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Cooperative Meat Packing

United States
Department of
Agriculture

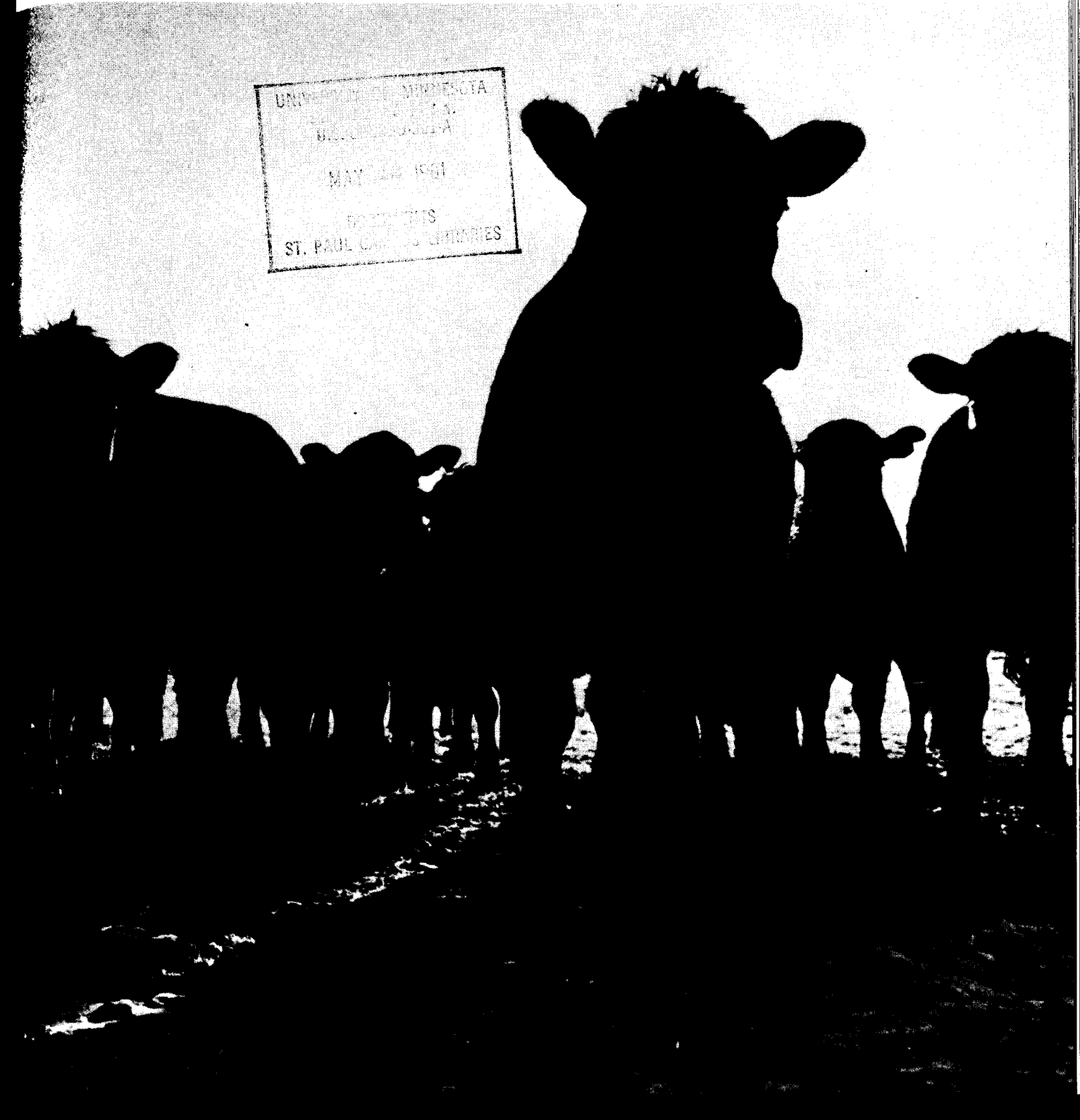
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Lessons Learned From Sterling Colorado Beef Company

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ABSTRACT

Integration into meatpacking is a marketing alternative for live-stock producers. For those considering such a step, Sterling Colorado Beef Co. provides a valuable learning experience. Feeders willing to commit capital, cattle, and time established the cooperative. Members said primary benefits were having a guaranteed market outlet and receiving a fair market price, rather than receiving a higher price or obtaining additional returns from meatpacking. Members attributed the cooperative's success to competent management and strong member-management relations. The major problems encountered involved issues of environmental protection and lack of commitment by some members.

Key words: Cooperative, meatpacking, vertical integration, cattle marketing, cattle procurement, cattle pricing, beef marketing.

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HIGHLIGHTS

Livestock producers often believe vertical integration into meatpacking will solve their marketing problems. This study draws on the experience of a large meatpacking cooperative to assist producers interested in this option.

Sterling Colorado Beef Co. was established in 1966 by a few large cattle feeders seeking to develop a better market for their cattle in northeastern Colorado. The company began as a closely held private corporation, but later offered its stock to many local feeders. Although Sterling Beef almost always operated like a producers' cooperative, it was not officially organized as one until 1976.

A unique feature of Sterling Colorado Beef is its method of scheduling its members' cattle for slaughter. Large and small feeders cooperate to insure an efficient slaughter schedule.

Another unique feature is that feeders can receive a price for cattle based on a weekly average price and are paid premiums as an incentive to deliver cattle that meet the preferences of Sterling Colorado Beef's customers.

Ninety-four percent of members responding to a survey indicated they benefitted from owning a meatpacking cooperative. Primary benefits cited were having a guaranteed market outlet, receiving a fair market price, and being able to sort and market any number of cattle when cattle reach market condition.

Often-assumed benefits of owning a meatpacking cooperative, such as receiving a higher price for cattle, receiving meatpacking savings (profits), and receiving large patronage refunds, ranked relatively low on the list of benefits.

Ninety-nine percent of the members surveyed believed their cooperative was successful and 65 percent gave it the highest possible rating. Primary reasons for success were competent management, strong member-management relations, and high member commitment.

Cooperative members cited environmental concerns (air and water quality and sewage treatment), lack of commitment by a few members, and labor relations as the three major problems encountered.

Advice is given to producers interested in cooperative meatpacking. Sterling Colorado Beef's management recommended being concerned about available power, water, and sewage. They also advised members to work together for the common benefit of all members.

Cooperative members advised producers to carefully study any proposed venture into meatpacking and to hire experienced, competent management.

Overall, the case study suggests that producers should accurately identify their marketing needs and alternatives, and realistically assess the benefits of entering into meatpacking. Prospective members should be prepared to commit their capital, cattle, and time if they expect a meatpacking cooperative to succeed. Members also must cooperate among themselves and with management to insure their cooperative's success.

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Cooperative Meatpacking:

Lessons Learned From Sterling Colorado Beef Company

*Clement E. Ward**

Livestock producers frequently express an interest in integrating into meatpacking as a means of solving their marketing problems. This study of a relatively successful meatpacking cooperative, Sterling Colorado Beef Co. (referred to as Sterling Beef), determines information useful to producers considering organizing a meatpacking cooperative. Various aspects of Sterling Beef's development, growth, and current operations, along with benefits, problems, and advice for others are discussed. The report will be useful primarily to cattle feeders but will benefit other livestock producers as well.

This analysis of Sterling Beef was based on a study of company records and interviews with key management personnel and six member-feeders during August 1979. Feeders interviewed included one of the two large original investors. In addition, all 185 cooperative member-feeders were mailed surveys in September 1979; 73 members, or 39 percent of the total, responded.

DEVELOPMENT AND GROWTH

Sterling Beef began and grew during a period of structural change in cattle feeding and meatpacking. Colorado's share of fed cattle marketings, among the 23 leading cattle-feeding States, increased from 6 percent in 1962 to 9 percent in 1979. Colorado was one of only seven States to experience a relative increase in cattle feeding during that period (3, 6).¹ Cattle feeding expanded partly because increased irrigation resulted in greater feed-grain production and availability. In 1962 Colorado had 1,200 feedlots with a one-time capacity of fewer than 1,000 head (referred to as farmer feeders) and 80 feedlots with a one-time capacity of 1,000 head or more (referred to as commercial feeders). The smaller size feedlots accounted for 29 percent of fed cattle marketings in the State. Since 1962, feedlots have become fewer in number but much larger.

In 1965, Colorado had only three major cattle slaughtering plants—plants killing 100,000 or more head a year. Two of them were located in the Denver area and brought a number of fed cattle from the Denver terminal market. As cattle feeding expanded, more plants were built and most cattle moved directly to the slaughtering plants. By 1979, seven major plants were operating, four of them were outside the Denver area.

*Associate Professor and Extension Economist-Marketing, Oklahoma State University.

¹Numbers in parentheses refer to references at the end of this report.

Initial Organization

Northeastern Colorado cattle feeders perceived marketing problems in their area during the late fifties and early sixties. Most cattle feeders in the Sterling area marketed cattle to meatpackers through the Denver terminal market 120 miles away, and sometimes to meatpackers near midwestern terminal markets over 400 miles away. Eighty percent of the survey respondents indicated they sold cattle to meatpackers in Denver and other Colorado cities before joining Sterling Beef. The remaining 20 percent marketed cattle through meatpackers in several other States (Kansas, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming), including several midwestern terminal markets (Kansas City, Omaha, St. Joseph, Sioux City, and Sioux Falls).

Feeders were dissatisfied with competitive conditions. They complained that occasionally no bids were received on cattle in Denver, sometimes for 2 consecutive days. When that occurred, feeders were forced either to accept any bid made on the following day or ship the cattle back to the feedlot and try marketing them later or elsewhere, a costly procedure. Feeders wanted a fair price for their cattle, but they believed they were receiving less than the true market value from meatpackers. They also wanted a local market outlet to reduce high marketing costs. Feeders paid commission fees, transportation costs, and for shrinkage in transit and in the yards, and spent at least a half day accompanying cattle to distant markets.

Two larger feeders thought there was a better way. They discussed building a meatpacking plant in Sterling, Colo. These feeders sought a strong marketing position since they had virtually no market power shipping cattle to Denver and other terminal markets. They believed a nearby market could save them commission fees, freight costs, shrink, and time, and they would no longer be dependent on commission salesmen to market their cattle.

Because both feeders had previously lost several thousand dollars in another feeder-owned meatpacking plant, they pooled their resources with an established meatpacker, Seitz Packing Co. of St. Joseph, Mo., after contacting several meatpackers. Four cattle feeders (the original two plus two others), three owner-employees of Seitz Packing, and a local banker organized Sterling Beef as a privately held corporation and built a slaughtering plant which opened in April 1966.

Cooperative Organization

Sterling Beef reorganized from a privately held corporation to a cooperative corporation in 1976. Management personnel urged the change because the firm had been operating in principle as a cooperative, and it was believed formal conversion would benefit Sterling Beef and its members. Some believed the firm should have been a cooperative from the outset because of the way it operated.

One incentive to reorganize as a cooperative was a reduced total tax burden for members and Sterling Beef. The 50 cents per hundredweight retained earnings could have been allocated to members as patronage refunds had the firm been a cooperative. Some members would have paid a lower income tax rate than Sterling Beef was paying on those funds.

Another incentive was to gain access to investment and operating capital from the Banks for Cooperatives system. These cooperative-owned lending institutions can usually loan money to financially qualified cooperatives at a lower interest rate than normally charged by commercial banks.

Management initiated the reorganization, but the board of directors and membership had to approve the proposal. Stockholders were notified by letter and phone that the best method of operating would be as a cooperative. Their initial reaction was mixed.

Larger feeder-stockholders rejected the proposal at first because an accounting firm advised Sterling Beef that cooperative members were required to vote on a one-member, one-vote basis.² Further study by the accounting firm indicated cooperative members could vote according to the proportion of stock held. Larger feeders then supported the change. Most feeders were not actively involved in the decision to reorganize as a cooperative, however, except those on the board of directors at the time.

Three-fifths of the 1979 survey respondents believed the reason for reorganization was related to taxation. Several members believed reorganization was in response to complaints filed against Sterling Beef by the Internal Revenue Service and that the reorganization was intended to prevent future problems.

One-fifth of the feeders surveyed believed the firm had been operating as a cooperative prior to 1976 and that the reorganization reflected its actual operating methods. These feeders also believed a cooperative was the best form of organization to serve the members. Other feeders believed the reason was related to improved methods of financing. They cited access to Banks for Cooperatives to borrow capital at a lower interest rate.

²More than 90 percent of U.S. agricultural cooperatives use this voting method (10).

Fourteen percent of the respondent-feeders would not have invested in Sterling Beef had it been a cooperative at the time they were asked to become members. Two of them each marketed more than 4,000 head of cattle to Sterling Beef in fiscal 1979. One feeder said it would depend more on who the organizers were than on the form of business organization chosen. A few feeders said cooperatives would not work in meatpacking because decisionmaking is too slow, and cited as evidence another cooperative meatpacking venture that had failed. They also indicated members receiving no return on their equity. Others believed Sterling Beef would never have raised the investment capital, especially from larger feeders, had it been organized on a one-member, one-vote basis.

More than 60 percent of the respondent-feeders said they noticed no change in Sterling Beef after it became a cooperative. Of those noticing a change, most noted the cash patronage refunds now being paid. Two feeders said the stock had diminished in value and one said it had no value. Recent stock exchanges indicate Sterling Beef stock currently carries a market value nearly twice the value of stock sold to finance the second major expansion in 1976 (which was \$336 per share). Two feeders thought they were receiving less for cattle since it became a cooperative and that it was less competitive now. One feeder believed his taxes had been reduced; another, that communication with feeders improved; and another, that Sterling Beef better serves small feeders now.

Management

The four feeders originally investing in Sterling Beef entered into a management advisory agreement with a management company formed by three owner-employees of Seitz Packing, who were also original stockholders in the new company (Sterling Beef). Sterling Beef agreed to pay the management company the lesser of \$120,000 per year or 20 percent of Sterling Beef's annual net profits for a 15-year period. For 10 additional years, the annual payment will be the lesser of \$120,000 or 10 percent of yearly net profits. This amount payable is subject to an adjustment based on the consumer price index, and if Sterling Beef operates at a loss for any 3 of 4 consecutive years, it may terminate the management contract.

The management company found a manager for Sterling Beef and is obligated to find another manager in the event the current manager leaves. To date, Sterling Beef has had only one general manager, hired from Seitz Packing where he previously had been a cattle buyer. The management firm also provided engineering consulting in designing and building the Sterling Beef plant, as well as other consulting services.

Membership

Sterling Beef's membership grew from four initial cattle feeders and four outside investors in 1966 to 185 feeders and six outside investors in 1979. Cattle feeders own 90 percent of the

stock and outside investors own the remaining 10 percent. Initial feeders own a larger share of Sterling Beef than feeders who invested later. Seven feeders, including the four initial feeders, hold 69 percent of the stock held by all feeder-members (table 1). Remaining stock, 31 percent, is held by 178 feeders, each owning fewer than 500 shares. Four-fifths of Sterling Beef's members own fewer than 50 shares of stock and invested less than \$11,800 apiece in their cooperative, based on the share price for Sterling Beef's first major expansion (\$236). Conversely, the seven largest stockholders each invested more than \$118,000.

The size of members' cattle operations is roughly proportional to their share of ownership in Sterling Beef. Eleven feeders each marketed more than 4,000 head of cattle to Sterling Beef in fiscal 1979 (table 2). They represented 8 percent of the members marketing to the cooperative that year and accounted for 59 percent of the marketings. Three-fifths of the members each marketed fewer than 1,000 head to Sterling Beef.

Sixty-four percent of members responding to the 1979 survey were 45-64 years of age and were nearly equally divided between the 45-54 and 55-64 age groups (table 3). Most members bought stock in their cooperative 3 to 11 years ago. Table 3 also indicates feeders in the middle age groups supplied the bulk of cattle to Sterling Beef.

About half the respondent-members live fewer than 50 miles from the Sterling Beef plant and provide 72 percent of the cattle to the cooperative (table 4). Less than 2 percent of the cattle are from members' feedlots more than 150 miles away. Nearly 90 percent of Sterling Beef's members live in Colorado, with the remainder in Nebraska, Kansas, and Wyoming.

Member Commitment

The four cattle feeders initially investing in Sterling Beef made a significant financial commitment to it. They invested more than \$600,000, which was more than 75 percent of the equity (\$800,000) and over 40 percent of the land, building, and equipment costs (\$1,400,000). They also guaranteed all notes incurred by the new slaughtering firm.

The same feeders made a significant commitment of cattle as well. They agreed to market 50 percent of their cattle, which amounted to 200 to 250 head per week to Sterling Beef. That was considered a sufficient number to operate the plant at an acceptable level initially.

Financing

Sterling Beef borrowed more than \$600,000 from an insurance company to supplement the equity capital from feeders and nonfeeders to build its first plant. The company also borrowed \$1,200,000 in operating capital from area banks the first year

Table 1—Distribution of stock among member-feeders of Sterling Beef, 1979

Number of shares	Members	Proportion of feeder ownership
	Number	Percent
Fewer than 25	123	5.8
25-49	29	5.4
50-99	16	6.2
100-499	10	13.1
500 or more	7	69.4
Total	185	99.9 ¹

¹Does not total 100 due to rounding.

Table 2—Number of Sterling Beef members and marketings by size

Number of head marketed to Sterling Beef	Members	Proportion of total marketings
	Number	Percent
Fewer than 1,000	82	12.7
1,000-3,999	36	28.0
4,000 or more	11	59.2
Total	129	99.9 ¹

¹Does not total 100 due to rounding.

Table 3—Number of respondents and marketings by age of Sterling Beef members, 1979

Age	Members	Proportion of total marketings
	Number	Percent
Fewer than 35	5	7.2
35-44	12	23.5
45-54	24	44.3
55-64	23	22.0
65 and over	9	2.8
Total	73	100.0

Table 4—Number of survey respondents and marketings by distance Sterling Beef members live from the plant, 1979

Miles from plant	Members	Proportion of total marketings
	Number	Percent
Fewer than 50	38	72.4
50-99	15	16.2
100-149	14	9.7
150 or more	6	1.7
Total	73	100.0

of operation. Long-term debt capital was secured by the plant, and short-term debt capital by accounts receivable. Sterling Beef also agreed to pay the city of Sterling \$190,000 plus interest over a 20-year period to retire bonds the city issued to finance expansion of its sewage treatment facility. Expansion was necessary for the city to handle the additional sewage generated by the new plant.

The plant was expanded in 1968, partly because more area feeders wanted to market cattle through it. Management met with area feeders in local meetings to explain expansion plans, opportunities, and capital needs. An estimated two-thirds of the first major expansion program was financed by stock sales and the remaining one-third by loans from an insurance company. Later expansions were financed more from retained earnings with less reliance on stock sales and long-term loans. An exception, a wastewater treatment plant, was financed primarily by long-term loans from the Wichita Bank for Cooperatives.

To expand owner equity, feeders initially allowed Sterling Beef to retain 50 cents per hundredweight (carcass weight) on all beef sold to the company. The retain was based on the 35 cents per hundredweight (live weight) savings to feeders from shipping cattle to Sterling rather than Denver. In 1971, the retain was lowered to 15 to 25 cents per hundredweight. The policy of retaining a specific amount per hundredweight was later eliminated.

Sterling Beef's board of directors currently does not retain a specific amount per hundredweight, but establishes a pretax savings target each year for cattle bought on a dressed weight and grade basis and for cattle bought on a live weight basis. Currently, the target for each payment method is \$750,000. When the cooperative's savings exceed the targeted level for either pool, the excess amount is returned to feeders as patronage dividends. This relatively recent policy resulted in dividends to members for the first time in 1979. Sterling Beef plans to distribute 50 percent of total patronage dividends in cash at the time they are declared and retain 50 percent for 1 year, at which time they will also be distributed in cash. Patronage dividends to owners of custom-fed cattle must be distributed by feedlot operators to cattle owners.

Growth

Sterling Beef has expanded nearly all its physical facilities at least twice since opening in 1966. The first major expansion was approved in 1968 and included the cattle pens, kill floor, cooler space, hide processing, inedible rendering, and wastewater treatment facilities. The kill capacity increased from 90 to 185 head per hour, or an annual capacity increase from 187,200 to 384,800 head.³ Continued expansion in 1972 in cat-

³Annual slaughter capacity assumes a single, 8-hour shift, 260 days per year.

tle pens, cooler facilities, and edible rendering boosted the hourly slaughter capacity to 196 head, or 407,680 head annually. Sterling Beef again enlarged the kill floor and cooler area in 1976 and increased its slaughter capacity to the current level of 250 head per hour, or 520,000 head annually.

The most recent addition was an Al-Wa-Tech wastewater treatment system in 1978, which is based on European meatpackers' wastewater treatment methods. A notable feature of the system is its ability to recover protein which can be dried and sold rather than wasted.

Sterling Beef's physical growth also can be observed by changes in the number of head slaughtered. Slaughter during the first fiscal year (1967) was 199,718 head, compared to 450,038 head during the most recent fiscal year (1979).

Sterling Beef's management and consultants studied proposed changes and visited other meatpacking plants to draw on their experiences when making decisions. After a major Colorado competitor began breaking carcasses, Sterling Beef considered building a carcass-fabricating or breaking plant adjacent to the slaughter plant. The \$5 million addition was concluded to be too costly and too risky considering that no one at Sterling Beef had management experience with a breaking plant and that skilled labor was unavailable in the Sterling area.

Instead, Sterling Beef joined with a group who had beef fabricating experience and formed the Circle C Beef Co. in Denver in October 1974. Sterling Beef purchased 40 percent of Circle C's stock, the other 60 percent being controlled by Circle C's management. In 1977, a labor dispute settlement at Circle C gave Sterling Beef all voting stock in Circle C for the subsequent 3 years, while retaining its 40 percent ownership share.

Sterling Beef and two consultants formed a partnership and entered into a management advisory contract with Morgan Colorado Beef Co. in 1976. At the time, Morgan Beef was a privately held meatpacker owned by several cattle feeders. In January 1980, Sterling Beef merged with Morgan Beef.

Sterling Beef ranked as the 11th largest steer and heifer slaughtering firm in 1970 (4). Slaughter increased somewhat during 1970-78, but its ranking dropped to 14th based on estimated slaughter for 1978. Morgan Beef in 1978 was the 15th largest steer and heifer slaughtering firm. The combined estimated slaughter of Sterling Beef and Morgan Beef in 1978 (before the merger) was 805,949 head, making the merged firm about the sixth largest steer and heifer slaughtering firm in the United States.

Sterling Beef has recorded considerable growth in selected balance sheet and operating statement accounts over its 13-year existence.⁴ Total assets increased each year except 1974, 1975,

⁴Financial data are premerger figures.

Table 5—Growth in selected balance sheet and operating statement accounts for Sterling Beef, 1967-79.

Year	Financial accounts			
	Total Assets	Total net worth	Net sales	After tax earnings
	<i>1,000 dols.</i>			
1967	3,527	834	30,127	34
1968	3,714	1,081	49,148	243
1969	5,937	2,991	55,683	234
1970	8,079	3,210	60,654	306
1971	9,530	3,804	126,270	385
1972	10,448	4,406	140,806	339
1973	13,249	5,029	156,872	623
1974	12,599	5,418	169,358	389
1975	11,905	5,772	190,138	354
1976	12,265	6,756	184,328	984
1977	11,971	7,390	182,913	634
1978	16,038	7,839	173,536	449
1979	19,652	9,524	273,103	2,532

Source: Annual Reports of Sterling Beef.

and 1977 (table 5). Plant and equipment assets (including land) increased from \$1.4 million in original costs to \$9.1 million in fiscal 1979.

Total net worth increased each year. Stockholder equity ending the first fiscal year was \$800,000 or 23.6 percent of total assets. By fiscal 1979, it grew to \$9.5 million or 48.5 percent of total assets. Total net worth increased annually because Sterling Beef recorded positive after-tax earnings each year.

Net sales grew from \$30.1 million in fiscal year 1967 to \$273.1 million in fiscal year 1979. Net sales increased annually from 1967-75, then declined between 1976-78 before increasing sharply in 1979.

Losses during the first year of operation reached \$220,000 at one point, but Sterling Beef ended its first year with after-tax savings of \$34,034. Savings reached \$2.5 million in fiscal year 1979, but annual after-tax savings were quite variable. They increased 6 years, declined 6 years, and in fiscal year 1979 were more than twice as large as any previous year.

Problems

Growth at Sterling Beef was not without problems. Management and members perceived problems somewhat differently, so each view is presented.

Management Views. Sterling Beef experienced its share of startup problems, but the management staff said such problems (for example, mechanical difficulties and hiring and training labor) were typical and largely unavoidable. The only serious physical plant problem since the early years was an explosion in the freezer which forced the plant to close for 4 weeks in 1978.

Three labor relations problems have seriously affected Sterling Beef and its subsidiary. The cooperative incurred an 8-week labor strike in 1975 and a 17-week strike in late 1979 and early 1980. A 14-week strike closed Circle C in 1977.

There also have been member-management relations problems. Initially, feeders investing in Sterling Beef bought shares for \$136, each share entitling them to market 20 head of cattle annually to the plant. Stock was issued so that total "kill rights" (20 head per share of stock) did not exceed the annual slaughter capacity of the plant. To finance the first major expansion, the cooperative sold stock for \$236 with kill rights of 33 head per share. To finance the second major expansion, stock sold for \$336 with kill rights of 30 head per share.

Kill rights guaranteed feeders the right to deliver a specified number of cattle each week. Capacity limitations, however, made it impossible for management to guarantee sufficient slaughtering space for its members if a large feeder chose to market on a single day all the cattle equaling that week's kill rights. Consequently, both feeders and management tended to ignore the kill rights and finally stopped using them.

A small percentage of members attempt to take advantage of their cooperative for personal gain. For example, some members want to market cattle on a dressed-weight and grade basis when price is rising, but market on live-weight basis when price is falling. The extra day between paying a feeder on a dressed-weight and grade basis and paying on a live-weight basis may result in a higher price on a rising market or prevent a lower price on a falling market.

Some feeders also argue they should receive the same price for all cattle regardless of quality. Sterling Beef uses a system of premiums and discounts to encourage its members to market the type of cattle its customers demand. Sometimes feeders market cattle to Sterling Beef that the cooperative cannot slaughter and market profitably. Management personnel indicated it is difficult but necessary to be stern regarding accepting such cattle, reminding feeders that the cooperative works for all members, not simply a few.

Sterling Beef has experienced problems with local and Federal Government agencies. They have had difficulty meeting clean air and water quality standards of the Environmental Protection Agency and have disagreed with the city of Sterling about who should pay for waste treatment facilities.

In 1975, Packers and Stockyards (P&S), U.S. Department of Agriculture, filed a complaint against Sterling Beef. P&S alleged Sterling Beef used a dual pricing system to pay for cattle (paying feeders who owned Sterling Beef a higher price than nonowners) and that it was discriminatory to nonowners. Sterling Beef contended that they bought cattle from members and nonmembers on a best-effort basis. The final decision noted that the alleged dual pricing system may have been justified had the marketing contracts with members been enforced. Sterling Beef was ordered, in essence, to treat owners and nonowners the same in paying for cattle.

P&S alleged two owners of Sterling Beef also owned or operated custom feedlots, thus creating a potential conflict of interest for the feedlot operator. In what the USDA called a landmark decision, the court stated that custom feedlots are within the jurisdiction of the Packers and Stockyards Act when feedlot operators buy or sell livestock for their feeder-customers. Sterling Beef was ordered not to purchase cattle from its members who own custom feedlots unless conflicts of interest were resolved to the satisfaction of P&S. To resolve potential conflicts, (1) feedlot customers and members must be treated equally; (2) feedlot customers must be notified by Sterling Beef and the feedlot operator of the relationship between Sterling Beef and the feedlot and of customers' marketing rights, options, and obligations; and (3) the final marketing decision rests with the feedlot customers.

Sterling Beef's problem with the Internal Revenue Service involved its use of marketing contracts and its payment methods prior to the company becoming a cooperative. IRS claimed Sterling Beef was paying feeders who owned stock in Sterling Beef a higher price than they paid nonowners. IRS alleged the higher payment constituted a stock dividend to owners from untaxed corporate profits. Sterling Beef argued the higher price was due to owners' commitment to market cattle through Sterling Beef but IRS claimed that because the contracts were not enforced, there was no justification for a higher payment. The conflict has not yet been resolved.

Member Views. Feeders ranked environmental concerns as the most important problem area, ranking it highest three times as frequently as the second most significant problem (table 6). Insufficient commitment by some feeders ranked second. That relates to feeders not feeding the kind of cattle Sterling Beef needs to satisfy its customers and feeders scheduling cattle for delivery but failing to deliver as promised. Labor relations and poor relations with State and Federal Government agencies ranked third and fourth, respectively. Feeders identified inconsistency among U.S. Department of Agriculture meat graders as another problem.

Some smaller feeders believe they are dominated by larger feeders, probably because voting is by stock and larger feeders own more stock. Some feeders also believe Sterling Beef should be able to pay higher prices to feeders. Feeders criticized Sterling Beef's management for failing to build a carcass fabrication and boxed beef distribution facility at the slaughter plant site, and identified beef market penetration as part of startup problems. One feeder remarked that startup costs were considerably higher than originally estimated.

That few respondents marked the last six items in table 6 as significant problems is notable. Respondent feeders apparently believe they have had good leadership, both by management and by feeders serving on current and past boards of directors, and that the plant operates efficiently. One respondent noted that Sterling Beef has handled its problems well over the years.

Table 6—Relative importance of potential problems encountered by Sterling Beef, according to respondent-feeders, 1979.

Potential problem	Rank by feeders				Weighted rank ²
	1	2	3	4 ¹	
	<i>Number of responses</i>				
Environmental concerns (air and water quality and sewage treatment)	21	8	4	3	1
Insufficient commitment by some feeders	7	6	7	3	2
Labor relations	6	10	3	2	3
Poor relations with State and Federal Government agencies	6	4	4	3	4
Small feeders dominated by larger feeders	1	3	3	2	5
Poor relations with local government and the community	1	4	0	1	6
Inability to pay feeders higher prices	1	1	3	3	7
Insufficient ability to penetrate and develop markets for beef carcasses	1	0	1	1	8
Too little control of the company by feeders	0	1	1	1	9
Poor boards of directors	1	0	0	0	10(tie)
Plant inefficiency	1	0	0	0	10
Inefficient scheduling of cattle into the plant	0	1	0	0	12
Poor working relations between boards of directors and management	0	0	0	0	13(tie)
Poor management	0	0	0	0	13

¹Feeders were asked to rank the three most important problems. A rank of 4 was given to responses checked but not ranked 1, 2, or 3.

²Weighting used was: Rank 1 = 4, 2 = 3, 3 = 2, 4 = 1.

CURRENT OPERATIONS

Sterling Beef's operations differ somewhat from other meatpackers, especially the cattle procurement and pricing practices (9). These practices reflect the cooperative nature of Sterling Beef. The differences are also reflected to some extent in its beef marketing operations.

Cattle Procurement and Pricing

Cattle normally are purchased from Colorado, western Kansas, western Nebraska, and parts of Wyoming and Montana. Occasionally, to meet its slaughter needs, Sterling Beef buys cattle outside its usual procurement area, and has purchased cattle from as far away as the Sioux Falls terminal market.

Most of the cattle Sterling Beef slaughters are delivered by members to the plant or bought by six company buyers directly from member and nonmember feedlots. Most member-feeders are farm feeders though more cattle are supplied by commercial feedlots. Sterling Beef's buyers help member-feeders sort cattle to be delivered on a dressed-weight and grade basis. Cattle bought from distant areas (for example, Montana) are bought by telephone and occasionally (three to four times per year) Sterling Beef hires order buyers to buy cattle for the cooperative. Few cattle are purchased from terminal markets and even fewer cattle are purchased from auction markets.

Sterling Beef prefers choice quality grade, yield grade 2 steers and heifers, producing 600 to 900 pound carcasses. Certain types of cattle (for example, prime quality grade and heavy steer carcasses) are bought to satisfy certain customers' specific demands.

Several meatpackers compete with Sterling Beef for cattle. Competitors include Denver and other Colorado meatpackers as well as major meatpackers whose plants are located in other States. The extent of competition and specific competitors depends on which part of Sterling Beef's procurement area is considered.

Sterling Beef members execute a marketing contract in which Sterling Beef agrees to kill a specified number of cattle annually for each member, and feeders agree to provide a minimum number of cattle to Sterling Beef. The cooperative may waive a member's minimum obligation during any year. Feeders need not commit all their cattle to the cooperative but are required to give Sterling Beef the opportunity to bid first on all cattle marketed until their marketing contract obligation is met. If Sterling Beef's bid price is unacceptable, feeders can sell cattle to other meatpackers for the same or higher price. After feeders have met their marketing contract obligation, cattle can be sold anywhere without first allowing Sterling Beef the opportunity to bid on them.

Two-thirds of the feeders surveyed (67 percent) indicated they market cattle to Sterling Beef without regularly seeking bids from other meatpackers. The remaining one-third (33 percent) regularly seek bids from two or three other meatpackers. Feeders also receiving bids from other meatpackers accounted for 48 percent of cattle marketed to Sterling Beef by respondents. Larger feeders may receive more bids because other buyers regularly visit their lots, whether or not visits are requested. Smaller feeders may seek no other bids because they spend less time searching for the highest bid or because they are more committed to marketing cattle through their cooperative. Because Sterling Beef buys many of its cattle from larger feeders who seek additional bids, it implies Sterling Beef bids competitively.

Feeders are asked to sign a quarterly cattle commitment for the cooperative's use in planning its slaughter schedule and buying needs. This commitment supplements the marketing contract. Feeders estimate how many head of cattle (by sex) they plan to market through Sterling Beef on each of three payment bases during each of the upcoming 3 months, and Sterling Beef agrees to accept delivery of that number. The three payment bases are: (1) Dressed weight and grade average of the week price; (2) dressed weight and grade negotiated price; and (3) live weight negotiated price.⁵ Sterling Beef sometimes buys cattle on a fourth payment basis: formula price tied to a carcass price reported by the National Provisioner's "yellow sheet." Most members market cattle on one of the two dressed weight and grade bases.

Dressed weight and grade average of the week price is similar to pooled pricing. Sterling Beef pays a price differential above the weekly average carcass price reported by the National Provisioner for each quality grade and yield grade combination. Management determines the differential above the average reported price on Friday of the week preceding the time cattle are delivered. The amount above the average reported price depends on byproduct prices, slaughter costs, and beef transportation costs. Management mails feeders 80 percent of the estimated average weekly pooled price the day cattle are slaughtered, and the remaining 20 percent 7 days later. Final payment is based on the actual weekly reported price, by-product sales, and slaughter and freight costs.

To illustrate the process, assume Sterling Beef's management determines byproduct sales this week will bring \$6.10 per hundredweight (cwt.) on a live-weight basis, and slaughter costs will be \$27.50 per head. Based on that, next week Sterling Beef will pay \$3.83 per cwt. over the daily reported carcass price at the River Markets (\$6.10 byproduct value per cwt. \times 1,100 pounds average steer weight - \$27.50 per head slaughter costs - \$7.00 profit target per head = \$32.60 per head \div 675

⁵Dressed weight and grade are commonly called grade and yield. The latter terminology is found in Sterling Beef's cattle marketing and commitment contracts.

pounds average carcass weight = \$4.83 per cwt. - \$1.00 per cwt. freight differential between Colorado and the River Markets = \$3.83 per cwt.)

On Tuesday next week a feeder delivers one head of cattle, a choice grade, yield grade 3 steer which will yield a 675-pound carcass. The reported price for that sex, weight, quality grade, and yield grade carcass is \$107.00 per cwt. The feeder receives 80 percent of the estimated average pooled price or \$598.48 (\$107.00 per cwt. carcass price + \$3.83 per cwt. over the reported price = \$110.83 per cwt. \times 675 pound carcass weight = \$748.10 per head \times 80 percent = \$598.48 per head). Seven days later, Sterling Beef pays the remaining 20 percent. Assume \$107.50 per cwt. actual weekly average carcass price for choice grade, yield grade 3 steers producing 600-700 pound carcasses. Also assume actual byproducts sales for the week were \$5.90 per cwt. and actual slaughter costs were \$26.75 per head. The actual price paid over the weekly average price was \$3.51 per cwt. (\$5.90 byproduct value per cwt. \times 1,100 pounds live weight - \$26.75 per head slaughter costs - \$7.00 profit target per head = \$31.15 per head \div 675 pounds carcass weight = \$4.61 per cwt. - \$1.10 per cwt. actual freight differential = \$3.51 per cwt.). The feeder receives an additional payment of \$150.84 (\$107.50 per cwt. actual carcass price + \$3.51 per cwt. over the reported price = \$111.01 per cwt. \times 675 pounds carcass weight = \$749.32 - \$598.48 previously paid = \$150.84).

Feeders' intraweek price risk is reduced by using the average weekly National Provisioner price. Feeders need no longer guess which day will be low or high. For example, previously feeders marketing Monday on an upward-trending market or feeders marketing Friday on a downward-trending market were disadvantaged without pooled pricing. Now feeders decide what week to market and accept the average of daily highs and lows for that week.

Feeders hedging cattle are finding it difficult to market hedged cattle by this method because it is difficult to determine when feeders should complete their hedge. Sterling Beef is working on a procedure to contract in advance so feeders still can use futures market hedging to reduce longer term price risk.

Feeders are paid premiums and discounts based on cattle characteristics (sex, weight, quality grade, and yield grade). Price differences from the base price are determined by Sterling Beef's management, and change periodically. Some may be similar to reported price differences, but Sterling Beef develops premiums and discounts for which there are no reported prices (for example, on yield grade 2 cattle). Price differences enable Sterling Beef to encourage members to supply the type of cattle Sterling Beef's customers demand.

Feeders are discouraged from supplying less desirable cattle. Feeders are urged to sort cattle and deliver whatever number are ready for slaughter, rather than waiting until a large

number reach slaughter weight and finish, some of which might be less desirable (for example, yield grades 4 and 5). Feeders receive a kill sheet indicating how their cattle dressed (for example, quality grade, yield grade, and dressing percentage) to help them feed, sort, and market cattle. Many feeders phone the cooperative and ask if it can use cattle of a specific type. If not, feeders are encouraged to market them elsewhere.

With dressed weight and grade negotiated price sales, buyer and seller agree on a dressed weight sale price. Feeders are paid that base price plus or minus premiums and discounts determined by management and based on cattle characteristics. Live-weight negotiated price involves buyer and seller agreeing on a sales price. Feeders are paid after cattle are slaughtered but receive no premiums or discounts based on cattle characteristics.

Most cattle bought on a live-weight basis are weighed at the feedlot with a 4-percent shrink and Sterling Beef pays the transportation to the plant. Sometimes other weighing and shrink conditions occur. For example, cattle may be weighed at the plant or at a grain elevator with a 1- to 3-percent pencil shrink. Some feeders deliver cattle to the plant themselves and pay the transportation costs.

Formula pricing is used infrequently. With this method, feeders agree to deliver cattle for slaughter, and price is based on a specific carcass price reported by the National Provisioner on the day of slaughter. Formula-priced cattle usually are purchased 1 to 2 weeks prior to slaughter.

In fiscal 1979, 63 percent of all cattle slaughtered were purchased by one of the dressed weight and grade methods, and the remaining 37 percent were live weight purchases. More members than nonmembers market on one of the dressed-weight and grade methods. Three-fifths (61 percent) of Sterling Beef's slaughter in fiscal 1979 was purchased from members. Members sold 85 percent of the total number of cattle they marketed through Sterling Beef on a dressed weight and grade basis, and that accounted for 83 percent of all cattle purchased on one of these methods. Three-fourths (76 percent) of Sterling Beef's live weight purchases were from nonmembers.

Scheduling cattle for slaughter is unique at Sterling Beef. The procurement department contacts four of the largest members on Monday to learn how many cattle they plan to deliver the following week. Other feeders contact the plant during the week to schedule their cattle for slaughter the following week. On Thursday, larger feeders are contacted again and a delivery schedule arranged. Feeders, especially larger ones, may be asked to move deliveries forward or backward 1 or 2 days to match expected cattle deliveries from other feeders with the plant's slaughter need. This causes few if any price problems when feeders are paid on the week's dressed weight and grade average.

Sterling Beef buys cattle from nonmembers to ensure a full slaughter schedule. Sterling Beef needs about 800 cattle at the plant each morning to start the daily kill. Feeders who deliver cattle at night receive a \$.50-per-hundredweight price premium to compensate for their higher delivery costs. They must pay someone night rates to sort and deliver cattle between 1 and 2 a.m., then pen them at the Sterling Beef plant.

Carcass Marketing

Sterling Beef markets most carcasses to breakers (firms that fabricate or break carcasses into primal and subprimal cuts). Its own subsidiary, Circle C, is included in that group, when Circle C bids the highest price. Sterling Beef sells some carcasses to retailers, and a small proportion to other meatpackers (referred to as packer-to-packer trades). It serves customers in Denver and markets in the North and East primarily, but some beef moves to customers in the West and Northwest. Competitors in markets served by Sterling Beef include the largest meatpackers (Iowa Beef Packers and MBPXL Corp.), plus smaller meatpackers in Omaha, Denver, and other cities.

Sterling Beef's sales staff markets most carcasses itself but uses brokers at times (for example, in certain cities, for new accounts, and for specific carcass types). Standing orders account for nearly all of Sterling Beef's carcass sales. Sterling Beef keeps customers informed as to whether it can supply each standing order, and notifies them 1 to 2 weeks in advance if it appears orders cannot be met. Deliveries are reduced proportionately to all customers if the slaughter level is less than required to fill all orders. Sterling Beef retains some flexibility in filling certain customers' orders. For example, certain customers have given Sterling Beef the privilege of substituting another type of carcass when the specified type is unavailable. The beef sales staff notifies customers as soon as it is known when substitutions are necessary.

Sterling Beef protects itself from becoming dependent on any single buyer by limiting the quantity of beef sold to its customers in one or two ways. First, it limits the proportion of total sales the cooperative does with any one customer. For example, the cooperative may refuse to sell any customer more than a designated percentage of Sterling Beef's total beef sales.

Second, management limits the amount of sales to any one customer based on the customer's financial condition. Customers are required to supply Sterling Beef with a financial statement and bank guarantee of payment. Management analyzes customers' cash position, cash flow, accounts receivable, and credit with other suppliers to determine a line of credit limit. Thus, Sterling Beef's sales to customers can be met, in turn, by expected income from its customers' sales.

Sterling Beef at times slaughters more cattle than it can sell with standing orders. Management analyzes the credit position

of customers who use those types of carcasses and selects those to whom it can offer more beef.

Sterling Beef attempts to provide more services and better products than competitors, and it believes it receives a premium price because of both. Customers are kept informed of supply availability, substitutes on orders, and information on meat shipments (for example, truck number, day of shipment, and shipment contents). Management estimates customer services return about a 25-cents-per-hundredweight premium. Sterling Beef also receives a price premium for yield grade 2 carcasses. It can supply yield grade 2 beef because its feeders respond to price premiums and market yield grade 2 cattle to the cooperative.

Most carcasses are priced by formula with price tied to a future carcass price reported by the National Provisioner. Some beef is priced by private negotiation and offer-acceptance pricing. Sterling Beef regularly (at least quarterly) evaluates all its customers and attempts to reduce sales to the lowest profit ones. It computes a net profit for each customer, taking into account freight costs, claims against sales, brokerage fees (if any), and cost of money for the payment turnaround period.

Byproducts Marketing

How byproducts are handled and marketed makes a considerable difference in the cooperative's savings. Sterling Beef's byproducts sales exceed the weekly hide and offal value reported by the U.S. Department of Agriculture (5).

Additional profits are earned by processing specific byproducts rather than selling them in raw form. For example, cured hides command a high enough premium (compared to green hides) to warrant a hide-curing operation. Edible tallow is rendered when its price compared to inedible tallow exceeds the additional rendering costs. Top white tallow (inedible) commands a 40 percent premium compared to unpolished tallow, so Sterling Beef produces the higher valued product. Inedible offal items also are rendered to produce meat and bone meal, and blood is dried. Sterling Beef's wastewater treatment facility enables it to recover blood protein which is also dried and sold. The only offal item sold raw is the stomach paunch, which is sold to local farmers for fertilizer.

Cured hides are sold to a domestic firm with price tied to a future price reported by the National Provisioner. Variety meats (such as tongue, liver, sweet breads, lips, heart, and tripe) are marketed F.O.B. at the plant to several European countries as well as Japan and Mexico. Most byproducts customers also have standing orders with the cooperative. Byproducts are sold to or through trading companies, other meatpackers who market directly to foreign buyers, and brokers.

PERFORMANCE APPRAISAL

Based on its growth record, Sterling Beef appears to be a successful, producer-owned meatpacking cooperative. Further analysis shows the degree of success, the ways it benefits members, and the reasons for its success.

Financial Measures

Performance can be measured and interpreted many ways. A high performance level does not necessarily mean large profits, but one method of evaluating performance is to study a firm's financial achievement record.

To put a farm's performance in perspective, financial data should be analyzed over time to identify trends and to compare with other firms' performance, or industry standards. The American Meat Institute (AMI), a trade association of meatpackers, publishes an annual summary of the financial status of the meatpacking industry (1), compiled from annual reports submitted by its members. Sterling Beef's financial performance is compared to AMI's financial data, which include slaughtering and processing hogs, lambs, cows, and bulls, in addition to steers and heifers.

Figure 1 compares assets, net worth, sales, and after-tax earnings (savings) for 1975-79. Sterling Beef's growth record is impressive when compared with the industry, but this is somewhat misleading. This comparison is between a new firm and an industry heavily weighted with older, more established firms. Also, percentages computed with small numbers as the base (for Sterling Beef) are compared with percentages computed with large, aggregated base figures (for the industry).

Financial performance also is measured by financial ratios. Four ratios were chosen because they often are used to analyze the financial condition of a firm. Figure 2 contrasts Sterling Beef's after-tax earnings as a percentage of net sales with the comparable earnings-to-sales ratio for the industry.⁶ Sterling Beef's earnings-to-sales ratio over the 13-year period averaged 0.42 percent compared to 0.94 percent for the industry. AMI figures probably are higher because they include pork slaughtering and processing firms and other operations with higher margins. The trend in industry sales-to-earnings since 1975 is slightly downward whereas Sterling Beef has experienced an upward trend. Profits as a percentage of sales, therefore, are increasing. Sterling Beef's earnings-to-sales ratio deviates from the industry movement in several years. For example, between 1969 and 1971 the industry experienced an increase in earnings relative to sales, whereas Sterling Beef experienced a decrease.

⁶Sterling Beef's financial records for a given fiscal year (e.g. 1979) were compared to AMI's financial figures for the previous year (e.g. 1978). Sterling Beef's fiscal year ends March 31, so 9 months of its fiscal year occurs in the preceding calendar year.

The ratio of after-tax earnings to total assets measures the efficiency with which a firm uses total capital. Sterling Beef's earnings-to-assets ratio for the 13-year period averaged 5.4 percent, slightly above the industry average of 5.08 percent (fig. 3). Sterling Beef's earnings-to-assets ratio trended upward compared to the industry, which experienced no appreciable upward or downward trend. Thus, after-tax earnings are increasing faster than the increase in total assets. Sterling Beef's higher average and upward trend are directly attributable to its high earnings-to-assets ratio experienced in fiscal 1979.

After-tax earnings compared to total net worth measures how efficiently a company uses its equity capital. The earnings-to-net worth ratio fluctuated more for Sterling Beef than for the industry but averaged higher for Sterling Beef (fig. 4). The 13-year average earnings-to-net worth ratio for Sterling Beef was 11.72 percent, and for the industry, 9.41 percent. Sterling Beef's records show 2 years in which its earnings-to-net worth ratio was much higher than the industry. An upward movement in the ratio means member capital is being used more efficiently, and again, the trend here is upward for Sterling Beef, whereas for the industry no trend was identified.

The net worth-to-total assets ratio can be interpreted as a measure of long-term financial strength. It indicates whether members are continually increasing their ownership share of total assets. Sterling Beef's net worth-to-assets ratio increased substantially over time, and since 1975 has been at about the industry level (fig. 5).

Sterling Beef's overall financial condition is improving. Fiscal 1979 helped improve the upward trend of each ratio. It remains to be seen whether 1979 was an indication of the future or an aberration in the cooperative's growth pattern.

Benefits to Feeders

Another measure of an agricultural cooperative's performance is whether it benefits its members. Benefits to feeders from the viewpoint of management are not necessarily the same as the benefits perceived by feeders.

Management Views. Management believes that small feeders benefit most from belonging to Sterling Beef, though many of the benefits cited apply to commercial feeders also. Sterling Beef enables feeders, especially smaller ones, to sort and sell cattle when cattle are ready for market. Cattle are sold in small sale lots and feeders no longer have to overfeed some cattle while waiting for enough others to reach slaughter weight and finish to fill a semitrailer truck. Consequently, feeders market fewer overfat cattle (yield grades 4 and 5) and stay more current. This, combined with Sterling Beef's premiums and discounts and its practice of returning results of cattle slaughtered to each feeder, has helped members become better feeders.

Comparison of Sterling Beef and the Meatpacking Industry

Figure 1

Percentage Growth Comparison of Selected Balance Sheet and Operating Statement Accounts from 1975-79

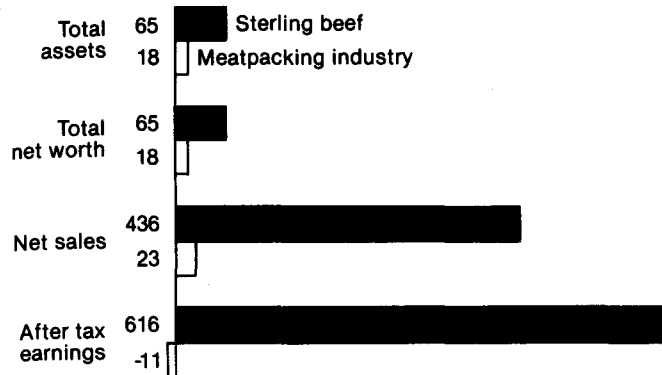


Figure 2

Earnings-To-Sales Ratio from 1967-79

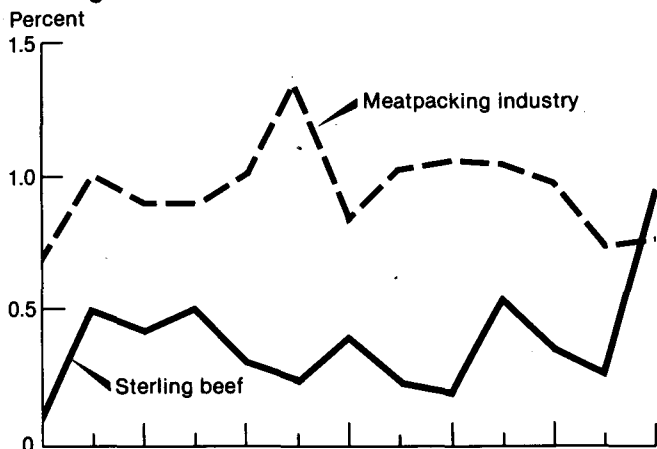
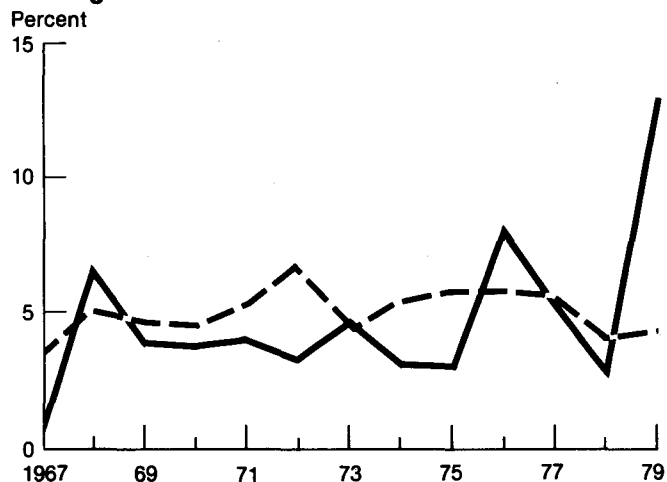


Figure 3

Earnings-To-Assets Ratio from 1967-79



Source: Sterling Beef annual reports; and Annual Financial Review of the Meatpacking Industry, AMI annual reports.

Figure 4

Earnings-To-Net Worth Ratio from 1967-79

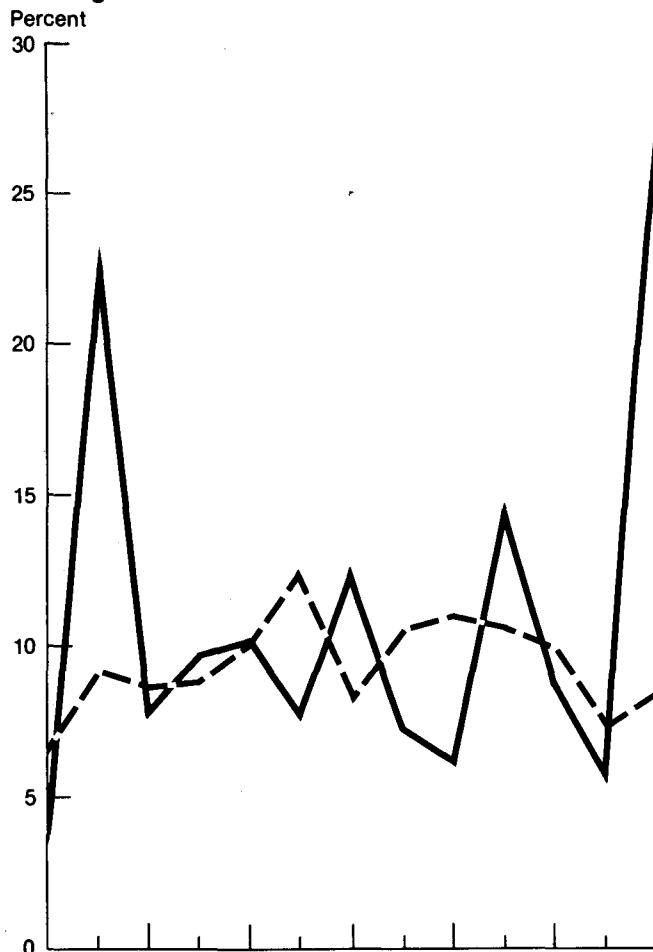
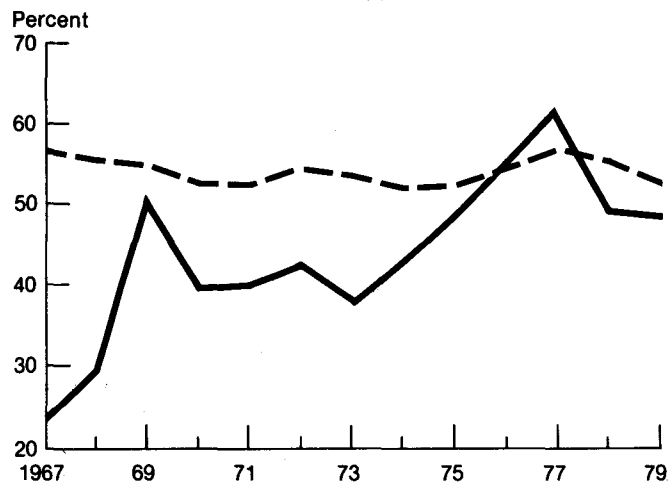


Figure 5

Net Worth-To-Assets Ratio from 1967-79



Feeders have a guaranteed, nearby market so they save time once used in marketing cattle to distant meatpackers; they also are no longer dependent on commission men who may not represent them fairly. Time savings permit more efficient use of time in managerial activities such as feeding cattle, buying replacement feeders, and farming, among other things.

Bankers are more lenient in lending to members of Sterling Beef and in fact encourage area feeders to join the cooperative. Important to bankers are such factors as a guaranteed outlet and the fact that members have become better feeders and merchandisers.

Sterling Beef pays feeders the "market price" and slightly more if the plant is having a particularly good year. Management believes Sterling Beef has stimulated buying competition in the area and has raised the price level in Northeastern Colorado.

Feeder Views. Most feeders believe they benefit from being members of Sterling Beef. Of 68 feeders, 64 (94 percent) said they benefit from Sterling Beef, while the remaining four feeders (6 percent) disagreed. Three of the four dissenters cited Sterling Beef's inability to pay higher prices as one reason why they do not benefit. Two feeders indicated that larger feeders dominate smaller ones.

Feeders surveyed ranked the benefits most important to them (table 7). A guaranteed market outlet ranked first, with three times more first-place rankings than any other factor. The second most important benefit to feeders was receiving a fair market price. These two benefits reflect concerns of producers throughout much of agriculture—access to a reliable market where they can receive an equitable price.

Benefits feeders ranked third to eighth indicate their cooperative helps them become better informed feeders, able to feed for a specific market. The cooperative provides a nearby market, less price risk, and more market clout.

Benefits ranked 9, 10, and 12 relate to cost and time savings from having a guaranteed, nearby market. Three others (numbers 11, 13, and 16) suggest cooperative members do not benefit from significantly higher returns reflected in above market prices for cattle, a share of meatpacking profits, or patronage dividends.

Other benefits were cited by a few feeders, most dealing with marketing and pricing. For example, Sterling Beef was mentioned as a good competitor that benefited feeders by providing competition for other buyers. Marketing on a dressed-weight and grade basis eliminates errors resulting from having to estimate how cattle will quality grade and yield grade. Feeders are paid on actual rather than estimated weight and grade. One feeder indicated he liked the fact that Sterling Beef uses premiums and discounts in paying for cattle, because good feeders are rewarded positively for their efforts and poor ones are rewarded negatively. Feeders learn whether cattle are fed properly and can remedy and deficiencies in the future, thus educating themselves.

Table 7—Relative importance of benefits to members of Sterling Beef, according to respondent-feeders, 1979

Potential benefits	Rank by feeders						Weight rank
	1	2	3	4	5	6 ¹	
	<i>Number of responses</i>						
Guaranteed market outlet	22	12	5	4	1	16	1
Fair-market price	6	8	9	4	3	7	2
Able to sort and market cattle when ready, even in less than truckload lots	6	4	7	3	5	8	3
Guaranteed and prompt payment	3	5	6	7	2	7	4
Nearby market outlet	6	2	3	7	4	10	5
Improved feeding due to information on how cattle yield	0	3	7	7	7	8	6
Reduced within-week risk of marketing on a low-price day	1	7	6	3	1	5	7
Increased market power	5	1	4	1	2	3	8
Freight savings from feedlot to meat-packer-buyer	0	3	2	1	4	9	9
Time savings in marketing cattle	0	1	2	5	2	8	10
Above-market price	2	3	0	1	1	2	11
No commission and yardage fees	0	0	1	4	4	9	12
Obtain meatpacking savings	1	1	1	0	6	3	13
Market information from buyers and management	0	2	0	2	2	2	14
Increased knowledge about meatpacking	1	0	0	0	2	2	15
Patronage refunds (dividends)	0	0	0	1	2	2	16
More favorable credit terms from lenders	0	0	0	0	1	0	17

¹Feeders were asked to rank the five most important benefits. A rank of 6 was given to responses checked but not ranked 1-5.

²Weighting used was: rank 1 = 6, 2 = 5, 3 = 4, 4 = 3, 5 = 2, 6 = 1.

Success Rating and Reasons

A third measure of Sterling Beef's performance is whether or not members consider their cooperative successful. Management and feeders again have separate but overlapping views as to why the cooperative has been a success.

Management Views. Management believes full credit should go to feeders for making the cooperative successful. The key is feeders working together, especially large and small feeders cooperating in delivering cattle. Sterling Beef's management makes a concerted effort to make the smaller feeders feel important. Buyers are supposed to regularly (about once per month) contact each feeder. Buyers help feeders sort cattle, advise about feeding and marketing cattle, and learn feeders' problems.

Member Views. Ninety-nine percent of the feeders surveyed believe Sterling Beef is successful. Only one, 1 percent of the total, believes it is not successful. Members ranked competent management as the factor contributing most to Sterling Beef's success. This factor received almost four times more first place votes than any other (table 8). Good relations between management and members ranked second and may be the key to Sterling Beef's success. Management credited the cooperative's success to the feeders and the feeders credited management. That may indicate how well management and feeders relate to each other and to each other's role in the cooperative.

Commitment by feeders to market to Sterling Beef ranked third, but received more first-place rankings than the second-ranking reason. Members earlier identified insufficient commitment by some feeders as the second biggest problem Sterling Beef has faced. Obviously, they believe member commitment is important. A few members believe large feeders dominate smaller ones, but a larger number of members believe large and small feeders have cooperated to make their cooperative successful.

While members almost unanimously agreed their cooperative has been successful, how successful has it been? Forty-seven of 72 feeders (65 percent) rated their cooperative excellent, and 22 feeders (31 percent) rated it good. Two feeders (3 percent) rated it average, and one feeder (1 percent) rated it poor.

Feeders also stated the one factor that most influenced their overall rating. Over two-fifths mentioned management in one way or another. Many said good management while others combined good management with good boards of directors or fairness by management. Another one-fourth of the feeders stated some aspect of marketing and pricing, especially a reliable, local market, offering fair prices. The third most often mentioned reason was the good working relationship between feeders and management. Included here were such things as small feeders being treated like larger ones, the marketing com-

mitment of feeders, and the commitment of management to make the cooperative successful.

Feeders ranking Sterling Beef's performance good, were nearly equally divided between (1) good management, (2) being a ready market and paying a fair price, and (3) good relations between management and feeders. Other comments indicated some feeders would have rated the cooperative excellent if it was more competitive in purchasing cattle or marketed beef more effectively.

The two feeders rating Sterling Beef average cited the failure to be competitive on some types of cattle and having poor returns on cattle. The only feeder rating Sterling Beef poor mentioned the inconsistency in quality and yield grading. In defense of the cooperative, however, management does not control U.S. Department of Agriculture graders.

Table 8—Relative importance of potential reasons for the success of Sterling Beef, according to respondent-feeders, 1979

Potential reasons	Rank by feeders				Weighted rank ²
	1	2	3	4 ¹	
	<i>Number of responses</i>				
Competent management	31	14	3	9	1
Good relations between management and member-feeders	7	9	3	7	2
Commitment by feeders to market to Sterling Beef	9	4	6	7	3
Efficient scheduling of cattle into the plant	3	5	11	8	4
Competent boards of directors	1	10	3	4	5
Cooperation among feeders (large and small)	5	3	4	4	6
Good plant location	0	7	3	10	7
Effective beef and byproducts marketing	1	4	7	4	8
Feeders control Sterling Beef	2	1	9	3	9
Efficient plant size	1	1	6	3	10
Good relations between management and the local community	0	1	0	4	11

¹Feeders were asked to rank the three most important factors contributing to Sterling Beef's success. A rank of 4 was given to responses checked but not ranked 1-3.

²Weighting used was: rank 1 = 4, 2 = 3, 3 = 2, 4 = 1.

ADVICE FOR OTHERS

The purpose of this study was to derive implications for other livestock producers interested in integrating into meatpacking. Having considered Sterling Beef's origin, growth, current operations, and performance, what lessons can be learned? The management, members, and the author offer suggestions for other producers.

Management

Producers may be surprised at the first advice offered by management. Producers are advised to be concerned with availability of power, water, and sewage treatment facilities for a new or existing plant before being concerned with availability of cattle. This advice reflects Sterling Beef's operations and history. From its very beginning, marketing commitment by feeders reduced the concern about having cattle available. Much more time and effort has been directed toward environmentally related concerns, and in the future more may be directed toward energy availability.

Producers must discipline themselves—collectively and individually—to make the plant successful. Management encourages feeders to feed and market the kind of cattle Sterling Beef needs for its customers. Individually, members can discipline themselves to supply only those types of cattle the plant can use. Together, feeders must cooperate among themselves, working toward the goal of a plant that benefits all, not just a few.

Market penetration may be a problem for new competitors. Management believed it need not be a significant problem if certain steps are taken. A key step is training employees to skillfully dress carcasses. Sales may be made through a broker at first. Later, the new cooperative can develop customers who work with them, whose specific demands can be satisfied, and who pay promptly. Management suggested hiring experienced meat salespeople who know the meat distribution system. Experienced salespeople know potential customers and how to approach them for that important first order; they are also aware of demand differences in various regions.

Members

Several feeders believe the concept of a meatpacking cooperative is an excellent way to improve an otherwise poor marketing situation. The manner in which feeders organized Sterling Beef has been an effective method of integrating into meatpacking and has provided additional leverage for feeders. In addition, it has helped members become better feeders.

Members advised other producers to study carefully any proposed venture into meatpacking. The meatpacking business differs considerably from cattle feeding, and a meatpacking cooperative differs from a farm supply and grain marketing

cooperative. Producers are urged to study existing meatpacking cooperatives and visit with management, boards of directors and members. One feeder believed meatpacking firms should be started by professional meatpacking personnel, not by professional cattle feeders. Another member suggested seeking the counsel of large, businesslike cattle feeders. Members warned producers not to expect instant success or large profits from having their own meatpacking cooperative.

More than half the feeders who gave advice for other producers (33 of 60 producers or 55 percent) identified management as the key to success. Several producers believe the plant will be only as good as the management. Feeders suggested hiring experienced, competent management, and advised producers to accept the fact that high quality management is expensive. Important also is hiring management that members can work with comfortably.

Commitment to the meatpacking cooperative was the next most frequently mentioned advice. Members see commitment as including a cattle commitment, a financial commitment, and a time commitment. Cattle commitment involves cooperating with other feeders and with management in scheduling cattle into the plant, and supplying the type of cattle the cooperative needs. Commitment means marketing to the cooperative even when other market outlets are better.

The need for producers to provide capital was mentioned several times. Feeders should be prepared to invest considerable money and time. One member mentioned that commitment was so important that the cooperative should not accept all feeders as members, only feeders with a high degree of commitment.

Members advise buying or building an efficient size plant and ensure that enough cattle are available for such a plant. They recognized the importance of marketing beef and recommended having assured outlets. One feeder even believed that beef marketing is the key to a meatpacking venture's success. Feeders recognized the importance of finding and maintaining a fair and knowledgeable board of directors and they advised developing certain controls over management. One feeder suggested that the system of premiums and discounts be developed within the reach of the average feeder, and that cattle be priced consistently.

Case Study

Sterling Beef is a single, unique example, and its approach may not work as well for other producers. Sterling Beef's uniqueness stems from the fact that a few large feeders decided to operate their own meatpacking plant, and they made a substantial commitment of money, cattle, and time to make it succeed. Several aspects of the Sterling Beef experience, however, seem particularly pertinent for other livestock producers.

Assessing Needs and Expected Benefits. Feeders assumed the overall leadership in planning and organizing Sterling Beef. They first assessed the marketing situation in their area and determined that improvement was needed.

Producers are advised to study current and future marketing conditions and determine needs and alternative solutions. Producers, both initial leaders and later supporters, must be convinced a need exists. Cooperative meatpacking may not be an appropriate solution to a marketing problem. Sterling Beef solved feeders' marketing problem in Northeast Colorado, but not all marketing conditions may be improved by integrating into meatpacking.

Producers also must determine the benefits that can reasonably be expected from a meatpacking cooperative. The Sterling Beef experience indicates some benefits can be expected but others should not. For example, members gain access to a reliable, nearby market outlet. Ownership and control of the outlet provides some assurance of receiving fair, equitable prices, and gives members a voice in marketing their livestock. They can better understand the market for which they are producing and can become more market-oriented and thus better feeders. A cooperative ensures at least the same degree of competition (if the plant is operating already) or additional competition (if the plant is new) in the area.

Other often-assumed benefits may not materialize and feeders should be careful not to oversell such potential benefits. For example, producers may not experience higher prices and may not obtain large meatpacking savings or receive large patronage dividends. Sterling Beef members emphasized that success does not necessarily mean either higher prices or savings. Primary benefits may be less tangible and some benefits may be related more to cost savings rather than increased revenue.

Commitment and Cooperation. Members, management, and persons working with cooperatives stress the importance of commitment and cooperation in accomplishing mutually beneficial objectives. Sterling Beef's success is attributable in part to just this. Both initial organizers and producers joining later recognized and believed in the need for the plant. In both cases, this preceded commitment.

Commitment was expressed in terms of money, cattle, and time. The financial commitment at Sterling Beef is roughly proportional to the commitment of cattle. It is reasonable to expect larger members of the cooperative to financially support the plant more than smaller members. For example, each may contribute the same per head of cattle, but total investment depends on the number of cattle fed annually. Commitment by the organizers and members joining later was upfront, and not simply a capital retain or similar type of financial arrangement. Since investment capital is required, producers should be prepared to invest in the cooperative from the beginning. A financial commitment may lead to an increased cattle and time

commitment to ensure a successful venture and secure that investment.

The commitment of cattle to Sterling Beef is not 100 percent by all members, but some level of commitment is maintained and is advisable. The minimum level at Sterling Beef is one that gives the cooperative the first opportunity to bid on any cattle offered for sale. A minimum commitment like that made by the original owners of Sterling Beef, to market 50 percent of their cattle through their plant, is an alternative and workable approach. Commitment also means delivering cattle when promised and feeding the type of cattle the cooperative needs to operate efficiently and to satisfy its beef customers. Time commitment should not be overlooked, for strong producer leadership on the board of directors contributed to Sterling Beef's success. Producers must be informed and involved in the formation and operation of their cooperative.

Cooperation among feeders at Sterling Beef was evident; both management and members recognized it as a key to success. Large and small producers are advised to work together, compromising and making concessions to each other, enabling the cooperative to benefit each of them. A high point in cooperation at Sterling Beef is the scheduling and pooled pricing of cattle.

Commitment and cooperation also pertains to management, and the relationship between management members. Sterling Beef's members cite cooperation between management and feeders as a reason for its success. A management team committed to success of the cooperative and considerate of members' needs is a necessity. Members and management must recognize their roles in the cooperative and be allowed to perform their respective functions with assistance, not interference.

Plans and Organization. Feeders who led the push to organize Sterling Beef recognized that cattle feeding and meatpacking are different. Producers can eliminate potential problems by recognizing the difference and seeking assistance from people knowledgeable about the meatpacking industry (for example, visits with operating managers and tours of meatpackers, trade groups, trade publications, meat industry consultants, land-grant universities, and the U.S. Department of Agriculture and other Federal Government agencies). Producers should carefully study costs and benefits, whether they are initially organizing a meatpacking cooperative or contemplating changes in an existing cooperative.

Producers are advised to hire competent management and pay them accordingly. Sterling Beef's members clearly signaled that.

Producers should study the cattle and hog cycle in deciding when to enter meatpacking. Meatpackers tend to do better financially when numbers of slaughter livestock are high because plants can be operated at near-capacity levels without

having to bid significantly higher prices against competitors to maintain that volume.

Plant size and location must receive careful consideration, taking into account the availability of cattle and capital (both related to the level of commitment), water, power, and labor, among other things. Producers should consider entering meatpacking with as small a plant as possible that still meets most (but not all) of the economies of size and that can be competitive, depending on the level of commitment and resources. Further expansion can occur as the firm becomes established and circumstances warrant.

Plant location affects community relations, including air and water quality and sewage treatment. Special attention to these areas in the planning and organizing stage may circumvent later problems. Producers are advised to meet with appropriate local, State, and Federal Government leaders and agencies to discuss regulations and areas of mutual interest and cooperation.

The form of business organization is important. Sterling Beef began as a corporation and later reorganized as a cooperative. Producers might be advised in some cases to begin as a cooperative but both business forms should be studied. Alternative sources for financing the venture should be explored and may determine in part which form of business organization is best.

Agricultural cooperatives are used more extensively and have a better image in some areas than others. If the cooperative form of business is selected, an informational and educational program discussing cooperative principles and practices may be needed to develop support for and understanding of cooperatives. Some producers are more apt to join a cooperative than others, and potential anticooperative arguments and problems can be anticipated and countered. For example, it is reasonable to expect larger producers to invest more dollars and supply more cattle than smaller producers, but they may be dissatisfied with one-member, one-vote voting. Other voting systems can be considered to resolve this conflict. An example is to allow each member one vote plus another vote for each X shares of stock held with a maximum number of votes per member. This method combines one-member, one-vote voting with proportionate voting by stock ownership, yet prevents the largest members from having unrestricted control.

Producers are advised to plan for startup costs and other unexpected costs (for example, labor strikes), and not to underestimate them. Contingency planning may lessen their impact when they occur. Certainly, recognizing uncertainties will alleviate members' overoptimistic expectations.

Operations. Some of Sterling Beef's operating methods should be considered along with alternatives. First, producers again are advised to hire experienced, competent management. This includes the general manager and other key management personnel.

The cooperative should adopt an accounting system enabling to evaluate cattle buyers, beef and byproducts salespeople, cattle feeders, meat and byproducts customers, as well as departmental plant operations. Financial accounts should be analyzed periodically by the board of directors as well as management and compared with past time periods and other firms or industry standards.

Informational and educational programs are necessary after cooperative is formed just as when it is being organized. Member complaints and dissatisfactions can be eliminated by keeping members informed.

Two important areas of meatpacking deserve special attention: procurement and marketing. Producers should consider alternative procurement methods. These range from purchasing cattle on the open market, to having all cattle committed in advance. Generally, the higher the commitment of cattle and the more cattle of the type needed that can be scheduled into the plant, the less the procurement costs (for example, number of buyers and related expenses). The cooperative then need not worry about competing for available cattle. Producers are advised to make a cattle commitment and to sign a marketing contract with the cooperative. Marketing contracts should be enforced, though in many cooperatives using such contracts, enforcement is no problem.

Optional pricing arrangements may be offered to members. The pooled pricing used by Sterling Beef should be considered because it has several advantages. It reduces intraweek price risk and enables larger feeders to schedule deliveries around smaller feeders' deliveries. Sterling Beef's system of premiums and discounts improves pricing accuracy because better producers are rewarded for delivering the type of cattle demanded. Premiums and discounts encourage feeders to become market oriented, supplying what is needed and reducing deliveries of undesirable types of cattle.

To improve their feeding skills, producers need to know how their cattle grade and yield. Too often, producers market livestock but never see the results of their feeding. Sterling Beef provides this feedback by giving producers kill sheets for cattle delivered.

A newly organized cooperative meatpacker may want to consider alternative marketing strategies. These range from marketing all beef and byproducts in the open market, to entering into supply contracts with a few customers. Supply contracts may make it easier to borrow capital and build an efficient plant, and they may reduce some marketing costs. However, contracts limit marketing flexibility. They might be used temporarily to secure market outlets, but by the end of the first contract period (6 months to 1 year), a new firm should begin developing its own customers.

Another alternative is to cooperate with another meatpacker, possibly another cooperative, in some type of joint venture or marketing agency. An established meatpacker could act as a sales agent until the new cooperative developed its own market outlets.

Sterling Beef attests to the importance of customer service and being market oriented. Customers pay more for the specific type of cattle they demand, and Sterling Beef provides related services to solidify the supplier-customer relationship. Meatpacking historically is a low-margin business, so if added customer services cost little but result in higher returns, they are worth the effort.

Byproducts marketing and processing also are very important, considering the low-margin nature of meatpacking. Meatpackers should compare the cost of processing byproducts with the additional revenue generated. Good examples at Sterling Beef are the protein recovery system in conjunction with their wastewater treatment facility, and their top white tallow polishing operation.

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**U.S. Department of Agriculture
Agricultural Cooperative Service**

Agricultural Cooperative Service provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The agency (1) helps farmers and other rural residents obtain supplies and services at lower costs and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs.

The agency publishes research and educational materials, and issues *Farmer Cooperatives*. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, or national origin.

