Opportunities and Management Strategies for New Mexico Beef Cattle Producers Considering an Organic Transition

(Part 2 of 3)

Organic Beef Production Basics

INTRODUCTION

Some beef producers in New Mexico currently employ practices that closely align with USDA organic standards, but there are gaps that require attention for full certification. While some aspects, such as using non-GMO feeds and avoiding synthetic pesticides, are already observed by certain producers, others may need to adjust practices in areas like sourcing certified organic feed and providing sufficient outdoor access for livestock. Additionally, meeting USDA organic certification requires thorough recordkeeping to document compliance with standards, which may necessitate new recordkeeping systems for many producers. New Mexico's arid climate, coupled with traditional ranching methods and the prevalence of rangeland feeding, could influence the feasibility of achieving and maintaining organic certification. To successfully transition, producers will need to navigate these unique regional challenges while balancing the increased costs and labor associated with organic production standards.[1] Consider the following factors and evaluate if organic beef cattle production is a suitable option.

PRODUCTION

The USDA National Organic Program (NOP) provides certification for organic products, including beef, and is a vital resource for producers pursuing organic status. However, achieving and maintaining compliance can be challenging, making it essential for producers to fully understand NOP standards and requirements. Utilizing resources from NMSU extension services, NMDA, and USDA can support producers in navigating certification processes, addressing specific organic standards, and developing compliant production practices. These resources often include guidance on managing livestock health, feeding, and pasture requirements under organic standards, helping producers make necessary adjustments. Given that certification standards may evolve, producers should regularly review and update their practices with the support of these resources to remain compliant and competitive in the organic market.

Organic agriculture is based on the holistic principles of a biologically oriented production system that preserves the integrity of production by guarding against

[1] "Organic Cattle, Sheep, and Goats for Meat Production_FINAL.Pdf."

contamination from prohibited substances and against commingling with nonorganic products. It is based on ecological principles that support sustainability.[2] The "USDA Organic" label is given to producers who adhere to strictly regulated processes and are vetted by USDA-accredited certifiers. Animals raised on an organic operation must meet animal health and welfare standards, not be fed antibiotics or growth hormones, be fed 100-percent organic feed, and have access to the outdoors.

Transitioning from conventional to organic cattle production is a multi-step process, and the timeline can vary widely among producers based on individual circumstances. To build an organic beef operation, cattle sourced from conventional operations must be managed organically for at least three months before calving, ensuring that their offspring qualify as organic. Additionally, pastures used for grazing must comply with the USDA's National Organic Program (NOP) (www.ams.usda.gov/nop) standards, which include requirements for soil health, pesticide use, and a structured grazing management plan. For more detailed guidance on organic certification and production requirements, the USDA's publication "Guide for Organic Livestock Producers" is an excellent resource, offering insights into each stage of the certification journey.

"It is important to note that there are different markets and production systems even within organic beef. Grain finished organic beef uses production practices similar to conventional beef starting with cows and calves grazing in organic pastures until weaning. Calves can then be fed with organic grain feedstuff to maximize gain and achieve a desired grade of finish, or they are kept on a stocker/backgrounding operation until ready for finishing."[3] Organic grass-fed or grass-finished beef is brought to a desired weight and yield grade with a forage based, non-grain diet.[4] Organic beef marketers frequently use specific labeling to highlight unique production practices that align with customer preferences. Both production approaches must fully comply with the USDA National Organic Program (NOP) standards, yet they involve distinct management practices with varying costs and benefits. These differences allow marketers to emphasize the added value of organic methods, helping to meet consumer demand for sustainably and ethically produced beef.

In 2001, the USDA introduced standardized organic food labeling to help consumers easily identify organic ingredients and components within products. For producers, organic certification provides a valuable framework, offering clear, consistent guidelines to participate in organic markets. This certification helps producers align their practices with consumer expectations and build trust through verified organic labeling. Beef cattle

[2] Rinehart, "Organic and Grass-Finished Beef Cattle Production."
[3] Banegas, "Opportunities and Management Strategies for New Mexico Beef Cattle Producers Considering an Organic Transition (Part 1 of 3) Organic Beef Market Basics."
[4] "Grass-Fed Beef."

operations that adhere to NOP standards and have less than $5,000 in annual sales may be exempt from certification and can use the term "organic," but not the "USDA Organic" seal.[5]

For producers considering organic options, the availability and cost of certified forages and feedstuffs can be a significant concern. “Precluding the prudent and environmentally sound use of technology such as synthetic fertilizers, herbicides, pesticides, growth promotants and pharmaceuticals results in an increased cost of production (ex. lower production per unit of input, increased labor cost) for organic beef.”[6]

Organic production requires the omission of implants, ionophores, and antibiotics. As a result of these omissions, the amount of feed required to produce one pound of beef increases. Excluding common conventional protocols means that health management of an organic herd becomes a more critical component for profitability. The cost of producing organic beef will generally be higher because of the added resources required and the loss of organic premiums for animals that receive non-organic health treatments.[7] One area that organic producers have lower costs is in their obligations to the Beef Checkoff program. “Producers of 100 percent USDA-certified organic products are exempt from most commodity checkoffs, based on separate legislation, but they must meet strict requirements and reapply for certification on an annual basis.”[8]

Herd management strategies such as breeding control, genetic selection, stocking rates, size moderation, efficient feeding, record keeping, culling programs, etc. that are used by conventional producers are effective in organic production to reduce costs, and tools for accounting and planning such as enterprise budgets and excel templates are easily accessible. Differences between conventional and organic producers can make these tools and strategies lack some utility. The cost of production for organic cattle can be calculated for a given operation but unique challenges exist when determining profitability. Assessing prevailing market prices for organic cattle, variability in organic feed prices and availability, not having timely access to markets, and difficulty calculating the opportunity cost of retaining animals pose additional risks for organic producers.

“The challenges of transitioning a beef cattle operation could seem daunting and the lack of cost and productivity measures for conventional producers transitioning to organic production is an area that needs more research. Transitioning farms can have a steep learning curve and don’t receive price premiums for organic products right away but have cost structures similar to certified organic operations during the conversion.[9] Combined

[5] “Organic Beef Captures Price Premiums | Ag Decision Maker.”
[6] Machen, “Natural, Grass-Fed and Organic Beef.”
[7] Elliott, “Chapter 45: Capturing Value-Added Opportunities.”
[8] “Is Anyone Exempt from Paying the Checkoff Dollar?”
[9] Gillespie and Nehring, “Comparing Economic Performance of Organic and Conventional U.S. Beef Farms Using Matching Samples*.”

conventional and organic operations are possible and could be a way for producers to adopt organic practices without committing to a full transition."[10]

Organic certification includes pasture time and feed percentage requirements that make organic beef production cost calculations more complex than conventional beef. Producers should also be familiar with differences in grain and grass finishing that are important for organic certification because grass finished cattle can take 60-80 days longer to reach market weight with a desired grade.[11] There are extra considerations in grass-fed systems, such as land mass and carrying capacity. These will govern how many total cattle can be finished on grass and can require an extensive grazing management plan. The NOP requires that "animals must graze on pasture at least 120 days per year, and animals must have a minimum of 30-percent dry matter intake from grazing pasture during the grazing season." Additionally, "ruminant livestock that are finished for slaughter are exempt from the minimum requirement of 30-percent dry matter intake from grazing pasture during the grazing season for a feeding period of no more than 120 days or one-fifth of the animal's life, whichever is shorter. The livestock still must have access to pasture during the grazing season."[12] These NOP regulations are commonly known as the "Pasture Rule".

This rule covers pasture management, access to pasture, feed, and grazing intake by ruminant livestock. There are several resources available to New Mexico producers who want to review how to implement the provisions, calculate dry matter intake (DMI), conduct grazing management, recordkeeping, and other specifics. The USDA publications; Pasture for Organic Ruminant Livestock: Understanding and Implementing the National Organic Program (NOP) Pasture Rule[13], National Organic Program Dry Matter Demand Tables For Classes of Beef Cattle[14], Guidance: Calculating Dry Matter Intake from Pasture[15], and Pasture Worksheet for Rotational/Stocking Grazing Systems[16] are great tools to create a plan for a compliant operation. The USDA website "Organic Recordkeeping: Guides, Templates and Other Resources" has links and important information for producers that can be found at https://www.ams.usda.gov/services/organic-certification/organic-records#LivestockFeed. These criteria, among others, must be reviewed for an operation and will affect costs. Producers in New Mexico will need to be vigilant in assessing the unique factors of their operation and their land to prioritize range health when using the tools and resources mentioned above.

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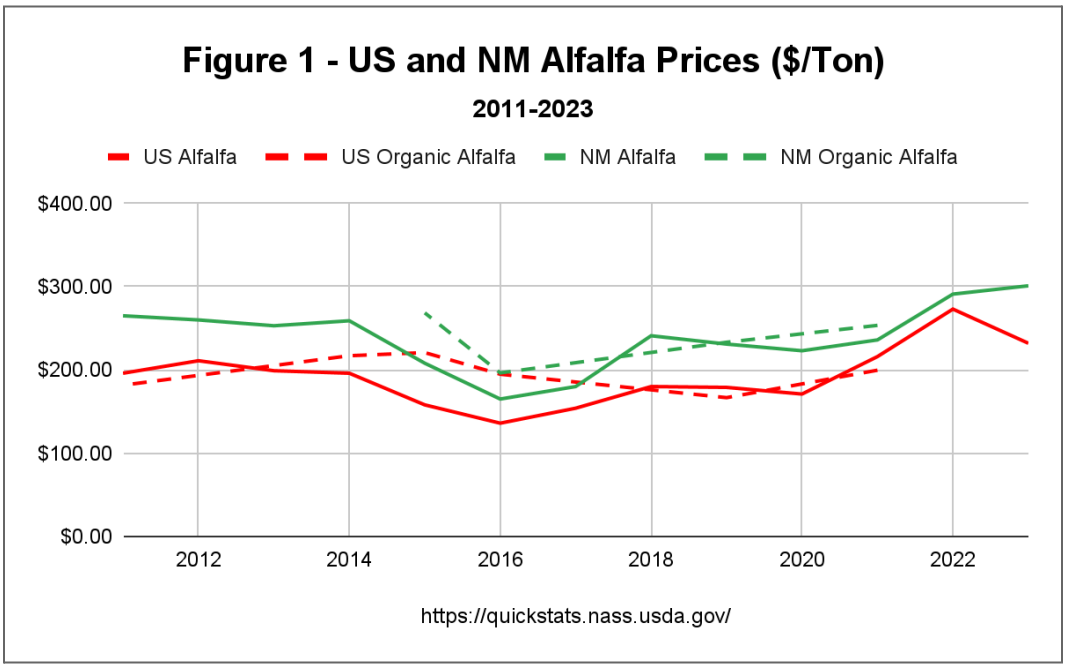
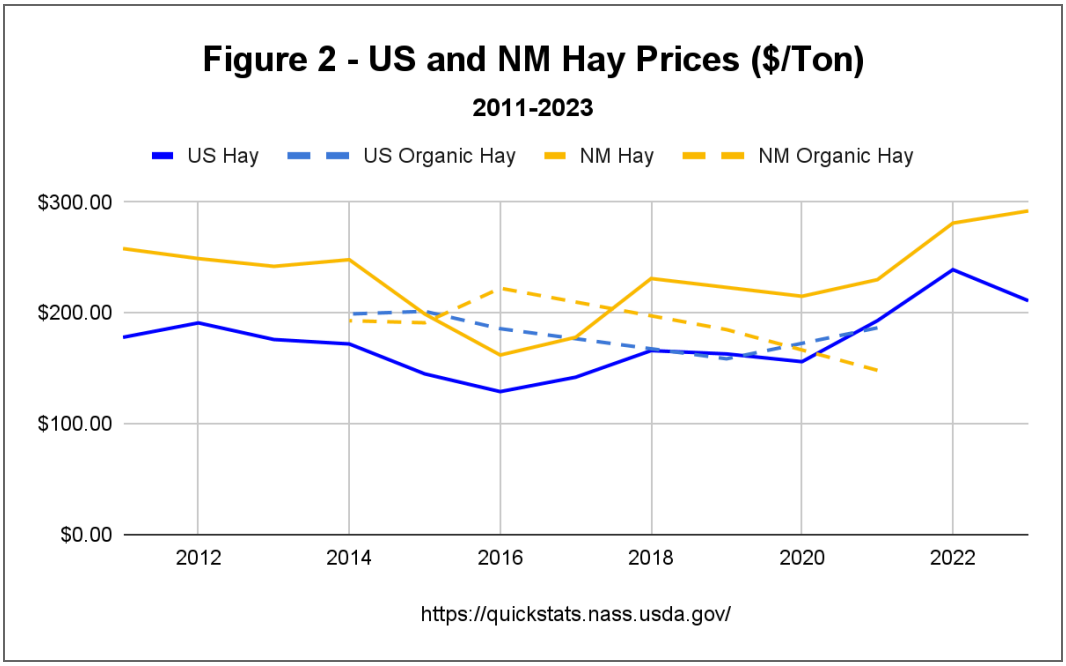
[10] Banegas, "Opportunities and Management Strategies for New Mexico Beef Cattle Producers Considering an Organic Transition (Part 1 of 3) Organic Beef Market Basics."
[11] Rinehart, "Organic and Grass-Finished Beef Cattle Production."
[12] Coffey and Baier, "Guide for Organic Livestock Producers."
[13] Rinehart and Baier, "Understanding and Implementing."
[14] "NOP-5017-3-DryMatterDemandTablesforClassesofBeefCattle.Pdf."
[15] "5017-1.Pdf."
[16] "NOP-5017-6-PastureWorksheet.Pdf."

A consideration for producers thinking about transitioning to organic is price differences between feed types which can fluctuate greatly. As of April 2024, the national spot price of organic feed corn was $268/ton[17], compared to non-organic corn feed prices averaging between $118/ton (Illinois) and $232/ton (San Joaquin)[18], a premium of between 16% and 127%. Organic premium alfalfa hay (Trade/Bale) price in New Mexico was $120 for a 3x4x8 large square bale. Assuming a bale weight of 1,250 pounds, organic alfalfa was $192 per ton. Non-organic premium alfalfa hay (Contract(Trade)/Per Ton) prices ranged from $220-$250[19], a difference of between -13% and -23%. Figures 1 and 2 illustrate the variation of prices between prices in the US and in NM for common feedstuff. Prices in NM are generally higher than national averages, but organic feed does not always carry a premium. These discrepancies would have to be calculated for the feed requirements of individual producers according to their available grazing and pasture resources, and production practices.



[17] "DAIRY MARKET NEWS, APRIL 29 - MAY 3, 2024.Pdf."
[18] "Ams_3511.Pdf."
[19] "2024 - Direct Hay Report.Pdf."



The NMSU RITF report found that many producers didn't know or preferred not to report their cost of production. The organic beef operations that participated in the survey cited reported a mean production cost of $612 per head. Eighty Five percent of them produced some of their own feed and 20% had to purchase organic feed. For those that purchased feed, they estimated that they paid 57% more for organic feed than conventional equivalents. Most of the producers had estimated gross incomes between $5,000 and $15,000, and only about 15% of the producers had gross incomes above $50,000.[20]

"Organic beef consumption is projected to continue growing in the U.S. and abroad. Producers in New Mexico who can satisfy the USDA NOP certification criteria and manage their cattle operations can benefit from this profitable market and have the opportunity to diversify their businesses. This snapshot of producer costs and incomes is not completely reliable as a benchmark for producers and data needs to be collected to create an accurate picture of cash flows for individual operations in this developing market. Producers that think this transition could fit their goals should make a plan that outlines the requirements for certification, identify the options that are available in their area with the available resources, and determine the costs and benefits unique to their operation. There is no standard way to complete a conversion to organic production but many resources are available for those producers interested in the opportunity."[21]

[20] Roberts, Spurgeon, and Fowler, "Characteristics of the United States Organic Beef Industry."
[21] Banegas, "Opportunities and Management Strategies for New Mexico Beef Cattle Producers Considering an Organic Transition (Part 1 of 3) Organic Beef Market Basics."

PRODUCTION CHALLENGES

Higher production costs are normally associated with organic practices so a producer must determine the appropriate premium to charge for their specialty products. These added costs are not the same for every producer and can include fees for organic certification, lower animal weight, longer finishing time, and more. Expanding into organic production involves a transition period where land and livestock must adhere to specific practices before certification. This transition period may limit the immediate profitability and scalability of operations. Additionally, organic meat must be processed in a facility that is certified and there are different levels of processing. Access to these facilities can be limited and will affect how specialty beef products are marketed.[22]

Disease and parasite control can be difficult because of the restrictions of the NOP. Health management can be extra challenging for organic producers and animal selection is more crucial. Animals that have to be treated with antibiotics must be separated from the organically raised herd and cannot be sold with the organic label, however, vaccines, pain medication, and dewormers are allowed and encouraged as part of preventative management practices.[23] Treatments that are allowed under the NOP include diatomaceous earth for parasites and products like garlic, mineral oil, and herbs. Pasture rotation is also an option for some producers and can reduce parasites.[24] The article "Practical guide to working with organic farms" is a basic introduction to the treatment decisions for organic farms and has a quick reference table of the basic medications allowed and prohibited under organic regulations.[25]

Organic beef producers in New Mexico may be hindered by limited access to certified feed and forage and by the availability and quality of suitable pastureland. Maintaining organic practices requires sufficient grazing space, and securing additional land can be challenging in many parts of our arid state. Seasonal variability in precipitation and extended droughts can also be extreme challenges for niche producers, especially those focusing on organic practices. Organic beef production is sometimes seen as more easily impacted by drought than conventional systems but a 2019 study of Iowa producers did not corroborate this assumption.[26] Further studies of NM production would have to be undertaken to verify if our state would also have few noticeable differences. Managing this variability becomes more complex with larger herds and range areas.

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[22] "Organic Cattle, Sheep, and Goats for Meat Production_FINAL.Pdf."
[23] Elliott, "Chapter 45: Capturing Value-Added Opportunities."
[24] Roberts, Spurgeon, and Fowler, "Characteristics of the United States Organic Beef Industry."
[25] Dvm, "Practical Guide to Working with Organic Farms."
[26] "Organic Beef Captures Price Premiums | Ag Decision Maker."

RECORD KEEPING, TRACEABILITY, AND THE ORGANIC SYSTEM

Clearly outlining production practices will build trust with customers and this transparency will differentiate products. Customers who are willing to pay a premium for organic beef want information about how it was raised and what inputs and processes were used. Organic certification program requirements ensure that USDA Organic labeled beef is trusted by consumers.

A huge advantage that organic beef has over conventional products is that the animals and final products move from an operation through a well defined, traceable, certifiable processing, handling, and marketing chain,[27] and it is a fully verifiable production system that collects information on every animal including breed history, veterinary care, and feed."[28]

The organic beef system and supply chain has some advantages over conventional production and this was especially apparent during the BSE (mad cow disease) outbreak that was first discovered in the U.S. in 2003. To assess the impacts of BSE on organic producers, a questionnaire was sent to determine how the industry reacted to the BSE outbreak. The questionnaire revealed that organic beef producers directly benefited from the BSE discovery. Organic beef was perceived to be higher quality and safer than conventional beef, so there were no reported decreases in demand and about 70% experienced an increase in demand. Twenty-two percent of the respondents experienced price increases for their product, the average price increase was 16% and only two respondents reported price decreases. There was no effect on prices for 73% of organic beef producers. Most of the respondents were not planning to change their marketing strategy to advertise BSE-free beef, and all organic producers favored Country of Origin Labeling (COOL)."[29]

Maintaining detailed records of all production practices includes feed sources, veterinary treatments, and any inputs used. This demonstrates compliance with the NOP certifications and producers can emphasize their traceability system to potential customers. Tracking the progress of each animal from birth or purchase to sale and processing allows consumers to make informed choices especially if their reasons for buying organic beef includes support for animal welfare and sustainable farming practices.

Traceability Challenges grow as the number of cattle in the operation grows. Maintaining accurate traceability and documentation becomes critical for compliance with certification standards and meeting consumer expectations.

BRANDING, MARKETING, AND SUPPLY CHAIN

Identifying and understanding the preferences of target customers can foster connections with those who value organic beef. Producers in New Mexico can explore various marketing channels to effectively reach their customers and differentiate their products. The USDA

[27] Machen, "Natural, Grass-Fed and Organic Beef."
[28] "Marketing Opportunities Available to Oklahoma Beef Cattle Producers - Oklahoma State University."
[29] Roberts, Spurgeon, and Fowler, "Characteristics of the United States Organic Beef Industry."

Organic label is helpful for consumers to identify production practices and are much of the reason they are willing to pay a premium.

Branding is a crucial element for organic beef production and producers can develop a strong brand by emphasizing production practices and highlighting the unique qualities of their cattle. Brand recognition can be accomplished with thoughtful labeling and packaging design to communicate the values of the products and attract consumers who prioritize the specific qualities of organic beef. Consumers like buying beef from people they trust, value the from-the-farm experience, and are willing to pay for it.[30]

Marketing includes producing promotional materials, using various channels, and making products available in places that will focus on target customers. Local farmers' markets, food festivals, and other events are important because they provide a direct-to-consumer platform for organic beef. This allows producers to interact with customers, showcase their products, and build relationships. Similarly, on-farm retail involves setting up an operation that allows producers to sell beef directly to consumers visiting their farm. This provides transparency about production practices and builds trust.

Partnering with specialty grocery stores, and building relationships with local restaurants and chefs who prioritize locally sourced organic beef can create a demand for products and provide exposure to a wider audience. In 2002, marketing organic beef to supermarkets was reported by only 9% of the respondents in the RITF study, however, supermarkets are the venues that have experienced the largest growth in sales of organic products in the last two decades and that number has likely grown.[31] Conventional grocery retailers surpassed specialty food stores as the primary outlets for organic food sales in the mid-2000s. By 2020, traditional supermarkets accounted for 56 percent of the share of organic food sold to consumers.[32]

Community Supported Agriculture (CSA) programs involve consumers subscribing to receive regular deliveries of beef directly from the producer. This fosters a direct relationship between the producer and the consumer. Another complementary method is cooperative marketing with other local producers, which could enhance marketing efforts and allows organic beef producers to share resources, have joint promotions, and increase visibility while sharing some costs. “Becoming a member of a cooperative is very attractive to many farmers because cooperatives give the farmer the ability to sell products in much the same way as in the commodity market, but often with a premium.”[33]

Direct marketing is popular among small to medium sized organic producers and is a valuable alternative for beginning producers. This strategy removes the “middle man” and a

[30] “Niche Market for Ranch-Raised Beef on the Rise.”
[31] Roberts, Spurgeon, and Fowler, “Characteristics of the United States Organic Beef Industry.”
[32] “USDA ERS - Organic Agriculture.”
[33] Rinehart, “Organic and Grass-Finished Beef Cattle Production.”

company's message is delivered directly to potential customers.[34] Direct marketing through social media or a newsletter provides a channel to consumers, updating them on product availability, promotions, and news about an organic beef operation. Using social media like Instagram, TikTok, Facebook, Twitter, and other platforms enables organic producers to share their stories and showcase their products. Seventy-five percent of the respondents in the RITF study marketed their beef directly to consumers[35] and it is likely that there is still a large portion of organic beef producers still using this method. Word of mouth, customer referrals, and influencers are a way to use positive experiences to increase an organic producer's market. Organic beef producers in New Mexico should encourage their satisfied customers to share their experiences of their product to others. Food, culinary, and agriculture influencers are credible third parties that can amplify products and interact with consumers. They can share their stories, recipes, and tips to educate and inspire their peers and consumers.[36]

BRANDING, MARKETING, AND SUPPLY CHAIN CHALLENGES

New Mexico organic beef production can be re-established and prosper, however, the supply chain that allows inputs and final products to efficiently be delivered needs improvement. The supply chain for conventional beef in the state also has restrictions, this was especially evident during the COVID-19 pandemic when increased consumer demand for local meat sources could not be met. New Mexico cattle producers only have six federally inspected slaughter facilities in the State to choose from for their direct to market beef,[37] none of which are certified for organic beef. The USDA-NIFA funded Sustainable Southwest Beef Coordinated Agricultural Project is working to fill knowledge gaps to better understand the outcomes of range finishing in the US Southwest, and how they compare with conventional supply chains.[38] Results from this project and the decision support dashboard that is being developed may be helpful for organic producers to better understand their own supply chain traits and to take advantage of opportunities.

Organic producers may face additional challenges when trying to expand their business also. Supply can easily outpace demand in these smaller markets and often additional consumer research, education, and awareness building efforts are required to ensure that people value organic beef and increase their consumption. Additional costs associated with these expansion efforts could offset increased revenue but growing too fast is not one of the greater risks of this market.

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[34] Elliott, "Chapter 45: Capturing Value-Added Opportunities."
[35] Roberts, Spurgeon, and Fowler, "Characteristics of the United States Organic Beef Industry."
[36] "Annual Report."
[37] "2021-Nmsu-Beef-Dairy--Livestock-Update.Pdf."
[38] "Sustainable_Southwest_Beef_Org_Supply_Chain_Options.Pdf."

Small-scale producers have had a lack of access to processing facilities for decades and organic producers have even less. There are only 18 organic certified slaughter facilities operating in the U.S. today and only one of those is in an adjacent state (Texas).[39] Organic producers have lost nearly all preference, convenience, and flexibility when it comes to when and where they can slaughter their livestock because meat processing regulations are largely written with large processors in mind and can only work with economies of scale that organic producers do not have. USDA organic certified facilities must be used in order to meet NOP criteria, and none of these facilities are in the state. Organic producers often face 6 to 18 month waits for a slot at a slaughterhouse and many have to drive hundreds of miles to reach a facility.[40] Even conventional meat processing facilities in New Mexico are regularly at maximum capacity and producers who do not secure spots to have their animals slaughtered must send them out of state for processing.[41] In 2021, the Biden Administration announced that $500 million would be invested to expand processing capacity for meat and poultry, and $150 million would be for existing small processing facilities. As the funding for processing is doled out, some of the concern about packing capacity may dissipate as additional capacity is brought online.[42]

Another opportunity for producers to have relief from this supply chain bottleneck lies in a state meat inspection program but there is split interest from producers. Producers who operate within the current regulatory environment and use direct sales have interest in expanding to additional markets, but are not receptive to the additional competition a state program would enable. Producers who are not currently involved in direct sales have little interest in taking part in it but do support a state inspection program because it could boost their sales of live animals within the state.[43] Senate Bill 37, "The Meat Inspection Act", will create a program in NM that will provide value-added opportunities to producers and might lay the groundwork for establishing organic processing facilities as well.

Some of the challenges of selling organic beef are finding a market, getting access to slaughter facilities, getting a premium price, raising enough beef to meet demand, and educating the consumer. Producers that have trouble finding a market receive lower prices for their beef and some producers who cannot process their beef in organic-certified facilities are unable to sell the meat retail. "[44] These challenges were likely the factors that led to the lack of organic beef producers in the state today but with proper support and planning, the opportunities for organic beef production can be seized by New Mexico producers.

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[39] "Organic Integrity Database."
[40] Pezzuti, "Where Are the Slaughterhouses Serving Small-Scale Farmers?"
[41] "2021-Nmsu-Beef-Dairy--Livestock-Update.Pdf."
[42] "TAMU 2021 - The U.S. Beef Supply Chain Workshop.Pdf."
[43] "2021-Nmsu-Beef-Dairy--Livestock-Update.Pdf."
[44] Roberts, Spurgeon, and Fowler, "Characteristics of the United States Organic Beef Industry."

CONCLUSION

The overall beef market is growing more complex due to "extensive branding efforts and development of niche markets, and demand for production of beef representing grass-fed, non-hormone, non-antibiotic, and organic beef markets is growing steadily."[45] New Mexico ranchers can meet the expectations of consumers seeking organic beef products by considering the factors outlined above and developing a plan to supply customers. Producers need to evaluate the market, their production practices, enterprise goals, and other factors when considering entering the organic beef cattle market. Profitability is possible with a tailored strategy that balances the benefits and challenges of each factor of organic beef production.

To obtain more information on organic transition or organic production systems for beef cattle in New Mexico you can reach out to a NMSU extension specialist, or contact the New Mexico Department of Agriculture, the New Mexico Livestock Board, the New Mexico Cattle Growers Association, or the New Mexico Beef Council.

[45] Drouillard, "Current Situation and Future Trends for Beef Production in the United States of America — A Review."

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