

Case study

A new value-added strategy for the US beef industry: the case of US Premium Beef Ltd

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Keywords

Supply-chain management, Value chain, Value analysis, Strategic management, Co-operatives, Meat

Abstract

US Premium Beef Ltd is a cooperative partnership between all segments of the beef industry value chain, affording each segment an interest in the key stages of beef production and processing, as well as an equal share of the financial risks and rewards. This "value-added" strategy is accomplished through vertical integration and adding a quality-based pricing structure to more closely link beef producers and consumers. The case study is an example of supply chain management as a strategic response to a mature industry. It also exemplifies how ownership structure of the firm, particularly the emergence of new-generation cooperatives, is employed as a strategic factor in developing a new competitive approach in an industry characterized by sales decline and aggressive competition from substitute products such as poultry and pork.

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Introduction

We, as an industry, can either decide to work together and compete, or we can maintain our romantic cowboy independence, fight amongst ourselves, and become totally irrelevant (Mark Gardiner, Kansas cattleman, whose family has raised cattle for over 110 years).

Deregulation in agriculture is creating the opportunity for farmers with a vision of the future to form the next generation of global competitors in American agriculture. The survival of the American cattleman depends on making changes to the competitive structure of the beef industry. US Premium Beef Ltd, one of the largest beef producers in the USA, is among a "new generation" of closed-membership cooperatives designed to operate in the highly competitive, and fragmented, global agribusiness industry. The structure of the US beef industry, and the emergence of US Premium Beef Ltd, are interesting stories in corporate strategy and supply chain management.

The US beef industry

Beef consumption in the USA has decreased significantly over the past 20 years. In fact, over this period the beef industry has lost 25 percent of the meat market share to pork and poultry. This situation has occurred for several reasons. Most importantly, beef producers have not received economic incentives to produce a consistent, convenient product that is priced competitively with pork and poultry. Another major reason for the decreased consumption of red meat is the concern over food borne illnesses that have been attributed to red meat. Several occurrences that have taken place in the last decade raised national concerns over the consumption of beef. These include a possible link between beef by-products and disease ("mad cow" disease) and the recent Hudson Foods recall of beef on a large scale causing a huge scare to Burger King customers. These concerns, along with the

The authors wish to thank the Kansas State University MBA students who participated in the development of this case study, and Mr Steven Hunt, CEO of US Premium Beef Ltd for his cooperation. Funding for this research was sponsored, in part, by the US Department of agriculture's CSREES Higher Education Program.

volatile prices of the beef industry, have led many beef producers to take a step back and examine where the industry is headed – and how it can best compete in the future (see Figure 1).

Since the 1830s, the USA has become the global leader in beef production, with 25.4 billion pounds of beef produced in 1997. Production in the USA peaked in 1996 at 25.5 billion pounds and is expected to remain below that level through 2005 as cattle inventories contract due to lower beef prices. There were 1,167,910 cattle operations in the USA in 1997. These operators held an inventory of over 99.5 million head of cattle in that year. Over 62 percent of the operations in 1997 had an inventory of less than 49 head with only 0.8 percent of the operations having an inventory of over 1,000 head. As average beef prices steadily declined from \$71.30 per one hundred pounds in 1992 to \$58.70 per one hundred pounds in 1996, the number of operators declined as well. However, the number of cattle being marketed and commercially slaughtered has increased over the same time period. This contrary behavior has been caused by increases in operating efficiencies at larger commercial feedlots and the increase in global beef trade (Table I).

In the international beef market, there are several characteristics that differentiate countries in the production and consumption of beef products. First, these differences include feeding methods. Beef producing countries with land not suitable for crop production, such as Australia, tend to grass-feed their cattle. Conversely, countries with excess feed grains, such as the USA, finish cattle with a grain ration consisting primarily of corn. Grain-fed cattle tend to have more

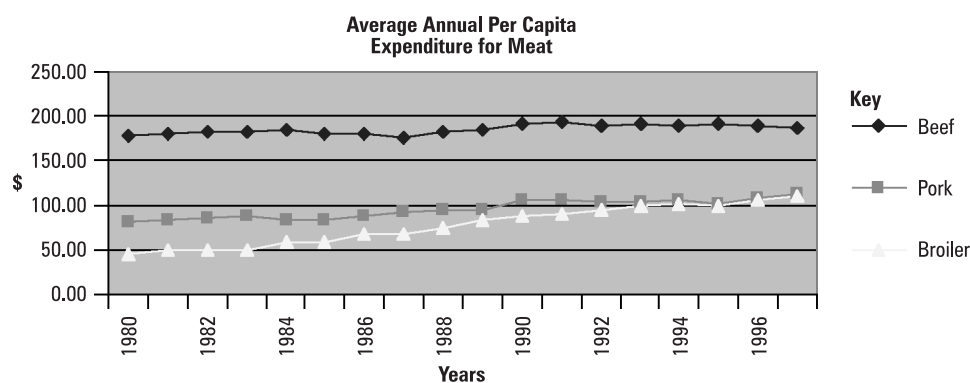
marbling and internal fat which makes the meat more tender while grass-fed cattle tend to have less marbling resulting in less tender, but leaner, meat. Thus, differences in national resources, such as excess grain or grass, can influence imports. For instance, the USA is a large exporter of grain-fed beef, but a large importer of grass-fed beef. The majority of the imports of the grass-fed beef are used in hamburger production because of its lower fat content. A country's beef imports are also highly affected by consumer tastes and preferences.

Second, the worldwide trade of beef has also been affected by advances in shipping and processing technologies. Changes, such as vacuum packaging using inert gases, refrigerated containers, and containerized shipping, have resulted in shipping beef longer distances and longer shelf lives without raising health concerns. Beef production in the major producing countries is expected to reach 48 billion tons in 1998. Beef production has increased 20 percent from 1980 to 1996. This growth in production is expected to continue at 1.5 percent per year through the year 2005. Per capita beef consumption, in the USA, is expected to fall over the next few years as production declines and relative prices favor the consumption of other meats. Thus, global markets are increasingly important for US beef producers.

US Premium Beef Ltd

In 1995, Steve Hunt, Terry Nelson, Doug Laue, and Terry Ryan, all cattle producers, were pondering the fate of the cattle industry

Figure 1 Meat expenditures



Sources: USDA and Cattle-Fax, obtained from The National Cattleman's Beef Association. www.ncanet.org

Table I Economic indicators and returns for US agriculture

| Item | 1990-1995 average | 1996 | 1997 | 1998 estimate |
|----------------------------|-------------------|---------|---------|---------------|
| Farm receipts | 184.7 | 213.3 | 212.9 | 209 |
| Assets | 898.6 | 1,034.9 | 1,083.0 | 1,131.5 |
| Liabilities | 142.7 | 156.2 | 162.2 | 167.6 |
| Equity | 755.8 | 878.7 | 920.8 | 963.8 |
| Farm real estate (\$/acre) | 741.5 | 890 | 942 | n/a |
| Exports | 43.7 | 59.9 | 57.4 | 58.5 |
| CCC outlays | 9.8 | 4.6 | 7.3 | 8.6 |
| Government payments | 9.2 | 7.3 | 7.9 | 7.4 |
| Returns (\$/unit) | | | | |
| Corn/acre | 174.31 | 202.3 | 200.3 | 194.8 |
| Wheat/acre | 89.8 | 111.7 | 84.5 | 78.8 |
| Soybeans/acre | 138.3 | 196.3 | 172.4 | 125.2 |
| Cotton/acre | 211.9 | 303.9 | 247.4 | 252.8 |
| Hogs/100lbs | 6.72 | 5.96 | 5.13 | -3.59 |
| Cow/calf (per cow) | 69 | -43.8 | -0.01 | 12.87 |
| Chickens/100lbs | 5.3 | 5.4 | 5.8 | 3.5 |
| Dairy/100lbs milk | 2.4 | 1.9 | 2.1 | 2.5 |

Source: USDA Outlook

and its current inequities. They believed there had to be a better way to organize beef production and sales so that everyone involved would benefit from taking the risks of production in the increasingly volatile global beef market. As the system currently works, when beef prices increase, feedlot owners benefit because they market a "finished" animal. When there are too many cattle on the market, the beef producer is pressured to lower prices, while the slaughter plants realize high profit margins due to an inelastic supply curve for beef at the farm level. However, all firms involved in the beef industry tend to agree that one "stage" of the beef industry value chain always seems to temporarily benefit at the expense of another.

The four US cattlemen thought there must be a way to overcome this industry structure by having the major segments of the production chain – cow-calf producers, backgrounders, feeders, and slaughterers – share an interest in all stages of beef production and processing, thus sharing the risks and returns throughout the whole process. They believed this could be accomplished by focusing beef production on value through vertical integration and by adding a quality-based pricing structure. The beef industry was also feeling increased competitive pressure from the pork and poultry industries, which had significantly increased their shares of the meat market in recent years. Both the pork and poultry

industries were heavily vertically integrated. However, at the time, less than 3 percent of the beef marketed in the USA was sold on a value-added basis. The idea of organizing different segments of the beef value chain seemed to be a fairly new concept for the industry.

From this initial idea, US Premium Beef (USPB) was born, on July 1, 1996. A mission statement and set of objectives for the organization were developed. The mission of USPB is:

Increase the quality of beef and long-term profitability of cattle producers by creating a fully integrated producer-owned beef processing system that is a global supplier of high quality value-added beef products responsive to consumer desires.

The newly formed company objectives are:

- Respond to consumers' desires for quality beef and new beef products.
- Develop a system that rewards beef producers for developing, producing, and delivering the highest quality animals that meet consumers' demands.
- Provide beef producers with the opportunity to move into a vertically integrated system that controls the quality of beef from "conception to consumption".
- Increase the income of beef producers involved in a closed beef co-op.
- Reduce inefficient economic seams that exist in the beef industry today.

The founders spent the first several months promoting the concept to producers in an attempt to determine whether enough interest existed to pursue the concept further. During this period, membership in USPB could be obtained for a \$500 initial fee plus a 50¢ registration fee per head of cattle committed to the program. The registration fees gave members the right to purchase USPB stock in the future; however, members were not obligated to buy stock. Initially, memberships representing 150 producers and 80,000 head of cattle were obtained. The next step was to develop a business plan and find a means to process the cattle.

One of the key concepts, and underlying economic differences, was for each member to have a financial interest in all phases of the beef industry including growing, slaughtering, processing and marketing. They considered three alternatives: building a slaughtering and processing plant, buying a slaughtering and processing plant, or partnering with an established processor. Due to the extremely high fixed costs associated with building a new plant in an industry where there already was excess capacity, it was determined that partnering was the only economically feasible alternative. However, there were several requirements that USPB had for their partnering arrangement. They wanted an equity ownership interest in any prospective partner, and they required equal corporate control with that partner. This would allow USPB the ability to adequately develop its ideas while protecting its shareholders' interests. They also wanted to differentiate their product from the rest of the processor's output so they could use a differentiations strategy of labeling, or branding, their beef products.

USPB found that six major processors were interested in a partnership arrangement. Most of the slaughtering and packing industry maintains excess capacity. Therefore, teaming up with an organization such as USPB was an attractive idea to large processors with excess capacity. Processors were beginning to view these types of supply chain agreements as necessary to their future survival in the industry. The biggest stumbling blocks on the road to an agreement with most of the processors were the issues of ownership and control. Some of the companies were so large that the cost of purchasing a 50 percent ownership interest would be excessive. In

addition, most companies seemed reluctant to give up 50 percent of the control over their business to a start-up group that could not yet raise the capital to invest in 50 percent of the processing operation.

After a long process of negotiations, an agreement was reached with Farmland National Beef Packing Company, LP, (Farmland National) on July 1, 1997. Several of the other companies had negotiated attractive packages, but Farmland National had certain benefits. First, Farmland National was a producer-owned organization that operated for the benefit of its members, much like USPB. In addition, the company was already involved in labeling and branding differentiated products in the consumer meat market. Second, Farmland National is the fourth largest processor in the industry, comprising 8 percent of the market. However, there were several issues yet to be addressed. One of these was the issue of increasing capacity. At the time, Farmland National had a capacity of nearly 2.4 million head per year. If Farmland National increased its processing capacity, USPB insisted on having the option of supplying half the new amount. In addition, the issue of label ownership already being used in the market caused discussion because Farmland had a widely known label already in use but was not willing to share the label with USPB. Therefore, a label bearing both the Farmland and USPB logos would have to be developed.

By the time USPB became part owner of Farmland National Beef, USPB had obtained memberships representing commitments to annually deliver 835,000 head of cattle for processing. The goal of USPB was to eventually deliver 1.2 million head of cattle per year. To become a member of USPB, an eligible producer had to complete an Application for Associate Membership, pay a one-time \$500 membership fee, and pay a registration fee of \$2.00 per head committed to the program. (Only those producers who became members prior to July 31, 1997 were eligible for the reduced registration fee of 50¢ per head.) However, in order to market cattle through USPB, members were also required to purchase stock in USPB. A stock offering was held from September 5, 1997 through January 23, 1998. During this initial offering, stock could be purchased for \$55 per share, with each share representing one head of cattle to be delivered annually.

Shareholders were also required to complete a Uniform Delivery and Marketing Agreement for either “even slots” delivery or “odd slots” delivery. The even slots agreement required members to deliver their annual cattle commitment in 24 equal semi-monthly segments and is aimed primarily at feedlot members. The odd slots agreement required delivery during a specified monthly period and is used primarily by smaller producers. Both agreements were for a period of ten years. Each member was required to purchase a minimum of 100 shares of stock (or forfeit their membership) and was eligible to purchase a maximum of 100,000 shares. Each shareholder received the right to one vote, regardless of the number of shares purchased. This policy was designed to balance the interests of the feedlot owners with those of the cow-calf producers and backgrounders. USPB shares were held in approximately even proportions by cow-calf producers, backgrounders, and feeders. However, the majority of its members, and hence its votes, were held by smaller cow-calf producers. The board of directors was made up of an even split between even and odd slot members.

The major benefit of owning stock in USPB is that all USPB cattle that come into the Farmland National processing plant are priced and paid for on a “grid” basis. A grid pricing structure is one in which each head is paid for individually based upon quality and yield grade. Fed cattle are typically purchased in lots, and payment is made based on an average price for the entire lot. The grid system allows the seller to obtain the value for their high quality cattle and not have the entire lot price reduced by a few head of lesser quality cattle. The average head of cattle has earned an average \$10.15 premium over cash prices and the top 20 percent of the cattle have earned a premium of \$27 per head. USPB retains \$12 per head for operating capital and debt reduction. Ninety-five percent of the remaining estimated price is paid to the member on the day of slaughter and the balance is paid two to three days after the final grade of each head has been determined.

Because USPB was organized as a closed-membership cooperative, members also have the opportunity to receive patronage dividends. USPB receives dividends derived from the earnings of Farmland National every

quarter. As part of their agreement, USPB requires Farmland National to pay out 48 percent of its earnings to its shareholders. USPB expects to return the \$12 per head retained plus pay a patronage dividend once a year. Another benefit of membership in USPB is the ability to receive carcass data on each head of cattle slaughtered at no charge to the member. This data can then be used to increase the quality of their cattle through genetic improvements.

USPB set up headquarters in Kansas City, Missouri with a field office in Dodge City, Kansas. Farmland National has processing facilities in Dodge City and Liberal, Kansas. Processing plants began accepting USPB cattle in early December 1997 with an average of 8,500 head being slaughtered every week since. Delivery of cattle is a critical issue for USPB and its owner-members. They must be able to deliver their agreed upon number of head of cattle at the appropriate times or the entire system breaks down. If a member can not ship the required number of head at the appropriate time, they can lease their “extra shares” to someone else for \$10 per head.

The beef value chain

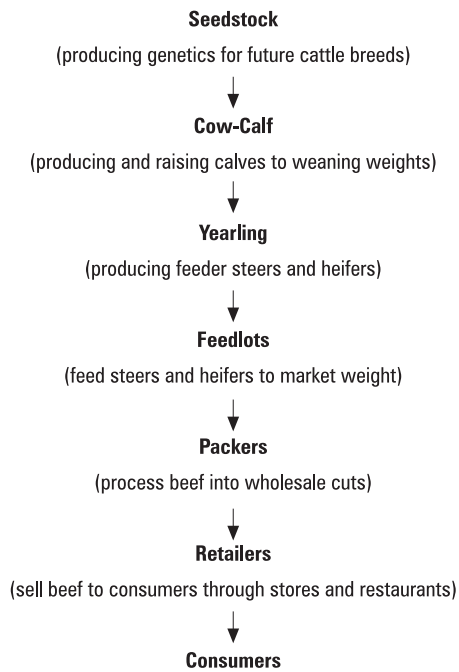
The term “value-added” refers to the collection of activities within a company or industry resulting in the creation of a product or service valued by the consumer. The value chain identifies the activities, functions, and business processes that have to be performed in designing, producing, marketing, delivering and supporting a product or service. The beef industry value chain includes breeding, feeding, and marketing cattle with the eventual processing and merchandising of retail products to consumers. Each segment of production uses various biological and economic relationships to efficiently generate a desirable beef product. In some cases, segments are in competition with one another, and because of their different characteristics they can be considered as separate segments within an industry (Figure 2).

The seedstock segment

Seedstock breeders are specialized cattle producers. They are also known as purebred breeders or registered breeders. Their main objective is to create genetic improvements

Figure 2 Beef industry structure

Product Flow is Top to Bottom



Information Flow is Bottom to Top

contributing to the beef industry. Seedstock breeders sell breeding animals, semen and embryos to other breeders and commercial cow-calf producers.

The commercial cow-calf segment

Commercial cow-calf producers maintain cow herds and raise their calves from birth to weaning. Each cow is expected to produce one calf each year. The calves are the main source of revenue for the producer.

The yearling-stocker segment

The yearling-stocker operator is responsible for adding weight to weaned calves before they are sent to feedlots for additional weight gain prior to slaughter. The calves are generally yearlings, 12-20 months of age, by the time they go into the feedlot. Some heavier weaning calves, more than 500 pounds, may go directly to the feedlot, thereby bypassing the yearling-stocker phase.

The feedlot segment

Feedlots are confinement feeding operations where the animals are fed essentially finishing rations before slaughter. Most feedlot operations feed relatively high grain rations for 90-150 days for economically efficient

gains and to enrich the palatability of the retail product.

The packing segment

This segment involves the slaughter, cutting, packaging and distribution (sometimes distribution is accomplished by the next step in the value chain) of beef. The plants in the USA are exclusively in private hands. There are no public slaughter plants in the USA, like those in Europe. Beef sold from slaughter plants is primarily boxed, accounting for 70-80 percent of the volume slaughtered. Boxed beef generally contains meat from which the bone and excess fat has been removed. Boxing of beef has proven to be more cost efficient at the slaughter plant level. Higher efficiency includes: labor rates that are usually lower at slaughter plants than retail stores, cutting rates which are usually faster and more efficient, larger volumes of retail product are handled in less space, more effective use is made of bone and fat by-products, and transportation costs are reduced. The result is a more valuable product that can be more easily handled than carcass beef. In addition, retailers have an advantage in purchasing only those cuts that can be more easily stocked without receiving the entire carcass. Finally, retailers encounter less spoilage because vacuum-packaged meat has a longer shelf life than carcass beef. Nevertheless, many retailers still prefer to perform the process of curing and packaging on their own.

The purveyor segment

This segment includes meat-wholesalers. These are operators who purchase then resell beef to a retailer or to another wholesaler. Purveyors and distributors are two types of beef wholesalers. Purveyors buy beef and perform some transformation, while distributors buy and sell beef without making any changes to the product. Purveyors sell almost exclusively to the food service industry.

The retail segment

The main retailers of beef in the USA are supermarkets, independent grocery stores, fast-food outlets, restaurants and institutions. The sales of supermarkets and independent grocery stores constitute about 60 percent of all beef sales. Most of the beef received by grocery stores is as primal, boneless sub-

primal, or beef for grinding. Almost all retail cuts are prepared at the store level. Usually, sales of beef account for 30-40 percent of total sales of the meat department.

The consumer segment

Consumers perform the last step in the value chain. Consumers continue to demand more service and convenience in their food products as their incomes rise and as they have less time to cook, prepare, and eat meals. Time and convenience are reflected in increasing away-from-home meals. Consumers eating at home also want more convenience, precooked meats and microwavable foods.

Risks and rewards

Every industry has its own set of risks and rewards. The beef industry is no exception. Seedstock breeders have risks they must face due to the specialized way they conduct business. A significant amount of money is invested in research and development. There are no guarantees the genetic improvements they develop will benefit the beef industry profitability.

Cattle producers in the first four segments of the beef industry value chain are each affected directly, and indirectly, by disease and weather risks. A harsh winter cannot only end the lives of many herds of cattle but it may also affect the production of grain that can make it difficult or expensive to continue to feed the cattle. For example, cattle producers in the commercial cow-calf segment initially begin grazing their cattle in fields and if the area has been plagued by drought, this can make it difficult to provide enough nourishment for the livestock. Once the cattle reach 700-800 pounds, the producers begin to fatten their herds. They change their feeding practices and begin to feed the cattle grains such as corn, wheat and sorghum or barley. Adverse weather conditions can also result in higher feed costs because of the higher costs of inputs comprising the cattle feed.

Another substantial risk involved with producing cattle is price risk which also affects each segment dealing with cattle production. If the demand for cattle is high, buyers will be willing to pay a higher price. Due to market variations, the price per pound of beef can

fluctuate anywhere from 60¢ to \$1.00 for grain-fed live cattle ready for slaughter. Cattle producers hope that they not only break even from the sale of their cattle, but make a return on their investment. Livestock producers often pay close attention to conversion rates. The average conversion rate for steers is 6.8-7.2. This means that for every 6.8-7.2 pounds of food the cattle consume, they gain one pound.

The packing segment of the beef industry also faces some important risks. Since beef slaughtering is labor intensive, an increase in labor rates or decrease in labor availability could prove costly. Governmental regulation also is a concern to beef packers. Regulations could force packers to implement new processes, such as more stringent quality control, that would drive up operating costs. Packers are also affected by exchange rate risk. For example, if a beef plant contracts with a Mexican company to purchase processed beef for a set price of 500,000 pesos and the value of the peso declines, the beef plant will receive fewer dollars for their meat. Disease risk is also a potential problem for beef processing plants. There is the possibility that meat may be processed improperly, resulting in a greater incidence of food pathogens and consumer illness. It is concern for food safety that requires meat processing plants to adopt food safety measures.

Finally, the quality of beef purchased is the main concern for retailers. They must purchase beef that meets the expectations of the consumer. If the beef they buy is of low quality, consumers will not purchase it. Also, they run the risk of purchasing beef that was improperly aged.

Determinants of beef prices

Beef production is the largest segment of the US agricultural economy. In Kansas alone there were approximately 38,000 cattle businesses in 1995, and \$4,523,400,000 in cash receipts from marketing of cattle. While each segment of the beef supply chain typically depends most on the segments closest to it, each segment is affected by the decisions and performance of all other segments in the system. Importantly, all segments are impacted most dramatically by consumer decisions. The business of beef is cyclical in nature. Profits and losses in the

cattle business cause cyclical increases and decreases in cattle numbers and beef production. When producers receive prices well above break-even for several years, they tend to expand their herds. The resulting increase in beef output pushes prices downward. Reductions in profitability, brought about by lower prices, results in sharp declines in prices paid for cattle. Financial losses cause producers to cut back on cattle numbers, eventually causing a decrease in beef output. The cattle cycle typically covers a ten year period during which time cattle numbers expand and contract in response to changes in prices and profitability.

Mergers of beef processors into fewer and larger companies have resulted in a highly concentrated industry structure. Many cattle producers have complained that this concentration enables processing plants to exact monopoly rents by paying less for cattle because of a lack of competing buyers. Retail buyers rely on last year's and last month's sales in placing their orders. If beef supplies are increasing, those orders will not empty the plants' coolers, and vice-versa. Retail meat buyers are not big risk takers because they are dealing with a fresh, quickly perishable, product. For packers to entice retail buyers to take more beef into their segment of the supply chain, the price must drop by a larger percentage than the additional percentage purchased by the retailer.

The beef industry – issues affecting future success

There are many issues that affect the future success of the beef industry: globalization, differentiation, environmental factors and changes in diet patterns. Consumers, particularly in the USA, are changing consumption patterns. The beef industry is highly competitive and characterized by very small margins. The principal competition comes from domestic producers of fresh beef products. Other competition comes from the other suppliers of protein, including other red meats, poultry, seafood, grain, dairy products, eggs, soy and other protein products. Competition exists both in the purchase of live cattle, as well as in the sale of beef products. The principal competitive element, in both buying and selling, is price.

Globalization

The global beef market has a significant impact on the US market. In 1995 the USA imported approximately 2.2 billion pounds of beef and exported nearly 1.6 billion pounds. Unlike most industries, this imbalance of trade is not due to recent agreements such as NAFTA and GATT. Exports have been increasing, closing the gap of the US international beef trade shortage. The 2.2 billion pounds of beef that are imported to the USA are lower grade and are not of much concern for value-added beef producers. In contrast, the 1.6 billion pounds of exported beef are of premium quality. As domestic per capita consumption decreases, the industry looks more towards international markets for future increases. This foreign market has high growth potential for premium beef. NAFTA has given many opportunities to the cattle industry, not only for large members but for smaller operations too. In competing for the global dollar, many smaller producers, suppliers, and feeders will invest together to realize more profit through global ventures. This realization will increase customer loyalty, broaden the customer base, and expand profits for these smaller operations. As foreign sales make up an increasing percentage of a company's revenues, economic downturns in global markets can have a serious impact on the company's profitability.

Environmental regulation

The US beef industry may be facing higher environmental standards in the near future. A current trend is a concern by consumers over promoting environmental problems. As a result, pork and poultry farms are beginning to become more and more environmentally regulated, particularly with regard to water purity, manure removal and dead carcass disposal. Currently, beef industry operations are subject to the inspection and regulation by the US Department of Agriculture (Packers and Stockyards Administration). The Packers and Stockyards Administration randomly inspects live animals, carcasses and all edible products to ensure compliance with USDA standards and grading of beef carcasses. Recent outbreaks of *E. Coli* in fast-food restaurants have caused greater public scrutiny of the rules that regulate food safety in the beef processing industry. Changes in these regulations are having a significant

impact on operations, profitability, and competitiveness of the industry.

Brand awareness

In the poultry industry, brand names such as Perdue, Tyson, Hudson, and Butterball dominate the market. Customers have come to expect less fat, better cuts, and consistent products. Brand names provide the reassurance customers will receive the same quality every time they purchase the product. This trend is starting to pervade the beef industry. With a brand name, a beef processing company can differentiate its product from other processors. The key to offering a better product is producing a noticeably better product. Currently, when processors purchase live cattle, buyers try to estimate the quality of beef that will result from the processed animal. This method is highly inaccurate and ranchers may not be compensated for higher quality beef. Firms are purchasing and processing cattle and then compensating the rancher based on the quality of the beef through a grid. This process encourages ranchers to produce cattle of higher quality resulting in a steady supply of premium beef. Firms can then use this beef to establish a brand name. In establishing a brand name, capital is required to support the advertising and promotional needs. Once a brand is established, the customers may be willing to pay a premium for the beef.

Information flow

Most of the higher costs in the beef industry comes from lack of coordination between levels of the value chain and the poor information flow to and from the consumer. Producers can help reduce costs by strengthening their relationships with suppliers, buyers, and customers. By transferring information on consumer preferences back to the producer, a more desirable beef product can be produced. Cooperative alliances will have a major role in this flow of information. By basing the purchase price of cattle on the quality of beef produced, the processor provides economic incentives for the producer of high quality beef and therefore transferring information back to the producer. By forming cooperative alliances, producers can play a strategic part in improving the efficiency of the beef value chain and better prepare for the future.

Low-cost producers

Another major factor for success in the beef industry is having a low-cost source of feed. Grain is a major input in the production of beef. Increases in the cost of grain will have a severe negative impact on the ability of beef to compete with other lower cost sources of protein. By using options to hedge against grain price increases, these risks can be minimized. There are many future issues affecting the beef industry. The firms who are able to identify these issues and make plans on dealing with these issues will be the ones who succeed. They must take advantage of lessons learned in this process in order for them to establish a strong global presence before future competition arises.

Development of cooperatives

In the USA cooperatives are an integral part of the nation's capitalistic private-enterprise system. As in most capitalistic countries, ownership can be traced to individuals (private property), membership is voluntary, control is in the hands of members rather than the government, and benefits are distributed to member-patrons on a patronage and, to a lesser extent, an ownership basis.

Agricultural cooperation in the USA

Many factors have been cited as major influences in the development of agricultural cooperatives, but these factors logically can be grouped into three types, all interrelated: market failure; increased return on equity; and public policy, as determined by presidential interest, by legislative initiative (at both state and federal level), and by judicial interpretation.

The Capper-Volstead Act of 1922 facilitated cooperative growth by clarifying antitrust law treatment of farmers' agricultural cooperatives. The act permitted farmers to "act together in associations" to process and market their products collectively, and to form marketing agencies-in-common. Previously, farmers had been prosecuted under antitrust laws for collective action, particularly concerning agreements on pricing and terms of trade. However, antitrust provisions concerning business conduct continued to apply to cooperative operations in the same manner as for other businesses.

New generation cooperatives

The phrase “new generation cooperative” (NGC) is the term that has been applied to 50 or so cooperatives like US Premium Beef Ltd that have emerged in the 1990s. These cooperatives are called NGC for at least three reasons:

- (1) They represent the newest generation of cooperatives as earlier generations emerged in the 1920s and then again in the 1940s;
- (2) Their major focus is handling and processing, representing a departure from the main objective of handling and storage held by their predecessors; and
- (3) An NGC is restricted to only accepting a predetermined amount of product from its members. In fact, a “two-way” contract exists between the members and the cooperative that requires the member to deliver a certain amount of product to the cooperative and requires the cooperative to take delivery of this product (i.e. closed cooperation). See Table II.

How NGCs work

Two policies distinguish new generation cooperatives from traditional cooperatives: delivery rights and restricted membership. The reason for the different membership and financial structure stems from the processing focus of the NGCs. In their feasibility study done prior to start-up, the proponents of the NGC have to make a decision regarding the capacity of the processing facility that is

Table II Benefits of being a USPB member

- . Own interest in Farmland National Beef, the nation’s fourth largest beef processing company and the leader in sales of value-added branded beef
- . Retain ownership of your cattle through the value-added processing
- . Individual animal carcass data at no extra charge
- . Transportation cost of \$0.55 per 100lbs paid towards delivery of cattle to processing plant
- . Sell your cattle on an industry competitive grid which USPB has equal governance over
- . Patronage dividend from Farmland National Beef Company earnings
- . Realize additional profit by participating in a more efficient vertically integrated beef processing system
- . Opportunity to expand with Farmland National Beef Company

constructed. Once the minimum efficient size is determined, the amount of product members can deliver to the plant is essentially fixed. To allocate the right of delivery among potential members and to raise capital for the construction of the plant, equity shares are sold in the cooperative. Each share entitles a member to deliver one unit of farm product (e.g. one head of cattle) to the cooperative. The price of each share is determined by taking the total amount of capital the cooperative wishes to raise and dividing it by the number of units of farm product that can be absorbed by the processing facility.

Capturing more of the “food dollar”

Producers must fulfill their contract obligations with their own product or purchase product elsewhere for delivery to the plant. In the event that a producer is unable or unwilling to meet their contractual requirements, the cooperative purchases the required amount of commodity and charges the cost against the member’s account. The member’s dividends will reflect the charge.

Many of the NGCs also offer preferred shares to enable contributions from the community or other interested parties. Holders of preferred shares do not have voting rights and there is a limit on the amount of interest paid on these stocks. This policy lets communities support the project while keeping control in the hands of the producer members.

It is the responsibility of the board to set the cooperative’s strategy, goals, and objectives, and to hire a manager. The manager, in turn, is responsible for conducting activities to achieve the goals and objectives of the cooperative, evaluating performance, and reporting to the board. The board and management have a collective responsibility to report to the membership. The success of any cooperative is therefore directly related to the confidence the membership places in its elected representatives and management team and the ability to maintain continuous communication between all three parties.

The membership and financial structure of the NGC provides members with a higher degree of personal ownership and a greater degree of commitment to the organization than is typically the case in more traditional cooperatives. This commitment plays a key

role in allowing the cooperative to meet its objectives of establishing a profitable and efficient agribusiness that captures more of the food dollar and provides a market for agricultural commodities.

Critical growth elements

The establishment of NGCs requires: feasibility studies, business plans and equity drives. Creating viable enterprises, which will continue to provide benefits to producers, employees and communities for the long term, is the real objective of exploring NGCs as an economic development strategy. Therefore, it is crucial that a thorough feasibility study be conducted to determine the most appropriate response in any situation. A solid business plan is vital in the promotion and development of a business. A successful equity drive will occur if members are willing to accept the risk of obtaining the projected return on equity. Producers and development agents committed to the success of the project and armed with a solid business plan based on a well done feasibility study will generate support and encourage the membership required for start up.

NGC principles – in keeping with tradition

The NGCs have some similarities with traditional cooperative structures:

- Democratic tradition is maintained through a policy of one member, one vote.
- Excess earnings are distributed among the members as dividends.
- The Board of Directors is elected from the membership by the membership.

Advantages of an NGC

- Producers can react quickly to market-driven opportunities.
- Restricted membership provides stability for producers and efficiency for the plant.
- A diverse set of stakeholders ensures the interests of the community are considered.
- Producers and processors are committed to the quality of the product.

Potential pitfalls for new generation cooperatives

- Lack of a clearly identified mission.

- Inadequate planning.
- Lack of member commitment.
- Inadequate management.
- Failure to identify and minimize risks.
- Overly optimistic assumptions.
- Not enough money.

All of the above factors were part of the decision for forming US Premium Beef Ltd as a new generation cooperative. The ownership structure clearly has certain strategic advantages with regard to guaranteed delivery of cattle and product flow but the prices for cattle have continued to raise questions about the long-term viability of the value-added concept.

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