg products. Buying, grading, selling, storing, and transportation are the marketing practices with which we will concern ourselves in this section.

**Buying, Grading, and Selling.** Eggs may be purchased by dealers

**Table 6. Volume of Eggs Purchased by Country Egg Dealers in Two Areas in Eastern South Dakota, 1955**

Number of Cases	Number of Firms						
	Retail Groceries	Produce Stations	Creameries	Branch and Feeder Stations	Hatcheries	Egg Assembly Plants	Trucks Other
Under 500	61	4	0	0	1	0	2
500—999	12	1	0	0	0	0	0
1000—1999	6	6	0	0	0	0	0
2000—4999	3	7	1	2	1	0	1
5000—24,999	1	29	5	6	3	1	0
25,000—over	0	4	5	0	0	5	0

as current receipts or by grade. Current receipts are purchased without regard to individual egg quality. Graded eggs are purchased according to quality. Current receipts are often broken and sold as refrigerated eggs. Retail grocers in rural areas sell current receipts. Graded eggs were shipped to out-of-state markets. Also supermarkets in urban areas of South Dakota sell graded eggs.

The majority of eggs purchased from producers were current receipts. Cooperative creameries and egg assembly plants purchased graded eggs from producers. Other dealers purchased mostly current receipts.

In the area studied, 70% of the eggs purchased by dealers were from producers. Thirty percent of dealers' purchases were from other dealers.

Dealers who purchased current receipts often graded the eggs before selling them to wholesalers. Egg assembly plants, creameries, and a few produce stations acted as wholesalers. These dealers were the main outlets for out-of-state markets. Consumers within the state were served by all other dealers.

**Assembly.** Transportation of eggs from producers to the first assembly point varied among dealers. Producers transport eggs when selling to retail grocers. Egg assembly plants, local produce stations, and truckers had regular pick-up routes. Creameries assembled eggs along with milk and cream.

**Quality Deterioration.** Eggs are perishable. Deterioration in quality

occurs during the marketing process. In a study by Michigan State College, it was observed that average decline in egg quality as reflected in prices received was 45 cents a case from producers to dealers, and 39 cents from dealers to consumers.<sup>5</sup>

Decline in egg quality can be minimized by proper storage practices and accelerations of egg movement from producers to consumers. Good storage practices for preservation of egg quality include cool rooms with high relative humidity. Precautions should be taken to include adequate ventilation to prevent eggs from "sweating."<sup>6</sup>

Storage practices of buyers interviewed are shown in table 7. Sixty-eight of the dealers lacked facilities to protect eggs from quality deterioration. Eighty-six dealers used refrigerated coolers. The group using refrigeration included 15 with humidity control and 71 without humidity control units. Thirteen stored eggs in the basement and eight used insulated rooms.

Seventy-nine dealers studied held eggs less than 48 hours. Eighty dealers held eggs over 48 hours and less than 96 hours. Sixteen or 9.3% held eggs purchased over 96 hours (see table 8). It also was observed

<sup>5</sup>Henry Larzelere, *Changes in Egg Quality from Farm to Retail Stores*, Agricultural Experiment Station, Bulletin 400, Michigan State University, East Lansing, 1954, p. 15.

<sup>6</sup>Sweating eggs refers to condensation of moisture on egg shells due to improper ventilation. It causes deterioration in egg quality due to mold growth.

**Table 7. Storage Practice of Country Egg Dealers in Two Areas in Eastern South Dakota, 1956**

Type of Storage	Number of Firms	Percentage of Firms
Refrigerated cooler .....	86	48.9
Floor of Plant .....	68	38.5
Basement .....	13	7.7
Insulated rooms .....	8	4.9
<b>Total</b> .....	<b>175</b>	<b>100.0</b>

that dealers who held eggs for 2 days or more were using poor storage practices. Dealers who marketed eggs daily generally used recommended storage practices including cold storage rooms and fans for ventilation.

#### Price Information

Large volume dealers relied on central market quotations from New York and Chicago for base prices. Central market quotations were most commonly received by radio. The Iowa State College morning report was used extensively. Thirty of the 45 intermediate volume dealers (5,000-24,999 cases of eggs yearly) also considered central market quotations in forming their price policies.

Upon receiving prices, large volume dealers disseminated the information to smaller dealers. Trucks on pickup routes and the telephone were used extensively to spread price information. In some localities local newspapers assisted in communicating prices to dealers. Small produce stations received price information from egg assembly plants. Retail grocers often telephoned nearby produce stations for

price information. Newspapers were also used extensively by retail grocers for price information.

Price dissemination in egg marketing operations is essential due to daily fluctuations in prices on central markets. Firms observed receiving insufficient market reports (2 days or more between reports) were located in sparsely populated and isolated areas. Most of these dealers were small grocery stores doing a limited egg marketing business.

Price information was received daily by a majority of dealers. Daily price reports were received by 113 dealers. Fourteen dealers received price information every other day. Nineteen dealers received price information weekly, and 21 received price information when changes occurred. This varied from 1 day to a week (see table 9).

Discretion as to when to change prices to conform with new price information lies with the individual firms. Thirty-three dealers changed prices immediately upon receiving new prices while the majority of dealers (129) changed prices the following day (see table 10).

The firm's decision as to when

**Table 8. Length of Time Eggs are Held by Country Egg Dealers in Two Areas in Eastern South Dakota, 1956**

Length of Time	Number of Firms	Percentage of Firms
Less than 48 hours .....	79	45.1
48—96 hours .....	80	45.6
Over 96 hours .....	16	9.3
<b>Total</b> .....	<b>175</b>	<b>100.0</b>

Table 9. Frequency with Which Country Egg Dealers in Two Areas in Eastern South Dakota Received Price Quotations, 1956

Period	Number of Firms	Period	Number of Firms
Daily .....	113	Weekly .....	8
Every other day ..	14	When Prices Change	21
Twice a week .....	19		

price changes were to be made presented a problem. Immediate price changes entail different prices during the day. This in turn may act as a basis for poor feelings among producers toward dealers. Also, trucks leave early in the morning and would find it impractical to gain new market information in the middle of the day. Immediate price changes were usually limited to dealers who received most of their eggs in the morning or afternoon. In this way producers tended to receive the same prices during any given day from any one dealer.

Dealers tended to compare different price sources before arriving at decisions on their own firm's pricing policies. Twenty-four dealers used central market quotations when purchasing current receipts. Approximately twice as many dealers relied on central market quotations for graded egg prices.

Wholesale prices originated with large volume dealers who were engaged in wholesale marketing of eggs. Usually egg assembly plants communicated wholesale prices to local produce stations. Thirteen dealers (11 produce stations and

two creameries) used current receipt wholesale prices. Eleven produce stations referred to wholesale egg prices when pricing for graded eggs. Competitors' prices were observed by the greatest number of dealers, with 99 referring to competitors' prices on current receipts, and 55 referring to competitors' prices for graded eggs. The extent of observation by dealers of competitors' prices varied among the firms studied. Some firms set their prices in accordance with competitors' prices. Other dealers referred to competitors' prices as a factor to be considered when deciding on what price they would pay for eggs. Small volume dealers, especially grocery stores, referred to competitors' prices more often than did large volume egg dealers. Branch and feeder stations used prices established by their home plants. Twelve firms studied used a combination of price sources when purchasing eggs on current receipts. One firm purchasing on grade combined sources of pricing information in determining its price.

Final decisions on price policies, in the case of small volume operators, usually included consideration

Table 10. Time Lapse Between Issuance of Price Quotations and Application to Purchases by Country Egg Dealers in Two Areas in Eastern South Dakota, 1956

Period	Number of Firms
Immediately .....	33
One Day .....	129
Two Days .....	3



of competitors' prices. This condition was especially true for local dealers where competition was keen. It is of interest to note that many buyers changed their sources of price information according to type of eggs purchased. Graded egg purchasers relied heavily on central market quotations, while purchasers of current receipts relied more heavily on large competitor prices. This situation was due to current receipts being used in the state market, with graded eggs being sold out-of-state in competition with out-of-state dealers (see table 11).

### Price Basis

Price information received from different sources acted as a guide for dealers. Other factors also played an important role in forming individual pricing policies. Competition, marketing agreements, and profit were important in dealers' individual price making decision.

**Competition.** Competition among dealers for producers' eggs is, in part, related to the number of outlets available to producers. In areas of high production, competition tended to be more intense than in areas of low production. The supply areas of dealers marketing from 5,000 to 25,000 cases of eggs yearly are shown in figures 4 and 5. The southeastern sector is characterized by greater overlapping than is the case in the northeast.

Figures 6 and 7 show the inter area markets for dealers handling in excess of 25,000 cases of eggs yearly. To gain a realistic picture of

**Table 11. Source of Price Information Used by Country Egg Dealers in Two Areas in Eastern South Dakota, 1956**

Source of Price Information	Number Using Current Receipts Reports	Number Using Graded Reports
Competitors' Price .....	99	55
Central		
Market Quotation ....	24	50
Wholesale Price .....	13	11
Price Established		
by Home Plant* .....	3	7
Combination of Above .	12	1

\*This pertains to branch and feeder stations.

the competition we would superimpose the two charts (less than 25,000 and over 25,000 cases) on top of one another and add all dealers marketing less than 5,000 cases of eggs yearly. The extensive overlapping of procurement areas resulted in an extravagant amount of cross hauling and duplication of collection routes.

Duplication in procurement areas may have one of two effects. First, marketing costs are increased by a number of firms running nearly identical egg pickup routes. On the other hand, in the short run, increased competition for producers' eggs will tend to give producers a greater choice in services offered and prices paid. Some producers may gain higher returns for their eggs; however, increased marketing costs due to duplication will probably lead to lower returns for the producers as a group.

Competition among dealers for producers' eggs existed in three

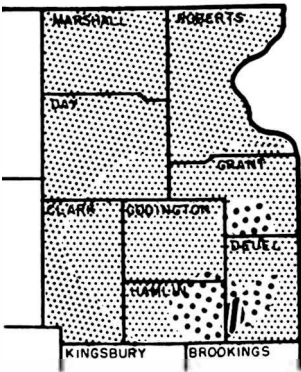


Figure 4. Supply areas of country egg dealers in Northeastern South Dakota handling from 5,000 to 25,000 cases of eggs per year, 1956.

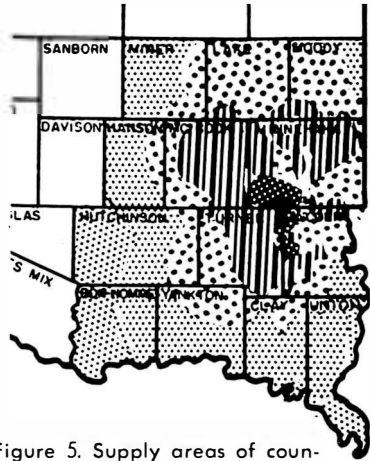


Figure 5. Supply areas of country egg dealers in Southeastern South Dakota handling from 5,000 to 25,000 cases of eggs per year, 1956.

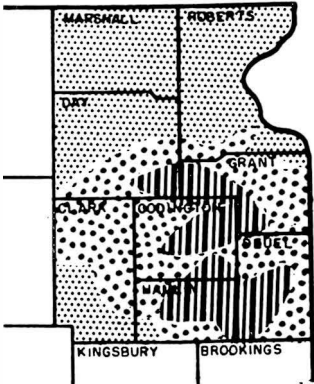


Figure 6. Supply areas of country egg dealers in Northeastern South Dakota handling over 25,000 cases of eggs per year, 1956.

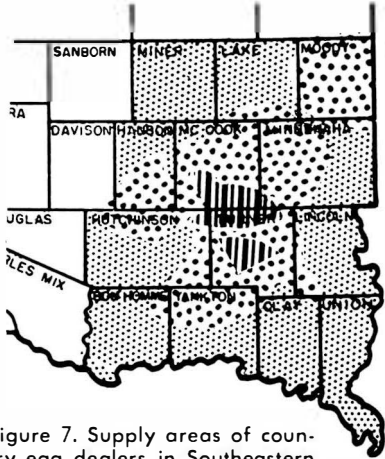
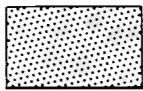
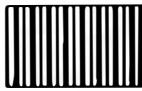


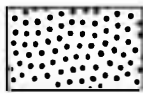
Figure 7. Supply areas of country egg dealers in Southeastern South Dakota handling over 25,000 cases of eggs per year, 1956.



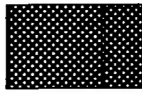
2 BUYERS



6 BUYERS



4 BUYERS



8 BUYERS

forms: price, service, or a combination of the two. Firms studied either met, ignored, or exceeded competitors' prices. Egg assembly plants in five instances ignored competitors, and in one case equaled competitors' prices. Produce stations in 33 cases met competitors' prices, and ignored competition in four instances. Seven produce stations exceeded competitors' prices, with six mentioning services as the method used in meeting competition. The majority of retail grocers (58) did not actively compete for producers eggs. However, nine equaled competitors' prices and 17 paid more for eggs than did their competitors. Nine creameries paid more for their eggs than did competitors, and two equaled their competitors' prices.

The majority of egg assembly plants and produce stations transported eggs from producers to dealers as a service to producers. Other forms of competition which cannot be adequately measured in the scope of this paper include good will and established selling practices of producers.

**Marketing Agreements.** Marketing agreements, when referred to country egg dealers, related to agreements between first and second dealers on pricing policies. Marketing agreements varied from complete control of egg dealers' pricing policies to informal agreements on pricing eggs between dealers. Complete control exists when the purchaser informs the receiver what price to pay and from what areas eggs may be purchased. Most agreements were between the

two extremes. However, dealers usually conformed to wholesalers' pricing policies. Under this situation buyers were either allotted a commission on eggs purchased or paid hourly wages by wholesale dealers. In some instances a combination of the two, hourly wages and commission, were used. In a minor number of instances, dealers who had marketing agreements purchased eggs on their own initiative and sold at the market price. In following this policy the dealer hoped to earn a higher return on eggs handled than would have been possible on a commission-selling basis. Loyalty to wholesalers for benefits received at some earlier period and restricted marketing channels along with financial dependence were given as reasons for keeping marketing agreements.

Informal agreements on pricing policies were found to prevail where wholesale dealers were relatively equal in size. It was observed in one area that three dealers, all of near equal size, listened to the market reports from Ames, Iowa, and then met for coffee. During this meeting reported egg prices were discussed and prices for the day were established.

Retail grocers occasionally engaged in marketing agreements with producers. These agreements followed a pattern. Retail grocers agreed to buy the producer's output and pay him a price related to other buyers in the community. The producer in turn agreed to sell his egg production to the grocer on the price basis acceptable to both par-

ties. These agreements were informal, and usually guaranteed producers a premium over prices quoted by other dealers in the community.

**Profit.** Gross margin is the difference between prices paid and prices received when eggs are sold. Dealers' average expected and actual gross margins are shown in table 12. Expected average gross margin expressed the dealer's opinion as to what he felt to be a fair return on labor and investment.

Although gross margins supplied were only estimates, certain points may be noted. Dealers operated to insure gross margins. Since actual gross margins were usually equal to or greater than expected gross margins, it may be assumed that this margin included a fair profit for dealers. Then it is reasonable to conclude that losses or gains due to price fluctuations were absorbed by either or both producers and retailers purchasing wholesale eggs.

Factors contributing to different margins among dealers included

**Table 12. Average Gross Margins Expected and Received by Country Egg Dealers in Two Areas in Eastern South Dakota Per Case of Eggs Marketed, 1956**

Type of Business	Gross Margin Expected	Gross Margin Received
Egg Assembly Plants	\$3.00	\$2.90
Retail Groceries .....	1.35	1.50
Creameries .....	1.25	1.50
Local Produce		
Stations .....	.90	.87
Hatcheries .....	.85	1.50

**Table 13. Average Prices Paid by Country Egg Dealers in Two Areas in Eastern South Dakota for Eggs Purchased on June 1 and September 1, 1956**

Basis of Egg Purchases	North-eastern Area	South-eastern Area
	Septem-ber 1, 1956	June 1, 1956
	cents per dozen	
Current Receipts ..	23.4	30.1
Grade A Large .....	32.0	31.3
Grade A Medium and B Large .....	22.9	27.8
Undergrades .....	17.6	24.6

services to producers, wholesaling expenses, and volume marketed. Firms engaged in selling eggs outside of South Dakota tended to have greater expenses per case of eggs handled than did local dealers. Margin expected and received tended to be greater in relation to the services rendered by dealers.

Local produce stations and truckers handled large volumes of eggs. Operational expenses were minor in relation to volume handled when compared with firms engaged in out-of-state marketing operations. Produce stations, egg assembly plants, and creameries engaged in wholesale marketing operations shipped eggs and egg products to out-of-state markets. Expenses were higher when compared to other dealers. Therefore, they required a larger gross margin per case of eggs handled.

**Study of Prices Paid by Country Egg Dealers.** Average egg prices paid by dealers in eastern South Dakota are shown in table 13. The spread in prices between current

receipts and Grade A large eggs was greater in September than in June. These price differentials were in part due to a stronger demand in June for current receipts for egg breaking operations.

Range in prices paid by dealers on June 1 and September 1 varied as much as 15 cents per dozen eggs purchased (see table 14). The maximum price spread occurred in current receipts. Differences in quality between current receipts purchased was the main factor contributing to the differences in price in the two periods.

To better understand price fluctuations among dealers, retail grocers will be considered separately. Grocers' average prices paid for current receipts were higher than those of other egg dealers (see table 15). This situation was due to acceptance of current receipts by consumers from retail grocers as high quality eggs. Other factors contributing to higher prices included small volume and limited handling expense from producer to consumer in retail operation. This made it

**Table 14. Range of Prices Paid by Country Egg Dealers in Two Areas in Eastern South Dakota for Eggs Purchased on June 1 and September 1, 1956**

Basis of Egg Purchases	Northeastern Area September 1, 1956	Southeastern Area June 1, 1956
Current Receipts .....	21-36	28-42
Grade A Large .....	30-35	29-36
Grade A Medium and B Large .....	22-28	26-30
Undergrades .....	15-20	18-26

**Table 15. Average Prices Paid by Retail Grocers and Other Country Egg Dealers in Two Areas in Eastern South Dakota for Eggs Purchased on June 1, and September 1, 1956**

Basis of Egg Purchases	Northeastern Area September 1, 1956		Southeastern Area June 1, 1956	
	Retail Grocers	Others	Retail Grocers	Others
cents per dozen				
Current Receipts	26.3	22.0	31.7	29.3
Grade A Large	.....	32.1	32.5	31.0

possible for grocers to pay producers higher prices than other dealers. However, this accounts for an insignificant part of the eggs purchased in Eastern South Dakota.

Prices paid by dealers varied with the type of business operated. Retail grocers had greater variation in prices paid for eggs than other dealers in the two periods studied (see table 16). Retail grocers' price range was probably due to inadequate price information and unspecialized marketing practices. Egg buying operations varied among retail grocers. Some operators purchased eggs from a few producers and paid premiums, while others accepted eggs from producers on a barter basis. These practices led to variations in prices for eggs purchased from producers by retail grocers. Prices among creameries, produce stations, and egg assembly plants varied less due to more adequate price information and competition from other egg producing areas in marketing eggs outside the state.

### Summary

South Dakota market outlets for eggs have been shifting from traditional Eastern markets to Southern and Western cities in the United States. There are indications that the use of truck transportation to move shell eggs to out-of-state consuming markets has been increasing.

Country egg dealers differed in respect to the importance of egg marketing in their overall operation. Some dealers looked upon egg operations as a major source of income, while others considered egg marketing as a service to other sectors of their business.

Dealers varied in volume marketed from a few cases of eggs to more than 25,000 cases yearly. Large volume operators were found in egg assembly plants, creameries, and produce stations. Other buyers tended toward smaller egg operations.

Eggs were purchased as current receipts or graded by size and quality. Graded eggs were often chan-

neled to out-of-state markets. Current receipts were used in egg-breaking operations. Also retail grocers in eastern South Dakota sold current receipt eggs to local consumers.

Handling practices which help to preserve egg quality were found to be lacking for 38% of the dealers interviewed. The majority of country egg dealers held eggs less than 48 hours. Costs incurred while marketing eggs were dependent on volume of operations and services rendered.

Price information received by dealers depended on their market position. Price leaders were usually large volume dealers selling eggs out-of-state. They received price information from central markets. Local dealers in turn received price quotations, usually daily, from price leaders. Radio was used extensively in receiving prices from central markets, while telephone and word-of-mouth were used to disseminate price information to other local buyers. Most small volume dealers considered competitors' prices when making decisions on their own pricing policies.

Market agreements between first and second buyers were found to be related to relative volume of the individual firms. Small dealers with market agreements were usually dominated by larger dealers. Large dealers who were second buyers tended toward mutual understandings among themselves in pricing policies.

Competition varied with intensity of production. Areas of high production had large numbers of deal-

**Table 16. Range of Prices Paid Retail Grocers and Others in Two Areas in Eastern South Dakota for Eggs Purchased on June 1, and September 1, 1956**

Basis of Egg Purchases	Northeastern Area September 1, 1956		Southeastern Area June 1, 1956	
	Retail Grocers	Others	Retail Grocers	Others
	cents per dozen			
Current Receipts	21-36	21-25	28-42	27-32
Grade A Large	-----	30-35	29-36	30-32

ers competing in the same trade areas. Areas of less intense production had fewer competing firms and consequently competition was not as important. Competition took two forms, that of service to producers and differences in prices paid for eggs.

Gross margin expected and received by dealers was partly dependent on the complexity of dealers' operations. Dealers selling over long distances and offering other services expected and received a larger gross margin than other dealers studied.

Comparison of prices received by producers on June 1, and September 1, 1956, seemed to indicate a greater demand for current receipts in June than in September. This was found to be due in part to egg breaking operations which use current receipts and operated in spring and early summer. Retail grocers were found to have a greater spread in prices paid for eggs than did other dealers. However, retail grocers as individual firms did not show evidence of variation in prices paid to different producers from whom they purchased eggs. Restricted purchasing by some retail grocers and purchasing eggs as a service to their customers were probably the two reasons for price variations being greater among retail grocers when compared to other dealers.

Country point pricing policies were largely dependent on central markets for price information. Price leaders received central market quotations and disseminated them

to other local buyers. Central market prices in turn became a base used by country egg buyers in pricing policies. The influence of central market prices tended to be related to country dealers' market outlets. Retail grocers sold eggs to consumers at the price at which they would move, and referred to competitors' prices only as they affected their ability to purchase eggs from producers. Wholesalers selling to out-of-state markets depended directly on central market quotations and were price leaders. Other dealers who channeled their eggs to wholesale buyers were indirectly affected by interpretations of central market conditions as seen by price leaders who tended to be collective in their decisions on price policy.

Dealers were engaged in marketing eggs either for a source of income or as a service to other portions of their businesses. Where income was dependent upon eggs, prices among dealers tended to show less fluctuation than where eggs were purchased as a service to other sectors of the business. Therefore, volume of eggs marketed was important in variations in prices paid.

Variations in market prices were absorbed by producers and retailers. Marketing margins of dealers were usually met before prices paid producers were established.

### **Conclusions**

The price structure for eggs in eastern South Dakota is similar to a pyramid. On top is the central market pricing mechanism. Immediate-

ly below the central market are the wholesale dealers in South Dakota. As we approach the base the volume marketed decreases until finally we reach the retail grocers. As we have observed, the pricing influence at the top of the pyramid decreased as the base was approached. Variations in pricing among large volume dealers was less than among small volume dealers. Price competition

for dealers' eggs was strongest among the medium size dealers, while transportation service was the competitive form most observed when nearing the pyramid's crest. Other factors which contributed to price differences include method of sales (current receipts or grade), seasonal variation, and type of product shell eggs or broken-out refrigerated eggs.

#### **Acknowledgment**

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