



BEEF

Chapter 45

Capturing Value-Added Opportunities

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A large, white, weathered wooden sign with green lettering that reads "FARMER'S MARKET TODAY". The sign is positioned in the foreground, partially obscuring the background. In the background, there is a blue tent, a brick building, and several people, including a woman in a red shirt and a man in a white shirt, standing near a silver car. The scene appears to be an outdoor market or fair.

A photograph of a cow standing behind a wire fence in a field, with trees in the background. The image is overlaid with a blue gradient.

Chapter 45:

Capturing Value-Added Opportunities

Introduction

This chapter examines how cow-calf producers can capture value-added opportunities. First, the chapter discusses how producers can add value to their cattle through genetic management and by meeting various management and production protocols. Second, the importance of product differentiation will be discussed. For producers to capture the value they have added in their cattle, they need to clearly communicate to buyers how value was added and differentiate from other production methods and protocols. This difference needs to be verifiable in order to capture value. Third, some marketing strategies that producers can use to capture added value will be discussed. These strategies can include retaining ownership, direct marketing, and joining strategic alliances. Producers need to choose value-added strategies that complement their current operation structure.

Genetic Management

Genetic management can improve carcass characteristics and reproductive capabilities. Genetic management includes selecting sires and managing dam selection by choosing genetic characteristics (e.g., maternal and performance production, carcass) that optimize producers' goals. Producers can use expected progeny differences (EPDs) along with accuracies, ultrasound technologies, and DNA technologies when making herd genetic decisions. Genetic selection, along with management protocols, influences the characteristics of calves produced on an operation. Thus, genetics can influence carcass characteristics with carcass traits being moderate to highly heritable (Robertson, 2006).

Information concerning the genetic quality of cattle should be passed along the supply chain (Bullinger, 2006). The information provides buyers and sellers more objective information that indicates the quality of cattle they are purchasing or selling. This information supplements visual inspections to provide more efficient cattle pricing.

Key Points

- It is necessary to know the target market and the factors that customers value.
- The potential for premiums resulting from the adoption of a management program or technique should be weighed against the costs of adoption.
- Branded beef programs and alliances provide an alternative marketing mechanism.
- To effectively capture added value, management and production protocols, organization design, and market differentiation need to be complementary.

Know Your Buyer

Sy et al. (1997) points to the importance of knowing who the potential buyers are and identifying the cattle characteristics that they value most. Sy et al. (1997) provide evidence that different segments of the chain value cattle characteristics differently. They find that purebred breeders value reproductive characteristics, while feedlot operators place higher value on slaughter weight and carcass yields (Sy et al., 1997).

Feeder Cattle Value

Feeder cattle value is based upon physical characteristics and market factors. Feeder cattle characteristics that have been shown to significantly determine price include weight, frame size, muscle score, gender, breed, condition, and health. Some of these characteristics can be influenced by genetic management. The characteristics of the lot are also significant in explaining feeder cattle prices. In addition, market and sale factors (e.g., location, time of year, number of buyers) that producers have less control over also influence feeder cattle prices. It has been shown consistently in the literature that cattle sold in the second and third quarters of a sale typically receive a higher price than sold in the first quarter (Lawrence and Yeboah, 2002; Sartwelle III et al., 1996). In addition, direct farm sales have been found to garner a premium ranging from \$2 to \$6/cwt (Miller, 1995). This type of sale offers larger lot sizes and is producer-sourced verified. Reputation of sellers also can play a role in feeder cattle prices, which is typically associated with sellers providing quality, consistent animals to buyers over time (Avent et al., 2004). Reputation plays more of a role when less information is provided to buyers about the cattle (Lawrence and Yeboah, 2002).

Physical Characteristics

Feeder cattle weight has been shown to have an inverse relationship to price. As feeder cattle weights increase, prices decline; however, the magnitude depends on market conditions (Avent et al., 2004). The literature has shown that heifers are discounted in relation to steers (Lawrence and Yeboah, 2002). Feeder cattle condition has been shown to affect feeder cattle prices; however, the price effects vary over time (Avent et al., 2004; Sartwelle III et al., 1996). Thin cattle may be discounted if associated

with poor health; however, if the thinness is associated with poor nutrition, the animal may receive a premium (Avent et al., 2004). This is because buyers may feel that they can achieve gains through improving the animal's nutrition level. Fleshy cattle are typically discounted (e.g., \$0.60/cwt, Avent et al., 2004) because buyers don't believe they will obtain as much economic gain from this type of animal (Avent et al., 2004).

Feeder cattle with unhealthy characteristics will generally receive large price discounts (e.g., \$26.68/cwt, Avent et al., 2004; \$1.31 to \$23.08/cwt, Sartwell III et al., 1996). Bulut and Lawrence (2006) showed that feeder cattle categorized as sick/dirty, sick/clean, and healthy/dirty would result in a discount of \$12.40, \$9.36, and \$1.18/cwt, respectively, over healthy/clean cattle. Angus and/or black-hided animals have been shown to garner premiums (e.g., \$3.06 /cwt, Bulut and Lawrence, 2006), while Brahman influenced cattle have shown to receive discounts. Sartwelle III et al. (1996) found that Angus steers compared to Hereford garnered a \$1.79/cwt premium in 1993 versus a discount in 1986.

Lot size and uniformity also affect feeder cattle prices. Buyers have been shown to pay a premium for lots that can fill a truckload for efficient shipping. Typically, lot sized premiums increase to 80 head (truckload), then premiums level off and start to decline (Bulut and Lawrence, 2006; Sartwelle III et al., 1996). In addition, buyers typically pay a premium for uniform lots as this is associated with lower sorting costs (Avent et al., 2004). Lots that are uniform in weight, frame, sex, and breed have shown to garner premiums (e.g., Lawrence and Yeboah, 2002.)

Conclusion

A producer needs to understand which characteristics are of value to their target buyers. Once these characteristics are identified, a producer can try to aim to develop cattle with those physical characteristics, which can be influenced with genetic management and production decisions. However, producers will have less control over market and sale factors that also influence cattle value.

Verification

Producers can potentially add value to their cattle through different verification methods. Producers will need to identify which markets value verification and realize that these valuations can change over time depending on global and domestic market conditions.

Age and Source

Age and source premium are tied to third party verification. Premiums have varied from a few dollars to \$50 per head. Obtaining an age and source premium requires producers to have the appropriate records, and to work with a third party verifying company. Identifying marketing outlets and securing market access for age and/or source animals is critical to ensure receiving the optimal premium. Feedlots' demand to buy age and source cattle and the availability of age and source calves influences the amount of the premium.

Quality System Assessment and Process Verified Program

Most "branded" programs or beef export program requires documentation of animal age through one of two USDA programs, USDA Quality System Assessment (QSA) Program and USDA Process Verified Program (PVP). Both of these programs (QSA and PVP) document age and source verification, however, the programs also may include additional protocols.

The PVP provides an opportunity to ensure consumers they are receiving a product which meets the specified claims of the company. Companies with approved USDA PVP are able to make marketing claims associated with their specific verified points such as all-natural claims, use of a certain health program, raised and fed in South Dakota, grass fed, and others. Producers in a PVP must be in compliance with the specific claims; therefore, audits of producer's records occur. Prior to approval into a PVP, many verification companies require an on-site evaluation.

The purpose of the USDA QSA program is essentially the same as a PVP; that is to ensure the consumer is receiving the product that is defined on the label. Typically, QSA programs are administered by a particular packer or feedlot and usually only

document age and source verification. Therefore, producers are limited to marketing cattle only to that packer or feedlot.

The best source of information of specific PVP or QSA is to obtain the guidelines from the desired company. Additional information about PVP and QSA can be found at the USDA Agricultural Marketing Service website. Enrollment into a PVP or QSA does not guarantee a premium; however, a premium can be received.

Conclusion

When deciding whether to participate in a verification program, a producer should investigate the potential marketing outlets and the possibly of garnering a premium for participation. The potential for premiums should be weighed against the cost of participation, including any adjustments that would be needed to be made in a producer's management system.

Management

Producers who follow various management protocols may be able to garner a premium depending upon the marketing channel that they use for their cattle. Premiums for different management practices have varied over time depending upon market conditions.

Preconditioning

Preconditioning programs involve a variety of management practices on the farm or ranch to improve the health and nutrition of calves prior to selling. Avent et al. (2004) estimated the costs for a 45 day preconditioning program at \$60/head in 2004 for cow-calf producers. The actual cost depends on the length of preconditioning period, feed cost, and labor. The incentive in implementing any management practice is obtaining improved performance or a premium to offset the cost.

Many of the preconditioning practices are completed prior to selling feeder calves in the Northern Great Plains. These practices include dehorning if needed, castration, and vaccination programs. If calves are sold directly from the ranch, adapting calves to bunk feeding and water fountains may not be completed.

Dehorning

Many producers are using genetic selection (i.e., polled) to avoid dehorning calves. Research has

reported receiving higher prices with polled or dehorned animals at sale time. Horn discounts were reported at \$4.07/cwt (Halfman et al., 2009) and \$3.70/cwt (Barham and Troxel, 2007). Schroeder et al. (1988) also reported a horn discount that increased as animal weight increased.

Castrating

Approximately 50% of the calf crop produced will be male; therefore, the options are to sell bull calves or castrate males (steers). Castration is widely used in the beef industry because it decreases aggressive behavior and improves carcass quality. A small percentage of feeder calves are sold as bulls in the Midwest; however, there are regions in the U.S. that sell a higher percentage of young bulls intended for slaughter. Bull prices are typically \$4.00 to \$10.00/cwt lower compared to steers (Avent et al., 2004; Barham and Troxel, 2007; Alkire et al., 2012). Avent et al. (2004) showed benefits (higher prices) to preconditioning calves when bulls were castrated at weaning time.

Vaccinating

Vaccination programs are an important management practice that can reduce disease and illness on operations. Vaccination programs should be developed for each individual operation with the help from the local veterinarian. Research has reported no premium to \$2.93/cwt premium (Leupp et al., 2008; Halfman et al., 2009). Calves sold in the fall appear to have some premium based on the vaccination program; however, the premium disappeared when calves were sold in the winter (January and February). One possible reason behind the lack of premium is the assumption that all the animals had the appropriate shots.

Bunk breaking

Determining if bunk-breaking calves is profitable can be difficult for the cow-calf producer. The benefit of bunk-breaking to the feed yard is improved health of calves since bunk broke calves consume feed sooner than non-bunk broke calves. Many feedlot facilities are equipped to manage newly weaned calves; however, other facilities prefer yearling or bunk broke calves. Feedlot operators benefit from bunk broke calves for several reasons: 1) the calves are not suffering stress of separation from their dams, 2) the calves know how to eat, and

3) the calves' immune systems are somewhat more mature. These reasons do not all come from bunk breaking but also the preconditioning management practices that accompany bunk broke calves. The decision to bunk break needs to be based on whether the potential premium is higher than the input costs.

Growth Implants

Growth implants, estrogenic and/or androgenic, provide a sharp increase in the rate and efficiency of gain in growing cattle. Data indicate that rate of gain can improve by 15 to 20% and feed efficiency (pounds fed to pounds gained) by 8 to 20%. Growth implants, consequently, have important economic considerations due to their return on investment. Many implants are available for use in beef cattle and for different stages of cattle production.

Conclusion

When deciding whether to adopt a particular management strategy, a producer should investigate the potential marketing outlets and possibilities of garnering a premium for adoption of the management technique. The potential for premiums should be weighed against the cost of adopting the management technique, including any adjustments that would be needed to be made in a producer's management system.

Niche Marketing

In the 1990's, organic and natural production started to gain popularity. By 1994, the organic and natural agriculture sector was growing approximately 20% a year. Even during the recession of 2008, the natural, grass fed, and organic (or niche) sectors in the U.S. grew 17%. However, the natural, grass fed, and organic beef market share remains a relatively small component of U.S. beef sales at 6.3% (National Cattlemen's Beef Association, 2015.)

Terminology used in these marketing strategies can be confusing to consumers. Consumers may inaccurately assume that beef labeled "natural," or "grass fed" has been raised without growth promotants or antibiotics. They often do not understand that verified protocols are needed to label products "organic", but may not be needed for a product to be labeled "natural." USDA definitions exist for "grass fed" and "organic" and are not the same; while definitions and protocols needed to label

products as “natural” are unclear.

Natural beef

Some consumers assume the terms “organic” and “natural” are interchangeable, and fail to recognize the strict regulations required to raise certified organic beef. The USDA defines “natural” beef as a product containing no artificial ingredients or added color (e.g. salt, monosodium glutamate) and only minimally processed. Some producers choose not to use antibiotics or growth-promotants, and market their beef as “natural,” and, by USDA definition are not incorrect. However, the important thing for producers to remember is that there is currently no third party verification system required by the USDA to label beef as natural. All minimally processed beef which does not contain artificial ingredients is considered natural. This USDA definition only addresses post-harvest protocols, and thus, essentially all beef can be labeled as natural, regardless of how the source animal was raised. The focus of the USDA definition on strictly post-harvest processing means that a “natural” label does not guarantee that the product’s source has never received growth promotants and/or antibiotics.

Adding further confusion for consumers are “natural” labels which originate in private industry. Some companies have natural products that have pre-harvest requirements. Companies will specify what the natural label means in terms of their individual products. These claims, which describe a verified process that must be documented, are specific to a particular company. The standard in the industry, however, has become “never-ever.” Never-ever programs not only prohibit the use of antibiotics (therapeutic and sub-therapeutic) and hormones, but they also prohibit use of ionophores and animal byproducts. There is considerable variation, even in never-ever programs. For example, industry programs may prohibit use of certain products throughout the life of the animal or prohibit use during the finishing phase only, or allow production of a minimally processed product with no artificial ingredients. These management strategies are defined by companies that have process-verified programs by the USDA Agricultural Marketing Service (AMS).

Since voluntary claims and statements are so variable, USDA has moved to definitively classify “naturally raised” to improve clarity in the marketplace and to ensure consumer’s interests are better protected (USDA, 2009). “Naturally raised” marketing claim standards state cattle raised for production of meat and meat products must have been raised entirely without growth promotants or antibiotics, except ionophores. The livestock must also have never been fed animal byproducts. This voluntary standard establishes the minimum requirement for those producers who choose to operate a USDA verified program involving a naturally raised claim (USDA 2009).

Grass fed beef

In 2007, USDA defined “grass fed beef” as beef originating from cattle that have consumed only grass and forage as the feed source for the lifetime of the ruminant animal, with the exception of milk consumed prior to weaning. According to USDA, the diet must be derived solely from forage consisting of grass (annual and perennial), forbs (e.g., legumes or Brassicas) or cereal grain crops in the vegetative (pre-grain) state. Cattle cannot be fed grain or grain byproducts (e.g. corn, distillers grains) and must have continuous access to pasture during the growing season. However, hay, haylage, baleage, crop residue without grain, and other roughage sources are also acceptable feed sources. Routine mineral and vitamin supplementation may also be included in the feeding regimen (USDA, 2007). Supplementation can be done to ensure the cow’s wellbeing during adverse environmental or physical conditions. The producer must fully document (e.g., receipts, ingredients, and ear tags) the supplementation that occurred, including amount, frequency, and supplements provided.

Organic beef

By 2011, organic beef sales had risen to over \$350 million, up from \$100 million in sales in 2009. USDA’s National Organic Program (NOP) has standards to assure consumers purchasing beef labeled as “organic” that the product has come from a source that has never received growth promotants (including hormone based) or antibiotics for any reason. The trend toward increased consumption of organic beef is projected to continue in the United

States. The chance to enter a profitable market may entice some beef producers to transition from a traditional beef production system to an organic beef production system. Producers considering this should thoroughly review the USDA NOP standards, which outline the requirements and the process involved in becoming a certified organic producer.

Prior to 2002, USDA had no rules regulating what could be labeled as organic beef. The rules were revised in 2006 and again in 2012. According to the USDA, organic beef is defined as a beef product coming from a recognized third party-verified organic production system that collects information on the history of every animal in the program, including breed history, veterinary care, and feed. To be certified as organic, all cattle must be born and raised on certified organic pasture, never receive antibiotics or growth-promoting hormones, must be fed only 100 percent certified organic grains and grasses, and must have unrestricted outdoor access to organic land meeting all organic crop production standards (USDA, 2012).

Additional requirements for certified organic beef are found in Table 1. Producers must also accommodate the health and natural behavior of their animals year round. Furthermore, all processors must also have organic certification from USDA, in order for the end product to be certified as organic (USDA, 2013). For additional information about requirements, visit the USDA Agricultural Marketing Service (AMS) website.

Because of the restrictions on use of medications, producers of organic beef must rely on animal selection and management practices to manage diseases and parasites. Vaccines are allowed and encouraged as part of the preventative management practices encouraged by NOP. Simply stated, vaccines are not antibiotics and are critical to the health, success and profitability of an organic program.

Pain medication and dewormers for dairy and breeder stock are other examples of allowed animal drugs (Coffey and Baier, 2012). Approved treatments are only allowed if preventive strategies do not work. Health management is critical to the success of any natural or organic program, and is one of the highest risk areas in attaining and feeding these cattle. If approved interventions fail, the animal should be given an appropriate treatment which is not part of approved interventions. Once this has been done, the animal or its products can no longer be sold as organic and should be separated from the herd. Cost of a treated calf in an organic program is much higher than one that is fed conventionally. This can be attributed to decreased market value, depressed performance, opportunity cost associated with removal from an organic program, and cost of treatment.

Conclusion

For some producers, niche marketing, including production of grass fed, certified organic, and various “natural” beef programs, offers opportunity to add value to their operation. However, producers should fully understand the implications of

Table 1: Requirements for Organic Certification

Requirements for producers	Requirements for processors
Implementation of an Organic Livestock Plan	No commingling or contamination of organic products during processing
Mandatory outdoor access, when seasonally appropriate	Implementation of an Organic Handling Plan
No antibiotics, growth hormones, slaughter byproducts, or GMOs	No use of GMOs or irradiation
100% organic feed and approved feed supplements	Proactive sanitation and facility pest management practices
Sound animal husbandry and preventative health care	Use of organic agricultural ingredients in “organic” products, when commercially available
Organic management from last third of gestation	Use of approved label claims
No rotating animals between organic and non-organic management	

changing production practices to produce beef for these niche markets. By eliminating the use of implants, ionophores, and antibiotics the amount of feed required to produce one pound of beef increases. Health management also becomes a critical component in profitability. Thus, the cost of producing organic beef or natural beef (as defined by some protocols) will be higher. Producers must determine if markets are available which will support the higher product prices which must be charged to make the niche markets profitable. Those interested in marketing to consumers who desire natural, grass fed, or organic beef should explore various organizations and groups that have expressed interest in such products. Direct marketing, which is discussed in the next section, is a method that many niche market producers choose to employ.

Capturing Value

Producers can use various marketing strategies to capture the added value that they have developed in their cattle. These marketing strategies can include retaining ownership, direct marketing, and joining strategic alliances. These strategies need to be coupled with proper market differentiation mechanisms.

Retaining Ownership

One method producers can capture added value through their cattle management is by retaining ownership. Producers could choose to retain ownership through the backgrounding stage to the finishing stage. Various studies have examined the profitability of retaining ownership to the backgrounding and finishing stages and have found a large variation in returns. Earlier studies have shown approximately a 70% chance of being profitable by retaining ownership to slaughter (i.e., Watt et al., 1987 as cited in Pope et al., 2011; Simmon et al., 1991), while more recent studies have shown closer to a 50% chance of being profitable (Lawrence, 2002).

The potential to capture added value through retained ownership must be weighed against potential cash flow constraints and additional production and price risk endured. Producers must clearly understand the quality of cattle and grading potential of the cattle that they decide to

retain ownership of. In addition, producers must understand grid pricing formulas and production (e.g., days on feed) and sale timing, if they decide to retain ownership to slaughter. Marsh and Feuz (2002) point out that producers considering retaining ownership of cattle must evaluate potential weaning weights, rates of gain, feed costs, and calf and yearling prices, which can vary from operation and year. Producers should calculate breakeven costs for different retained ownership scenarios that they are considering and consider different mechanisms (e.g., forward price contracting, futures and options, and insurance) to manage their price risk.

Direct Marketing

Direct marketing is a popular concept among small to medium sized producers and is a good alternative for beginning producers. Direct marketing in essence removes the “middle man” from the marketing process, as a company’s message is provided directly to potential customers. Some important questions for producers to ask themselves are: what are the legal liabilities, who are our target customers, can we meet demand and what are the costs?

Once a producer answers these questions they can then begin to think about the different marketing channels available to them. A marketing channel is a set of practices or activities required to transfer the ownership of products, and/or to move the products, from the point of production (on the farm/ranch) to the point of consumption (restaurant, consumer, institution) this includes all of the marketing activities done during the marketing process. There are several different ways to direct market products.

- Producers could sell their meat at a farmers market
- Create a Community Supported Agriculture (or CSA)
- Through the internet
- A roadside stand
- A U-pick style in which consumers come and pick the animal they want and they have it processed

For additional information and a comparison of different direct marketing techniques see Table 2.

In recent years, a consumer driven movement to know where their food comes from has evolved.

Table 2: Comparison of different types of direct marketing for agricultural products. Adapted from Deborah Young, CHARACTERISTICS OF DIRECT MARKETING ALTERNATIVES. <https://economics.arizona.edu/sites/arec.arizona.edu/files/pdf/CharacteristicsTable.pdf>

Food	U-Pick/ Pick your Own	Roadside Market	Farmer's Market	Internet Sales
Investment	Signage, parking and supplies for packaging; restrooms	Signage, stand, parking and supplies for displaying, storing and packaging	Stand, and supplies for displaying, storing, and packaging	Website, website design, photos, videos
Grower Liability	Liable for accidents, need liability insurance	Liable for accidents, need liability insurance	Need liability insurance unless covered by market	
Other Costs	Labor for supervision in fields; transportation to field site; promotion	Sales labor, promotion; some storage, packaging and handling costs; may need to buy additional products to sell	Sales labor, stall or sales fees; transportation	Internet promotion (internet ads); some storage, packaging and handling costs; may need to buy additional products to sell
Pricing	Sales per customer may be large; no product transportation costs; no sales or brokerage fees	Hard to sell large volumes; No transportation costs	Smaller sales per customer, direct competition from other producers	Smaller sales per customer, transportation costs are a big factor, potential for large sales depending upon product (i.e. hay, carrots, honey)
Quality	No grading; very fresh	Can sell more than one grade; sell seconds; expect spoilage	Highest quality needed	Can sell more than one grade; expect spoilage
Barriers to Entry	Limited demand; limited crops' locations	Limited demand; location; roadside access; marketing management; zoning	Municipal restrictions; conflict with goals of organizers	Cost of setting up a website and the task alone can be daunting, knowledge of interstate law for food products
Special Advantages	Average value of purchase may be higher than other direct marketing outlets	Can be expanded as needed; can be tailored to specific customer preferences	Potential for many customers; low overhead; advertising done by organizer	Potential for many customers; can be expanded as needed; can be tailored to specific customer preferences
Special Disadvantages	Open to weather, damage to field/farm by visitors; location may be critical	Open to weather, location may be critical	Time consuming; transporting product; less control of overall promotion	Transportation, legalities may seem murky, can seem very time consuming

This movement is anecdotal evidence of greater demand for locally produced meats and direct marketing (though direct to consumer sales only accounted for 0.4% of total agricultural sales in 2007). By processing locally, farmers and ranchers can capture a greater portion of the revenue stream. In 1997, locally produced farm products in the U.S. accounted for \$551 million dollars in sales. By 2007, sales jumped to \$928.9 million (in 1997 dollars to account for inflation), an increase of 59%. Among all vegetable and melon farmers 44.1% sold directly to consumers in 2007, while only 6.9% of livestock producers sold directly to consumers (Martinez et al., 2010). Sixty-five percentage of gross farm sales for fruit, vegetable, and nut farms came from the sale of locally produced products (this includes local sales through packers to local supply houses). However, only 37% of gross annual sales of livestock and field crop producers came from local markets (Low and Vogel, 2011). This leads to the question why aren't more livestock producers selling directly to the consumer?

In order to market meat directly it is necessary to have a stable supply in order to meet the demand of the market. If for example a producer is marketing directly to a restaurant then the producer needs to be able to supply that restaurant with the level of quality they desire, as well as the volume of product needed in order for the restaurant to meet their consumer demand year round. However, if a producer is unable to meet the volume needed for a restaurant they may be better off marketing directly to consumers at local farmers markets, word of mouth, or online advertising. It is also possible for a group of producers to market as a group to an entity in order to meet the demand. For more information about creating a marketing group or co-op, visit the Sustainable Agriculture Research and Education (SARE) website.

In the end producers have many options in direct marketing their products, whether to consumers or businesses. There is some initial cost and research required by the producer, in order to determine if direct marketing is profitable for their business. Once a producer decides direct marketing is for them they will also have additional costs of marketing which could include extra liability

insurance, space rental, advertising, and more. Producers who direct market have the potential ability to capture some extra revenue through the use of direct marketing their product.

Branded Beef Programs and Alliances

Branded beef programs and alliances give producers an alternative way to market their animals as compared to traditional auctions and direct mechanisms, including private treaties. Marketing through branded beef programs may give producers who raise high quality cattle a better opportunity to capture more of the value that they have created but is inaccurately signaled to the buyer or is not defined by the producer to demand a higher value. Lack of efficient signals often occurs because it is costly to signal or obtain information on product attributes. To reduce the costs of obtaining and assessing product information it is often necessary to increase scale to spread the information costs and assume the necessary risks. An alternative to marketing cattle using market mechanisms that inaccurately signal the value of product attributes is to switch to a contract or integrate. The beef sector has seen evolution towards more limited integration. This is evident by the increasing number of beef alliances and the increase use of beef branding that has occurred in the beef supply chain. Sporleder (1994) defines strategic alliances as “purposive strategic relationships between independent firms that share compatible goals, strive for mutual benefits, and acknowledge a high level of mutual dependence” (as cited in Gillespie et al., 2006).

These alliances can be horizontal and/or vertically coordinated across the supply chain. Schroeder and Kovanda (2003) found that the fed cattle marketed through alliances had increased from 8% in 1996 to 39% in 2006. Schroeder and Kovanda (2003) indicate that number of head marketed through alliances can range greatly, with some alliances being smaller in nature, while others as large as 200,000 head per year. Schroeder and Kovanda (2003) point out that the largest beef alliances include Certified Angus Beef (non-equity alliance), based upon licensing agreements (5% of the total fed cattle marketing) and U.S. Premium Beef, LLC (2% in total fed cattle slaughtered from 2000-2001).

Alliances are an organizational form that is between spot markets and vertical integration. These alliances are typically seen in five categories as outlined by (Gillespie et al., 2006): breed, commercial, natural/implant free, cooperative, and calf marketing. These alliances can take many forms whether they are cooperatives versus non-cooperatives and differ on member compensation, risk sharing, and equity vs. non-equity based (Purcell and Hudson, 2003). These alliances can provide products benefits by including bulk purchasing of inputs, reducing transaction costs (commission fees, trucking - pooling cattle), information sharing (best management practices, carcass and performance data), and more value-based pricing for products (e.g., grid pricing formulas).

Market Differentiation

There has also been an evolution to more market differentiation mechanisms. These market differentiation mechanisms include brand awareness strategies that efficiently signal to buyers/consumers quality and consistency of products. These types of programs can provide buyers with third party verification of genetics (along with other management information). The efficiency that buyers can be aware of the technology investment and assured of the product is an important part of capturing value. Market differentiation mechanisms need to clearly communicate with buyers the product that is being sold and give assurance (third party verification, internal monitoring) to buyers that the product is associated with the perceived management investment. Efficiency in communicating new genetic protocols (e.g., genetic selection indices) or management techniques can add value to your cattle when there are adequate market differentiation mechanisms that effectively communicate consistent product information to buyers and consumers. This may require a large initial investment in advertising or other marketing methods to educate buyers on the potential benefits of a new value-added product.

The adoption of technologies takes financial, labor, and human capital investments. Producers have to weigh the costs of investing in technology with the benefits (potential to capture the added-value). There is the opportunity to capture greater value from added premiums, or reduced costs, by

adopting greater management in beef production if there are complimentary organization and market differentiation mechanisms (James et al., 2007). The ability to capture the added-value also relies heavily on the type and organization design of the operation and the ability to signal the investment to potential buyers or consumers.

Conclusion

In order to more fully capture the added-value through cattle management, complementary organizational forms and market differentiation mechanism must be utilized. These two components can facilitate greater technology adoption. A critical component of any organizational design form is that it is complemented with regular information flow and feedback through all sectors of the supply chain. This information flow depends on records and performance information being shared through the supply chain, either through efficient, clear price signals, or from information and value-sharing in more integrated supply chains. Complimentary organization arrangements and differentiation mechanisms can be obtained more readily when participants are more similar in their production management characteristics.

Summary

This chapter discusses how producers can add value to their cattle through genetic management, and by meeting various management and production protocols. The potential premiums for these protocols vary depending upon the marketing channel and market conditions. Producers can identify value-added management and production protocols that fit within their operation structure. In order to capture potential premiums, producers need to use a complementary market channel to their product differentiation strategy.

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